

Proposed Afognak Microwave Station

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# Exxon Valdez Oil Spill Trustee Council

441 W. 5<sup>th</sup> Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



### **MEMORANDUM**

- TO: Trustee Council
- FROM: Moliy McCampon Executive Director

RE: AJV Acquisition: Microwave Repeater Site

DATE: November 30, 2001

AT&T Alascom is seeking permission to locate a microwave repeater site on land purchased by the Trustee Council as part of the AJV (Afognak Joint Venture) large parcel acquisition. The State of Alaska now holds title to the land and the United States holds a conservation easement on the land. Permission from both governments is required. In addition, because this is land acquired through the EVOS process, the "informed consent" of the Council is also being sought.

Materials describing the proposed site have been provided by New Horizons Telecom, Inc., AT&T Alascom's authorized agent, and are attached. They include a project description and drawings showing the proposed site location and layout. Representatives of AT&T Alascom will be at the Trustee Council meeting to discuss the proposal and answer any questions you might have.

 Federal Trustees
 State Trustees

 U.S. Department of the Interior
 Alaska Department of Fish and Game

 U.S. Department of Agriculture
 Alaska Department of Environmental Conservation

 National Oceanic and Atmospheric Administration
 Alaska Department of Law





GENERAL AND ELECTRICAL CONTRACTORS & ENGINEERS TELECOMMUNICATIONS FACILITY DESIGN & CONSTRUCTION

November 28, 2001

Exxon Valdez Oil Spill Trustee Council 441 West 5<sup>th</sup> Avenue, Suite 500 Anchorage, AK 99501

Re: Big Waterfall Bay Telecommunication Site Proposal

Attn: Molly McCammon, Executive Director

Dear Ms. McCammon,

AT&T Alascom, Inc. is pursuing a microwave communication system between their existing telephone system on Kodiak Island and the mainland telephone system in Homer. This communication system involves a series of microwave repeater sites between the main endpoints of Kodiak and Homer. A site near Big Waterfall Bay has been identified as an essential repeater location to this system.

New Horizons Telecom, Inc. (NHTI) is AT&T Alascom's authorized agent for initiating the acquisition of a long-term lease for the installation of a tower, two small support buildings and a double contained fuel storage tank. Attached please find a detailed project description, storage tank information and drawings showing the proposed site location and layout. We have also included two photographs of existing AT&T Microwave facilities, which are located in Southeast Alaska.

Additionally, we have discussed this proposed location with the State of Alaska, Department of Natural Resources, Division of Parks & Outdoor Recreation, Director and Field Operations Chief prior to contacting the Exxon Valdez Oil Spill Council. Initially, we proposed locating this site on Shuyak Island. During discussions with the Park Service, this location was selected as an alternate due to Park Service plans to keep Shuyak Island undeveloped.

Thank you for your time and consideration in reviewing this proposal. We understand the EVOS Council will meet December 11. We are available to meet with the Council on this date.

If you have any further concerns or questions, please contact me at (907) 761-6122.

Sincerely,

Doug LeCren, P.E. New Horizons Telecom, Project Manager

Cc: Scott Wood, AT&T Alascom Jim Wickes, AT&T Alascom



# KODIAK DIGITAL MICROWAVE SYSTEM **BIG WATERFALL BAY**



December 2001

Prepared By:



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#### **PROJECT DESCRIPTION**

AT&T Alascom is investigating a microwave connection between their existing access point on Kodiak Island and their access point in Homer. This is a six link system utilizing five repeater sites between the main endpoints of Kodiak and Homer. One of these sites is proposed to be situated on a knoll near Big Waterfall Bay. Due to transmit power limitations of microwave transmissions set by the FCC, all of these sites must be approved or the whole system will not function. A site near Big Waterfall Bay is essential to the project. This system will greatly improve the communications capabilities available at Kodiak Island and will serve as a source for communications upgrades to communities along the route. The school systems of the communities along the route may be one of the biggest benefactors, as high speed Internet access will become available via this system.

AT&T Alascom wants to acquire a long-term lease on an approximately one-half acre site for the installation of a tower, two small support buildings, an above ground double walled fuel storage tank and a helicopter landing area. The lease area is 110 ft by 200 ft and the existing topography will be maintained. The site will be in operation year round, requiring the facility to be self-supporting. Maintenance will be as required. Experience has shown planned maintenance activities of once or twice a year are typical but problems can require more activity.

One of the support buildings would house the telecommunications equipment, and the other would be for the generation of electric power. Both of the buildings will be 12'x16'x10' high. The communications tower is self-supported on three legs. The legs are spaced 21 feet apart and the tower is 100 feet tall with the capacity to increase to 150 feet tall in the future if needed.

The above ground storage tank (AST) is double contained and has a capacity of 6,000 gallons of diesel fuel. It is estimated that 4,500 gallons of fuel per year will be consumed and will need to be replaced annually. The tank will be UL-142 rated and will have all the current spill prevention and leak detection systems required by code and regulation (see attached sheets for additional tank and refueling information).

Construction will be in two phases, phase one is the tower foundation, building and tank installation and the second phase is the installation of the tower and placement of antennas, equipment and equipment connections. The first phase construction is planned for spring of 2002 estimated to be complete by summer (May – July). The second phase could start within two weeks of the first phase or start after completion of phase one but all the construction would be complete by the end of September 2002. The minimum construction period is 4 weeks.

A construction camp would be set up on site consisting of tent living and cooking quarters, temporary power generation equipment, motor driven air compressors, small excavation equipment and miscellaneous hand tools. The temporary construction area

and camp would be within the lease lot. Helicopter landing will be required outside the lease lot until a site can be cleared inside the lease boundary. Supplies and construction material will be carried to the construction site via helicopter from a barge anchored at sea near the site. Smaller items and personnel will be transported via helicopter directly from Kodiak.

A land "As-Built" survey of the as constructed conditions will be performed upon completion of all construction work and to establish permanent lot corner monuments. This survey will consist of a survey crew being transported via helicopter to the area and to other existing nearby monuments as required.

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## ABOVEGROUND STORAGE TANK INFORMATION

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## ABOVEGROUND STORAGE TANK

This facility includes a 6,000 gallon tank, which is a double contained aboveground storage tank (AST). Inside the generator building is one 50 gallon day tank for the generators. The outside storage tank and the day tank have overfill alarms as required by Federal Regulations CFR 40 Part 112.

Each of the tanks' main features and spill prevention controls are listed in the following table:

Description	Day Tank	6000 gal.		
Tank Type	DT	AST		
UL Listing	UL 142	UL 142		
Other Certifications				
Product Stored	Diesel #1	Diesel #1		
Tank material type	Steel	Steel		
Secondary Containment	Secondary Containment			
Double Wall	YES	YES		
Electronic Monitoring	YES	YES		
Piping				
Aboveground	YES	YES		
Underground	NO	NO		
Piping Secondary Containment	YES	YES		
Filling Manhole Sump	NO	YES		
Supply/Return Manhole Sump	NO	YES		
Venting capacity suitable for fill and withdrawal rates	YES	YES		
Tank materials compatible with products contained therein as	YES	YES		
well as compatible with other contacting materials	<u>.</u>			
Overfill prevention valve. Set to stop product flow at or before	YES	YES		
95% tank content level				
Anti-siphon devices on supply lines	NO	YES		
Anti-siphon devices on return lines	NO	NO		
Emergency pressure vents are provided for both the tank body	YES	YES		
and the interstice				
Fusible shutoff valve at building entrance	YES	YES		
Protection from traffic (bollards, barriers, etc.)	N/A	N/A		
Corrosion protection				
Paint	YES	YES		
Tank inside of building	YES	NO		
Non corrosive tank material	NO	NO		

## TANK COMPONENT LISTING

Corrosion protection systems will provide corrosion protection to the metal components of the tanks and piping that routinely contain regulated substances. Corrosion protection for the aboveground tanks is provided by a painted on coating. This coating shall be visually inspected for cracks, peeling, weathering or any other deterioration. The facility's aboveground storage tank is continuously monitored for leaks with a Veeder-Root TLS-350 system. The system control panel is located in the communications building. The interstitial spaces of the double-wall tanks are continuously monitored for leaks.

### FUEL TRANSFER OPERATIONS

#### Piping

Fuel transfer operations at this facility are conducted through a double wall pipe that travels above ground from the AST, then enters the generator building through the wall. Exterior piping is flexible hose inside secondary containment constructed of schedule 40 galvanized steel pipe. Interior piping is constructed of stainless steel tube.

This is a remote site with no vehicular access; no protection from vehicular traffic is necessary.

The day tanks and associated piping are located inside the generator building.

#### Pumps

A suction pump provides fuel from the bulk storage tank to the day tanks. The pump is controlled by a high/low float switch located in the day tank control panel. The pump is located above the day tank in the generator building and a leak in the pump would drain to the generator room floor

#### Day Tank

Day tank is used to provide fuel to the generators and are located in the generator building. The day tank is double walled steel tank with interstitial monitoring, high and low level alarms, as well as pump failure alarms.

## **REFUELING PROCEDURES**

#### General Information

All delivery personnel must be reliable and properly trained in transfer procedures for flammable and combustible liquids and in spill response measures. They are responsible for compliance with all state and local fuel transportation regulations. Subcontractors shall provide to AT&T Alascom a copy of their written delivery procedures and evidence of training for employees who perform refueling activities.

The transport driver is charged with responsibility for transfer operations and shall be present for the duration of the refueling process. At least one AT&T Alascom employee is required to be present at all times during all fuel deliveries.

Fuel transfer from a barge shall be conducted in accordance with 33 CFR Part 154. The fuel supplier shall have a Coast Guard approved "Operation Manual" as required by 33 CFR Part 154.

A fuel transport vehicle tank must be attended by a qualified person at all times during product transfer. A person "attends" if, throughout the process, he/she is awake, has an unobstructed view of the fuel transport vehicle and/or dispensary hose, and is within 25 feet of the shutoff device. A person is "qualified" if he/she has been made aware of the nature of the hazardous materials being transferred, he/she has been instructed on the procedures to be followed in emergencies, and is authorized to operate the transport vehicle, and has the means to do so.

Fuel transport vehicles, containers, and equipment shall only be used for their designed intended use and shall not be used unless they are in proper repair and free of defects and accumulations of flammable residues or liquids.

Fuel transport vehicles transporting flammable or combustible liquids shall be legibly marked in accordance with DOT, USCG, FAA or other regulations.

All manhole closures shall be closed and secured, and all valves shall be closed and free of leaks while the fuel transport vehicle is in transit.

Loading and unloading of vehicles or containers shall be conducted only in safe locations. A motor vehicle containing hazardous materials must not be parked within 300 feet of an open fire. Some examples of conducting in safe locations are, keeping clear of surface water or sharp objects which can puncture a container or hose, and keeping clear of combustible materials such as trees or dry brush.

Inspect <u>all</u> equipment prior to use.

Containers must be compatible with the chemical characteristics of the liquid to be stored/transported.

The total volume of the container to be filled should be printed on the container or a plate at the fill pipe so delivery personnel can be certain the container has adequate room to accept the planned delivery volume.

Transfer operations should be conducted during daylight or with adequate lighting. Good visibility is conducive to safe transfer of fuel and oil, and facilitates observation and cleanup of minor spills if they occur.

If storms are nearby or are imminent, the discretion of on-site personnel must be relied upon to determine whether to conduct fuel transfer. Fuel transfer should not occur during electrical storms.

Barge/boat fuel transport vehicles should securely moor the vehicle to both land-set and water-set anchors.

Helicopter fuel transport vehicles should not connect up to the fuel container until the container has been properly sealed for transport.

Smoking is <u>strictly prohibited</u> during refueling operations within 25 feet of any open vessel containing petroleum products. In accordance with AT&T Alascom health and safety guidelines, any open flame or other ignition source in the vicinity of combustible or flammable materials is absolutely forbidden. Turn off all nonessential motors and potential ignition sources during fuel transfer.

Each transfer location shall have at least one 2-A, 20-B, C fire extinguisher.

Fire extinguishers shall be operational (refer to NFPA 10, Standard for Portable Fire Extinguishers). During fuel transfer, fire extinguishers shall be in view, readily accessible and placed no less than 10 feet and no more than 15 feet from work areas.

Any waste generated during refueling, such as absorbent pads or disposable gloves, shall be removed from the site and disposed of properly.

Fuel is generally delivered to this facility once per year.

Hoses and Portable Pumps

Each length of hose used for delivery of product shall be marked to indicate the manufacturer's recommended working pressure.

All pressure hoses and couplings shall be inspected at intervals appropriate to the service. With the hose extended, apply pressure to the hose and couplings to the maximum operating pressure. Any hose and couplings showing deterioration, leakage or weakness shall be withdrawn from service and permanently repaired or discarded.

Portable pumps shall be explosion-proof, manufactured specifically for fuel transfer and compatible with the product being transferred. Motors having sparking contacts shall be provided with explosion-proof enclosures.

Pump ignition wiring shall be substantially installed with firm connections. Spark plugs and all other terminals shall be suitably insulated to prevent sparking in the event of contact with conductive materials. The ignition switch shall be of the enclosed type.

Wiring shall be adequate for the maximum loads carried and shall be protected from physical damage and contact with possible product spill. When a pump is used to deliver product, automatic means shall be provided to prevent pressure in excess of the design working pressures of accessories, piping and hose.

Pumps shall have an engine air intake equipped with a flame arrestor to prevent flame in the event of backfiring.

Pumps must be located such that spillage or leakage is prevented from coming in contact with the engine or any parts of the ignition or exhaust system, or adequate shielding shall be provided. Pumps shall be placed inside a secondary container to contain leakage and spillage during operation or hose disconnection. It is recommended that hose connections used in the field be a quick-connect type which prevents liquid release when the connection is broken. Hose connections shall be broken first at the supply container and the hose capped. Hoses shall be rolled or elevated in the direction of fuel transfer to remove as much residual fuel as possible. The hose connection at the receiving container shall then be broken and capped. Both hose ends shall be capped between use.

#### Refueling Procedures - Barge - Helicopter

Refueling of the Facility is accomplished from a barge which is moored near the site. Fuel is transferred from the barge to a bladder and carried by helicopter to the site where a second team empties the bladder into the tanks. Each team must have at least two members. Spill kit must be present during fueling and defueling operations.

#### First team:

- 1. Inspect all equipment prior to use.
- 2. Securely moor barge.
- 3. Turn off nonessential motors and potential ignition sources.
- 4. Establish a grounding bond. A grounding clamp should be attached from the vehicle to a grounding rod or fill pipe to prevent the accumulation of static electricity.
- 5. The operation and maintenance of the bladder shall be in accordance with the manufacturer's recommendations. The volume capacity of the bladder should be marked on the bladder. The volume of material being transferred should be measured with an accurate metering device composed of materials compatible with the liquid. Use of a meter avoids overfilling the bladder and records total gallons sent to the site. Meter readings should be recorded in a book for this purpose.
- 6. Ensure bladders are placed on a level/sturdy surface.
- 7. Connect hose from the barge to bladder.
- 8. Place catch pan, bucket, or absorbent pad under fittings to catch any potential liquid leaks during transfer or when fittings are disconnected.
- 9. Fill bladder.
- 10. When bladder is full, close valves at bladder and disconnect.
- 11. Helicopter returns empty bladder and picks up full bladder to take to second team at the facility.
- 12. When refueling is complete, drain hose back into transport vehicle.
- 13. Secure transport vehicle manholes and valves (see Note 1).
- 14. Disconnect grounding bond prior to departure.

#### Second team:

1. Check to ensure isolation valves in the retention area are closed.

- 2. Unlock the tank fill cap.
- 3. Manually measure product level by inserting measuring stick to the bottom of tank to verify sufficient volume is available to receive the fuel shipment. Do not drop the measuring stick to the bottom of the tank because this may damage the tank. Wipe the stick with an absorbent pad upon removal. Chemical resistant gloves and eye protection should be worn.
- 4. Ensure bladders are placed on a level, sturdy surface.
- 5. Connect hose from bladder to pump inlet. Connect dispensing hose to pump outlet.
- 6. Place catch pan or absorbent pad under fittings to catch any potential liquid leaks during transfer or when fittings are disconnected.
- 7. Open bladder valve.
- 8. Fill tank. The fuel dispensing device should have an automatic shutoff with a grounding clamp from the nozzle to the tank shell.
- 9. When bladder is empty, close valves at bladder and disconnect for attachment to next bladder.
- 10. When refueling is complete close dispensing hose valve.
- 11. Remove dispensing hose and drain to tank.
- 12. Manually measure product level by inserting measuring stick to the bottom of tank again to confirm and document the amount of fuel delivered.
- 13. Secure fill cap.

# FIGURES

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# PHOTOGRAPHS OF EXISTING AT&T ALASCOM FACILITIES

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AT&T Alascom Mount Ripinski Microwave Facility



AT&T Alascom Point Howard Microwave Facility

Afognak Resolution 02-02 & Map

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### RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL CONCERNING PROTECTION OF LANDS IN PERENOSA BAY

WHEREAS the Trustee Council has invested nearly \$156 million to acquire and protect habitat on and near northern Afognak Island that is critical for several species injured by the oil spill, consisting of 41,549 acres along Seal Bay and Tonki Cape acquired from the Seal Bay Timber Company in 1993, 26,665 acres acquired on Shuyak Island from the Kodiak Island Borough in 1996, and 41,750 acres acquired on northern Afognak Island from the Afognak Joint Venture (AJV) in 1998;

WHEREAS the Kodiak Brown Bear Trust, American Lands Conservancy, and Rocky Mountain Elk Foundation are proposing to seek private foundation dollars to leverage public funds to further the habitation protection and restoration efforts begun by the Trustee Council on northern Afognak Island;

WHEREAS the first phase of the effort is focused on 18,000 acres of coastal habitat in Perenosa Bay currently held by AJV;

WHEREAS the AJV lands lie within and near the lands purchased by the Trustee Council that are now within Afognak Island State Park and Shuyak Island State Park, and include timber rights on 2,000 acres of land east of Pauls and Laura Lakes on which the Trustee Council acquired surface title, and their protection would help preserve the integrity of the Trustee Council's investment in the area;

WHEREAS the Trustee Council would have chosen to acquire these additional lands in order to provide contiguity in protection, land management strategies, and ownership had there been sufficient funding to do so;

WHEREAS protecting contiguous tracts of land provides further protection of wildlife movement corridors, consistency in land management strategies, and facilitates public recreational use in concert with protection of injured species and supporting habitats;

WHEREAS the AJV lands, as well as the timber reservation near Pauls and Laura Lakes, are among the lands most highly ranked for restoration value and biological significance by the Trustee Council's habitat protection process and support critical habitat for several species injured by the *Exxon Valdez* oil spill including pink salmon, Dolly Varden, Pacific herring, bald eagles, black oystercatchers, harbor seals, harlequin ducks, marbled murrelets, pigeon guillemots, river otters, and sea otters;

WHEREAS the Sitka spruce within the timber reservation represents some of the most valuable habitat for wildlife, particularly marbled murrelets and bald eagles, as well as providing stable riparian zones for pink and sockeye salmon and Dolly Varden;

WHEREAS this area has many documented anadromous streams which support populations of pink salmon, coho salmon, sockeye salmon, rainbow trout and steelhead which have significant importance to commercial fishing, subsistence fishing, sportfishing, guiding, as well as bears, eagles, and marine mammals;

WHEREAS Pacific herring spawn in Perenosa Bay and feed in nearshore waters;

WHEREAS six species of birds injured by the *Exxon Valdez* oil spill – marbled murrelet, pigeon guillemot, black oystercatcher, harlequin duck, bald eagle, and common murre -- use northern Afognak and the protected offshore waters for all or parts of their lifecycles;

WHEREAS the adjacent marine waters are highly productive and are inhabited by northern sea lions, northern fur seals, harbor porpoises, and several species of whales, with the nearshore waters of Perenosa Bay offering feeding, pupping, and calving habitat for many species of marine mammals including harbor seals and sea otters;

WHEREAS in addition to injured species, elk, deer and brown bear utilize the habitats proposed for protection and the resources they support;

WHEREAS the AJV lands in this general area contain significant archaeological and cultural resources, with some sites listed as Important by the State Historic Preservation Office;

WHEREAS protection of this area will further the Trustee Council's restoration objectives by maintaining water quality and riparian habitat for anadromous fish, river otters, and harlequin ducks; maintaining nesting opportunities for bald eagles, marbled murrelets and pigeon guillemots; minimizing disturbance to nearshore and intertidal habitat used by a variety of species; and maintaining opportunities for recreational use by Alaskans and tourists alike;

WHEREAS the Kodiak Brown Bear Trust, American Lands Conservancy, and Rocky Mountain Elk Foundation bring together knowledge of Alaska, successful experience in completing large and complex land acquisitions, private foundation support, and a significant national constituency;

THEREFORE BE IT RESOLVED that the Trustee Council strongly supports and encourages the effort underway by the Kodiak Brown Bear Trust, American Lands Conservancy, and Rocky Mountain Elk Foundation to seek funds for protection of the coastal habitat in Perenosa Bay. Approved by the Council at its meeting of December 11, 2001 held in Anchorage, Alaska, as affirmed by our signatures affixed below:

DAVE GIBBONS Alaska Region USDA Forest Service

DRUE PEARCE Senior Adviser to the Secretary for Alaskan Affairs U.S. Department of the Interior CRAIG TILLERY Assistant Attorney General State of Alaska

JAMES BALSIGER Director, Alaska Region National Marine Fisheries Service

FRANK RUE Commissioner Alaska Department of Fish and Game MICHELE BROWN Commissioner Alaska Department of Environmental Conservation

Resolution 02-02



Jack Bay Resolution 02-03

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RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL REGARDING JACK BAY SMALL PARCEL PWS 1010

DRAFT

We, the undersigned, duly authorized members of the *Exxon Valdez* Oil Spill (EVOS) Trustee Council (Council), after extensive review and after consideration of the views of the public, find as follows:

1. On December 4, 2000, the Council resolved to provide funding for the United States to purchase fee simple title to all of the seller's rights and interests in the small parcel PWS 1010, consisting of 942 acres, and to provide funds necessary for closing costs recommended by the Executive Director of the Council (Executive Director) and approved by the Council, subject to certain conditions. One of the conditions was that a title search satisfactory to the State of Alaska and the United States must be completed and that the seller is willing and able to convey fee simple title by general warranty deed to the property. The seller is the University of Alaska (University).

2. The Forest Service, on behalf of the United States, has conducted a title search of the property and determined that the University is unable to convey fee simple title by general warranty deed because the State of Alaska (State) reserved the mineral estate when it conveyed the parcel to the University as part of the University's land entitlement.

3. An appraisal approved by the state and federal review appraisers estimated the fee simple fair market value of PWS 1010 is \$1,130,000. The appraisal must be up-dated to consider the fair market value of the property without the mineral estate and the current market. The up-dated market value, however, is not expected to exceed \$1,130,000.

4. For all of the reasons detailed in the Council's resolution of December 4, 2000, the Council continues to find that the purchase of PWS 1010, even without the mineral estate, is an appropriate means to restore a portion of the injured resources and services in the spill area. THEREFORE, we resolve to provide funds for the United States to purchase all of the University's rights and interests in the small parcel PWS 1010 and to provide funds necessary for closing costs recommended by the Executive Director and approved by the Council, pursuant to the following conditions:

(A) the amount of funds to be provided by the Trustee Council to the United States shall be the approved appraised fair market value but in no instance shall it exceed \$1,130,000 for small parcel PWS 1010;

(B) authorization for funding for any acquisition described in the foregoing paragraph shall terminate if a purchase agreement is not executed by December 15, 2002;

© completion of a title search satisfactory to the State of Alaska and the United States and the University is willing and able to convey fee simple title to its estate by general warranty deed acceptable to the United States;

(D) no timber harvest, road development or alteration of the land will be initiated by the seller prior to the purchase without the express agreement of the State and the United States;

(E) completion of a hazardous materials survey satisfactory to the State and the United States;

(F) compliance with the National Environmental Policy Act;

(G) the United States shall manage the parcel as open to public access;

(H) a conservation easement on parcel PWS 1010, satisfactory in form and substance to

Resolution 02-03

the United States and the State of Alaska Department of Law, shall be conveyed by the University to the State. It is the intent of the Council that any facilities or other development on the foregoing small parcel shall be of limited impact and in keeping with the goals of restoration and that there shall be no commercial timber harvest nor any other commercial use of the small parcel except such limited commercial use as may be consistent with applicable state or federal law and the goals of restoration to pre-spill conditions of any natural resource injured, lost or destroyed as a result of the EVOS and the services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected resources as described in the Memorandum of Agreement and Consent Decree between the United States and the State of Alaska entered August 28, 1991 and the Restoration Plan approved by the Council.

By unanimous consent, following execution of the purchase agreement between the seller and the United States and written notice from the Executive Director that the terms and conditions set forth herein and the purchase agreement have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the United States Department of Justice to take such steps as may be necessary for withdrawal of the purchase price for the above-referenced parcel from the appropriate account designated by the Executive Director.

Such amount represents the only amount due under this resolution to the sellers by the United States to be funded from the joint trust funds, and no additional amounts or interest are herein authorized to be paid to the sellers from such joint funds.

Resolution 02-03

Approved by the Council at its meeting of December 11, 2001 held in Anchorage, Alaska, as

affirmed by our signatures affixed below:

DAVE GIBBONS Alaska Region USDA Forest Service CRAIG TILLERY Assistant Attorney General State of Alaska

DRUE PEARCE Senior Advisor to the Secretary for Alaskan Affairs U.S. Department of the Interior JAMES BALSIGER Director, Alaska Region National Marine Fisheries Service

FRANK RUE Commissioner Alaska Department of Fish & Game MICHELE BROWN Commissioner Alaska Department of Environmental Conservation

Resolution 02-03

Attachment A (Restoration Benefits Report)

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# Parcel ID: PWS 1010 JACK BAY

Rank:	PMSC	Acreage: 942
Location:	South shore of Jack Bay, 12 miles southwest of Va	ldez
Landowner	: University of Alaska	
Address:	Statewide Office of Land Management 3890 University Lake Drive, Suite 103 Anchorage, Alaska 99508	

**Parcel Description.** This parcel is on the south shore of Jack Bay, 12 miles southwest of Valdez. The parcel is heavily forested and borders the Chugach National Forest along the southern boundary. Jack Bay State Marine Park is located across the bay from this parcel.

**Restoration Benefits.** Acquisition of this parcel will prevent development and or timber harvest and public ownership of this parcel will protect habitat for pink salmon, Dolly Varden, Pacific herring, bald eagles, harlequin ducks, harbor seals and intertidal organisms. Acquisition will further benefit the restoration of recreation/tourism by ensuring public access to the parcel and protecting the view of Jack Bay for people entering or leaving Port Valdez by boat.

Key habitat and other attributes of this parcel include the following:

- Pink salmon and Dolly Varden. The parcel has two anadromous streams that provide habitat for pink salmon and Dolly Varden.
- Pacific herring spawn in the intertidal area adjacent to the parcel.
- Bald eagles nest on the parcel.
- Harlequin duck frequently forage in Gregoreoff Creek inlet and rest in the intertidal rocks. Breeding females have been observed and two nests were found in 1991.
- Harbor seals are often present in small numbers in Gregoreoff Creek inlet during the spawning season.
- Intertidal/subtidal habitat. The shoreline includes boulder-strewn areas and low cliffs, beaches with beachgrass, and extensive intertidal mudflats with mussel beds. Large dense eelgrass beds occur in the estuary at the mouth of Gregoreoff Creek.
- Subsistence. The parcel is a documented subsistence use area.
- Recreatoin/tourism. The area is viewed by passengers on tourboats and the ferry upon entering and leaving Port Valdez. Access to the parcel is by small boat and kayaks.

**Proposed management.** The parcel will be managed as part of the Chugach National Forest to protect and preserve resources and services injured by the oil spill.





Grant Priorities (Memo) 1 . • . .
### THE CONSERVATION FUND

Alaska Field Office 9850 Hiland Road Eagle River, AK 99577 Phone: (907) 694-9060 Fax: (907) 694-9070



421 West First Avenue, Suite 200 Anchorage, AK 99501 Phone: (907) 276-3133 Fax: (907) 276-2584

November 30, 2001

Exxon Valdez Oil Spill Trustee Council

Re: Status Report - Small Parcel Grant Agreement

Dear Trustees:

The purpose of this document is to provide you with an update on progress under the grant through the U.S. Fish and Wildlife Service to The Nature Conservancy and The Conservation Fund to acquire habitat important to the long-term restoration of species and services injured by the 1989 *Exxon Valdez* oil spill. After a lengthy review and revision process, agreements were signed with the Conservancy and Conservation Fund on September 26, 2001. The term of the agreement is approximately one year (until September 30, 2002).

Prior to and since signing, we have been consulting with Trustee agencies, potential willing sellers, and others to identify and prioritize properties for acquisition. Some of these properties were previously nominated through the small parcel program and some we have identified independent from the nomination process. The attached table summarizes likely prospects we are actively exploring.

The 13 "Action Properties" total 939 acres with an estimated price tag of \$1,362,200. Additional due diligence and closing expenses are estimated at \$60,000. We are confident that we will be able to consummate a number of these deals, but are equally sure that we will not reach agreement on some properties. We plan to provide a full briefing at the December 11, 2001 meeting of the Trustee Council.

We have also listed a number of properties that are on our radar screen that we are evaluating. Some of these we may choose to bring forward to the Trustee Council at a later meeting contingent on further evaluation and our progress on the Action Properties.

We would like authorization to proceed on negotiations, including securing appraisals, on the full list of properties listed as "Action Properties".

Sincerely,

Brad Meiklejohn TCF Alaska Representative Randy Hagenstein TNC Program Director

#### EVOS Habitat Protection Grant: Summary of Proposed Parcels

1-Dec-01

#### Action Properties:

							Disposition			Ra	ting			
Tract:	Location:	Acres:	Est. Value:	S/acre:	Basis:	Agency:	Unit:	S/acre	Biology:	Threat:	Enh. My	gt. Leverage:	Overall:	Notes:
Hopkins et al.	Kachemak Bay	75.66	82,200	1,086	assessment	State Parks	K. Bay SP	L	м	м	н	L	м	inholding; asking \$240,000
Univ. of AK	Kachemak Bay	40	35,000	875	min. bid	State Parks	K. Bay SP	L	М	М	Н	L	М	inholding; avail. over the counter
Ness	Kachemak Bay	48.35	60,000	1,241	asking	State Parks	Overlook Park	L	М	М	н	L	М	important connection from Diamond Cr. To Overlook Park, listed through Bay Realty
Doyle	Port Graham	160	150,000	938	BIA appraisal	Pt. Graham Cont	munity Trust/TNC	L	М	н	L	H	М	Community trust model; EVOS share may be \$150k of \$385K
Knol	Anchor R.	37	80,000	2,162	appraisal	ADFG	-	M	н	н	М	н	Н	Contiguous with following 2 properties
Nakada	Anchor R.	5	23,500	4,700	assessment	ADFG		м	н	н	М	н	н	private money/bargain sale
Herndon & Thos	Anchor R.	60	90,000	1,500	asking	ADFG		L	н	н	м	н	Н	likely value is slightly lower than asking
Kurka	Anchor R.	40	265,000	6,625	appraisal	ADFG		м	М	н	М	L	M	
Ninilchik NA	Deep Creek	10.93	60,000	5,489	RH estimate	State Parks	Deep Creek	м	н	н	н	М	н	State Park may seek cost share
Univ of AK	Nuka Island	22.51	76,500	3,398	assessment	State Parks	K. Bay SP	м	н	М	н	м	н	State Parks may provide some inkind
Chokwak	Kiliuda Bay	160	160,000	1,000	BIA appraisal	DNR	Shearwater Peninsula	L	н	н	н	м	н	Would compliment Kiliuda/Sitkalidak exchange
Ericksen	Kiliuda Bay	120	120,000	1,000	RH estimate	DNR	Shearwater Peninsula	L	н	н	н	м	н	Would compliment Kiliuda/Sitkalidak exchange
Inga	Kiliuda Bay	160	160,000	1,000	BIA appraisal	USFWS	Kodiak NWR	L	н	м	н	L	М	Last private tract on south shore of Kiliuda Bay
-		939	1,362,200											

#### Properties under evaluation:

Bowman et al. Jnknown	M L M mostly state land on island; listed through Remote Property
Jnknown	te t tt the second second
	H L H Homer Indune ad
MIDCO	H M Important marine bird research site
City of Kenai	M H H NAWCA match available
Salamatof	
Sacaloff	
Noya (heirs)	
Aga (heirs)	
Malutin	
Vekeffer	
Berestoff	
Zeeder	
MIDCO City of Kenai Salamatof Sacaloff Noya (heirs) Aga (heirs) Malutin Nekeffer Berestoff Zeeder	H M Mimporta M H H NAWC

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### Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



### **MEMORANDUM**

TO:	Trustee Council
FROM:	Molly VicCammon Executive Director

DATE: December 3, 2001

#### **RE:** Scientific advice

Attached is a draft process for developing scientific peer review and advice for the GEM Program. The concepts have been discussed with the National Research Council review committee, but this is the first attempt to more fully develop a proposed process. In order to keep the GEM Program moving forward, I would like to implement the Scientific and Technical Advisory Committee by May, 2002. The subcommittees would be formed in June.

At your December 11 meeting, I would like to discuss these concepts in detail with you. Your approval is needed by late January, 2002.

#### Gulf of Alaska Ecosystem Monitoring and Research Program

#### Draft Process for Selecting the Scientific and Technical Advisory Committee (STAC), subcommittees, and working groups December 3, 2001 Draft

#### Addendum to Program Management (GEM Program Document, Volume I, Chapter 6)

(*References to Volume numbers refer to the August Draft of the GEM 2001 Program Document*)

**Introduction.** This document proposes a new process for providing scientific and technical advice for the GEM Program. Trustee Council staff have discussed this process at length with the National Research Council's review committee on GEM. The process addresses both broad policy guidance relating to overarching scientific issues, as well as specific advice on individual projects. The process includes establishing an infrastructure of a prime Scientific and Technical Advisory Committee with a number of subcommittees and ad hoc work groups that report to the Trustee Council through the Executive Director and staff. Establishing this infrastructure will proceed in a "top down" fashion, with the selection of a Scientific and Technical Advisory Committee (STAC) by the Trustee Council with the advice of an independent nominating committee, the selection of the subcommittees by the Trustee Council with the advice of the STAC, and the occasional selection of a work group by the Trustee Council or Executive Director with the advice of the subcommittees, the STAC or the Public Advisory Group (now proposed as the Program Advisory Committee).

#### Scientific and Technical Advisory Committee (STAC)

Purposes

- 1. The STAC will select the subcommittee members from among nominees provided by the Executive Director.
- 2. The STAC will work with the subcommittees to provide leadership in identifying and developing testable hypotheses relevant to the central questions of the GEM plan, consistent with the mission, goals and policies of the Trustee Council.
- 3. The STAC will help identify and recommend syntheses, models, process studies, and other research activities for the *Invitation to Submit Proposals*.
- 4. The STAC will work with the subcommittees and ad hoc work groups in identifying core variables and core monitoring stations.
- 5. The STAC will assist Trustee Council staff in identifying peer reviewers and participate in peer review at the broad, programmatic level.

#### Membership

- 1. The STAC has seven voting members: six regular members appointed by the Trustee Council and the GEM Chief Scientist. QUESTION: SHOULD STAFF BE A VOTING MEMBER?
- 2. The six Trustee Council-appointed members shall be drawn from the academic or private scientific sectors (no more than 4), from the government scientific sector

Draft ISNC, STAC, subcommittee, work group process November 21, 2001 ·

(no more than 2), and from the technical (includes specialties such as community involvement, mariculture and subsistence) sector (1), and shall together possess expertise in the habitats and disciplines of the Alaska Coastal Current and offshore, the intertidal and subtidal (nearshore), the watersheds, modeling, resource management, human activities and their potential impacts, and community-based science programs. QUESTION: IS THE BREAKDOWN APPROPRIATE?

- 3. At least four of the STAC members will also serve on the Program Advisory Committee (former Public Advisory Group).
- 4. The members of the STAC are emeritus and senior scientists and others selected primarily for their expertise, broad perspective, and leadership in areas important to the GEM Program. They can not be principal investigators for GEM projects.
- 5. The chairs of the five subcommittees shall be non-voting members of the STAC. QUESTION: HAVING THE CHAIRS ON THE STAC FOSTERS PROGRAM COORDINATION, BUT IT NOW MAKES THE STAC A 12-MEMBER COMMITTEE. TOO MANY?
- 6. With the exception of the GEM Chief Scientist, the regular members of the STAC shall serve single terms of three years, except during the first three years of the program when two members shall serve single terms of three years, and two shall serve single terms of two years. The STAC shall select its own chair.
- 7. After serving on the STAC, a person is not eligible to serve again on the STAC for three years, with the exception of a person who was appointed from the list of alternates to complete a partial term. A person appointed as an alternate is eligible to be nominated to an open membership slot to serve a full term. QUESTION: SHOULD THE LAY-OFF PERIOD BE 1 YEAR INSTEAD OF 3?
- 8. In the event of a vacancy prior to the end of a term, the Trustee Council shall appoint a replacement from among the list of alternates. Inactive members may be removed by the Trustee Council from the STAC membership.

#### Nominating Process for STAC

The Executive Director will issue a public call for nominations to serve on the STAC. The call will identify the types of expertise and the qualifications the Trustee Council desires to see for the nominees. Any person (including oneself) or organization is free to make a nomination. Those nominating a person – or the person being nominated -- will be asked to submit a one page synopsis of the qualifications of the nominee to the Executive Director. At the request of the Executive Director, a Nominating Committee will convene to develop a recommended list of 6 nominees with 2 alternates. The Nominating Committee may suggest other names if there are gaps in desired expertise among the nominees. The list of nominees will be forwarded to the Trustee Council by the Executive Director. **QUESTIONS: WHAT IF COUNCIL WANTS SOMEONE NOT ON LIST? IS THIS PROCESS TOO FORMAL?** 

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#### STAC Nominating Committee

#### Purpose

The STAC Nominating Committee will review nominations for the STAC and make recommendations for appointments to the Trustee Council through the Executive Director.

#### Membership

- The STAC Nominating Committee will be composed of seven members who are not regular employees of agencies represented on the Trustee Council and who are not currently receiving financial consideration from the Trustee Council. QUESTION: SHOULD TRUSTEE AGENCY EMPLOYEES BE PROHIBITED FROM SERVING ON NOMINATING COMMITTEE WHEN THEY AREN'T PROHIBITED FROM SERVING ON THE STAC?
- 2. The members of the nominating committee shall be professionals and other members of the public who are familiar with the development and operation of regional marine monitoring programs similar to GEM.
- 3. There shall be at least three members who reside in Alaska. QUESTION: IS THIS A SUFFICIENT NUMBER?
- 4. A STAC nominee may not serve on the Nominating Committee.
- 5. The Executive Director shall recommend to the Trustee Council nominating committee composed of individuals who meet the established criteria and have agreed to serve if appointed.
- 6. The Trustee Council shall appoint the members of the nominating committee.

#### **Rules of procedure**

- 1. The Nominating Committee shall select a chair by majority vote to conduct the meetings.
- 2. The Nominating Committee shall establish a process for developing a recommended list of nominees for the STAC. QUESTION: SHOULD THERE BE AN ESTABLISHED, FORMAL PROCESS FOR THIS?
- 3. The Nominating Committee may suggest other names if there are obvious gaps in the expertise of the nominees.
- 4. The chair shall submit the lists for STAC and alternates to the ED, who shall submit them to the Council for its action.

#### Subcommittees

Purposes

- 1. A subcommittee will recommend to the STAC testable hypotheses, topics for RFP's, and appropriate peer reviewers in their broad habitat type for proposals and reports.
- 2. A subcommittee will identify possible locations of core monitoring stations and implementation strategies for measuring monitoring variables that are relevant to the key questions and testable hypotheses.
- 3. A subcommittee will, if requested, help organize the peer review on proposals and reports in their broad habitat types. Trustee Council staff will provide logistical support.

3

#### Membership

- 1. A subcommittee is composed of 5 individuals: scientists, resource managers, and/or other experts selected primarily for their disciplinary expertise and familiarity with a broad habitat type (watersheds, intertidal and subtidal, ACC, or offshore). Other criteria include institutional and professional affiliations in order to promote collaboration and cooperation.
- 2. Each subcommittee member serves three years. The subcommittee selects its own chair, usually as the person's third year on the committee.
- 3. Nominees who agreed to serve, but were not selected by the STAC, could become ad hoc members of the subcommittee. Ad hoc members may serve as peer reviewers, recommend peer reviewers, and would automatically be considered as nominees to fill openings on subcommittees.

4. Subcommittee members may include principal investigators of GEM projects. QUESTIONS: IS 5 THE RIGHT NUMBER? IS IT APPROPRIATE TO HAVE PI'S ON SUBCOMMITTEE?

#### **Nominating Process**

- 1. The Executive Director will issue public calls for nominations to the subcommittees. The announcements will list desirable qualifications and other nominating criteria.
- 2. The STAC will review the nominees and make recommendations to the Trustee Council for their consideration.

#### <u>Work Groups</u>

#### Purposes

- 1. A Work Group will recommend to the subcommittee, the STAC and/or the Trustee Council courses of action on the task for which the work group has been established.
- 2. A Work Group may advise on strategies for implementation of specific monitoring and research tasks.
- 3. A Work Group may help organize the peer review on proposals submitted to address the task for which the work group has been established.

#### Membership

- 1. Any number of individuals may be appointed to work groups established by the Trustee Council, the STAC or the Executive Director. Expertise will depend on the issue to be addressed.
- 2. Work groups are expected to be issue specific and of a limited duration.



CIIMMS

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Unlocking Alaska's natural resource information

Alaska's Cooperatively Implemented Information Management System

#### http://info.dec.state.ak.us/ciimms

*CIIMMS*, Cook Inlet Information Management and Monitoring System was initiated as EVOS project 99391, with an initial focus on the Kenai River, expanding to Cook Inlet in 2000 and statewide following completion of EVOS funding requirements in 2001. CIIMMS was implemented in phases, both geographically and functionally.

CIIMMS provides an interactive website that links a geographically distributed system of information providers. Through the CIIMMS website, users are able to identify and access, download and print, information ranging from primary data (geospatial and tabular) to reports, project descriptions, and other documents across a variety of themes such as habitat, land use, pollution and water quality, with a specific geographic focus. CIIMMS also provides on line tools to make it easy to contribute information to the CIIMMS network.

CIIMMS consists of hardware, software and information. CIIMMS establishes a framework for sharing and managing information efficiently and cooperatively, as well as tools to assist in this effort. CIIMMS provides guidelines on how to implement various aspects of the CIIMMS framework.

#### What CIIMMS Does:

- Help find answers to questions,
- Provide information relative to a query based on search terms selected because of a question,
- Help focus searches and increase relevance of responses,
- Provide a structure for cooperatively sharing resource information,
- Provide tools to access and retrieve information from disparate sources,
- Use and rely on standards, and also work in spite of a sometimes, frustrating lack of standards.

#### What CIIMMS Doesn't Do:

- Think for you,
- Set standards,
- Automatically get your data,
- Survive unattended,
- Analyze data,
- Synthesize data.

#### What CIIMMS Can Do

- Grow and expand to visually present information and data through the Open GIS protocols that are the foundation of the map-based search as technology matures.
- Become more robust and useful over time, its usefulness increasing exponentially relative to the number of contributions.

*CIIMMS*, Cook Inlet Information Management and Monitoring System became Alaska's Cooperatively Implemented Information Management System in July 2001.

#### Accomplishments:

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- Scanned and provided on line, all completed EVOS final reports.
- Worked with F&G to provide the Anadromous Waters Catalog data and information on line as well as Habitat Guides and 309 Kenai River Database.
- Provided on line connectivity to the DNR Well Log Tracking Database.
- Provided on line connectivity to the University of Alaska, Environmental and Natural Resources Stream Team Database.
- Demonstrated feasibility of a distributed system using servers located at DEC and ADNR with connectivity to a variety of data servers.
- Connectivity with:
  - > Alaska Resources Library and Information Services (ARLIS)
  - > Alaska State Library, Juneau, Fairbanks
  - Anchorage Municipal Library
  - Alaska Geographic Data Clearinghouse
  - Alaska State Geographic Data Clearinghouse
  - Municipality of Anchorage Clearinghouse
- Documentation (metadata) of ENRI Gray Literature compilation focusing on Cook Inlet.
- On line map based search capability using open GIS protocols and connectors.
- Cross profile search capability.
  - > Bibliographic
  - > Tabular
  - > Spatial
  - ➢ Biological
  - > Web
- Extensive system documentation.
- CIIMMS project database.
  - Entry of all EVOS projects
  - Entry of all 319 projects
  - Entry of a variety of Coastal Zone Management documents focusing on Cook Inlet
  - > Entry of USFS documents pertaining to study area.
  - CIIMMS metadata database with on line data entry and controls.
    - ADF&G spatial metadata and data made available in conjunction with CIIMMS and Alaska State Geographic Clearinghouse.
    - > DNR EVOS spatial metadata entered using CIIMMS
- On line map based data entry function.
- Data entry link with Alaska State Geographic Data Clearinghouse.
- Web crawl to collect web pages for indexing and highly targeted searching.

#### **On Going Efforts**

- Real time, on line connectivity to ADF&G Anadromous Streams Database using Open GIS Connector.
- Catalog, metadata, and on line availability of EVOS mapping products.
- Connectivity with EPA STORET Database for Alaska.
- Connectivity with DEC facilities database.
- ADF&G documents pertaining to Cook Inlet have been scanned; metadata to be provided by ADF&G Commercial Fish Division and Division of Habitat.
- University of Alaska Fairbanks Library connectivity February 2002.
- Geographic expansion to Southeast, Prince William Sound, and Fairbanks.

Misc. Articles and Letters

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Anchorage Daily News

#### **11 groups argue Exxon owes Sound \$100 million** RECOVERY: Oil company says area is robust,' but biologists disagree.

By Doug O'harra Anchorage Daily News (Published: August 31, 2001)

Herring populations that crashed amid disease. Pink salmon runs with high death rates and possible genetic damage. Killer whale families in decline. Evidence of oil leaching into the food chain.

Arguing that these and other examples prove the Exxon Valdez oil spill has continued to damage Prince William Sound in unexpected ways over the past decade, a coalition of local and national conservation groups Thursday called for state and federal leaders to bill Exxon Mobil Corp. another \$100 million, beginning in 2002.

"The damage is severe," marine biologist Rick Steiner said. "It's ongoing. Some of it may have been anticipated 10 years ago. Much of it clearly was not."

Exxon's response was blunt.

"The ecosystem in Prince William Sound is healthy, robust and thriving," company spokesman Tom Cirigliano said in a telephone interview from Irving, Texas. "There are other areas in the world with worse spills that have recovered, and we believe Prince William Sound has recovered too."

The stark contrast between how the oil company and some others -- including the state-federal Trustee Council and local conservationists -- view the Sound's recovery from the 1989 spill of 11 million gallons may not be new. But whether Exxon must spend additional millions for restoration projects between Sept. 1, 2002, and Sept. 1, 2006, will become a critical issue during the next few years.

A key provision of the \$900 million court settlement from 1991 requires Exxon to pay up to \$100 million extra to restore habitats, populations or species that had suffered substantial and unanticipated losses. But to get the money, state and federal governments must provide detailed plans and evidence and meet certain other requirements.

Only two days before the final scheduled payment of the court settlement Saturday, representatives of 11 groups -- including the Alaska Center for the Environment, the National Wildlife Federation and the Coastal Coalition -- gathered at the Federal Building in Anchorage to argue that the government needs to start preparing now to force Exxon to pay the extra money by Sept. 1 of next year. They outlined their reasons in a letter sent to President Bush and Gov. Tony Knowles.

"As Alaskans we feel great concern for the continued lack of recovery to the injured resources," said Michelle Wilson, of the center for the environment. "Today we urge the state and federal governments to immediately bill Exxon for unanticipated damages."

But Craig Tillery, a state assistant attorney general who deals with environmental issues and sits on the Trustee Council, said that it's too soon for the government to press for the money.

"The race isn't to get as much money as you can by a certain date," he said. "The point is to get as much money as you need to restore the environment."

Under the "reopener for unknown injury" clause in the settlement, the cost of any restoration project cannot be "grossly disproportionate" to the benefits and must deal with a problem that could not have been reasonably known, Tillery said. Finally, the government must provide detailed plans. The claims can be made through 2006.

"This reopener is an opportunity to correct things that we were either mistaken about or everybody overlooked at the time of the original settlement," Tillery said. "You have to be pretty cautious. . . . You might not get another chance."

In a written statement, Exxon called it premature to raise the issue.

"There is no way for us to speculate on what the government might claim, if anything," the statement read. "If and when a claim is made, the government will need to support it with appropriate data, and we will evaluate it at that time."

But Steiner and other people said that the evidence for ongoing and unanticipated injury is too compelling to wait.

"Why wait until 2005 or into 2006 and then have to argue this out in court?" Steiner asked. "We ought to do what we can now. The sooner the better for the ecosystem."

At the Federal Building on Wednesday, Steiner showed charts that detailed chaotic fluctuations in Sound populations since the early 1990s. He noted that the Trustee Council, which oversees research into the Sound's condition, lists only two species as recovered from the oil spill and six species as not recovering at all. He provided lists of three species of marine mammals, five categories of fish and four groups of birds that have suffered unexpected problems during the past decade.

At one point, Steiner held up a jar of oiled gravel collected from Sleepy Bay on Latouche Island last month.

"We still have oil on the beaches of Prince William Sound," Steiner said. "This is still toxic, and it's still relatively unweathered, and it's still causing toxic contamination in the food web."

As it has in the past, Exxon disputed any notion that the Sound remains impaired.

"Certainly there were severe short-term impacts on many species due to the spilled oil, and they suffered damages," the company said in the statement. "But, based on studies of many scientists who have worked extensively in (the Sound), there has been no long-term damage caused by the spilled oil."

"That's ludicrous," Steiner responded Thursday.

Doug O'Harra can be reached at do'harra@adn.com and 257-4334.

Close Window

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# Hatchery expands shellfish production

**FACILITY:** Output includes oysters; clams, cockles and geoducks.

By MCKIBBEN JACKINSKY Protection The Associated Press 1019 (1999)

KENAI — Don't let the quiet inside the Qutekcak Shellfish Hatchery fool you. Most of the activity in the 7,500square-foot building on the shore of Resurrection Bay takes place beneath the surface and behind the scenes.

face and behind the scenes. The Seward hatchery is home to scallops, little neck clams, geoducks, oysters and cockles at varying stages of development.

They are the results of an intricate network of tanks and pipes, some pipes delivering filtered water from Resurrection Bay, others serving up species-specific food.

species-specific food. When the state-owned hatchery opened in 1998, it focused on oysters and the clams.

Since then, geoducks and scallops have been added. This year, the hatchery became the first place to successfully reproduce cockles in captivity.

Captivity. Before wild brood stock arrives at the hatchery, the Fish and Game Department's pathology lab inspects the animals for disease. Before animals are shipped from the hatchery to the wild, they are checked again.

checked again. "They're clean going in' and clean coming out," hatchery director Ron Long said There are 52 shellfish farms in Alaska, spreading from Metlakatla in Southeast to Kachemak Bay. Of thoses 42 are active, "Long" said "We're supplying seed to over half of them."

It's a far cry from 1995, when the Kenai Peninsula Economic Development District conducted a survey to determine the potential feasibility of expanding the shellfish farming industry in Alaska and the obstacles to be overcome.

overcome. "The prime thing they found was the lack of a consistent and quality supply of seed," Long said. "The second thing was lack of diversi-

See Page B-7, SHELLFISH

· 清新植生态 344人

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#### ANCHORAGE DAILY NEWS MONDAY, AUGUST 27, 2001

## **SHELLFISH:** Spill money financed facility

#### Continued from B-1

ty. All the farmers' eggs were in one basket, and they were competing with farmers from other states."

It was clear from the report that Alaska oyster farmers needed to expand to other species.

But under state law, oysters are the only shellfish seed that can be imported.

Alaska farmers were getting it from Washington state.

"Washington hatcheries are also farms," Long said. "And they hatch primarily for their own use. That dovetails in with lack of consistency and quality since what they made available were the leftovers."

The answer was an in-state hatchery.

The Alaska Legislature appropriated \$3.2 million from the Exxon Valdez oil spill settlement to build the facility. Seward was selected as the location because of Resurrection Bay's clear water. Building be- in other parts of the nation as well lion pounds of clams a year to satisgan in 1996.

"It was clear at the time that there was to be no continued funding," Long said. "An operator had to be selected to do the operations and maintenance."

Owned by the Alaska Department of Fish and Game, the hatchery was leased to the city of Seward.

Seward, in turn, assigned maintenance to the Qutekcak Native Tribe, which had had success spawning little neck clams at a pilot hatchery nearby.

"They are the only ones that had done that in Alaska," Long said of Qutekcak's success with the clams.

The biggest challenge for the Seward hatchery is to keep afloat financially while research like the cockle reproduction project is being done and state regulations are taking shape. The goal is to eventually focus on the business of making seed more readily available to farmers. The original plan called for that to happen within five vears. More recent projections place that at eight

years.

to but had no success.

"They backed off after Qutekcak's success."

There is a growing interest in Alaska shellfish, but, Long said, "the rest of the world is light years grants as well as seed sales. ahead of us."

as Australia, China, Japan, Europe, Scandinavia and Canada.

fish industry grosses \$50 million said. annually.

\$40 million.

One island in Florida saw a 10- to other locations as well. year growth from zero to \$40 million after an initiative banned gill- significant," he said. nets.

The biggest challenge for the Seward hatchery is to keep afloat fi- sell oysters for approximately \$1.25 nancially while research like the each, and high-end "white tablecockle reproduction project is being done and state regulations are San Francisco are selling them for taking shape.

The goal is to eventually focus

that has spawned little neck clams. more readily available to farmers. Washington hatcheries attempted The original plan called for that to happen within five years.

More recent projections place that at eight years.

Meanwhile, the hatchery is funded by government and private

"We're operating at a trade Hatcheries have been developed deficit right now, importing 1.5 milfy the demand in Anchorage because there aren't enough grown In British Columbia, the shell- here to meet that demand," Long

He foresees a time when Alaska In Washington state, it totaled will produce enough shellfish to meet the needs in-state and export

"The return on investment is

Oyster seed sells to farmers for approximately a penny, farmers cloth" restaurants in New York and \$6 each.

"Those are the places starting to "They still remain the only place on the business of making seed demand Alaska oysters," he said.



purple hinged rock scalloos inside the hatchery.

Ron Long, program director of the Qutekcak Shellfish Hatchery in Seward, holds two



# Chugach Regional **Resources** Commission

### H|V|

	•	
Chenega Bay		
Eyak		
Nanwalek	DATE:	November 30, 2001
Port Graham	TO:	Molly McCammon, Executive Director
Qutekcak Native Tribe		Exxon Valdez Oil Spill (EVOS) Trustee Council
Tatitlek	FROM:	Patty Brown-Schwalenberg, Executive Director
Valdez Native Tribe		Chugach Regional Resources Commission
	RE:	FY02 Community Involvement Project Detailed Project Description

I received your fax regarding your recommendation to the Trustee Council on Project 02052 Community Involvement/Planning for GEM. I appreciate your willingness to work with the communities in taking the time needed to formulate a transitional project that will be meaningful to all parties. As you know, Sarah Ward resigned from her position as Community Involvement Coordinator and we are still working with Sandra Schubert of your staff to develop a revised position description that will fit within this program as well as the Lower Cook Inlet Waste Management Project.

We continue to work with extremely limited staff on completing the reports for 00052, 00610 and 01131, and to complete all five of the tribal natural resource management plans as outlined in the previous year's DPD, keeping in mind that we are currently working on a myriad of critical issues. These issues include the reauthorization of the right-of-way for the Trans Alaska Pipeline, facilitation of the Inter-Tribal Oil and Gas Coalition and its associated video production, developing testimony for the proposed regulations for the subsistence harvest of halibut, continuing development of the Tribal Community Fund concept, conducting non-EVOS related fisheries research projects, development of an inter-Tribal GIS system and database, as well as participation in federal, Tribal, and state working groups addressing other natural resource issues. As you can see, we have many irons in the fire and again, I appreciate your continued commitment to meaningful community involvement and your willingness to work with us to ensure we develop a DPD that is successful.

# Cordova District Fishermen United

Celebrating 65 Years of Service to Commercial Fishermen in Cordova, Alaska P.O. Box 939 Cordova, Alaska 99574 / Telephone (907) 424-3447 / Fax (907) 424-3430

November 30, 2001

EVOS Trustee Council 1689 C Street, Suite 100 Anchorage, AK 99501-5151

#### SENT VIA FACSIMILE TO 907.276.7178

Dear Members,

As the oldest fishing organization in the state, Cordova District Fishermen United also sadly has the distinction of representing fishermen in the spill-impacted area of Prince William Sound. As such, we feel uniquely qualified to impress upon you our strong support for work such as the project proposed by Ken Adams and Ross Mullins which attempt to provide direct benefits to the fishing communities so radically impacted by the *Exxon Valdez* spill. We sincerely believe that there must be a focused effort by EVOS and others involved in research in the Gulf and Prince William Sound to develop and fund projects, which produce practical and accessible results that provide direct benefits from improved management, and predictive capabilities to the oil spill impacted communities dependent upon marine resources.

While the SEA program has advanced our understanding of how the marine ecosystem in PWS functions in many ways, practical and affordable applications of this knowledge to improve resource management have fallen short of the original objectives of the program. This continues to be a significant source of discontent and frustration with the EVOS process within the fishing community in Prince William Sound. Ken and Ross' proposal represents the type of focus that must be incorporated into any EVOS-funded projects - and especially GEM - so that research, restoration and monitoring provide more direct and practical benefits to marine resource dependent communities.

We hope that scientific review and discussions with the PAG, which includes representatives from the fishing community, will lead to your support and funding

for the kinds of projects that Ken and Ross have proposed, both now and in the future.

We look forward to discussing our recommendations to you in greater depth should you desire. Please don't hesitate to contact us if we may be of any assistance.

Sincerely,

Sue aspelund.

Sue Aspelund Executive Director

cc: EVOS PAG

November 20, 2001

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North Pacific

Ms. M. McCammon Executive Director *Exxon Valdez* Oil Spill Trustee Council 645 G Street, Suite 401 Anchorage, Alaska 99501-3451 U.S.A.

#### RE: Letter of support for the North Pacific Ecosystem Status Report

Dear Ms. McCammon,

Firstly, we are very pleased with your interest and offer of support to assist with the production of a North Pacific Ecosystem Status Report. This report would be an international compilation of the status and trends at all ecosystem levels and their forcings in the North Pacific (open ocean and shelf areas). We believe that our cooperative international efforts in this area will provide a timely and significant product that will communicate progress in scientific understanding to a more diverse audience, including policy- and decision-makers.

At our Tenth Anniversary Meeting in Victoria last month, the PICES Science Board discussed the North Pacific Ecosystem Status Report in more detail. There was general agreement that the first effort should not be too ambitious; rather PICES should seek to set achievable goals, and to develop future versions of the report by building on successes that are achieved in the first attempts. As this type of report has not been produced previously in the North Pacific, the Science Board members felt that the first report should be considered as a pilot project, and in that light, they discussed your suggested changes to the draft outline of the report. Even though our Science Board saw merit in including a section on human uses and activities, it concluded that for the initial reports, addition of this topic was more ambitious than members were willing to consider at this time. Clearly this is an important topic for PICES to take into account in the future, and the GEM reports on the state of the Gulf of Alaska marine resources may provide useful guidance to PICES in this area. A similar report for the North Atlantic, prepared by the OSPAR Commission, is also heavily weighted toward describing the effects of human interventions on marine ecosystems.

Although the review and editorial process has not been completely established yet, there was strong support among the Science Board members to maintain the editorial function within the PICES community. PICES will take adequate measures to ensure that each input from various nations, regions and organizations is accurately represented in the North Pacific Ecosystem Status Report (current plans for the pilot report preclude substantial amounts of interpretation by PICES scientists) and each contributor will be given the opportunity to review the report, but final responsibility for the contents should rest with PICES.

Secretariat

c/o Institute of Ocean Sciences P.O. Box 6000, Sidney, B.C., Canada. V8L 4B2 Phone: (250) 363-6366 Fax: (250) 363-6827 E-Mail: <u>pices@ios.bc.ca</u> Secretariat@pices.int

Chairman

Hyung-Tack Huh

Vice-Chairman Vera Alexander

Executive Secretary Alexander S. Bychkov Our ultimate goal is to produce a report that describes not only the state of marine resources in the North Pacific, but the reasons for the current state, and the forecast of future states. If this approach is acceptable, your generous offer of US \$10,000 to the project would be most graciously accepted.

Sincerely yours,

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Abychkor

Alexander Bychkov Executive Secretary

Cc: Dr. R. Ian Perry (PICES) Dr. Phillip Mundy (GEM)

#### THE CONSERVATION FUND

October 17, 2001

Carol Fries Commissioner's Office Alaska Department of Natural Resources 550 West 7<sup>th</sup> Avenue, Suite 1400 Anchorage, Alaska 99501

RE: Sitkalidak Island Land Exchange

Dear Carol,

I am writing on behalf of The Conservation Fund to comment on the Sitkalidak Island Land Exchange.

The Conservation Fund has had a sustained interest in land conservation throughout the Kodiak Island archipelago since 1992. Dr. Bob Putz was directly involved in many of the large parcel negotiations, while I have directed the purchase of fifty-three separate small parcel properties. We have worked closely with the Exxon Valdez Oil Spill Trustee Council on Kodiak Island projects and will continue to do so 1047-012 under the recently-signed Habitat Protection Grant Agreement.

Throughout our tenure on Kodiak Island we have maintained a strong interest in the protection of wildlife habitat on Sitkalidak Island. We believe that Paragraph 20b (iii) of the 1995 Agreement Between Old Harbor Native Corporation and the United States of America is the controlling document regarding conservation on Sitkalidak Island. Paragraph 20b iii directly addresses the conservation of Sitkalidak Island:

"Old Harbor Native Corporation agrees to convey to an appropriate entity, either a federal or state conservation agency, or an appropriate non-profit conservation organization, a conservation easement in perpetuity that reflects the objectives in Paragraph 20b."

The 1995 Agreement is unambiguous to the fact that Old Harbor Native Corporation (OHNC) would convey a perpetual conservation easement for the long-term conservation of Sitkalidak Island. Indeed, a number of the maps put out by the Trustee Council show Sitkalidak Island as being protected under a conservation easement resulting from the 1995 Agreement. However, to date the OHNC has not fulfilled its obligations under the 1995 Agreement and has not conveyed a conservation easement on . . Sitkalidak Island. ang taon ang taon na sina na si Ng taong t 

BRAD A. MEIKLEJOHN ALASKA REPRESENTATIVE 9850 HILAND ROAD EAGLE RIVER, ALASKA 99577 (907) 694-9060 FAX (907) 694-9070

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EXMON LALBEZ GRESFILL TRUSTEE COUNCIL

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The Conservation Fund has made numerous attempts to secure the conservation easement specified under the 1995 Agreement. In 1996 The Conservation Fund, in a gesture of goodwill, purchased and donated six sea kayaks to Old Harbor. From 1996 to 1998 The Conservation Fund brought tourism experts and conservation experts to Old Harbor to advise on ecotourism opportunities. In 1998 Dan Sakura, Dr. Bob Putz, and Richard Erdmann and I met with Walt Ebell and Roy Jones to discuss the conveyance of the conservation easement. At that meeting it became apparent that OHNC was not prepared to convey the easement without additional compensation.

It is our opinion that the Sitkalidak Island conservation easement was paid for under the 1995 Agreement and that no further compensation is due OHNC for the easement. OHNC has argued differently before the Trustee Council, claiming that OHNC will only convey a conservation easement on Sitkalidak Island if it receives additional "fair and reasonable compensation."

We believe that this background information on the Sitkalidak Island conservation easement forms the context for examining the merits of the proposed land exchange between OHNC and the State of Alaska. The easement and the exchange are linked together in Paragraph 20b of the 1995 Agreement. In a letter to Alex Swiderski dated September 17, 1998 OHNC agreed that the easement and exchange "be linked together and move forward in tandem." It is our understanding that the Trustee Council agreed to provide funding to execute the exchange provided that the easement and exchange moved forward as a package.

Old Harbor Native Corporation is represented by very talented counsel. We are concerned that OHNC has found an artful way to dodge its responsibilities under the 1995 Agreement. We are concerned that, instead of conveying the perpetual easement required under Paragraph 20b iii of the 1995 Agreement, OHNC now proposes a ten-year "standstill" agreement at a price of \$100,000 per year. Not only is there no basis for the \$100,000 figure, we are concerned that this figure further validates OHNC's unreasonable expectations of "fair and reasonable compensation" for an easement it has already been paid for. The path we are being led down is that if the ten-year standstill agreement is worth \$1 million, then certainly a perpetual easement is worth many millions more.

The Best Interest Findings document on the proposed exchange states that:

"OHNC has agreed that the lands acquired by OHNC along with the remainder of its lands on Sitkalidak Island would not be developed for a period of ten years from the date of the final exchange and to negotiate in good faith with the United States Fish and Wildlife Service to reserve a perpetual conservation easement on its holdings on Sitkalidak Island." According to counsel for OHNC, no documents have been drafted or executed which describe, define, or record either the standstill agreement or the perpetual conservation easement. Based on the lack of performance under the 1995 Agreement, we see no reason to take it on faith that a standstill agreement, not to mention a perpetual easement, will ever be forthcoming. The Old Harbor Native Corporation is attempting to move the goalposts.

While the proposed exchange may be worthy on its own merits, we can only support the exchange if a perpetual conservation easement is executed at or prior to the exchange. We do not feel that additional compensation for the easement is warranted. If the exchange is consummated prior to a perpetual conservation easement, any remaining leverage to secure the conservation easement will be lost.

We ask that the State of Alaska require the execution of a perpetual conservation easement on Sitkalidak Island as a specific condition of the proposed exchange:

Sincerely

Brad Meiklejohn

Cc: Molly McCammon EVOS Trustee Council Pat Pourchot Marty Rutherford Walt Ebell, Esq. Dr. Bob Putz Glenn Elison Todd Logan Alex Swiderski Barry Roth

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### Lingering Oil: Bioavailability and Effects to Prey and Predators

Project Number:	02585					
Restoration Category:	Research and Monitoring					
Proposers: Part I: NOAA- ABL	Stanley Rice, Jeff W. Short, Mandy Lindeberg; NMFS, Auke Bay Laboratory; ABL Program Manager: Dr. Stan Rice					
Part II: DOI-USGS:	Jim Bodkin, Brenda Ballachey, Paul Snyder, Dan Esler; DOI Program Manager: Dede Bohn					
Lead Trustee Agency:	NOAA					
Cooperating Agencies:	DOI-USGS					
Alaska Sea Life Center:	Yes					
Duration:	1st year of a 2 year project					
FY02 FY03	296.4K Part I (NOAA): 201.6 K Part II (USGS): 94.8 K 30K (Estimated: closeout)					
Geographic Area:	Prince William Sound, Gulf of Alaska					
Injured Resource/Service:	Intertidal, Sediments, Sea Otters, Harlequin Ducks					

#### ABSTRACT

About 20 acres of contaminated beach were found in 2001 surveys of western PWS conducted by Auke Bay Laboratories (ABL). This estimate was more than twice the estimate following the 1993 shoreline assessment surveys. Sea otters and harlequin ducks have not recovered, raising concerns that continued exposure may be affecting their survival. This study is an outgrowth of ABL surveys in 2001 and USGS studies of impacts to sea otters and harlequin ducks. Biochemical assays and mortality patterns are consistent with continuing oil exposures, but linkages between oil persistence studies and impact studies have not been attempted to date. This study will attempt to identify a greater degree of linkage between oil persistence, exposure and effects by choosing a common set of sites at which to assess oil persistence and biological effects on sea otters and harlequin ducks. The emphasis will be on bioavailability, and impact to sea otters and harlequin ducks, but some effort will be expended on bioavailability and exposure of prey species living in oil patches. ABL will lead studies of oil bioavailability and impacts to prey species; DOI-USGS will lead studies directly on sea otters and harlequin ducks.

#### GENERAL INTRODUCTION

In summer 2001, the shoreline assessment project found about 20 acres of beach in Prince William Sound that were still contaminated with oil. This 20 acre estimate of oil contaminated beaches was more than twice the estimate coming from the surveys in 1993 (1993 surveys covered more beaches, but dug far fewer holes) (Gibeaut and Piper, 1998a and b). Most of the oil found in 2001 was classified as "light", but was still readily located, and easily observed. Some of the subsurface pits (20) were classified as heavily oiled. Oil saturated all of the interstitial spaces, and was extremely repugnant. These "worst case" pits exhibited an oil mixture that resembled the oil a few weeks after the spill- highly odiferous, lightly weathered, very fluid. Most of the subsurface oil was found at a lower tide height than expected (between zero and 6 ft), in contrast to the surface oil which was found mostly at the highest levels of the beach. This is significant, because the pits with the most oil were found low in the intertidal zone, closest to the zone of biological production.

Recovery of sea otters and harlequin ducks in the North Knight Island area has not occurred, with both species showing evidence of injury in 2001). Oil exposure has been suspected as a factor constraining recovery, particularly in consideration of elevated levels of cytochrome P4501A (P450), a biomarker of aromatic hydrocarbon exposure, in otters and ducks from oiled areas (Ballachey et al. 2001b, Trust et al. 2000). Higher mortality rates have been demonstrated for sea otters (Monson et al. 2000) and harlequin ducks (Esler et al. 2000) residing in oiled areas of western PWS, but without confirming bioavailability and identifying exposure pathways, it has not been clear that lingering oil was responsible. Presence of oil was not a measure of bioavailability. Earlier studies showing significant oil concentrations in contaminated mussel beds were suggestive, but there was never an exhaustive survey of mussel beds to determine their distribution and significance, and assumptions were made that they were not widespread and likely did not present a large risk to predator species. The survey in 2001 indicates relatively more oil lower down on the beach, near the biological zone, and raises the possibility that oil deposits at high impact sites may be limiting recovery of sea otters and harlequin ducks.

#### Field studies in 2002 will focus on two primary questions:

(1) Is the lingering oil bioavailable? And, (2) is it still causing impacts? Auke Bay Laboratory (ABL) will lead studies on oil bioavailability, and will modify their surveys to overlap with impact sites relevant to sea otters and harlequin ducks (and control areas). DOI-USGS will focus their impact studies on aea otters and harlequin ducks at the same suite of sites. Bioavailability studies will look at the mobilization of oil out of oil patches, into the water and into prey species. This suite of studies should permit extensive interpretation of the data by having answers to questions of bioavailability within a site, within a bay, within a region, and impacts at a very site specific level (within an oil patch, within a bay, within a region), and will include impact studies on both prey and predators.

The two research groups are submitting a joint proposal to investigate bioavailability and

impacts, but will operate independently. Both groups have shared data and selected sites worthy of further study so that the oil persistence/bioavailability data can be compared to the exposure and impact data gathered on the two predator species. The following project proposal has been divided into two sections: Part I, led by ABL, which will focus on bioavailability of oil from oil patches and transport to prey species; and Part II, led by DOI-USGS, which will focus on the impacts to sea otters and harlequin ducks. Upon completion of the data collection and analyses, researchers from the two groups will work together to interpret results and prepare a final report.

#### PART I: Bioavailability of PAH from oil patches and impacts to prey species (NOAA-ABL)

#### ABSTRACT

Presence of oil indicates but does not prove that the oil is potentially bioavailable. The extensive beach surveys conducted in western PWS in 2001 estimate that about 20 acres of upper intertidal beach remain contaminated, and lend support to the hypothesis that lingering oil can still cause injury to invertebrates near the oil patch as well as to the predators feeding in the area. This half of the project, led by ABL, will focus on determination of bioavailability of oil within an oil patch, within a bay, and possibly within a region of the spill. Further, prey species (mussels, other invertebrates, and crescent gunnels living in the oil patches) will be assessed for contamination (bioavailability of PAH) and also for impacts. This half of the project should aid interpretation of the impact studies on sea otters and harlequin ducks conducted by DOI-USGS as there will be a high overlap of impact and control sites between the two study components.

#### INTRODUCTION

In summer 2001, the shoreline assessment project identified about 20 acres of beach in Prince William Sound that were still contaminated with oil, and changed our perception of how much oil remains and where on the beach it is located.Further, it has elevated the possibility that the lingering oil may be causing continuing injury in some species, including sea otters and harlequin ducks. Oil was found at 58% of the 91 sites assessed; 6775 randomly stratified sampling pits were assessed to have the linear equivalent of 7.8 km of oil contaminated beach. This 20 acre estimate of oil contaminated beaches was more than twice the estimate coming from surveys in 1993 (1993 surveys covered more beaches, but dug far fewer holes) (Gibeaut, and Piper, 1998a, b). Most of the oil found in 2001 was classified as "light", but was still readily located and observed. All the pits used in the assessment were dug by hand, and all the initial classifications were made from visual observations. Over a period of about 100 days, 91 sites were visited, each site picked randomly from a population of sites judged to be heavily or moderately oiled in one of the surveys from 1989-1993.

In addition to the area estimated to remain contaminated, several other important points are evident. (1) Surface oil was not a good indicator of subsurface oil at that specific pit. In other words, surface oil, which was found predominantly high in the intertidal beach areas, was not a good predictor of subsurface oil, which was found predominantly much lower in the intertidal zone. (2) Some of the subsurface pits (n = 20) were classified as heavily oiled. In these pits, oil saturated all of the interstitial spaces, and was extremely repugnant. These "worst case" pits exhibited an oil mixture that resembled the oil a few weeks after the spill- highly odiferous, lightly weathered, very fluid. (3) Subsurface oil was also found at a lower tide height than expected (between zero and 6 ft), in contrast to the surface oil which was found mostly at the highest levels of the beach. This is significant, because the pits with the most oil were found low in the intertidal zone, closest to the zone of biological production, and indicate that our estimates

are conservative at best.

The lingering oil has survived two summers of intense clean-up by Exxon (1989,1990), 12 winters of storms, and 12 years of tides (Brodersen et al., 1999; O'Clair et al., 1996). Oiling levels have certainly declined during this time period, but the remaining oil would appear to be relatively stable and not very vulnerable to further degradation and weathering (Hayes and Michel, 1998 and 1999). This begs the question- is it bioavailable, and is it still causing impacts? In the mid 1990's, similar concerns grew out of some studies on oiled mussel beds (Babcock et al., 1998; Carls et al., 2000). A few oiled mussel beds had been located, and were thought to remain oiled because they were not cleaned in 1989 or 1990, but their impacts were presumed to be relatively insignificant because their total areas were not large (less than an acre). It was curious that oil remained and that it was not heavily weathered, but the volumes from the specific sites were thought to be too small to be damaging on a wide scale. The surveys in 2001, which were not exhaustive surveys of the lower intertidal zones, raise the question that there may be more mussel beds that remain contaminated, and that possible entry into the food chain may not be restricted to the lingering oil targeted in the 2001 surveys. The distribution, quantity and significance of oiled mussel beds remains unknown, and probably deserves further attention in outlying years.

Sea otter and harlequin duck studies in 1996-98 continued to show long term effects: elevated P450s (Ballachey et al. 2001, Trust et al. 2000), and abnormal mortality patterns Monson et al. 2000, Bodkin et al. in press, Esler et al. 2000). In the heavily oiled area of northern Knight Island (including Herring Bay and Bay of Isles), sea otter abundance remains well below pre-spill levels (Dean et al. 2000). The population size of harlequin ducks before the spill was not accurately known, but the winter mortality rates in oiled areas are significantly higher than in non-oiled areas of the sound. Studies of both sea otters in 2001 found further evidence of continued exposure, based on blood chemistries and liver examinations (sea otters) and P450 levels (harlequin ducks). This generates concern that the lingering oil is indeed bioavailable and at concentrations sufficient to have impacts on predator species.

This half of the project will attempt to determine if oil is bioavailable in areas where sea otters and harlequin ducks are doing poorly, and compare results from oiled areas to nonoiled areas where they are doing well. Bioavailability of PAH in prey species, and their damage, will be assessed at very specific oil patch sites, and at control sites within the impacted bays as well as regional control sites. These data should permit a better evaluation of lingering oil as a potential cause of the continuing injury in sea otters and harlequin ducks, as there will now be a high degree of overlap, geographically and chronologically, between the study sites looking at PAH bioavailability/prey damage and assessment of effects on the predators.

#### NEED FOR THE PROJECT

#### A. Statement of Problem

After 12 years, significant oil remains in and on the beaches of Prince William Sound, but its presence is not proof that the oil is bioavailable to prey and predators. The amount of oil found in 2001 was surprising (more than twice the estimate coming from 1993 surveys), as was the location on the beach (lower intertidal zone). Significant impacts to sea otters and harlequin ducks in the oiled area persist, including lower survival rates in oiled areas than in unoiled areas, for both species. We do not know if the persistent oil is bioavailable to otters and harlequin ducks, and if it is, if it has toxic impacts as the data suggest.

#### B. Rationale

Studies of persistence/ bioavailability will be coordinated with further studies of impacts to sea otters and harlequin ducks. The study sites will be modified from the existing studies so that there is greater overlap- bioavailability studies and impact studies will be compared at the same sites where otters and ducks have adequate numbers for study (Montague Island as a control site; Green Island, Bay of Isles, Herring Bay, Northwest Bay as impact sites). The bioavailability studies will be led by the Auke Bay Laboratory, and the impact studies on sea otters and harlequin ducks will be led by USGS.

#### C. Location

All study sites and sampling will be conducted within Prince William Sound. For some of the "effects" studies, Cordova harbor will be used as a "positive" oil control and samples of mussels or fish will be collected there. All other sites will range from Montague Island (control area) to Green Island and northern Knight Island (see Figure 1).

#### COMMUNITY INVOLVEMENT

Charters to support the research will be solicited from the spill impacted area. Further, some labor support for some of the field operations may be solicited from the Native villages.

#### A. Objectives

- 1. Determine if the oil remaining is bioavailable:
  - a. From beach sites judged to be heavily oiled from the 2001 surveys
- 2. Determine if the oil remaining is still causing impacts:
  - a. To mussels, as determined by DNA damage to hemolymph cells

b. To intertertidal fish (crescent gunnels) living in or near subsurface oil deposits

Nov 11, 2001

#### B. Methods

#### General sampling strategy for bioavailability and prey impacts:

Bioavailability of PAH and prey impacts will be assessed at a suite of sites that overlap with the harlequin duck and sea otter studies. There are several sampling components to the study:

*Bioavailability of PAH*: The key question of bioavailability will be assessed in several different ways and scales. Plastic strips (sensitive, cheap to analyze) will be the primary sample medium for assessment, and will be supplemented by mussel and prey samples. Plastic strips will be placed above and below the beach surface at several points in a beach relative to an oil patch. See the sampling diagram with a beach layout (Figure 2).

*Bioavailability to mussels and mussel beds*: Mussels and strips sample slightly differently; mussels can pick up more PAH in droplets than strips. Using combinations of mussels and strips, we will have better capabilities of interpreting the data. Mussels are not ubiquitous in oil patches; for this reason, there will be some use of caged mussels to supplement collections from resident mussels. Mussel beds within the sample sites will also be targeted if they are oiled, to see if bioavailability and impacts are the same as oil patches without mussels. Mussel beds from the earlier mussel bed studies will not be targeted in this study (for budget reasons) because we need the present sample sites to have overlap with the 2001 surveys and the otter/duck studies. The probability of detecting released oil is not great after 12 years of tides and weathering. For this reason, we have adopted the general strategy of targeting beaches with high quantities of oil remaining, and have put many sampling devices in a spread of locations and depths to increase our probabilities for capturing minimal releases of oil. The strips are the most sensitive sampling device we know of.

#### Design and structure:

<u>Regional Controls</u>: Montague island area will serve as a regional control. Two independent sites on Montague may be used for some of the sampling.

<u>Within Bay Control sites</u>: Several bays will be sampled in an oil patch, but also at some distance within the bay away from the sampled patch. This will allow interpretation on the scope of some of the signals (PAH in resident mussels; P450 in crescent gunnels) to determine how site specific the signal is.

<u>Positive Control</u>: Some analyses require a "positive" control for the methods and field collections. If there were no measurement of DNA damage in mussels or P450 impacts in crescent gunnels, the methods would be in question; positive controls (Cordova harbor) will prevent this interpretation glitch. Table 1 lays out the sampling design by site, sample type, sub-location, and sample quantities.

<u>Statistics</u>: In addition to the complement of retrieved samples for analyses, an additional 10% will be added as duplicates. This will be spread across the sample sites and strata, and will permit accuracy measurements.

<u>Sampling Periods (Seasonal)</u>: Two seasons will be sampled where practical; winter when storm violence may be more likely to cause the release of subsurface oil, and impacts may be the greatest; plus summer when extensive sampling is more favorable and practical. There is risk of loss of the sampling devices, so about twice as many will be deployed as will be analyzed. This extra deployment has little impact on costs, but ensures a sampling scheme without holes. These extra deployment numbers are <u>not</u> shown in table 1. There will be "over-sampling", particularly of strips and prey, and some analyses will be contingent on primary analyses, to be run later in the current year, or possibly into next year under a different proposal.

<u>Sampling Locations:</u> The following sites will be used (figure 1)

Montague Islanda control site; two different areas may be sampledGreen Islandotter impact site with known oil; otters are present in numbersBay of Islesimpacted site with marginal numbers of recovering ottersNorthwest Bayimpacted site; worst case site for bioavailability studiesHerring Bayimpacted sites; worst case site for bioavailability studiesCordova harborimpacted "positive" control site

\*Oiled mussel beds will also be sampled from a subset of these.



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Deployment of Devices in the Intertidal





## Table 1. Numbers and types of samples analyzed at different sites to determine bioavailability

	LDPE (strips)							
	Heavy C	Heavy Oil Patch		sel Beds				
Site	Oiled Patch	Local Control	Oiled	Local Control				
Cordova (positive Controla)	6							
Montague Is. (area control)		6		6				
Green Is.	6	6						
Bay of Isles	6	6	6	6				
Herring Bay	6	6	6	6				
Northwest Bay	6	6						
subtotal = 90	30	30	12	18				

Grand Total (winter/summer + 10% QC) = 200

\*1/2 of the strips are subsurface and 1/2 are at the beach surface

\*Deployment of LDPEs doubled to ensure recovery

	Bioavailability to Mussels							
	Ca	ged	Resident					
Site	Oiled Patch	Local Control	Oiled	Local Control				
Cordova (positive Controla)	2		2					
Montague Is. (area control)		2		2				
Green Is.	2	1						
Bay of Isles	2	1	2	2				
Herring Bay	2	1 .	2	2				
Northwest Bay	2	1						
subtotal = 28	10	6	6	6				

Grand Total (winter/summer + 10% QC) = 40

\* all samples are at the beach surface

	lm	pacts - DNA Dar	nage Assess	ment	
	Mussels	; (Comet)	Gunnels (P450)		
Site	Oiled Patch	Local Control	Oiled	Local Control	
Cordova (positive Controla)	20		20		
Montague Is. (area control)		20		20	
Green Is.	20	20	20	20	
Bay of Isles	20	20	20	20	
Herring Bay	20	20	20	20	
Northwest Bay	20	20	20	20	
subtotal = 28	100	100	100	100	
	200 x	2 (w/s)		200	

\* 20 = # of individuals; Gunnels = 1 sampling period (summer)

## Specific Methods: Sampling strategy for bioavailability and prey impacts:

## A. Determine bioavailability of PAH at heavily oiled 2001 survey sites.

1. To determine if PAHs are available, plastic strips (low density polyethylene devices or LDPEs) will be deployed at each of the sites (See figure 1) in a sampling pattern designed to capture any flow dynamic that is possible (see figure 2). Strips will be deployed above and below the beach surface in protective perforated containers. Some strips will be deployed higher on the beach from an oil patch, some within the oil patch, and some below the oil patch. At some distance away from the oil patch, a similar sampling scheme will be deployed to determine if PAH are available on a broader scale than just in the immediate vicinity of a specific oil patch. Likewise, regional controls will determine if there is more PAH available at even a larger scale. These deployments will be made in both the winter and in the summer. Oiled patches discovered and mapped during the 2001 survey will be relocated (patches found in lower zones near the biological active zones will be targeted) and LDPEs placed in close proximity. This array of LDPEs will be replicated to ensure retrieval of sufficient numbers 30 days later, and to allow for the 10% replicate analyses required for statistical evaluation of accuracy. See table 1 for numbers analyzed by site, compared to other measurements.

2. Mussels will also be sampled for bioavailability of PAH. Mussels will be used in addition to strips because they tend to sample oil droplets more efficiently than strips, and comparative analyses will allow for greater interpretation of the results. Mussels are often not available at some of the oiled sites, and caged mussels may be used for that sampling. See table 1 for numbers analyzed by site, compared to other measurements

3. Some prey animals will be sampled in addition to resident mussels to see if PAH are bioavailable in these species. Over-sampling will be the strategy; selected samples for analyses will be based on results from strips, and collections from other sites. Only the high impact areas will be analyzed initially; other samples will be archived and further analyses will be proposed if PAH are found in the mussels from the high impact sites. A minimum of 20 samples will be analyzed by GC-MS (Short et al., 1996).

4. A limited number of sediment samples will be collected during both sampling periods within the oiled patches to determine the condition of the oil and whether PAH composition matches weathered *Exxon Valdez* oil (EVO) (Short and Heintz, 1997). These samples will be analyzed by GC-MS (Short et al., 1996). These samples will be needed for interpretation and only a few need to be analyzed.

**B.** Determine DNA damage to resident mussels from oiled and unoiled patches via single cell gel electrophoresis (comet analysis).

DNA damage in mussels, measured by the comet analysis, has evolved as a monitoring tool for PAH and other contaminants in polluted harbors (Steinert et al., 1998). It is a very sensitive technique, is relatively inexpensive, and requires relatively few cells. DNA damage is repairable, hence sample collection and preservation at the site is a requirement.

### Specific methods:

20 mussels will be sampled from each specific sampling location; hemolymph samples will be taken on site, cryopreserved in liquid nitrogen, and returned to the lab for storage (-70 C) and assay of DNA damage. A "positive" control will be used (Cordova harbor) to verify that the sample collection and methods are working. A minimum of twenty five cells will be utilized to determine the extent of damage at the individual level. Impacted sites will be compared to control sites within the bay (e.g., bed rock mussels with no underlying oil bed), and to regional controls (Montague Island). Samples will be analyzed blind. 200 mussels will be contracted out to Dr. Robert Thomas of California State University at Chico. See table 1 for numbers and sites compared to other measurements.

# C. Determine if crescent gunnels living in oil patches are exposed to oil (P450) and compare to collected specimens from other sites that are either nearby (same bay) or distant (regional controls)

Crescent gunnels live under rocks in the intertidal zone at low tide and are the only vertebrate that resides <u>within</u> an oil patch (Peden and Hughes, 1984). If a vertebrate can show exposure and damage, crescent gunnels would appear to be the species with the highest probability. Earlier work has shown that gunnels collected from the spill zone had higher P450 values (Woodin and Stegeman, 1993), but interpretations were hampered by the lack of collections from known oil patches. This project would collect animals from within oiled patches, from nearby unoiled patches within the same bay, and from regional controls. Damage to organs evaluated histopathologically would not be conducted this fiscal year (because of costs), but the tissue blocks would be retained and would be proposed for future funding if there are significant differences in P450 responses from the different sites.

#### Specific methods:

20 crescent gunnels will be sampled, dissected, and preserved appropriately on site. Gunnels collected from impacted sites will be compared to control sites within the bay system of the impact site, and to regional controls (Montague Island, and also a "positive" control from Cordova Harbor). Organs (including liver, kidney and gills) will be dissected out, preserved, and subsequently processed into blocks and slides for P450 antibody staining. A total of 200 fish will be analyzed. Samples will be analyzed blind. All analyses will be contracted to Dr. Gary Marty of University of California Davis. This study will be done only in the summer. Sampling sites for gunnels will be the same as they are for the mussels (see table 1).

#### Interpretive model for bioavailability studies

The following rationale outlines how we will interpret the bioavailability of lingering EVO :

PAH are bioavialable if:

- The LDPE tested positive for PAHs in the surface deployments.
- The LDPE strips are positive in subsurface deployments outside the oil patches.
- The bioavailability is more significant if the control sites within a bay test positive.

- The bioavailability is more questionable if the regional control sites have significant positive PAH results.

- The deployments are suspect if lab and field blanks test positive.

- The methods are suspect if the positive control of Cordova Harbor is NOT positive.

Further analyses to strengthen case:

- The multiple impact sites test positive.
- PAHs are present in mussels and/or prey.
- P450 present in Crescent Gunnels; comets are above normal in oiled areas.
- P450 and comet assays are suspect if the samples from Cordova Harbor are not positive.

SCHEDULE for Bioavailability and prey impact studies

## A. Measurable Project Tasks for FY02 (October 1, 2000 – September 30, 2002)

- FY02: All field collections and measurements will be completed in the FY 02 funding cycle. All chemical analyses, blood work, P450 analyses, etc will be initiated in FY 02.
- FY03: Close out of the FY 02 is anticipated for both agencies. Further work would be dependent on results, and would be applied for as an independent proposal. Some chemical analyses may spill into FY 03, but all data analyses will be completed by Jan 2003. Final reports would be due May 15, 2003.

B. Project Milestones and Endpoints

<u>Winter field work</u>: Deployments about Feb 1, 2002, with a pick-up cruise a month later (Bioavailability, mussel impacts, prey collections).

<u>Summer field work</u>: Deployments about mid June, followed by a pick-up cruise in July (Bioavailability, mussel impacts, fish impacts).

## C. Completion Date

Field work completed by Aug of 2002. Chemical analyses completed by November 2002.

P450 analyses completed by November 2002. Comet tests completed by October 2002.

Final report by May 15, 2003

## PUBLICATIONS AND REPORTS

Several specific papers on bioavailability, and impacts are expected. At some point, one or more synthesis papers combining bioavailability and impact data across disciplines is expected but is beyond the scope of the project at this time.

## **PROFESSIONAL CONFERENCES**

The EVOS Trustee meetings will be attended by the principle investigators.

## NORMAL AGENCY MANAGEMENT

None of these projects are part of normal agency management activities.

## COORDINATION AND INTEGRATION OF RESTORATION EFFORT

This project is related to the close-out of the Shoreline assessment project, and will use the information generated from that study for specific site selections. Likewise, the sea otter and harlequin duck work is an outgrowth of projects funded in FY 01 or FY 02, and will utilize information from those projects. Further, there has been coordination between the two agency component parts in development of the proposal, to ensure geographical overlap and relationship.

## **EXPLANATION OF CHANGES IN CONTINUING PROJECTS**

N/A

## PROPOSED PRINCIPAL INVESTIGATORS

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## Jeffrey W. Short

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## PRINCIPAL INVESTIGATORS

Stanley D. Rice GM-14 Physiologist

Received BA (1966) and MA (1968) in Biology from Chico State University, and PhD (1971) in Comparative Physiology from Kent State University. Employed at Auke Bay Fisheries Laboratory since 1971 as a research physiologist, task leader and Habitat Program Manager since 1986. Rice has researched oil effects problems since 1971, and has published over 115 papers, including over 75 on oil effects. Studies have ranged from field to lab tests, behavioral to physiological to biochemical studies, from salmonids to invertebrates to larvae to meiofauna. Rice has conducted and managed soft funded projects since 1974, including the Auke Bay Laboratory *Exxon Valdez* damage assessment studies since 1989. Activities since the oil spill have included leadership and management of up to 10 damage assessment projects, field work in PWS, direct research effort in some studies. Quality assurance of all studies, particularly the biological impacts research has been the continuing focus through the restoration years. Principle investigator in subtidal sediment studies, pink salmon effects studies, and in the SCAT surveys of 2001. In addition, Rice has lead the effort on use of LDPE research by the Auke Bay Lab.

## Jeffrey W. Short

#### Research Chemist

Education: M.S. (Physical Chemistry). 1989- Present: Established and managed the hydrocarbon analysis facility at ABL to analyze hydrocarbon samples generated by the *Exxon Valdez* NRDA effort. Responsible for quality control and data interpretation of all data hydrocarbon data produced by ABL labs. Principle investigator of several EVOS projects through the damage assessment and restoration years, paarticularly those studies involved in tracking oil (subtidal sediments), tracking the Hydrocarbon Data Base, several specific projects (Pristane; Coal as a background source), and most importanly, principle investigator of the large shoreline assessment project (SCAT) in FY 2001. Many publications.

## Mandy R. Lindeberg

Fisheries Research Biologist

B.S. Marine Biology. 1990- present: Mandy has been involved in *Exxon Valdez* oil spill research for the last 11 years. Her research includes studies on intertidal invertebrates and seaweeds, mussel populations, and a co-principal investigator of spot shrimp populations in Prince William Sound. She was the field chief of the intensive PWS oiled shoreline survey during 2001. Her responsibilities include quality control of field and laboratory sample processing, data analysis, graphics, and proposal/report preparation.

## **OTHER KEY PERSONNEL**

Chemists Marie Larsen, Larry Holland, Josefina Lunasin will participate in the chemical analyses of the samples. Contractors Dr. Robert E. Thomas and Dr. Gary Marty will participate at the principle investigator level on analyses for DNA damage in mussels and P450 response in crescent gunnels.

## LITERATURE CITED

See combined "Literature Cited" section for Parts I & II.

## Summary of ABL Budget:

Support Logistics: Vessel Charter			
Winter deployment cruise:	9 days,	9 K	
Pickup cruise:	8 days,	7 K	
Summer deployment cruise:	7 days,	7 K	
Pickup cruise	7 days,	7 K	
		Subtotal vessel	30 K
Materials and supplies:			
Strips, collectors,		4 K	
Nitrogen, shipping logistics		2 K	
Misc field gear		3 K	
Comet supplies		2 K	
-			11 K
Contracts:			
Comet analyses:		5 K	
P450, Histopath processing,	analyses	30.2 K	
Soft Labor:		12 K	45 0 17
The second se			47.2 K
Travel:	ana (mintar anna		
2 Imps: Calif to PWS- R. In 1 Trin: Calif to PWS- C Mar	omas (winter, sum	$\frac{12 \text{ K}}{12 \text{ K}}$	
ADI to DWS 4 don	(summer)	1.2 K 1 6 V	
ABL- 10 P W 5 4 depit		1.0 K 1.6 V	
4 pick 4 depl	up		
4 dept	un	2.0 K	
3 tring: ANC to Trustee meet	up ings	2.0 K 1 6 K	
5 tips. Aive to Trustee meet		1.0 1	12 6 K
			12.0 11
Analytical costs: 200 strips at \$ 200	per strip	40 K	
caged mussels: 32 at	\$500 ea	16 K	
resident mussel: 24 at	\$500 ea	12 K	
sediments: 6 samples	at \$500 ea	3 K	
prey samples 20 at \$5	00 ea	10 K	
			81 K
Labor: Lindeberg, field party chief		12.5 K	104 0 17
		Subtotal	194.3 K
		Plus overhead	1.3 K
		Total:	201.6 K

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## PART II: Impacts to Sea Otters and Harlequin Ducks (DOI - USGS)

## ABSTRACT

Sea otters and harlequin ducks have not fully recovered from the EVOS, based on demographic, physiological and biochemical differences between populations in oiled and unoiled areas. To explore links between residual oil and the lack of population recovery, we propose to capture sea otters in areas known to have relatively high quantities of residual oil, and collect blood and liver samples. These areas will overlap with the study sites described in Part I of this DPD, to be sampled for bioavailability of lingering oil in intertidal areas. Exposure of sea otters to hydrocarbons will be measured by the cytochrome P450 biomarker (in blood and liver) and liver function will be assessed by gross and histologic examination, and by serum enzymes. Harlequin ducks are already being captured in oiled areas as part of another project (02423). However, included in this proposal are components for (1) histopathology of sea duck liver biopsies, collected from Barrow's goldeneyes in 1996 and from harlequin ducks in 2001 and 2002. Results of this study will be interpreted in conjunction with data collected by NOAA-ABL scientists, on the bioavailability of oil in shoreline areas of western PWS.

## INTRODUCTION

Through 2001, studies have shown a lack of recovery for sea otters (*Enhydra lutris*) and harlequin ducks (*Histrionicus histrionicus*) in oiled areas of western PWS, and several lines of evidence strongly implicate continuing exposure to oil as a primary factor limiting recovery (Bodkin et al. in press; Esler et al. in press). Both species feed on invertebrates in the nearshore ecosystem, and potentially could be exposed to oil either through their prey or directly, in sediments or in the water column. Major research findings in 1995-2001 include: (1) lower survival rates for sea otters and harlequin ducks in oiled areas (Monson et al. 2000, Esler et al. 2000), (2) elevated levels of cytochrome P450 1A (CYP1A), a biomarker of hydrocarbon exposure (Ballachey et al. 2001b, Trust et al. 2000, Esler, pers. comm.), and (3) diseased livers in sea otters from the oiled area in 2001 (USGS unpub. data). The discovery in summer 2001 of greater amounts of residual EVOS oil on beaches (NOAA-ABL, unpubl. data) substantiates concerns that exposure in nearshore areas persists, and that residual hydrocarbons are constraining recovery of sea otters and harlequin ducks in areas of PWS that were heavily oiled in 1989.

Sea otters and harlequin ducks are subject to continuing study in 2002, as part of Project 02423. For harlequin ducks, ongoing work consists of (1) capture of wild birds for survival rate studies (radiotelemetry) and tissue sampling for CYP1A assays, and (2) controlled studies of oil exposure on physiology and behavior of harlequin ducks held at the SeaLife Center in Seward. For sea otters, ongoing studies include (1) collection of carcass remains off beaches, to estimate ages and survival rates, and (2) surveys of abundance. Sea otters in heavily oiled areas were

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captured in July 2001, as part of Projects 01423 and 01534, but no further capture of sea otters was proposed for 2002. However, the observation of diseased livers in 4 of 15 sea otters caught in 2001 at northern Knight Island, in conjunction with elevated serum enzymes indicative of liver dysfunction, has generated additional concern about the effect of residual oil on health of both sea otters and harlequin ducks residing in areas of western PWS where beach sediments are known to retain oil.

Based on new findings from summer 2001, we propose to capture sea otters in waters adjacent to known areas of residual oil, to assess oil exposure (using the CYP1A biomarker) and liver function (by gross examination, biopsies for histopathological examination, and serum chemistries). For harlequin ducks, similar work is already underway as part of Project 02423; however, we propose to expand the harlequin duck studies with histopathological examinations of liver biopsies from wild-caught and captive birds. Additionally, we propose to do histology on archived liver biopsies collected in 1996 from Barrow's goldeneyes in oiled and unoiled areas of western PWS. We will coordinate capture locations for sea otters and harlequin with NOAA-ABL researchers who are examining bioavailability of lingering oil (see Part I of this DPD).

## NEED FOR THE PROJECT

## A. Statement of Problem

Sea otters and harlequin ducks occupy an invertebrate-consuming trophic level in the nearshore and are conspicuous components of the nearshore ecosystem. Previous restoration projects (95025-99025; 99423-02423) have examined the status of recovery of sea otters and harlequin ducks. Results to date clearly suggest that complete recovery has not occurred for sea otters or harlequin ducks, and implicate continuing exposure to oil as a limiting factor.

The lack of recovery of sea otters is based on an aggregate of findings. The sea otter population in western PWS (WPWS) suffered heavy losses in 1989, with estimates of sea otter mortality due to the spill ranging from 750 to 2,650 individuals (Garshelis 1997, Garrott et al. 1993). Surveys of abundance, conducted 1993-2000, have shown a significant increasing trend in the overall WPWS sea otter population. In contrast to the western Sound, sea otter numbers at northern Knight Island (where oiling of beaches was heavy) remain below pre-spill estimates and do not show a significant increasing trend (Figure 1; Bodkin et al. in press; Dean et al. 2000; USGS unpubl. data). Survey results are consistent with other observations of sea otters in western PWS,

which suggest that the population in the most heavily oiled areas has not yet recovered. Carcass collections and modeling efforts based on age-at-death data through 1998 (Monson et al. 2000)



Figure 1. Estimated sea otter abundance at northern Knight Island.

indicate post-spill survival rates of sea otters in WPWS have been lower than prespill rates, even for animals born after 1989. From 1996-98, measurement of the CYP1A biomarker in sea otters showed elevated levels at Knight Island (Fig. 2), indicating recent exposure to aromatic hydrocarbons (Ballachey et al. 2001b, Bodkin et al. in press); analyses of samples from 2001 are pending. Serum chemistries of sea otters in the western Sound show elevations of enzymes indicative of liver disease, most notably gamma-glutamyl transferase (GGT) (Ballachey et al. 2001a, USGS unpubl. data). During the period 1992-2001, over 30% of the sea otters in

the oiled area had a moderate to severe increase in serum GGT levels, compared to less than 10% in the unoiled area. In July 2001, livers of sea otters in oiled and unoiled areas of WPWS were examined directly, by endoscopy, and

biopsied for histopathology. Observations of the livers, and histology results, confirm that there is a higher incidence of microscopic and biochemical abnormalities in sea otters from the oiled area (USGS unpubl. data). In some cases, damage to the liver appears sufficient to impair survival of those individual otters.

To further investigate links between continuing oil exposure and toxic effects on sea otters, we propose to capture sea otters in summer 2002 in areas of western PWS which are known to have relatively high concentrations of residual EVOS oil, and which will be monitored in 2002





to determine the bioavailability of that oil. We will evaluate induction of the CYP1A biomarker and liver function in these otters, and relate our findings to results on bioavailability of oil along adjacent shorelines. These studies will provide unique and valuable information on long-term

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chronic effects of the oil spill on sea otters and aid in projecting recovery time for the sea otter population in PWS.

Recent studies (/025, /427, and /423) suggest that harlequin duck populations also continue to suffer deleterious effects from the oil spill. In 1996-98, sea ducks (harlequins and goldeneyes) had higher CYP1A levels in oiled areas than in unoiled (Trust et al. 2000), and in 2000, harlequin



Figure 3. Survival probabilities of harlequin ducks, 1995-98.

duck samples continued to show elevated CYP1A (D. Esler, pers. comm.) indicating that hydrocarbon exposure is continuing. In addition, harlequins in oiled areas have lower survival than their counterparts in the unoiled area. This difference was demonstrated over the course of 3 winters (1995-98) and again in the winter of 2000-2001 (Figure 3; Esler et al. 2000, Esler et al. in press, , D. Esler pers. comm.). Continued study of harlequin ducks is underway as part of Project 02423, and thus we are not proposing additional capture of harlequins as part of this project. However, given the liver pathologies observed in sea otters in summer

2001, we propose to do histopathology on (1) archived liver biopsies collected from Barrow's goldeneyes in oiled and unoiled areas in 1996 (Trust et al. 2000), (2) liver biopsies collected from wild-caught harlequins in oiled and unoiled areas in the fall of 2001, and (3) liver biopsies collected in spring 2002 from harlequin ducks held in captivity at the SLC and exposed to oil (the latter two groups are part of studies under 02423).

## **B.** Rationale/Link to Restoration

Sea otter and harlequin duck restoration requires assessments of population recovery status and definition of impediments to recovery. The proposed work will complement an ongoing study of continuing injury to sea otter and harlequin duck populations (Project 02423), by identifying the extent to which residual oil is bioavailable and examining individual animals from those same areas for evidence of exposure and toxic effects of hydrocarbons on the liver.

## C. Location

Studies will be conducted in PWS. Specific study sites for the sea otter components will be northern Knight Island, Green Island, and the Port Chalmers/Stockdale area at Montague Island. Harlequin duck study sites, as described in Project 02423, are Montague Island, Green Island, Knight Island, Crafton Island, Main Bay, and Foul Bay. Captive harlequin duck studies (02423) are at the Alaska SeaLife Center in Seward. Communities affected by the project include Chenega, Whittier, Cordova and Seward.

## COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE

## **PROJECT DESIGN**

## A. Objectives

- 1. Assess liver function and incidence of liver abnormalities in sea otters from oiled and unoiled areas.
- 2. Monitor CYP1A induction in sea otters in oiled and unoiled areas, as an indicator of ongoing aromatic hydrocarbon exposure.
- 3. Assess incidence of liver abnormalities in harlequin ducks from oiled and unoiled areas.
- 4. Relate CYP1A and liver findings to residual oil concentrations in capture areas.

## **B.** Methods

<u>Sea Otters</u>. In summer 2002, we will capture sea otters in oiled and unoiled areas of PWS. We will capture up to 40 otters in oiled areas (Knight Island and Green Island) and up to 10 otters in unoiled areas (Montague Island). Liver and blood samples were recently collected from sea otters in the Monterey harbor area of California (non-EVOS study); these will be used as alternate reference samples for liver histopathology and CYP1A assays.

Capture and handling methods will be similar to those employed previously (Bodkin et al. 1999). Sea otters will be sedated, body measurements taken, a tooth collected for age determination, and a blood sample taken by jugular venipuncture. Each otter will be tagged with two color-coded, numbered flipper tags. Liver biopsies will be taken by endoscopy procedures, as conducted in summer 2001. Following reversal, sea otters will be released in the same vicinity as captured.

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In Project /025, the RT-PCR assay (quantitative reverse transcriptase PCR assay; Snyder et al. 2000, Vanden Heuvel et al. 1993, 1994) was adapted to measure CYP1A levels in sea otters. This assay quantifies the messenger RNA (m-RNA) that codes for the CYP1A protein. Results of the assay are reported as the molecules of mRNA per 100 ng of RNA. We will conduct the assay on both peripheral blood mononuclear cells and a liver biopsy. The peripheral blood lymphocytes will be isolated in the field by a ficoll gradient technique, cryopreserved in liquid nitrogen and shipped to Purdue University for analyses. In addition, duplicate slides of whole blood will be made for hematology, and blood from each otter will be processed to obtain serum, which will be frozen and later submitted for serology analysis.

Histopathology on the liver samples will be done using standard procedures, at the School of Veterinary Medicine, Purdue University.

## Harlequin Ducks

An extensive study of harlequin ducks is ongoing under Project /423. Liver biopsies will be collected as feasible from individual birds in that study, at the time of surgeries to implant radiotransmitters for survival studies. In addition, liver biopsies were collected from Barrow's goldeneyes in 1996 and archived. Histopathology on the liver samples will be done using standard procedures, at the School of Veterinary Medicine, Purdue University.

## C. Cooperating Agencies, Contracts, and Other Agency Assistance

The overall project is a joint effort with NOAA-ABL. USGS-BRD personnel will be responsible for directing and conducting sea otter and harlequin duck studies. A contract will be established with Purdue University for histopathology of liver samples and for CYP1A assays on sea otter tissues. ABL personnel will conduct studies on oil bioavailability as described in Part I of this DPD.

## SCHEDULE

## A. Measurable Project Tasks for FY02

<u>Sea Otters</u>	
December-March:	Coordinate and plan sea otter capture.
	Obtain/update marine mammal permits.
July:	Capture of sea otters in WPWS; sample blood and liver for CYP1A and
	histopathology.
Harlequin Ducks	
November:	Capture harlequin ducks for field studies of survival and CYP1A induction
	(Project 02423); biopsy livers for histopathology (new element).
March:	Surgically biopsy livers of captive birds at SLC for histopathology.

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## **B.** Project Milestones and Endpoints Sea Otters

FY02:July 2002: Capture of sea otters, sampling of blood and liver.Fall/winter 2002/03: Sample analyses

## Harlequin Ducks

FY02: Liver biopsies will be collected in Nov. 2001 and March 2002, in conjunction with activities under Project 02423. Histopathology will be completed by September 2002.

## C. Completion Date

All sample collection will be completed in FY02; laboratory analyses will be completed by December 2002, and project close-out will occur in FY03. A final report will be submitted by May 15, 2003.

## NORMAL AGENCY MANAGEMENT

The work proposed here is not part of normal agency management and is related specifically to research addressing oil spill restoration concerns. No similar work has been conducted, is currently being conducted, or is planned using agency funds.

## **PROPOSED PRINCIPAL INVESTIGATORS**

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## **Paul Snyder**

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## Dan Esler

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## PRINCIPAL INVESTIGATOR QUALIFICATIONS

Jim Bodkin, Research Wildlife Biologist, and team leader for coastal ecosystem in Alaska for the Alaska Biological Science Center of USGS, Biological Resources Division. He has over 20 peer-reviewed scientific publications and directs an active coastal marine research program. He has studied and published on sea otter foraging ecology and community structuring since 1988 and has been principal investigator for sea otter survey methods development. He earned a M.S. from California State Polytechnic University in 1986.

**Brenda Ballachey** is a Research Physiologist at the Alaska Biological Science Center of USGS, Biological Resources Division. She was Project Leader for sea otter NRDA studies from 1990 through 1996, and has been involved in all aspects of post-spill research on sea otters, including the Nearshore Vertebrate Predator (NVP) project, with primary responsibilities for examining effects of residual oil on biomarkers and health of sea otters and other NVP study species. She

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received her M.S. in 1980 at Colorado State University, and Ph.D. in 1985 Oregon State University. She has authored or coauthored over 25 peer-reviewed publications.

**Dr. Paul Snyder** is an Associate Professor of Pathology and Immunotoxicology and Director of the Clinical Immunology Laboratory of the Department of Veterinary Pathobiology, Purdue University. He is also a Diplomate of the American College of Veterinary Pathologists. His research interests are in the area of mechanism-based studies on the pathology and immunology of xenobiotics on biological systems. He has been a PI on the Nearshore Vertebrate Predator project since 1995.

**Dan Esler** is a Research Wildlife Biologist with the Alaska Biological Science Center, USGS Biological Resources Division. He has conducted waterfowl research in arctic and subarctic regions of Alaska and Russia for the past 11 years. Since 1995 he has served as project leader for harlequin duck studies as part of the EVOSTC-sponsored Nearshore Vertebrate Predator project. He earned a M.S. from Texas A & M University in 1988 and is currently enrolled as a doctoral candidate at Oregon State University. He has authored over 20 peer-reviewed journal publications and numerous reports and presentations addressing research and issues in waterbird conservation.

## **OTHER KEY PERSONNEL**

George Esslinger, Kim Kloecker and Daniel Monson of the USGS Alaska Biological Science Center will assist with all aspects of logistics for the sea otter capture and sample collection. Dr. Mike Murray, Staff veterinarian at the Monterey Bay Aquarium, will be contracted to provide expertise in endoscopy procedures.

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Nov 11, 2001

Project 02585

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2002 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET

October 1, 2001 - September 30, 2002

	Authorized	Proposed		PROPOSED I	FY 2002 TRUS	TEE AGENCII	ES TOTALS	
Budget Category:	FY 2001	FY 2002	ADEC	ADF&G	ADNR	USFS	DOI	NOAA
							\$94.8	\$201.6
Personnel	\$0.0	\$28.7		的形态中的			關於自己的原因的	
Travel	\$0.0	\$17.4						
Contractual	\$0.0	\$139.2			<b>来</b> 。这些情况说			
Commodities	\$0.0	\$97.0		举副导家副编也	序。公开并把同时	这些口利的结果		中國沿陸的國
Equipment	\$0.0	\$0.0		LONG R	ANGE FUNDI	NG REQUIRE	MENTS	
Subtotal	\$0.0	\$282.3			Estimated	Estimated		
General Administration	\$0.0	\$14.1	L		FY 2003	FY 2004		
Project Total	\$0.0	\$296.4	<b></b>		\$30.0	\$0.0		
				学生 化金融制度		<b>浓劲和他的温</b> 度		於會計報情報
Full-time Equivalents (FTE)	0.0	0.5	<b>这种情况</b>	的影响。				影为建筑局有
¶	·		Dollar amoun	ts are shown ii	n thousands of	dollars.		<u></u>
Other Resources	\$0.0	\$0.0			\$0.0	\$0.0		
Comments:		-						
The Auke Bay Laboratory wil	I lead the intert	idal contamina	ation/impact st	udies: USGS v	will lead the Ot	ter/Duck impac	t studies.	
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<u>}</u>								
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			••••				·	
[]							FOR	M 2A
	Project Nur	nber: 0258	5			l		RUSTEE
FY02	Project Title	e: Lingering	g Oil: Bioava	ailability and	Effects			
	Lead Ageno	cv: NOAA-	Auke Bav L	aboratory				
	gom		<b>j -j</b>	<i>,</i>				MARY
Prepared: 11/15/2001	L		<u> </u>					

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October 1, 2001 - September 30, 2002

	Authorized	Proposed		·····································			
Budget Category:	FY 2001	FY 2002					
Personnel		\$12.5					夏季末 計劃時後
Travel		\$12.6					
Contractual		\$77.2					
Commodities		\$92.0	高いななのでは生まれない。	他的合同情况	國的非非當於國家	利用即每年间第	的多常的问题中学
Equipment		\$0.0	LONG RA	NGE FUNDIN	IG REQUIREN	IENTS	
Subtotal	\$0.0	\$194.3		Estimated	Estimated	1	
General Administration		\$7.3		FY 2003	FY 2004		
Project Total	\$0.0	\$201.6		\$15.0			
				和特許同時期後援			國家主要的關鍵
Full-time Equivalents (FTE)		0.2		同的時期的時間	一時的國際	的時間發展的意識	北京行行的市场
			Dollar amounts are shown in	n thousands of	dollars.		
Other Resources							
FY02	Project Nur	mber: 0258	5 1 Oil: Bioavailability and	Effects			FORM 3A TRUSTEE

October 1, 2001 - September 30, 2002

Personnel Costs:		GS/Range/	Months	Monthly		Proposed
Name	Position Description	Step	Budgeted	Costs	Overtime	FY 2002
Jeep Rice	Habitat Program Manager	GM-15	0.0			0.0
Jeff Short	Research Chemist	GS-14	0.0			0.0
Mandy Lindeberg	Fisheries Research Biologist	GS-11	2.5	5.0		12.5
	· ·					0.0
						0.0
						0.0
				4		0.0
						0.0
						0.0
						0.0
						0.0
·	LSubtoto		2.5			0.0 275555551111655
		「「ならないのないないか」	2.0		sonnel Total	<u>またが</u> 第12 5
Travel Costs:		Ticket	Round	Total	Daily	Proposed
Description		Price	Trips	Davs	Per Diem	FY 2002
EVOS Workshop - Jan. 200	2	0.4	3	2	0.2	1.6
Winter Sampling						0.0
deployment	Juneau/Cordova	0.3	4	2	0.2	1.6
						0.0
pick up	Juneau/Cordova	0.3	4	2	0.2	1.6
	California/Cordova	1.0	1	2	0.2	1.4
						0.0
Summer Sampling						0.0
deployment	Juneau/Cordova	0.4	4	2	0.2	2.0
pick up	Juneau/Cordova	0.4	4	2	0.2	2.0
	California/Cordova	1.0	2	2	0.2	2.4
		<u> </u>				0.0
					Iravel Total	\$12.6
	Project Number: 02585				ļł	-OKW 3B
	Project Titley Lingaring Oil: Piagu	oilability and	Effecte		ļF	Personnel
	A service of the serv		Elieots			& Travel
	Agency: NOAA- Auke Bay Labora	tory				DETAIL

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Prepared: 11/15/2001

October 1, 2001 - September 30, 2002

Contractual Costs:		······			Proposed
Description					FY 2002
Vessles Charters		<b>.</b>			
wint	er deployment	9 days	9K		
l wint	er pick up	8 days	7K		
		<u> </u>			
sum	mer deployment	7 days			
sum	mer pick up	/ days	/Κ .		30.0
l emporary labor	(NUAA) - field and I	ab support			12.0
Dr. Robert Thoma	15	Comet An:	alvses		5.0
California State Ur	niversity at Chico	oomer, an			0.0
	arony aronioo				
Gary D. Marty, D	/M, Ph.D.	P450, Hist	opath processing, analyses		30.2
Diplomate, Americ	an College of Veterir	hary Pathologis	sts, Fish pathology Services		
When a non-trustee org	ganization is used, th	e form 4A is re	equired.	Contractual Total	\$77.2
Commodities Costs:	······································				Proposed
Description					FY 2002
Materials and sup	blies:				
Strip	os, collectors				4.0
Nitro	gen, snipping logisti	CS			2.0
Misc	c. field gear				3.0
com	et supplies				2.0
Analytical costs:					40.0
strip	$s = \frac{1}{2} $	a v 20			40.0
cage	ed mussels = \$500 e	a. x 32			10.0
resi	mente = <sup>6</sup> 500 ee vi	ea. x 24			12.0
seul	$\frac{1}{10} = \frac{1}{2} = 1$	5			10.0
prey	- \$500 ea x 20			Commodities Total	\$92.0
<u>L</u>					ψοΣ.Ο
[]	Γ			<b>–</b>	ORM 3B
	Project N	Jumber: 02	585		atractual &
FY02	Project 7	itle: Lingeri	nd Oil: Bioavailability and Effects		
			o Ray Laboratory		mmodities
	Agency.	NOAA- Au	te Day Laburatury		DETAIL

Prepared: 11/15/2001

October 1, 2001 - September 30, 2002

New Equipment Purc	hases:	Number	Unitl	Proposed
Description		of Units	Price	FY 2002
				0.0
		1		0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
Those purchases asso	pciated with replacement equipment should be indicated by placement of an R.	New Equ	ipment Total	\$0.0
Existing Equipment			Number	Inventory
Description			of Units	Agency
NOAA/NMFS- Au	ike Bay Laboratory			
Co	mputer/Software			
HP HP	LC			•
GC	CMS			
		÷		
	4			
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l			<u></u>	<u></u>
<b></b> ]				
	Project Number: 02585			ORM 3B
FY02	Project Title: Lingering Oil: Bioavailability and Effects			quipment
	Agency' NOAA- Auke Bay Laboratory			DETAIL
Prepared: 11/15/2001				

October 1, 2001 - September 30, 2002

	Authorized	Proposed		and the set of the set of the			。 · · · · · · · ·	
Budget Category:	FY 2001	FY 2002					國的社会主任中	
Personnel		\$16.2						
Travel		\$4.8	Sector States					
Contractual		\$62.0						
Commodities		\$5.0		目的自己的	<b>新小学学生的</b>			<b>的。</b> 他们的问题:
Equipment		\$0.0		LONG RA	NGE FUNDIN	IG REQUIREN	<b>MENTS</b>	10 Pdf 2 20 11 20
Subtotal	\$0.0	\$88.0			Estimated	Estimated	1	
General Administration		\$6.8			FY 2003	FY 2004		
Project Total	\$0.0	\$94.8		······································	\$15.0			
-	i							
Full-time Equivalents (FTE)		0.3			的目光等词题的			11日中 11日日
		······	Dollar amount	s are shown in	n thousands of	dollars.		
Other Resources					1		<u> </u>	·
Comments:	- <b>!</b>		••••••••••••••••••••••••••••••••••••••	·	·	·	L	·
No costs are included for NEI	PA compliance	technical rev	iew session at	lendance rest	oration attenda	ance report w	riting publicati	ons
professional conferences, or co	mmunity involv	ement USGS	is contributing	approximatel	v six person m	onths of salar	v towards this	project.
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U								
[]				,				FORM 3A
	Project Nur	nber: 0258	5				-	TRUSTEE
<b>FY02</b>	Project Title	e: Lingering	Oil: Bioava	ilability and	Effects			
			Sea Otters a	nd Harleoui	n Ducks			AGENUY
	- Agency. D	0.0000-		ina nanoqui			5	SUMMARY
Prepared: 11/15/2001	<u> </u>						]	

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October 1, 2001 - September 30, 2002

Personnel Costs:		GS/Range/	Months	Monthly		Proposed
Name	Position Description	Step	Budgeted	Costs	Overtime	FY 2002
Research scientist	Wildlife Biologist	GS 12/04	1.0	7.0		7.0
Capture personnel	Biologist	GS 9	2.0	4.6		9.2
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	l		2.0	11.6		0.0
·		而也是 <u>你的</u> 我也是我们还会自己		11.0	0.0	16 つ <b> </b>
Travel Costs:		Ticket	Round	Total	Doily	Proposod
Description	·····	Price	Trine	Dave	Per Diem	FV 2002
Airfare & ner diem IN - AK BT (	Snyder): CA-AK RT (Murray, Hatfield)	1.0	3	Day3		4 8
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L	· · · · · · · · · · · · · · · · · · ·				Travel Total	\$4.8
[=]	<b></b>				<b></b>	
	Project Number: 02585				F	-ORM 3B
	Designed Titles, Linearing Off, Discourse	- llability av d	Effecte		1	Personnel
<b>FIV</b> 2	Project I tile: Lingering UII: Bloava	anability and			l l	& Travel
	Agency: DOI/USGS - Sea Otters a	and Harlequi	n Ducks			DETAIL

Prepared: 11/15/2001

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October 1, 2001 - September 30, 2002

Contractual Costs:			Proposed
Description			FY 2002
Assays of blood and liver for Assays of liver, histopatholo Overhead to Purdue - 5K Charter vessel for captures M. Murray contract 20 days Quest Laboratories, blood a	or cytochrome P450 1A 50@\$200 ogy - 50 SO and 90 HD - 140 @\$30 - 20 days @1.8k/day @ .25K/day assays 50@ \$35		10.0 4.2 5.0 36.0 5.0 1.8
When a non-trustee organization is used, the form 4A is required. Contractual To		Contractual Total	\$62.0
Commodities Costs:			Proposed
Description			FY 2002
Veterinary supplies fuel and miscellaneous sup	plies		1.5 3.5
		Commodities Total	\$5.0
<b>FY02</b>	Project Number: 02585 Project Title: Lingering Oil: Bioavailability and Effects Agency: DOI/USGS - Sea Otters and Harlequin Ducks	F Cor Col	ORM 3B htractual & mmodities DETAIL

1

October 1, 2001 - September 30, 2002

New Equipment Purchases:	Number	Unit	Proposed
Description	of Units	Price	FY 2002
			0.0
			0.0
			0.0
			0.0
			0.0
	Į		0.0
			0.0
	•		0.0
			0.0
			0.0
			0.0
			0.0
I hose purchases associated with replacement equipment should be indicated by placement of an R.	New Equ	ipment Total	\$0.0
Existing Equipment Usage:		Number	Inventory
		or Units	Agency
	1		
·			
		<u></u>	
During at Number 00505			ORM 3B
			quipment
<b>FIUZ</b> [Project Lingering OII: Bloavailability and Effects			DETAIL
Agency: DOI/USGS - Sea Otters and Harlequin Ducks			
Prepared: 11/15/2001			

02630 DPD and Budget

.

**Planning for GEM** 

Project Number:	02630
Restoration Category:	Research/Monitoring
Proposer:	Restoration Office / Trustee Council
Lead Trustee Agency:	ADF&G (Restoration Office)
Cooperating Agencies:	All
Alaska SeaLife Center:	No
Duration:	3rd year 3-year project
Cost FY 02:	TOTAL \$304,700 (\$63,800 approved August; \$240,900 proposed December)
Cost FY 03:	\$0
Geographic Area:	Spill area wide
Injured Resource/Service:	All injured resources and services

## ABSTRACT

This project will conclude planning and begin initiation of the Trustee Council's vision for longterm monitoring and research in the Gulf of Alaska, the Gulf Ecosystem Monitoring and Research program (GEM). Planning and implementation during FY 02 will be based on the draft GEM Program Document until its review by the National Research Council (NRC) is complete. The document describes how a network of monitoring and supporting activities will be implemented over a five-year period starting in FY 03 using synthesis, research, modeling, and data management-information gathering. As directed by the Trustee Council, the GEM program is closely coordinated with, and complementary to, related large-scale marine science programs and organizations in the Gulf of Alaska and adjacent waters. In FY 02, GEM planning will support the final review of the GEM Program Document by the NRC, develop the FY03 *Invitation to Submit Proposals*, and continue development of the draft GEM Strategic Plan for Monitoring and Research.

Project 02630

## INTRODUCTION

In conjunction with the 10<sup>th</sup> anniversary of the 1989 oil spill, the Trustee Council, in March 1999, formally dedicated a portion of the Restoration Reserve to long-term monitoring and research in the spill area and adjacent northern Gulf of Alaska. This project will conclude planning for implementing the Trustee Council's vision, now known as the Gulf of Alaska Ecosystem Monitoring and Research program (GEM). In FY 00 a draft scoping document, the Draft GEM Science Program (April 2000), was developed and submitted to the NRC for preliminary review. This report was preceded and followed by an extensive public involvement process. Meetings to gather advice on the content and future of GEM were held in communities throughout the spill-affected region with stakeholder groups, Alaska Native organizations, state and federal policy makers, and scientists. This consultation continued into FY 01 with a statewide GEM workshop that drew attendance from throughout the U.S. Building on ideas from the consultations, the workshop and preliminary NRC recommendations, the draft GEM Program Document (GPD), including a draft monitoring and research plan, was produced and forwarded to the NRC for its review. In FY 02, this project will continue the process of developing and implementing GEM, consult and coordinate with other marine research efforts, support the final review of the GEM Program Document by the NRC, contribute to developing the FY 03 Invitation for Proposals, and begin developing a "State of the Gulf Report" as regional input to a status report on north Pacific resources now being developed by PICES.

## NEED FOR THE PROJECT

## A. Statement of the Problem

In order for the Trustee Council's vision for GEM to be implemented over a five-year period starting in FY 03, the following activities need to be completed in FY 02: 1) collection and assimilation of reviews from the NRC, the scientific community and the public; 2) revision of the draft GEM Program Document into a form that can be approved by the Trustee Council; 3) development of the FY 03 *Invitation to Submit Proposals*; 4) establishment of a set of committees and work groups and series of workshops to assist with further development of the GEM program; and 5) continue the process of consultation and coordination with other marine research efforts.

#### **B.** Rationale/Link to Restoration

In deciding to allocate a significant portion of the Restoration Reserve for long-term monitoring and research, the Trustee Council explicitly recognized that complete recovery from the oil spill will not occur for decades and that long-term observation and, possibly, restoration actions are needed if injured resources and services are to be fully restored. The Council further recognized that conservation and improved management of these resources and services will require a substantial ongoing investment to improve understanding of the biology and marine and coastal ecosystems that support the services as well as the people of the spill region. Hence, the Council made a commitment to development of a long-term monitoring and research program for the spill region that will inform and promote the full recovery and restoration, conservation, and improved management of spill-area resources.

## C. Location

The transition to the GEM program will occur primarily at the Restoration Office in Anchorage, with input from spill-area communities and key experts outside Alaska. Monitoring and research carried out under GEM will take place mostly in the coastal and marine environment within the oil-spill area and, to the extent necessary, in adjacent parts of the northern Gulf of Alaska.

## COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE

The incorporation of substantial community involvement and the use of traditional ecological knowledge into the overall GEM program are important goals to be addressed during this phase of planning for the GEM project. The Restoration Office will work closely with the Public Advisory Group and other members of the public in order to ensure that community interests are coordinated with plans for long-term monitoring and research. Advice from the communities will also be sought in how best to reconstitute the Public Advisory Group to ensure community participation. Community and TEK experts will be included as committees and work groups are developed and will be encouraged to participate in workshops.

## **PROJECT DESIGN**

## A. Objectives

Specific objectives are to:

- 1) Revise the draft GEM Program Document (GPD) in response to NRC and public comment and support the process of its adoption by the Trustee Council.
- 2) Develop the content of the FY 03 *Invitation to Submit Proposals* and the FY 03 Work Plan.
- 3) Begin development of a "State of the Gulf Report" and provide regional input to a status report on North Pacific Resources.
- 4) Continue development of GEM Monitoring and Research Program.
  - a) Provide scientific guidance and support in developing the proposed Scientific and Technical Advisory Committee (STAC), subcommittees, work groups, and new procedures for peer review and proposal solicitations.

b) Provide scientific support to the committees in furthering development of the GEM Monitoring and Research Strategic Plan, including updating and maintaining GEM gap analysis database.

c) Assist Data Manager in developing data and information policies and procedures.

d) Work with stakeholders, interested community groups, and existing communitybased projects to develop meaningful ways to incorporate traditional ecological knowledge and community involvement into the program.

- e) Initiate and develop modeling advisory group.
- f) Initiate and develop Intertidal and Subtidal study plan.
- g) Initiate and develop the Alaska Coastal Current and Offshore study plans.
- h) Initiate and develop the Watershed study plan.
- 5) Consult and coordinate with other marine research efforts.
  - a) Develop a network of partnerships to complement core monitoring efforts, aid in the peer review process and expand the scope of the GEM Program. Potential partners include NEP GLOBEC, USGOOS, CORE, PICES, SSSF, NPRB, NPAFC, AAAS and others.
  - b) Assist State of Alaska in planning for June 2002 Oceans and Watersheds Symposium and first State of Alaska's Oceans and Watersheds Report, due in fall 2002.
  - c) Assist with other meetings.
  - d) Develop outreach with marine-related NGOs.
  - e) Expand outreach on GEM program.

## **B.** Methods

The methods described below are organized by project objective (in parentheses):

(1) <u>Revise the draft GEM Program Document in response to NRC and public comment and</u> <u>support the process of its adoption by the Trustee Council</u>. In response to NRC comments, the document's section on Program Management (Volume I Chapter 6,) and other related sections will be further developed to support GEM initiation and development. Additional information will be provided the NRC upon request. The final NRC review is expected in the spring of 2002, and a final draft of the GEM Program Document will be developed and submitted to the Trustee Council for adoption as soon thereafter as possible.

(2) Develop the content of the FY 03 Invitation to Submit Proposals and the FY 03 Work Plan. The FY 03 Invitation to Submit Proposals will be developed this year in two phases. Phase I will follow the normal schedule (invitation issued in mid-February, proposals due mid-April, draft recommendation out in early June) and include three basic types of projects: continuing oilrelated injury, ongoing GEM transition, and GEM synthesis. These projects can go forward pending the final NRC review report. Phase II will follow receipt of the final NRC report, final revision of the GEM Program Document, its adoption by the Trustee Council, and preliminary subcommittee work and is anticipated to be issued in early fall 2002, with a Trustee Council decision slated for December 2002-January 2003.

(3) Begin development of a "State of the Gulf Report" and provide regional input to a status report on North Pacific Resources. Working in cooperation with the PICES Secretariat and PICES members, begin developing the "State of the Gulf Report" as part of a larger north Pacific effort now being organized and coordinated by the PICES Secretariat. This effort will also be

coordinated with the State of Alaska's first State of the Oceans and Watersheds Report, scheduled for fall 2002.

(4) <u>Continue development of GEM Monitoring and Research Program.</u> This objective will take the combined efforts of the existing Restoration Office staff, the Trustee Council's Chief Scientist, and some additional staff support as we continue with the transition to the GEM Program. During FY 02, all the administrative functions of the program will be reviewed (procedures for issuing invitation for proposals, receiving and reviewing proposals, reporting requirements, project management, etc.) and recommendations made to the Trustee Council on how to streamline the program, increase efficiency, reduce costs, and ensure public input and involvement and scientific credibility. The office will use existing staff plus 6 months internship and 6 months additional scientific support to assist in this effort. Specifically, staff will

- a) <u>Provide scientific guidance and support in developing the proposed Scientific and</u> <u>Technical Advisory Committee (STAC), subcommittees, work groups, and new</u> <u>procedures for peer review and proposal solicitations.</u> Staff will be instrumental in defining the processes, locating members and organizing staff support for developing the committees.
- b) <u>Provide scientific support to the committees in furthering development of the</u> <u>GEM Monitoring and Research Strategic Plan</u>. This will include improving and maintaining the GEM gap analysis database and the GEM and TC bibliographies and supporting document collections.
- c) <u>Assist Data Manager in developing data and information policies and procedures</u>. Quality data management is a priority for the GEM Program. Establishing a Data Advisory Working Group and developing data and information policies and procedures will involve substantial meeting time.
- d) <u>Work with stakeholders, interested community groups, and existing communitybased projects to develop meaningful ways to incorporate traditional ecological</u> <u>knowledge and community involvement into the program.</u>

Scientific support will be provided to further develop this aspect of the GEM Program. Staff will work with the Chugach Regional Resources Commission's tribal natural resource management planning effort, the proposed Fisheries Management Applications Work Group, and other efforts to facilitate this, as well as examine new opportunities.

- d) <u>Initiate and develop modeling advisory group.</u> An oceanographic modeling workshop was convened in November 2001 to start to build consensus on physical modeling and data collection. Post-meeting follow-up will be conducted in conjunction with GEM transition physical modeling and Hinchinbrook mooring project development. In addition, coupled physical-biological models will play a strong role in GEM and the modeling advisory group will be asked to assist in setting the direction of these efforts.
- e) <u>Initiate and develop Intertidal and Subtidal study area</u>. An organization meeting of the Nearshore Monitoring Workshop project (02395) was held in Santa Barbara in November. A day-long session is scheduled at the Annual Workshop in January 2002, with follow-up on ideas to be developed at the workshop.
- f) Initiate and develop the Alaska Coastal Current and Offshore study areas. Participate in the NEP-GLOBEC 2001 principal investigators meeting, the US GOOS Steering Committee, and the PICES Monitor Work Group, and other scientific meetings as appropriate as well as coordinate with relevant institutions (NOAA, ADF&G, CORE, CoML, etc.)
- h) <u>Initiate and develop the Watershed study area</u>. Develop a one-day workshop on watershed issues as they relate to marine-terrestrial linkages scheduled for January 2002. Participate as a member of the steering committee of Project 02612, Nutrient Cycling in the Kenai River Watershed, and work with PIs in the development of the project study plan.
- 5) Consult and coordinate with other marine research efforts.
  - a) <u>Develop a network of partnerships.</u> This will be accomplished through development of an MOA with regional agencies and institutions, participation in CORE and PICES, active memberships on the Alaska SeaLife Center Scientific Advisory Committee, the Science Coordination Panel of the Southeast Sustainable Salmon Fund, the Board of the North Pacific Research Board, the PICES MONITOR Task Team, and the US GOOS Steering Committee, and by attending and making presentations on GEM at meetings of scientific organizations and other marine research institutions including NEP-GLOBEC, NPAFC, AFS, AAAS, AGU, ASLO, KBRR, PWSSC-OSRI, and at academic institutions such as UAF and UAA.
  - b) <u>Assist State of Alaska in planning for June 2002 Oceans and Watersheds</u> <u>Symposium and Report.</u> The Trustee Council will be a co-sponsor with the State of Alaska and numerous other organizations in the first statewide Alaska Oceans and Watersheds Symposium June 18-19, 2002, to be followed in fall 2002 with the first State of Alaska's Oceans and Watersheds Report. Funds will be provided to assist in this effort. In addition, in-kind staff support will be provided to assist with planning and logistics.
  - c) <u>Assist with other meetings.</u> The Trustee Council is frequently asked to contribute to the costs of other scientific and policy meetings and symposia that would be of benefit to the GEM Program. Participation in this manner greatly aids in building partnerships.
  - d) <u>Develop outreach with NGOs.</u> As interest in Alaska's marine environment expands, a number of existing and newly established non-profits are focusing their attention on marine issues. Briefings will be held for these groups, and their concerns incorporated as GEM develops.
  - e) <u>Expand outreach on GEM</u>. A new brochure on the GEM Program will be prepared and the website updated and expanded to include more recent information and be more user friendly.

## C. Cooperating Agencies, Contracts, and Other Agency Assistance

Federal and state resource agencies will be actively involved in further development of GEM, as will other institutions, particularly the scientific committees involved with planning and implementing monitoring and research in the north Pacific Ocean. These include, for example,

the North Pacific Research Board, the North Pacific Marine Science Organization (PICES), the North Pacific Anadromous Fish Commission (NPAFC), the Global Oceans Ecosystems Dynamics (GLOBEC) Northeast Pacific Project (NOAA-NSF), the Ocean Carrying Capacity (OCC) study of the National Marine Fisheries Service (NMFS), the Fisheries and Oceanography Coordinated Investigations (FOCI) of NMFS-PMEL, and other NOAA entities.

# SCHEDULE

## A. Measurable Project Tasks

October 2001: Participate in PICES MONITOR task team meeting to present draft GEM Program Document (GPD)

November 2001: Attend NPMR presentations on project results (NPRB coordination) November 2001: Meet with NRC to hear oral comments on draft GEM Program Document November 2001: Hold physical oceanographic modeling workshop on GEM transition projects November 2001: Participate in Watershed Workshop Planning Meeting November 2001: Participate in US GOOS Steering Committee meeting to plan 2002 Workshop on implementing regional coastal monitoring programs December 2001: GEM brochure completed December 2001: Web site updated January 2002: EVOS Annual Meeting, including meetings on Watershed & Intertidal/Subtidal February 2002: Issue Invitation for Proposals for FY 03, Phase I\ Participate in AGU meeting session on cross-shelf transport (sponsored by GLOBEC NEP) (this is key to refining conceptual model for GEM)

April 2002: Receive comments from NRC on GEM Program Document

April 2002: STAC committee process in place

May 2002: 1<sup>st</sup> STAC meeting

June 2002: Subcommittee process in place

June 2002: Submit revised GEM Program Document for Trustee Council approval

June 2002: Oceans and Watersheds Symposium

## **B.** Project Milestones and Endpoints

Obj. 1, GEM Program Document – adopted June 2002

Obj. 2, Invitation Phase 1 – released February 2002; Phase II – released October 2002

Obj. 3, State of Gulf Report – completed Fall 2002

Obj. 4, Program development/implementation - ongoing throughout life of GEM

Obj. 5, Consult/coordinate - ongoing throughout life of GEM

## C. Completion Date

Trustee Council is expected to adopt GEM Program Document June 2002. Implementation costs in FY 03 and beyond will be part of regular administrative budget (Project /100).

# **PUBLICATIONS AND REPORTS**

Revised 11/30/01

The product of this project will be the GEM Program Document. No reports will be required and no additional publications are expected.

#### **PROFESSIONAL CONFERENCES**

The GEM Program will be discussed at the PICES and NPAFC meetings in October 2001, at the U.S. GOOS Committee meeting in February 2002, and at the American Fisheries Society National Meeting in August 2002. Attendance at additional professional conferences may be required for coordination and integration.

#### NORMAL AGENCY MANAGEMENT

The Trustee Council directed the executive director and chief scientist to develop a plan for longterm monitoring and research (i.e., GEM) in a resolution adopted on March 1, 1999, in regard to the expenditure of Restoration Reserve funds. Thus, this project is something that is appropriately carried out by the Restoration Office.

#### COORDINATION AND INTEGRATION OF RESTORATION EFFORT

This project will be fully coordinated with and among Trustee agencies, scientific peer reviewers, the Public Advisory Group, and others.

### **PROPOSED PRINCIPAL INVESTIGATORS**

Molly McCammon, Executive Director *Exxon Valdez* Oil Spill Trustee Council 441 W. 5<sup>th</sup> Ave., Suite 500 Anchorage, Alaska 99501 907-278-8012 907-276-7178 (fax) molly\_mccammon@oilspill.state.ak.us

Dr. Phil Mundy, Science Coordinator *Exxon Valdez* Oil Spill Trustee Council 441 W. 5<sup>th</sup> Ave., Suite 500 Anchorage, Alaska 99501 907-278-8012 907-276-7178 (fax) phil mundy@oilspill.state.ak.us Dr. Robert Spies, Chief Scientist Exxon Valdez Oil Spill Trustee Council Applied Marine Sciences 4749 Bennett Drive, Suite L Livermore, California 94550 925-373-7142 925-373-7834 (fax) spies@amarine.com

Ms. McCammon has 28 years of experience in Alaska in business, journalism, communications, and public policy, emphasizing natural resource issues. She has been Executive Director of the Trustee Council since 1994.

Dr. Mundy has 28 years of experience as a fisheries scientist, including 25 years in Alaskan fisheries research and management. As Science Coordinator since 1999, Phil has been key to development of the Gulf Ecosystem Monitoring (GEM) program. He has worked as a reviewer of research on the oil spill since 1989.

Dr. Spies has 35 years of experience as a scientist in marine ecology, marine pollution and toxicology, the effects of petroleum on marine organisms, and benthic ecology. He is president of Applied Marine Sciences, Inc. and has been the Trustee Council's Chief Scientist since 1991.

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	FY 0	2 EXXON VA		E COUNCIL P	ROJECT BU	DGET		
		Oct	iober 1, 2001 - S	eptember 30,	2002			
	Authorized	Proposed		PROPOSED	FY 02 TRUS	TEE AGENCI	ES TOTALS	
Budget Category:	FY 01	FY 02	ADEC	ADF&G	ADNR	USFS	DOI	NC
				\$187.0	\$117.7			
Personnel	\$56.7	\$55.2	法律律法律定的	<b>新建筑 古</b> 名称	中心和影响	和分词目的消费		法的问题的代码出
Travel	\$20.0	\$60.0			States States -		的意义和分析	
Contractual	\$161.5	\$160.0			HR CARE			한 NGTA 및 것 다 관련 제 2014년 - 전 1917년
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Equipment	\$0.0	\$10.0		LONG R	ANGE FUNE	ING REQUIR	EMENTS	
Subtotal	\$243.7	\$285.2				Estimated		
General Administration	\$19.7	\$19.5				FY 2002		
Project Total	\$263.4	\$304.7						
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October 1, 2001 - September 30, 2002

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Budget Category:	FY 01	FY 02						
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Contractual	\$0.0	\$50.0						
Commodities	\$5.5	\$0.0	同時間有些時間	的行政的问题。	臺灣和歐洲國際的		新的问题。	中國民產黨是明朝自己的主义的
Equipment	\$0.0	\$10.0		LONG F	RANGE FUND	ING REQUIR	REMENTS	
Subtotal	\$32.3	\$175.2						
General Administration	\$1.0	\$11.8						
Project Total	\$33.3	\$187.0						
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FY02	Project Title	e: Planning	for Long-Ter	m Research	n & Monitori	ng Program	ן	
	Agency: A	DFG/Restor	ation Office					
								SUMMARY

# October 1, 2001 - September 30, 2002

Personnel Costs:		GS/Range/	Months	Monthly		Proposed
Name	Position Description	Step	Budgeted	Costs	Overtime	FY 02
						0.0
Intern (APPROVED AUGU	ŞT)		3.0	3.2		9.6
Intern			3.0	3.2		9.6
						0.0
Staff scientist			6.0	6.0		36.0
						0.0
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		Ticket	Round	Total	Doily	Broposod
Description		Price	Trine	Dave	Dally Per Diem	
Travel for Restoration Offic	e staff and other personnel as peeded	11108	- inpo	Days		10.0
for PICES meeting (Victoria	B C in October) modeling workshop			•		0.0
including participants) and	meetings with other potential					0.0
collaborators (APPROVED	AUGUST)					0.0
						0
Travel for STAC and subco	mmittee meetings and community					50.0
involvement workshops: als	to for travel for Restoration Office					0.0
staff and other personnel a	s needed					· 0.0
,						0.0
						0.0
						0.0
						0.0
					Travel Total	\$60.0

Y02	Project Number: 02630 Project Title: Planning for Long-Term Research & Monitoring Program Agency: ADFG/Restoration Office	FORM 3B Personnel & Travel DETAIL

F

October 1, 2001 - September 30, 2002

Contractual Costs:		······	Proposed
Description			FY 02
External meeting sup Internal meeting sup	oport (PICES, Oceans & Watersheds Symposium, other) port (space rental, printing, etc.)		45.0 5.0
When a non-trustee o	proanization is used, the form 4A is required	ractual Total	\$50.0
Commodities Costs			Proposed
Description	· · · · · · · · · · · · · · · · · · ·		FY 02
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L		odities lotal	\$0.0
FY02	Project Number:02630 Project Title: Planning for Long-Term Research & Monitoring Program	F Co Co	ORM 3B ntractual & mmodities
	Agency: ADFG/Restoration Office		DETAIL

October 1, 2001 - September 30, 2002

New Equipm	ent Purchases: Number	Unit	Proposed
Description	of Units	Price	FY 02
			0.0
Computer and	d software for staff scientist; upgrade computer projector		10.0
		} 1	0.0
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Those purcha	ses associated with replacement equipment should be indicated by placement of an R New Equ	linment Total	\$10.0
Existing Equ	inment Ilsage:	Number	Inventory
Description		of Units	Agency
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1	Project Number: 02630	F	ORM 3B
EV02	Project Title: Planning for Long-Term Research & Monitoring	E	quipment
	Program		DETAIL
	Agency: ADFG/Restoration Office		
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October 1, 2001 - September 30, 2002

	Authorized	Proposed	
Budget Category:	FY 01	FY 02	
Personnel	\$7.4	\$0.0	
Travel	\$0.0	\$0.0	
Contractual	\$161.5	\$110.0	
Commodities	\$0.0	\$0.0	
Equipment	\$0.0	\$0.0	LONG RANGE FUNDING REQUIREMENTS
Subtotal	\$168.9	\$110.0	
General Administration	\$12.4	\$7.7	
Project Total	\$181.3	\$117.7	
Full-time Equivalents (FTE)			·理论不是有了。280.0000元,2月17年,2月10日,2月19日的世纪的中国中国的中国中国的公司
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October 1, 2001 - September 30, 2002

Personnel Costs:			GS/Range/	Months	Monthly		Proposed
Name	Position Description		Step	Budgeted	Costs	Overtime	FY 02
			- 1				0.0
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		Subtotal	1. 小时间的带着了	0.0	0.0	0.0	
					Per	sonnel lotal	\$0.0
Travel Costs:			LICKET	Round	lotal	Daily	Proposed
Description			Price	Inps	Days	Per Diem	Fy 02
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							······································

FY02

Project Number: 02630 Project Title: Planning for Long-Term Research & Monitoring Program Agency: ADNR FORM 3B Personnel & Travel DETAIL

October 1, 2001 - September 30, 2002

Contractual Costs:			Proposed
Description			
Applied Marine Sciences and development of first (APPROVED AUGUST).	(Chief Scientist Bob Spies) to assist with modeling workshop GEM invitation, including working with habitat subcommittees		40.0
Applied Marine Sciences GEM Program Documen procedures and policies,	(Chief Scientist Bob Spies) to assist with revision of t, continued development of GEM invitation, review of operating and initial STAC and subcommittee work.		70.0
When a non-trustee orga	nization is used, the form 4A is required.	Contractual Tota	I \$110.0
Commodities Costs:			Proposed
Description			FY 02
		Commodities Total	\$0.0
FY02	Project Number: 02630 Project Title: Planning for Long-Term Research & Monitoring Program Agency: ADNR		FORM 3B ontractual & ommodities DETAIL

October 1, 2001 - September 30, 2002

New Equipment Purchases:	Number	Unit	Proposed
Description	of Units	Price	FY 02
			0.0
			0.0
			0.0
			0.0
			0.0
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		i	0.0
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		1	0.0
Those purchases associated with replacement equipment should be indicated by placement of an R	. New Equ	ipment Total	\$0.0
Existing Equipment Usage:		Number	Inventory
Description		of Units	Agency
			1
Project Number: 02630		l l F	ORM 3B
Project Title: Planning for Long-Term Research & Monitor	ing		auipment
Program	-		
Agency: ADNR			
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- 11 The Miami Museum of Science Miami, Florida
- 13 The New England Aquarium Boston, Massachusetts
- 15 The Providence Public Library Providence, Rhode Island
- 16 About the Institute of Museum and Library Services



I AM PLEASED TO PRESENT THE National Awards for Museum and

Fibrary Service. THIS YEAR'S RECIPIENTS

enriching LIVES AND connecting

PEOPLE TO EACH OTHER AND TO THE WORLD.

THEY ARE making a Difference IN

THEM FOR THEIR DEDICATION AND entrugiasm

LAURA BUSH

From the Chairmen and Director

The Institute of Museum and Library Services proudly salutes the winners of the National Awards for Museum and Library Service. These awards were created to underscore the powerful role of museums and libraries as leaders in our democratic society. The award celebrates their role as cornerstones of community life. This national honor is a tribute to the ability of libraries and museums to reach out to children, families, and communities in towns and cities all across the nation. The award winners demonstrate a core commitment to public service through innovative programs and active partnerships that address the urgent and changing needs within the communities they serve.

This year's recipients embody extraordinary public service. Through partnerships with schools, religious institutions, youth organizations, businesses, social service agencies, and many other groups, these institutions address the core needs of diverse communities across America.

Kinshasha Holman Conwill Chairperson National Museum Services Board

Director and Library Services

Robert Martin, Ph.D. Institute of Museum

Martha Gould Chairperson National Commission on Libraries and Information Science



ARLIS HAS BECOME THE MOTHER LODE OF ALASKA RESOURCES INFORMATION, FACILITATING WISE DEVELOPMENT, CONSERVATION, MANAGEMENT, AND MEANINGFUL PUBLIC PARTICIPATION.

ARLIS-The Alaska Resources Library and Information Service

Contact ARLIS Management Team 907-272-7547

Alaska Resources Library and Information Services 3159 C Street, Suite 100 Anchorage, Alaska

#### Supported by

Address

Alaska Department of Fish and Game Environment and Natural Resources Institute (UAA) Exxon Valdez Oil Spill Trustee Council Fish and Wildlife Service Minerals Management Service National Park Service U.S. Army Fort Richardson U.S. Geological Survey University of Alaska Anchorage

> Website www.arlis.org

Bureau of Land Management is also a supporting agency We regret this typesetting error.

ARLIS has become the mother lode of Alaska resources information, facilitating wise development, conservation, management, and meaningful public participation.

In 1995, facing serious budget cuts in the largest state in the nation, seven federal, state, and university librarians in Alaska banded together. In the tradition of the Last Frontier they began a pioneering effort to pool resources and consolidate collections. ARLIS opened in 1997. Not only did this partnership save individual library collections from extinction, ARLIS has proven to be greater than the sum of its parts.

Focused on Alaska's vast natural and cultural resources, ARLIS houses books, technical reports, journals, maps, videos, photographs, and a circulating collection of animal skulls, skins, and mounted birds. As unique as this collection is, ARLIS's most valuable resource is its knowledgeable staff. As the nation grapples with such controversial topics as drilling in the Arctic National Wildlife Refuge, the declining Steller sea lion populations, the reauthorization of the TransAlaska Pipeline, and marine pollution, ARLIS staff provides unbiased, universal access to information to patrons on all sides of the issues, locally, nationwide, and around the world.

The Children's Discovery Museum of San José



Children's Discovery Museum of San José 180 Woz Way

San José, California 95110

Contact Marilee Jennings Acting Director 408-298-5437

Address

Website www.cdm.org

> The sounds of wonder and discovery at Children's Discovery Museum are just as sharp as architect Ricardo Legorreta's building design. In the 52,000-square-foot facility, San José's children learn about the world around them and one another through concrete experiences. In a community where people speak 144 different languages and where one in five children lives in poverty, the Museum is a learning hub that inspires children of all ages and backgrounds.

> The Museum began as a classic Silicon Valley start-up, conceived not in the garage of Hewlett-Packard fame, but at a kitchen table. Meeting there, two concerned mothers brainstormed ways to nurture young minds. Today, over 150 exhibits and special programs meet the needs of children to learn by doing.

> In Discovery Youth, for example, a diverse group of adolescents uses on-site multimedia equipment to build Web sites and develop technical expertise. And since 1993, BioSITE (Students Investigating Their Environment) has helped 1,000 children explore the environment around nearby Guadalupe River.

> Countless other programs-including a traditional Lunada Familiar, in which Latino families gather together under the light of the moon to recount stories and perform-exemplify the thoughtful relevance of this Museum's programming.





The Hancock County Library System

Contact Prima Plauché Director 228-467-5282

Address Hancock County Library System 312 Highway 90 Bay St. Louis, Mississippi 39520

> Website www.hancock.lib.ms.us

"We are committed to being a force for educational excellence and a conduit to advance literacy and technological access to information in Hancock County, Mississippi," said Prima Plauché, Director of the Hancock County Library System. It's an ambitious enterprise, but through partnerships with government, business, and grassroots supporters, the library system receives more than \$21 per capita income in a state where average local government spends only \$8.75 per person on libraries. Successful capital campaigns raised funds for three new libraries in Hancock County including the state's first joint-use school/public library.

Technological access to information is essential to areas like Hancock County where more than 50% of the population resides in unincorporated communities. From Bay St. Louis, the county seat, the Library System's CONNECT project forged links to MAGNOLIA (Mississippi Alliance for Gaining New Opportunities through Library Information Access) and MissIn (Mississippi Information Network). The Hancock County Library System is now expanding that connectivity through FOCUS (Free Online Computer User Services) "to ensure that the information superhighway intersects with the country roads of Hancock County," says Plauché.

WE ARE COMMITTED TO BEING A FORCE FOR EDUCATIONAL EXCELLENCE AND A CONDUIT TO ADVANCE LITERACY AND INFORMATION IN HANCOCK COUNTY, MISSISSIPPI.

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The Miami Museum of Science

Contact Dr. Judy Brown Vice President of Program and Research Development 305-646-4200

Address Miami Museum of Science and Space Transit Planetarium 3280 South Miami Avenue Miami, Florida 33129

> Website www.miamisci.org

For more than a decade the Miami Museum of Science has received national recognition for its innovative programming for adolescents. The Museum has developed targeted programs that address the gender and diversity barriers that prevent large numbers of females and minorities from entering the fields of science and mathematics. For example in the Museum's Upward Bound Math and Science Center, students received mentoring, college preparation classes, professional internships, computer access and field research experiences, resulting in 100 percent of graduating seniors enrolling in colleges and universities.

The Museum has forged partnerships with a wide range of organizations including Miami-Dade County Public Schools, community-based groups, private enterprises, and government funding agencies. In the NIH-funded BioTRAC program, the Museum is opening doors in biomedicine, providing students with access to internships at University of Miami's worldrenowned School of Medicine research labs, where they are participating in cutting-edge research in such fields as diabetes, pediatric disease, and nanotechnology.

Youth participation is not short-term. Students are continuously engaged in Museum programming throughout their middle and high school years, with some coming full circle by ultimately joining the Museum's professional staff.



ADDRESSING THE GENDER AND DIVERSITY BARRIERS THAT PREVENT LARGE NUMBERS OF FEMALES AND MINORITIES FROM ENTERING THE FIELDS OF SCIENCE AND MATHEMATICS.





The New England Aquarium



The New England Aquarium is dedicated to presenting, promoting, and protecting the world of water. Located on Boston's waterfront, the Aquarium's mission is fulfilled in part through exhibits, education, and research. However, one of its highest priorities is to be a responsive community member.

To build bridges from Boston's neighborhoods, the Aquarium has established long term sustainable partnerships with organizations that serve youth, both in and out of school.

The Afterschool Initiative serves over 400 children enrolled with the Boys and Girls Clubs and Citizens Schools. Tailored to the needs of each partner, the program includes hands on science activities, teen internships, and family field trips.

The Harbor Discoveries summer camp located on a Boston Harbor island features four aquatic themed weeks. Over 500 children participate, and over 250 Boston children receive scholarships.

The Aquarium's collaboration with the Boston Public Schools includes week long teacher sabbaticals, science curriculum development, access to the Teacher Resource Center, and over 4000 free student admissions.

By reaching out to Boston's youth, the New England Aquarium hopes to inspire the next generation of environmental leaders.

Contact Jerry Schubel President 617-973-5200

Address The New England Aquarium Central Wharf Boston, Massachusetts 02110

> Website www.neaq.org





The Providence Public Library

Contact Ms. Dale Thompson Library Director 401-455-8000

Address Providence Public Library 225 Washington Street Providence, Rhode Island 02903

> Website www.provlib.org

Through innovative programs and services, the Providence Public Library reaches beyond the doors of its ten neighborhood branches, serving the varied needs of a dynamic urban population, regardless of income, address, or native language. Each branch is playing a key role in the renaissance transforming Providence by addressing the core needs of its local community.

Providence is a colorful montage of many faces. Its dynamic neighborhoods reflect the cultural and ethnic diversity of a city that inspires hope through universal opportunity. As a champion of individual advancement through literacy, Providence Public Library is helping to shape the economic revival that has energized its community.

The heartbeat of each neighborhood is unique. With programs designed to build literacy and business skills, it provides an anchor for assimilation and future independence for new immigrants. Its educational opportunities for children are designed to stimulate learning, encourage intellectual development and creativity, and promote academic achievement. The Library also offers a wide range of inspiring cultural and arts programs. Through an array of enrichment and technology initiatives, Providence Public Library brings vitality to the entire community.



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About the Institute of Museum and Library Services

*Address* Institute of Museum and Library Services 1100 Pennsylvania Ave., NW Washington, DC 20506

> Website www.imls.gov

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The Commission is a permanent, independent agency of the federal government charged with advising the legislative and executive branches on national and international library and information policy and plans. The Commission also advises the Institute on general policy with regard to library services.

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441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

AGENDA *EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL MEETING **December 11, 2001 10:00 a.m.** 441 West 5<sup>th</sup> Ave., Suite 500, ANCHORAGE

DRAFT

Trustee Council Members:

CRAIG TILLERY Assistant Attorney General State of Alaska MICHELE BROWN Commissioner Alaska Department of Environmental Conservation

DRUE PEARCE Senior Advisor to the Secretary for Alaskan Affairs U.S. Department of the Interior DAVE GIBBONS U.S. Department of Agriculture Forest Service

JAMES W. BALSIGER FRANK RUE Director, Alaska Region Commissioner National Marine Fisheries Service Alaska Department of Fish & Game Teleconferenced in Anchorage, Restoration Office, 441 W 5<sup>th</sup> Ave, Suite 500 Federal Chair

- 1. ARLIS tour 8:30 a.m. 9:30 a.m. - At ARLIS, 3150 C Street
- Call to Order 10:00 a.m.
   Approval of Agenda
   Approval of Meeting notes August 6, 2001
- 3. PAG report Chuck Meacham 10:05 a.m.
- 4. Executive Directors Report 10:10 a.m. -NOAA budget adjustment \*
- Investments Molly McCammon, John Jenks and Bob Storer 10:30 a.m.
   -Recent reports
   -Discussion of payout policy



- 6. Public Comment 11:00 a.m.
- Deferred projects Molly McCammon and Bob Spies 11:30 a.m.
   -Project 02585: Lingering Oil followup \* Bob Spies, Jeep Rice and Jim Bodkin
   -Other projects \*
- 8. Executive session and lunch 12:00 1:00 p.m.
- 9. Deferred projects continued \* 1:00 p.m. 2:00 p.m.
- 10. Habitat 2:00 p.m.

-Status of current activities - Molly McCammon -Small parcel offers (3 10-acre parcels on Kodiak) \* - Chris Mullaney, USFWS -Afognak resolution: supporting protection efforts \*- Molly McCammon -Afognak microwave station proposal \* - Sherry Greenshields, Alascom -Jack Bay offer \* - Ken Holbrook, USFS -Consultation on grant priorities \* - Brad Meiklejohn, The Conservation Fund and Randy Hagenstein, The Nature Conservancy

- GEM Molly McCammon and Phil Mundy 3:45 p.m.
   Status report on planning and review
   Proposed Scientific and Technical Advisory Committee and subcommittee process\*
- 12. CIIMMS briefing Carol Fries, ADNR and Russel Kunibe, ADEC 4:15 p.m.

Adjourn - 5:00 p.m.

Open House - 5:00 p.m. - 6:30 p.m.





645 G Street, Suite 401, Anchorage, AK 99501-3451 907/278-8012 fax:907/276-7178

TRUSTEE COUNCIL MEETING NOTES

pill Trustee Council

Anchorage, Alaska August 6, 2001

By Molly McCammon Executive Director

Trustee Council Members Present:

Dave Gibbons, USFS●Dave Allen, USFWSJames Balsiger, NMFS

Frank Rue, ADF&G
Michele Brown, ADEC
\*Craig Tillery, ADOL

\* Chair

In Anchorage: Gibbons, Toohey, Balsiger, Rue, See, and Tillery. By teleconference in Juneau: Bosworth.

• Alternates:

Rob Bosworth served as an alternate for Frank Rue from 8:40 a.m. until 10:10 a.m. Marianne See served as an alternate for Michele Brown for the entire meeting. Cam Toohey served as an alternate for Dave Allen for the entire meeting.

Meeting convened at 8:40 a.m., August 6, 2001

1. Approval of the Agenda

APPROVED MOTION: Approved the August 6, 2001 agenda (Attachment A).

Motion by Gibbons, second by See.

# 2. Approval of the Meeting Notes

APPROVED MOTION: Approved May 3, 2001 meeting notes (Attachment B) with an amendment to section 6, first sentence, changing the wording from United States Fish and Wildlife Service to Alaska Department of Fish and Game.

Motion by Balsiger, second by See.

- 3. Project 01535 **APPROVED MOTION:** Approved the transfer of \$18,400.00 from the Data Management Project (01455) budget to the Final Report Project (01535). Motion by See, second by Balsiger. 4. Office Move **APPROVED MOTION:** Approved \$98,800 in additional funds to move the Restoration office, with \$37,600 for FY 01 and \$61,200 for FY 02. Motion by Bosworth, second by See. 5. Status of Large and Small parcel programs APPROVED MOTION: Approved combining the funds remaining in the two Kodiak 10-acre designations, with the intent the funds will be spent on either Larsen Bay Shareholder parcels or Kodiak Tax Parcels. Motion by Balsiger, second by Gibbons. 6. UA Parcel - PWS 05 APPROVED MOTION: Adopted resolution 01-12 (Attachment C) to renew the authorization for funding the purchase agreement for small parcel PWS 05 until September 1, 2002. Motion by Gibbons, second by Balsiger. 7. UA Parcel - PWS 06 APPROVED MOTION: Adopted resolution 01-13 (Attachment D) to renew the authorization for funding the purchase agreement for small parcel PWS 06 until September 1, 2002. Motion by Gibbons, second by Balsiger.
  - 8. <u>GEM writing contract, Project 01630</u>

APPROVED MOTION: Approved the transfer of \$10,700 from Project 01455 (GEM Data System) to Project 01630 (Planning for GEM) for the purpose of contracting for preparation of a human uses section for the GEM document. (\$10,000 for the contract and \$700 for ADNR general administration costs.)

Motion by Balsiger, second by See.

### BREAK

Technical difficulties.

Off the record at (9:35 a.m.) On the record at (9:53 a.m.)

Public comment period began at 10:08 a.m.

Public comments received telephonically from 2 individuals in Anchorage, and from 1 person in Anchorage.

Public comment period closed at 10:30 a.m.

9. <u>GEM</u>

**APPROVED MOTION:** 

Approved a motion to submit GEM draft to NRC Review Committee.

All signified by saying "aye".

## BREAK

Off the record at (11:05 a.m.) On the record at (11:10 a.m.)

## BREAK INTO EXECUTIVE SESSION

10. Executive Session:

APPROVED MOTION:

Adjourn into executive session to discuss legal issues and habitat.

Motion by Gibbons, second by See.

Off the record at (11:50 a.m.) On the record at (1:10 p.m.) 11. FY 02 Work Plan

# **APPROVED MOTION:**

Adopted resolution 01-14 (Attachment E) to approve the FY 02 Work plan with the following amendments:

Project 02245 - Contingent on receipt of information from the Alaska Native Harbor Seal Commission on the availability of federal funds for the commission to undertake work related to harbor seals.

Project 02558 - Contingent on receipt of information from the proposer on the availability of federal funds for research on harbor seals at the Alaska SeaLife center.

Project 02395 - Provide for all project funds to go through ADF&G, but on the condition that the workshop and the development of resulting recommendations are to be a collaborative effort between the two proposers.

Motion by Balsiger, second by Rue.

#### 12. NOAA's General Administration costs

APPROVED MOTION:

Approved a motion to approve NOAA's expenditure of \$21,162 in General Administration (GA) costs, which resulted from NOAA recovering more than the allowable amount of GA based on actual direct project spending.

Motion by Balsiger, second by Rue.

Meeting adjourned 3:15 p.m.

Motion by Rue, second by Balsiger.

Quarterly Project Status Report

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441 W. 5<sup>th</sup> Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178 **MEMORANDUM** 

TO:	Trustee Council
FROM:	Sandra Schubert, Program Coordinator
THROUGH:	Molly Mocalmine, Executive Director
DATE:	November 16, 2001
RE:	Quarterly Project Status Summary July 1 - September 30, 2001

This memorandum summarizes the status of reports for the quarter ending June 30, 2001, for all restoration projects funded by the Trustee Council for FY 92-00. The memorandum also includes progress updates for FY 01 projects and the status of the 22 NRDA reports that were not final at the time the settlement agreement was reached.

Attachment A summarizes the status of project reports (including NRDA reports) by agency.

Attachment B lists the reports that are significantly behind schedule. Reports are on this list if (1) their due dates have passed and they have not yet been submitted to the Chief Scientist, (2) they were reviewed by the Chief Scientist, returned to the PI for revision longer ago than six months, and have not been revised and resubmitted to the Chief Scientist, or (3) they were submitted to the Chief Scientist for peer review more than six months ago and have not yet been peer reviewed.

Attachment C summarizes activities conducted during the July-September quarter for all projects underway in FY 01.

As of September 30, 2001, a total of 372 restoration project reports had been peer reviewed and accepted by the Chief Scientist (this is up from 369 reports accepted as of June 30, 2001). Once accepted by the Chief Scientist, reports are submitted to the Alaska Resources Library and Information Services (ARLIS). As of September 30, 352 reports were available to the public through ARLIS and other libraries around the state (this is up from 328 reports available as of June 30, 2001). Please contact the Restoration Office or ARLIS if you would like a list of the reports that are currently available to the public.

My biggest concern continues to be the large number of late reports (see Att. B). A few of these reports date back several years. In addition, several FY 00 reports that were due April 15, 2001 have not been received. I would appreciate any help you can provide in seeing that PIs in your agency submit the required project reports.



Trustee Council November 16, 2001 Page 2

# Status of FY 92 Project Reports as of September 30, 2001

A total of 75 reports are being produced on projects funded in the 1992 Work Plan. These reports are considered "final" reports and are subject to peer review and approval by the Chief Scientist. (NOTE: Reports "in progress" are in peer review, are under revision by the PI in response to peer reviewer comments, or have been revised and are undergoing a second review by the Chief Scientist.)

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available	Reports <u>in Progress</u>	No Report Yet Submitted
··	to Public	······	· · · · · · · · · · · · · · · · · · ·
74	0	1	0

# Status of FY 93 Project Reports as of September 30, 2001

A total of 28 final reports are being produced on projects funded in the 1993 Work Plan.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
25	1	1	1

# Status of FY 94 Project Reports as of September 30, 2001

A total of 37 final reports are being produced on projects funded in the FY 94 Work Plan.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
36	· 1	0	0

Trustee Council November 16, 2001 Page 3

# Status of FY 95 Project Reports as of September 30, 2001

A total of 53 reports are being produced on projects funded in the FY 95 Work Plan. Beginning with the FY 95 project year, "annual" reports on continuing projects are peer reviewed, but are not required to be rewritten in response to peer review comments. Rather, the peer review comments are to be used to guide future work on the project.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Re <u>Yet Su</u>	port <u>Ibmitted</u>
53	0	0		0

# Status of FY 96 Projects as of September 30, 2001

A total of 51 reports are being produced on projects funded in the FY 96 Work Plan.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
46	2	0	2

# Status of FY 97 Projects as of September 30, 2001

A total of 53 reports are being produced on projects funded in the FY 97 Work Plan.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
53	0	1	0

Trustee Council November 16, 2001 Page 4

# Status of FY 98 Projects as of September 30, 2001

A total of 47 reports are being produced on projects funded in the FY 98 Work Plan.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
37	4	6	0

## Status of FY 99 Projects as of September 30, 2001

A total of 58 reports are being produced on projects funded in the FY 99 Work Plan.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
26	10	13	8

## Status of FY 00 Projects as of September 30, 2001

A total of 44 reports are being produced on projects funded in the FY 99 Work Plan.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
2	5	21	18

# Status of FY 01 Projects as of September 30, 2001

A project-by-project summary of activities conducted during the July-September quarter is presented in **Attachment C**.
Trustee Council November 16, 2001 Page 5

### Status of NRDA Reports as of September 30, 2001

A total of 22 NRDA reports that were not final at the time the settlement agreement was reached are in the process of being finalized.

Reports Available to Public at ARLIS	Reports Accepted by Chief Scientist but Not Yet Available <u>to Public</u>	Reports <u>in Progress</u>	No Report <u>Yet Submitted</u>
21	0	1	0



Summary of Project Report Status as of September 30, 2001

### 1992 WORK PLAN

AGENCY	NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
	REPORTS	Submitted to		Accepted by	Public at
		Chief Sci.		Chief Scientist	ARLIS
ADEC	2	0	0	2	2
ADFG	26	0	1	25	25
ADNR	1	0	0	1	1
DOI	33	0	0	33	33
NOAA	. 11	0	0	11	11
USFS	2	0	0	2	2
TOTAL	75	0	1	74	74

### 1993 WORK PLAN

AGENCY	NUMBER OF REPORTS	Not Yet Submitted to Chief Sci.	In Progress	Peer Rev'd/ Accepted by Chief Scientist	Available to Public at ARLIS
ADEC	2	0	0	2	2
ADFG	12	1	1	10	10
ADNR	0	0	0	0	0
DOI	9	0	0	9	9
NOAA	3	0	0	3	3
USFS	2	0	0	2	1
TOTAL	28	1	1	26	25

### 1994 WORK PLAN

	NILIMPED OF	Not Yet	In Progress	Peer Rev'd/	Available to
AGENCY		Submitted to		Accepted by	Public at
	KErOK15	Chief Sci.		Chief Scientist	ARLIS
ADEC	1	0	0	1	1
ADFG	19	0	0	19	19
ADNR	2	0	0	2	2
DOI	6	0	0	6	5
NOAA	5	. 0	0	5	5
USFS	4	0	0	4	4
TOTAL	37	0	0	37	36





Summary of Project Report Status as of September 30, 2001

# 1995 WORK PLAN

AGENCY		NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
		REPORTS	Submitted to		Accepted by	Public at
			Chief Sci.		<b>Chief Scientist</b>	ARLIS
ADEC		4	0	0	3	4
ADFG		27	0	0	26	27
ADNR		1	0	0	1	1
DOI		7	0	0	7	7
NOAA		8	0	0	8	8
USFS		6	0	0	6	6
TOTAL	Į	53	0	0	51	53

### 1996 WORK PLAN

AGENCY	NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
	REPORTS	Submitted to		Accepted by	Public at
		Chief Sci.		Chief Scientist	ARLIS
ADEC	1	0	0	1	0
ADFG	27	2	0	25	25
ADNR	3	0	0	3	3
DOI	4	0	0	4	3
NOAA	9	0.	0	9	9
USFS	7	0	0	6	6
TOTAL	51	2	0	48	46

### 1997 WORK PLAN

AGENCY	NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
	REPORTS	Submitted to		Accepted by	Public at
		Chief Sci.		Chief Scientist	ARLIS
ADEC	2	0	0	2	2
ADFG	28	0	1	27	28
ADNR	4	0	0	4	4
DOI	6	0	0	6	6
NOAA	7	0	0	7	7
USFS	6	0	0	6	, 6
TOTAL	53	0	.1	52	53

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Summary of Project Report Status as of September 30, 2001

### 1998 WORK PLAN

AGENCY	NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
	REPORTS	Submitted to		Accepted by	Public at
		Chief Sci.		Chief Scientist	ARLIS
ADEC	1	0	1	0	0
ADFG	21	0	2	19	17
ADNR	2	0	0	2	2
DOI	6	0	0	6	6
NOAA	13	0	1	12	10
USFS	4	0	2	2	2
TOTAL	47	0	6	41	37

### 1999 WORK PLAN

AGENCY	NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
	REPORTS	Submitted to		Accepted by	Public at
		Chief Sci.		<b>Chief Scientist</b>	ARLIS
ADEC	1	0	0	1	0
ADFG	26	3	7	16	14
ADNR	4	0	1	3	2
DOI	10	0	3	7	2
NOAA	12	4	1	6	6
USFS	5	1	1	3	2
TOTAL	58	8	13	36	26

### 2000 WORK PLAN

AGENCY	NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
	REPORTS	Submitted to		Accepted by	Public at
		Chief Sci.		Chief Scientist	ARLIS
ADEC	2	0 ·	2	0	0
ADFG	18	8	8	3	2
ADNR	0	0	0	0	0
DOI	. 8	3	2	3	0
NOAA	15	6	9	0	0
USFS	1	0	0	1	0
TOTAL	44	18	21	7	2





Summary of Project Report Status as of September 30, 2001

### NRDA REPORT COMPLETION

AGENCY	NUMBER OF	Not Yet	In Progress	Peer Rev'd/	Available to
	REPORTS	Submitted to		Accepted by	Public at
		Chief Sci.		Chief Scientist	ARLIS
ADEC	1	0	0	1	1
ADFG	17	0	1	16	16
DOI	2	0	0	2	2
NOAA	2	0	0	2	2
TOTAL	22	0	1	21	21

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ATTACHMENT B Overdue Reports (as of 10/31/01)

Agency	Project	PI	Final or	Project Title	Status of Report
	Number		Annual		
ADEC	98291	See	Final	Chenega shoreline oiling	Peer reviewed; returned to PI for revision 2/18/00.
ADFG	FS13	Baker	Final	Effects of hydrocarbons on	Peer reviewed; returned to PI for revision 11/11/98.
				bivalves	Revision was expected early summer 2000; still not
					received.
ADFG	93033-1	Rothe	Final	Harlequin duck - Afognak	Peer reviewed; returned to PI for revision 11/14/95;
				habitat assessment/PWS	most recent due date was 7/1/98; then expected
				production	5/31/00; still not received.
ADFG	93033-2	Rothe	Final	Harlequin restoration	Never submitted; most recent due date was 7/1/98;
					then expected 5/31/00; still not received.
ADFG	96258A-1	Edmundson	Final	Sockeye: Kenai	Never submitted; was due 1/1/98 (with manuscript).
					PI retired 6/1/00; Edmundson has been assigned as
					new PI and will complete report as part of his PhD
		o <i>i</i>			directed studyexpect to submit January 2002.
I ADFG	96258A-2	Swanton	Final	Sockeye: Kodiak	Never submitted; was due 10/30/97; then expected
	074004 4	1 I			3/31/00; now expected 6/20/01.
	97139A-1	Honnola	Final		Peer reviewed; returned to PI for revision 9/5/00.
ADEG	98191A	vv lilette	Final	Oll-related embryo	Peer reviewed; returned to PI for revision 4/20/00.
ADEC	000500	Brown	Annual		Door reviewed, returned to DI for revision 0/11/00
	99002D	BIUWII-	Annual		Peer reviewed; returned to Pi for revision 9/11/00.
	00127	Kompkoff	Annual	Tatitlek cobo releaso	Nover submitted: was due 4/15/00
	0013042	Dickson	Final	Port Dick restoration	Rever submitted, was use 4/15/00
	00162R	Konnedy	Me	Herring disease	A manuscripte were due 0/20/00: 2 not submitted
	991020	I Seeb	Final	Genetics project: pollock	A manuscripts were due 9/30/00, 5 hot submitted.
	33232-1	L. Ocen	i illai	component	4/30/00: still not received
ADEG	99252-2	l Seeb	Final	Genetics project: black	Never submitted: was due 1/31/00: then expected
		2.0000		rockfish component	6/30/00: still not received
ADEG	99263	Meganack	Annual	Port Graham streams	Peer reviewed: returned to PI for revision 0/1/00
	00200	mogunaon	, annuai	i on oranam accang	r oor remembed, returned to r rior remainin 9/1/00.

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ATTACHMENT B Overdue Reports (as of 10/31/01)

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ADFG	99375	E. Brown	Final	Herring egg distribution	Due 9/30/00; 2 of 4 chapters (ms.) were submitted 12/9/00; peer review on hold until complete report submittednow expected 6/30/01
ADFG	00052	P. Brown- Schwalenberg	Annual	Community involvement	Never submitted; was due 5/1/01.
ADFG	00263	Meganack	Final	Port Graham streams	Never submitted; was due 12/15/00.
ADFG	00273	Rosenberg	Annual	Surf scoters	Never submitted; was due 9/30/01.
ADFG	00407	Rosenberg	Annual	Harlequin ducks	Never submitted; was due 9/1/01
ADFG	00610	Brown- Schwalenberg	Annual	Kodiak Youth Area Watch	Never submitted; was due 4/15/01, then extended to 5/1/01.
ADFG	01064	Frost	Ms.	Harbor seals	5 ms. due in March, June, & Sept. 2001 are overdue
ADFG	01385	Schoch	Final	Monitor Kachemak Bay	Never submitted; was due 9/30/01.
DOI	99163	Piatt	Final	APEX-Subproject M	Never submitted; was due 9/30/00.
DOI	99459	Irvine	Final	GOA residual oil	Peer reviewed and returned to PI for revision 3/27/01.
DOI	00479	Piatt	Ms.	Effects of food stress	Two of 3 manuscripts not yet submitted.
DOI	00501	Piatt	Final	Seabird monitoring	Never submitted; was due 9/30/00; due date
				protocols	extended to 10/31/00.
DOI	01338	Piatt	Final	Murre/kittiwake survival	Never submitted; was due 9/15/01.
DOI	01423	Dean	Final	NVP: sea urchin	Never submitted; was due 9/1/01.
NOAA	98329	Rice	Final	Synthesis: Toxicological impact to pink salmon	Draft monograph peer reviewed and returned to PI 10/10/00.
NOAA	98347	Heintz	Annual	Fatty acids	Report accepted but letter requested 3/20/00
				, ,	response not received: now expected 2/1/01
NOAA	99090	Carls	Final	Mussel bed monitoring	Never submitted due to loss of 2 ABI personnel: was
				č	due 4/15/00: due date was extended to 8/25/00: then
					expected 1/1/01: now expected 2/02 (2 ms due
					9/30/00 have also not been submitted)
NOAA	99163	Duffy, et al	Final	APEX	Never submitted: was due 9/30/00 (all done except
		-			Piatt's subproject M).
NOAA	99330-2	Pimm	Final	Mass-balance model	Never submitted: was due 9/99: as of 4/00 was
					"expected shortly": still not received.
					· · · · · · · · · · · · · · · · · · ·

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ATTACHMENT B Overdue Reports (as of 10/31/01)

					•
NOAA	99347	Heintz	Final	Fatty acids & lipids RE diet	Never submitted; was due 9/30/00; now expect 10/30/01.
NOAA	00048	Ruggerone	Ms.	Sockeye salmon	2 manuscripts were due 12/99; then expected
NOAA	00195	Short	Annual	Pristane	Never submitted; was due 4/15/01; then expected
	00330	Pauly & Okey	Ms	Mass-balance model	4 manuscripts were due 9/30/00: 1 not submitted
	00303		Appual	PWS food webs	Never submitted: was due $1/15/01$
	00393	Pice	Final	Salmon natal habitats	Never submitted; was due 9/30/01
NOAA	00404	McDonald	Me	Intertidal manitoring	Never submitted; was due 3/30/01.
NOAA	00510	MCDUIIalu	1015.	recommendations	Nevel submitted, manuscipt was due 4/15/00.
	00509	Short	Me	EVO vs. rogional	Never submitted: was due 8/00: then expected
NOAA	00090	Short	1015.	background bydrogorbong	7/1/01
	00145	Beaves	Final	Cutto & dollyre:	Poor reviewed: returned to PI for revision 12/15/00:
0353	90140	Reeves	Final	cuits & donys.	reel reviewed, returned to Frior revision 12/15/00,
LIGEO	00000.0	Curina	Final		Nover submitted was due 12/21/00, then expected
0555	99339-2	Sunny	Final		Ald Floor at the sector of
				recommendations	4/15/00, Still not received.
			4-14-2 (	hief Osia-ti-t for a conversion	
	ing reports	s were submitted		mer Scientist för peer review	v more than 6 months ago:
00000	- Eim al	054			
98320	Final	SEA Diana and and and a	- 4		2/24/00
99327	Annual	Pigeon guillem	JC		4/28/00
99188	Final	Otolith marking			9/20/00
00482	Final	PSP (suppleme	ent receiv	/ed 6/12/01)	12/28/00
01468	Final	FEATS			1/31/01
00159	Annual	Boat surveys			4/13/01
00290	Annual	Hydrocarbon d	atabase		4/13/01
00374	Final	Herring coordin	ation an	d planning	4/16/01
01555	Final	Corticosterone	in seabir	ds	4/26/01
00396	Annual	Sharks			5/7/01



### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> Agency
01012-BAA	Photographic and Acoustic Monitoring of Killer Whales in Prince William Sound and Kenai Fjords	C. Matkin/North Gulf Oceanic Society	NOAA

#### Project Tasks to be Completed this Quarter

Oct-Dec

UNDERWAY-Input data into GIS system UNDERWAY-Analyze photos from 2000 fieldwork UNDERWAY-Acoustic analysis of calls from previous year

Jan - March UNDERWAY-Winter recordings in Seward from remote hydrophone

<u>April-June</u>

UNDERWAY (ADDITIONAL DATA NEEDED FROM 2001)-Publish paper on population dynamics of killer whale pods since EVOS DONE-Annual report due 4/15/01

<u>July-Sept</u> NO UPDATE PROVIDED -Field work

Conferences

Vancouver in November 2001 (\$1.1)

**Publications** 

DELAYED-Matkin, et al. Populations of killer whales in PWS 11 years after EVOS; submit to Marine Mammal Science SUBMITTED-Saulitis, et al. Acoustic behavior of AT1 transient group in PWS; submit to Animal Behavior



### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

Proj.No.	Project Title	Proposer	<u>Lead</u> Agency
01052	Community Involvement Planning for GEM	P. Brown- Schwalenberg/CRRC	ADFG
		·	
Project Ta	asks to be Completed this Quarter		
Oct-Dec DONE-Con DONE-Con DONE-Ren UNDERWA UNDERWA DONE-Parti Jan-March 2 DONE-Ho	tract with Science Advisor tract with TEK Specialist ew contracts with communities Y-Develop monitoring parameters to be included in GEM pla Y-Refine list of community interests and objectives for GEM cipate in EVOS GEM Workshop	n 1	<b>^</b>
2 DONE-De <u>April-June</u> DELAYED-/ CANCELED <u>luly-Sept</u>	evelop individual community plans Annual report due 4/15/01 O-Submit proposals for pilot projects		

FY 00 tasks not completed during FY 00:

PRIORITY LISTS OF SPECIES DONE-Identify species on which to develop monitoring programs at local level SOME TALKS HAVE BEEN HELD-Pilot communities talk to adjacent landholders regarding stewardship & mgt. UNDERWAY-Develop draft GEM Community Integration Plan UNDERWAY-Work with non-pilot communities to develop tribal natural resource mgt. programs



## Exxon Valdez Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01064-CLO	Monitoring, Habitat Use, and Trophic Interactions of Harbor Seals in Prince William Sound	K. Frost, ADFG	ADFG

#### Project Tasks to be Completed this Quarter

The final report (and the manuscripts it will largely consist of) for this multi-year project will be tracked under 01064. The following list of manuscripts and due dates have been approved by the Chief Scientist and appended to the FY 01 DPD. This list supersedes the lists of manuscripts and the schedules in both the 00064 and 01064 DPDs.

#### Published

- Frost, K. J., Simpkins, M. A. and L. F. Lowry. Diving behavior of subadult and adult harbor seals in Prince William Sound, Alaska, 1992-1996. 2001. Marine Mammal Science 17(4): 813-834 (00064 DPD, part of #1) - Lowry, L. F., Frost, K. J., Ver Hoef, J. M. Movements of satellite-tagged subadult and adult harbor seals in Prince William Sound, Alaska, 1992-1997, 2001, Marine Mammal Science 17(4): 835-861, (00064 DPD, part of #1) Accepted for Publication - Ver Hoef, J. M. and Frost, K. J. Bayesian hierarchical model for monitoring harbor seal changes in Prince William Sound, Alaska, Environmental and Ecological Statistics (00064 DPD, #2) Underway OVERDUE - Iverson, S. J., Frost, K. J. and Lang, S. L. C. Fat content and fatty acid composition of forage fishes in Prince William Sound. Alaska: variation with species, diet and seasonal blooms. Canadian Journal of Fisheries and Aquatic Sciences. March 2001 (00064 DPD, part of #4) DVERDUE - Iverson, S. J., Field, C., Bowen, W. D. and Blanchard, W. Quantitative fatty acid signature analysis: statistical modeling of marine mammal diets from fat stores. Ecology. March 2001 (00064 DPD, part of #4) - Frost, K. F, Lowry, L. F., and ver Hoef, J. M. Trends in harbor seal abundance in Prince William Sound, Alaska, based on molting-period counts of during 1984-2000. Marine Mammal Science. March 2002 (01064 DPD, #8) OVERDUE - Frost, K. J., Simpkins, M. A. and L. F. Lowry. Diving behavior of harbor seal pups in Prince William Sound, Alaska, 1997-2000. Marine Mammal Science. September 2001 (01064 DPD, #9) OVERDUE - Iverson, S. J., Frost, K. J. and Burns, J. M. Links between diet and energy storage in juvenile harbor seals in Prince William Sound, Alaska. Journal of Animal Ecology. June 2001 - Iverson, S. J., Frost, K. J. and Lowry, L. F. Spatial and temporal scales of diet and foraging patterns of harbor seals in Prince William Sound, Alaska, Ecological Applications, December 2001 (01064 DPD, #6) OVERDUE - Lowry, L. F., Frost, K. J., Ver Hoef, J. M. Movements of satellite-tagged harbor seal pups in Prince William Sound, Alaska, 1997-2000. Marine Mammal Science. September 2001 (00064 DPD, #3) Final report Will be submitted March 1, 2002 01100 ALL

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

All Trustee Council Agencies

Project Tasks to be Completed this Quarter N/A



<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01126	Habitat Protection and Acquisition Support	C. Fries/ ADNR, K. Holbrook/USFS, G. Elison/DOI	ALL
Project T ADNR REVIEW A land exchar UNDERWA DONE; BEI COMPLETI KEN 30 KEN 31 ALSO, NEG ALSO, INIT EASEMEN	asks to be Completed this Quarter PPRAISAL DONE; PUBLIC MEETING SCHEDULED; D nge: conduct public process, review appraisal & title & d Y-Koniag Phase II: review title & closing documents NG REVIEWED BY SELLER -Karluk Village Council: c ED APPRAISAL REVIEWS-Pursue 2 small parcels: 9, Icicle Seafoods 0, Swartzes Enterprises GOTIATIONS UNDERWAY ON DUCK FLATS PARCEL IATED TITLE REVIEW FOR EYAK POWER CREEK & T MODIFICATION	DRAFT EXCHANGE REPORT COMPLE losing documents complete appraisal review S COMPLETED OLD HARBOR POWER/	TED-Old Harbor
ADF&G NEGOTIAT LANDO OFFER LANDO	IONS UNDERWAY-Pursue 3 small parcels: WNER OPTED OUT OF PROCESS-KEN 293, Yager MADE BY TC 5/3/01-KEN 294, Eliot WNER REJECTED OFFER-KEN 295, Brookwood		
USFWS DONE-Kon -Akhiok-Kan NEGOTIAT KAP 28 KAP 28 KAP 28 TC WILL B shareholder	iag Phase II: continue work to extend conservation ease guyak V: conduct closing for final 75 acres IONS UNDERWAY-Pursue several small parcels: 1, Shugak 3, Metrokin 5, Carlson E ASKED TO MAKE OFFERS ON 3 ADDITIONAL PAR	ement CELS AT 12/11/01 MEETING-Kodiak ta:	x & Larsen Bay
USFS UNDERWA ALL PURCI ALSO, NEG	Y-Acquire PWS 1028, Valdez Duck Flats HASED BY OTHER PURCHASER (CHUGACH ALASK SOTIATIONS UNDERWAY ON DUCK FLATS PARCEL	A CORPORATION)-Pursue 13 Tatitlek h S	omesites
01131	Chugach Native Region Clam Restoration	D. Daisy/CRRC	ADFG
Project T April 15, 20 SUBMITTE	<u>asks to be Completed this Quarter</u> 01 D 9/12/01 (TRACKING UNDER 99131)-Submit final rep	port	



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01144	Common Murre Population Monitoring	D. Roseneau/USFWS	DOI
Project Ta	asks to be Completed this Quarter		
<u>Oct-Dec</u> DONE-Arrar	nge vessel contract		
<u>Jan-Mar</u> DONE-Arrar	nge for hiring seasonal employee		
<u>April-June</u> DONE-Arrar	nge equipment & gear		
<u>July-Sept</u> DONE-Field DONE-Enter	work at Chiswell Islands murre colonies r data		
01154	Archaeological Repository, Display Facilities, a Exhibits for Prince William Sound and Lower C Inlet	and J. Bittner/ADNR Cook	ADNR
Project Ta	isks to be Completed this Quarter		
FY 01 activit CORDOVA (DELAYED DELAYED T UNDERWA COMPLETE DESIGN UN DESIGN UN DONE 1/01-	ties: AND PORT GRAHAM CONSTRUCTION NEARLY O TO 12/31/01)-Complete first group of local display far O 9/30/01-Plan and design second group of local dis Y-Plan and design first group of traveling exhibits E-Develop training program for personnel in local disp IDERWAY; NEPA DONE-Work on repository IDERWAY; NEPA DONE-Proposal development and Issue RFP for second round of display facilities	COMPLETE; NANWALEK MOVED TO S cilities (Cordova, Seldovia, Port Graham, splay facilities (Valdez, Tatitlek, Chenega lay facilities	ECOND GROUP Nanwalek) Bay) <sup>r</sup> d
01159	Surveys to Monitor Marine Bird Abundance in I William Sound During Winter and Summer	Prince D. Irons, R. Suryan/USFWS	DOI
Duele of T-	alia to be Completed this Outstan		
<u>Oct-Dec</u> UNDERWA	Y-Rewrite computer programs for data analysis		
<u>Jan-Mar</u>			

<u>April-June</u> DONE-Submit annual report 4/15/01

uly-Sept



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01163-CLO	Alaska Predator Ecosystem Experiment in Prince William Sound and the Gulf of Alaska (APEX)	D. Duffy/Paumanok Solutions, et al	NOAA

Project Tasks to be Completed this Quarter by Sept 30, 2001 NO UPDATE PROVIDED -Final manuscripts due for papers



# Exxon Valdez Oil Spill Project Status Summary

## FY 01 Work Plan

### Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01190	Construction of a Linkage Map for the Pink Salmon Genome	F. Allendorf/Univ. Montana	ADFG
Project T	asks to be Completed this Quarter		

#### <u>Oct-Dec</u>

UNDERWAY ON 10 EMBRYOS FROM EACH OF THE 68 FAMILIES OF THE 1999 COHORT-Genetic analyses of fry from 1999 cohort sampled at time of release from ASLC

DONE ON ALL 36 MARKED PINK SALMON ADULTS-Morphological analyses of adults from 1998 cohort that return to ASLC

ALSO, CONDUCTED FLOW TEST ON FISH PASS, WHICH INDICATES MODIFICATIONS NEED TO BE MADE TO THE FISH PASS AND ALTERNATIVE PLANS NEED TO BE DEVELOPED FOR COLLECTING RETURNING ADULTS. REVISED PLANS TO NOW INCREASE SAMPLING EFFORT IN UPPER RESURRECTION RIVER TO COLLECT RETURNING ADULTS.

ALSO, WORK CONTINUES ON EVEN-YEAR PINK SALMON LINKAGE MAP (NOW CONSISTS OF 33 LINKAGE GROUPS INCLUDING 41 MICROSATELLITES, 81 PINES, & ONE GENE OF KNOWN FUNCTION).

#### Oct-May

NO PROGENY DUE TO LOW NUMBER OF RETURNS COLLECTED AND THE LACK OF A MALE/FEMALE PAIR TO BE COLLECTED FROM THE SAME FAMILY; NO FISH ARE CURRENTLY BEING RAISED AT ASLC-Rear experimental progeny from 2000 cohort at ASLC

#### <u>Öct-July</u>

DONE; ANALYZED 11 LOCI IN ALL 36 ADULTS COLLECTED FROM UPPER RESURRECTION BAY IN AUGUST 2000-Perform genetic analyses of sexually mature 1998 cohort that return to ASLC ALSO PREPARED FOR FIELD SEASON (ALL ADF&G PERMITS RECEIVED; PUBLIC NOTIFICATION IN PROCESS)

#### Oct-Sept

DONE ON 50 INDIVIDUALS FROM 7 FAMILIES; MS. IN PREP. TO BE SUBMITTED TO MOLECULAR BIOLOGY & EVOLUTION-Continue genetic analyses of microsatellite mutations in 1998 and 1999 cohorts -Continue morphological and genetic analyses of returning sexually mature fish from the 1999 cohort

#### April 15

DONE-Annual report due

#### **Conferences**

DID NOT PARTICIPATE-Plant & Animal Genome Mapping Meeting, San Diego, January

#### Manuscripts

-Lindner, et al. Submitted. Gene-centromere mapping of 312 loci in pink salmon by half-tetrad analysis -Lindner, et al. To be submitted to Genetics. Linkage map for pink salmon based on gynogenetic haploids & half-tetrads



<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01195	Pristane Monitoring in Mussels	J. Short, P. Harris/NOAA	NOAA
Project Ta Oct-Dec	asks to be Completed this Quarter		
<u>Jan-March</u> DONE-Atter DONE-1st c	nd meetings with hatcheries to discuss results a lata collection trip	and coordinate data collection	
NO UPDAT DELAYED- Collect mus	E PROVIDED Submit annual report 4/15/01 ssel samples		
<u>July-Sept</u> NO UPDAT -Analyze 20	E PROVIDED 01 samples for pristane		
Publications			



Proj.No.	Project Title	Proposer	<u>Lead</u> Agency
01210	Youth Area Watch	R. DeLorenzo/Chugach School District	ADFG
Project Ta	sks to be Completed this Quarter		
Aug-Sept DONE-Site 1	eacher orientation		
Oct-Dec DONE-Selec DONE-Stud DONE-Com DONE-Prep	ct students for participation ent orientation & training plete protocol training for teachers are weather station at each site		
<u>Jan-March</u> DONE-Coor ALSO, STUI	dinator sends data to PIs 3/1/01 DENTS TRAVELED TO AUKE BAY LAB.		
April-June DONE-Site t DONE-Coor OONE-Stude	eacher follow-up training dinator sends data to PIs 6/1/01 ents complete project reports 6/1/01		
<u>July-Sept</u> -			
Ongoing Stu UNDERWA -Bi-monthly -Daily weath STUDENT T PROPOSAL -Assist in do -Interact and	Ident Activities: Y-Maintain web site mussel collection er station monitoring TRAINING UNDERWAY-Collect harbor seal samples w S FOR LOCAL PROJECTS SUBMITTED-Conduct loca cumenting local TEK I exchange information with PIs	ith local hunters al projects	



### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency	,
01245	Community-Based Harbor Seal Management and Biological Sampling	V. Vanek/ADFG, M. Riedel/Alaska Native Harbor Seal Commission	ADFG	

#### Project Tasks to be Completed this Quarter

Ongoing -Collect biological samples -Process samples

<u>Oct-Dec</u>

DONE-Hold training sessions for new community technicians and students DONE (IN SPRING-Hold training workshop in conjunction with ANHSC meeting (10/00)

<u>Jan-Mar</u>

DONE-Produce & distribute newsletter (ANHSC)

#### April-June

DUE DATE EXTENDED TO 6/30/01-Annual report due 4/15/01 DONE-Hold workshop in conjunction with ANHSC meeting (4/01) DONE-Present community reports (5/01)

uly-Sept

DONE-Present biosampling demonstration to youth spirit camp participants



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

Proj.No.	<u>Project Title</u>	Proposer	<u>Lead</u> Agency
01247	Kametolook River Coho Salmon Subsistence Project	J. McCullough, L. Scarbrough/ADFG	ADFG
Project Tas Oct-Dec DONE-Local DONE-ADFG DONE-Set up DONE-Obtain DONE-Obtain DONE-Conde DONE-Conde DONE-Hatch DONE-Hatch DONE-Meet DONE-Meet DONE-Meet DONE-Local DONE-Local DONE-Local DONE-Local DONE-Local DONE-Local DONE-Saniti AQUARIUM aquarium fry <u>July-Sept</u> WILL MEET DONE-Local ALSO, LOCA	sks to be Completed this Quarter assistants conduct stream surveys for coho & report finding personnel travel to Perryville to capture adult coho & place p school aquarium n FTP rm maintenance of instream incubation system uct escapement surveys iery specialist provide additional training for Perryville assist rm coho salmon egg take, fertilize eggs, place in incubation ble salmon for genetic & pathology tests with students & community to discuss project with Chignik RPT/CRAA & Perryville Subsistence Work Gro assistants make monthly trips to incubation boxes to inspec analyze subsistence & commercial harvest data with assessment team to evaluate project assistants monitor boxes for fry release ze boxes after fry leaves BROKE AND ALL EGGS DIED; NEW AQUARIUM HAS BE into Kametolook River	gs to ADFG in holding pens ants boxes oup to discuss project ct condition of boxes & eggs EN PURCHASED & INSTALLED-Stu	idents release
01250	Project Management	All Trustee Council Agencies	ALL

Project Tasks to be Completed this Quarter N/A



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> Agency
01256B	Sockeye Salmon Stocking at Solf Lake	D. Gillikin/USFS, G. Todd/ADFG	USFS
Project Ta	sks to be Completed this Quarter		
<u>Oct-June</u> DONE-Rear	sockeye fry at Main Bay (PWSAC)		
<u>April-June</u> DONE-Subm DONE-Relea	nit annual report (4/15/01) use 4th year of sockeye fry (PWSAC)	· · · ·	
<u>July-Sept</u> UPDATE NC -Evaluate fish DELETED BI for 2002 stoc	T PROVIDED hway & monitor returning adult salmon (USFS, April-July) ECAUSE PEER REVIEW RECOMMENDATION IS TO CL king (PWSAC, Aug)	OSE OUT PROJECT IN FY 02-Conduc	ct egg takes
1273-CLO	Scoter Life History and Ecology: Linking Satellite Technology with Traditional Knowledge to Conserve	D. Rosenberg/ADFG	ADFG
	the Resource		
Project Tas	sks to be Completed this Quarter		
<u>Oct-Dec</u> UNDERWAY UNDERWAY DONE-Maint	r-Data entry & analysis r-GIS & map preparation ain web site		
<u>April 15</u> OVERDUE; I	OUE DATE EXTENDED TO 9/30/01 BUT REPORT NOT S	UBMITTED-Submit final report & ms.	
<u>Conferences</u> DONE-North	American Waterfowl Symposium, 10/00, Saskatchewan (\$	1.7)	
01290	Hydrocarbon Database and Interpretation Service	J. Short, B. Nelson/NOAA	NOAA

Project Tasks to be Completed this Quarter

April 15

DONE-Submit annual report in form of updated release of hydrocarbon data software

Conferences

-Quality Assurance Control/NIST





### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01327-CLO	Pigeon Guillemot Restoration SeaLife Center	Research at the Alaska D. Roby/OSU, G. Divoky/UAF	DO!
Project Ta	sks to be Completed this Quarte	<u>er</u>	
<u>Oct-Dec</u>			
<u>Jan-March</u> UNDERWAY & data interp	(SOME OUTSIDE LAB ANALYS	ES ARE OVERDUE; PI IS WAITING TO GET THEM)-Com	plete lab analysis
<u>April-June</u> DONE-Install UNDERWAY	artificial nest sites, decoys, & pla -Complete MS thesis	yback sound equipment at ASLC	,
July-Sept			
<u>Dec 15, 2001</u> -Submit final	report		
01338	Survival of Adult Murres and to Forage Fish Abundance	Kittiwakes in Relation J. Piatt/USGS-BRD	DOI
Project Tas	sks to be Completed this Quarte	er	
Oct-Dec			

<u>Jan-Mar</u>

<u>April-June</u> DONE-Resighting effort on Gull and Chisik islands

<u>July-Sept</u> OVERDUE-Submit final report (9/15/01)



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

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Ē	<u>roj.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> Agency
01	1340	Toward Long-Term Oceanographic Monitoring of the Gulf of Alaska Ecosystem	T. Weingartner/UAF	ADFG
	Project Tas Aonthly ONE-CTD s ONE-Prepa ONE-Acquir ONE-Acquir ONE-Submi ONE-Deploy ONE-Deploy ONE-Submi	surveys pdate homepage re wind fields re meteorological fields it deployment procedure & initial sample data collection to y mooring (Nov/Dec)	RO	
	341-CLO	Harbor Seal Recovery: Controlled Studies of Health and Diet	M. Castellini/UAF	ADFG
	<u>Project Tas</u> OCT <u>-Dec</u> OONE-Close ept. 30, 200 OONE-Submi	ks to be Completed this Quarter down ASLC operation; transfer samples & data to Fairban <u>1</u> it final report	KS	
01	360-BAA	The <i>Exxon Valdez</i> Oil Spill: Guidance for Future Research Activities	C. Elfring/Polar Research Board, NRC	NOAA
 D  D 	Project Tas Oct-Dec ONE-3rd me an-Mar ONE-Interim ONE 9/1/01	eeting (finalize interim report) report delivered & discussed Trustee Council deliver Research & Monitoring Plan		
	pril-June ONE-4th me ELAYED TO U <u>IV-Sept</u> ELAYED TO ELAYED TO	eeting (information gathering) D FY 02 (NOV. 2001)-5th meeting (deliberations on Resear D FY 02 (EARLY 2002)-6th meeting (report writing) D FY 02 (JANUARY 2002)-Submit final report for Academy	ch & Monitoring Plan) outside review process	



### ATTACHMENT C

## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01366-CLO	Improved Salmon Escapement Enumeration Using Remote Video and Time-Lapse Recording Technology	E. Otis/ADFG	ADFG
Project Ta	sks to be Completed this Quarter		
<u>April 15</u> DONE-Subr	nit final report		
<u>Conference</u> DONE (PRE	<u>s</u> SENTED PAPER)-AFS, Fairbanks, 11/00 (\$1.2)		
FY 00 tasks	not completed in FY 00:		
DONE-Revie DONE-Evalu	ew tapes ate camera's performance against weir counts		
01371-CLO	Effects of Harbor Seal Metabolism on Stable Isotope Ratio Tracers	D. Schell/UAF	ADFG
Project Ta	sks to be Completed this Quarter	· · · · · · · · · · · · · · · · · · ·	
<u>Oct-Dec</u>			
	ing experiments		
DONE-Reve	rse labeling experiment		
<u>Jan-Mar</u> DONE-Amin	o acid isolation and stable isotope spectrometry		
<u>Mar-June</u> UNDERWA`	/-Data analysis and synthesis		
<u>Sep. 30, 200</u> DUE DATE	11 EXTENDED TO 11/15/01-Submit final report		
Conferences	a Marine Mammology &/or American Society for Limnology & C	ceanography (\$2.3)	
01385	Partnering with NOAA to Quantify and Monitor Environmental Attributes of Kachemak Bay	C. Schoch/ADFG	ADFG
Project Ta	sks to be Completed this Quarter		
Oct-Dec			
DONE-Com	plete draft plan for deployment of data sondes & weather stat	ion in Kachemak Bay	
lune			

DONE-Deploy data sondes

Sept NO UPDATE PROVIDED -Submit project report



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> <u>Agency</u>
01389	3-D Ocean State Simulations for Ecosystem Applications from 1995-98 in Prince William Sou	J. Wang/UAF	ADFG
Project Ta	asks to be Completed this Quarter		
<u>Oct-Dec</u> DONE-Corr	plete tide simulation & validations with 4 years of obse	rvations	
<u>Jan-Mar</u> -Complete p DONE-Com	preparing forcing data of the 4 years aplete analysis of interannual variability of ocean circula	ition & ecosystem in PWS	
April-June			
<u>July-Sept</u> DONE-Com DONE-Com SUBMITTE UNDERWA Impact of or	aplete modeling of zooplankton overwintering aplete modeling of 1995-98 D TO CHIEF SCIENTIST 8/29/01; UNDER PEER REV Y-Submit manuscript: Simulating interannual variability cean circulation on ecosystem in PWS, 1995-98	IEW-Submit final report (9/30/0 of ocean circulation of PWS; J	1) nl Geophys Research or
<u>Allen/Bodna</u> DONE-Puro modeling pr CANCELED	n/Patrick Subcontract (completion dates not specified) hase UNIX workstation to sit at IMS-IARC as a server ojects 0; FUNDS FOR THIS COMPONENT WILL LAPSE-Mal	for SEA database and to be ava	ailable for future GEM nto the database and add
new data to DONE-Retr CANCELEE new server	the server (Allen) ieve the SEA database from PWSSC and install it on th ; FUNDS FOR THIS COMPONENT WILL LAPSE-Ret (Patrick)	ne new server (Bodnar) rieve the SEA Information Syste	em and install it on the

<u>Conferences</u> DONE-2000 Fall AGU Meeting, San Francisco (\$1.4)



### Exxon Valdez Oil Spill Project Status Summary FY 01 Work Plan

# Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> Agency
01391	Cook Inlet Information Management/Monitoring System (CIIMMS)	C. Fries/ADNR, J. Hock/ADEC	ADNR
L			
Project Ta	<u>sks to be Completed this Quarter</u>		
ONGOING; MOSTLY DO DONE-Deve	WORKING THROUGH A FEW TECHNICAL BUGS-Action (metadata)	cess to specified databases completed completed	
DONE-Deve DONE (UAA MAPPING-II	lop technical specifications/system documentation, inclu SCIENCE FORUM IN JANUARY, AK FORUM ON ENV N FEBRUARY, WORKSHOPS IN KENAI & HOMER)-Pu	iding long-term O&M plan /IRONMENT IN FEBRUARY, AK SURV iblic outreach	EYING &
<u>April-June</u> MOSTLY DO	ONE-Complete initial production phase of CIIMMS		
<u>July-Sept</u> DONE; ACC	EPTED BY SPIES; UNDERGOING FORMAT REVIEW	AT ARLIS-Submit final report (9/30/01)	
— FY 00 tasks	not completed in FY 00:		
OONE-Refin	e user interface		
01393-BAA	Prince William Sound Food Webs: Structure and Change	T. Kline/PWSSC	NOAA
L			
Project Ta	sks to be Completed this Quarter		
NOTE: PRO	JECT APPROVED BY TC 12/5/00		
<u>Oct-Dec</u>			
<u>Jan-March</u>			
<u>April-June</u> UNDERWA	Y-Complete last samples for mass spectometry		
<u>July-Sept</u> LAST SAMP SAMPLES F	LES FOR OBJ. 1 COMPLETED-Complete mass specto OR OBJ. 2 IN PROCESS-Process new isotope data	ometry	

<u>Conference</u> WILL PRESENT POSTER-Joint Assembly of International Association for Physical Sciences of Oceans, Mar del Plata, Argentina (\$2,300)



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proi.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> Agency		
01396	Alaska Salmon Shark Assessment	L. Hulbert/NOAA	NOAA		
Project Ta NOTE: PRO	asks to be Completed this Quarter DJECT AUTHORIZED TO PROCEED 1/22/01.		······		
<u>April-June</u> DONE-Subr	nit annual report (April 15)				
<u>July-Sept</u> NO UPDATI -Conduct fie -Deploy tags -Analyze dat -Analyze sto	E PROVIDED Id research s ta from FY 01 field season machs				
01401	Assessment of Spot Shrimp Abundance in Prince William Sound	C. Hughey/ Valdez Native Tribe, C. O'Clair/ NOAA	ΝΟΑΑ		
Project Ta Oct DONE-Sam	isks to be Completed this Quarter ple spot shrimp at ADF&G sampling sites and 6 additional	sites			
<u>Nov-March</u> UNDERWAY-Process egg samples UNDERWAY-Complete estimates of abundance, sex & size composition, & relative number of egg-bearing females					
<u>April 15</u> DONE-Subn	nit annual report				
<u>April-Sept</u> NO UPDATI	E PROVIDED				

-Complete estimates of fecundity & juvenile abundance



<u>Proj.No.</u>	Project Title		<u>Proposer</u>	<u>Lead</u> Agency
01404	Testing Archival Tag Technology in Alaska	Salmon	J. Nielsen/USGS-BRD	DOI
Project Ta	asks to be Completed this Quarter			
NOTE: FUI	NDS FOR THIS PROJECT WERE APPROVED E	31 10 12/5	/////.	
<u>Dec-March</u> DONE-Purc DONE-Esta	hase archive tags, dummy tags, and tags for buo blish holding facilities for salmon for use in impla	iy array nt studies a	at Fort Richardson fish hatche	ery
<u>April-June</u> DONE-Cont	rol tests for surgical implants of tags for estimate	s of surviv	al, handling stress, and delay	ed mortality in coho
DONE-Surg DONE-Esta	ical implants of archive tags in size-structured stublish monitoring protocols for tag retention, growt	udy groups h, behavio	(N=60) r, and survival	
<u>july-Sept</u> DELAYED-[	Deploy light sensor tag array on stationary buoy ir	ו PWS		
$\bigcirc$				
J1407	Harlequin Duck Population Dynamics		D. Rosenberg/ADFG	ADFG
<u>.</u> ,	· · · · · · · · · · · · · · · · · · ·			1
Project Ta	asks to be Completed this Quarter			
DONE-Coor	dinate and plan surveys			
DONE-Prep	are equipment ract for vessel support hire personnel			
<u>Jan-March</u> DONE-Conc	duct population surveys			
<u>April-Sept</u>	Y-Data analysis and report preparation			
DONE-Main OVERDUE:	tain equipment DUE DATE EXTENDED TO 9/1/01 BUT REPOR	NOT SL	JBMITTED-Annual report due	4/15/01
<u>FY 00 tasks</u> DONE-Crea DONE-Anal	not completed in FY 00: te databases, GIS yze field data			



### ATTACHMENT C

### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01423	Patterns and Processes of Population Change in Selected Nearshore Vertebrate Predators	J. Bodkin, D. Esler/USGS-BRD, T Dean/CRA, Inc.	- DOI
Project Ta Oct-Dec DONE-Conc DONE-Capt Jan-March DONE-Biops April-June DONE-Colle DONE-Colle DONE-Colle DONE-Capt DONE-Capt DONE-Capt DONE-Capt DONE-Capt DONE-Capt DONE-Capt DONE-Capt DONE-Capt DONE-Capt DONE-Capt	And the set of the set	irds captured late FY 00) uction irds at original capture site A tive flock UAL WORKSHOP; SUBSTITUTED A I Saskatchewan (Esler) allachey)	DIFFERENT
01424	Restoration Reserve	All Trustee Council Agencies	ALL
Project Ta Under PL 10 Treasury. To request to m All funds we Staff and Tro now been ac will be divide acquisition, ( research.	sks to be Completed this Quarter 6-113, Congress allowed for the deposit of the Joint Trus o date, the Trustee Council has adopted investment polic investing the EVOS funds to an account in the state treasury we re transferred from the Court Registry Investment System ustees have undergone training per the policies adopted by ided to remaining joint trust funds and are being managed ad into 3 separate accounts: (1) \$30 million for the Koniag (2) \$25.1 million for habitat, and (3) the balance, approxim Harbor Seal Recovery: Effects of Diet on Lipid Metabolism and Health	t Fund in appropriate accounts outside es, asset allocations, and a payout sch vas signed by Judge Holland in late Sep to the new Investment Fund on Octobe by the Council. The Restoration Reserv d as a single account. On October 1, 20 easement extension and possible perm nately \$115-120 million, for long-term mo <b>R. Davis/Texas A&amp;M Univ.</b>	the US edule. A tember 2000. er 5, 2000. e funds have 002, the fund hanent onitoring and ADFG
Project Ta	sks to be Completed this Quarter		

ADDITIONAL YEAR OF FUNDING PROVIDED AND FINAL REPORT DUE DATE CHANGED TO 6/30/02-Submit final eport

-Submit 2 ms.: (1) effects of diet on fatty acids in blubber; (2) aerobic capacity & lipid metabolism in harbor seal muscle)

#### **Conferences**

-Biennial Meeting of Marine Mammal Society (\$1.4)



## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

	<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
Γ	01452-BAA	Assessing Prey and Competitor/ Predators of Pink Salmon Fry	R. Thorne, G. Thomas/PWSSC	NOAA
	Project Tas NOTE: FUNI	sks to be Completed this Quarter DS FOR THIS PROJECT WERE APPROVED BY TC 12/5	5/00.	
	<u>Jan-Mar</u> DONE-Review DONE-Design UNDERWAY	w databases and models for program and survey design n and begin refinements of measurement systems -Design and begin assembling processing system for nea	r-real time abundance estimates	
	<u>April-June</u> DONE-Field s DONE-Contir	surveys nue data analysis		
	<u>July-Sept</u> DONE-Evalua DONE-Make UNDERWAY	ate and refine survey design initial predictions of recruitment -Develop ms. for publication in a peer reviewed journal		
_	April 15, 2002 -Submit final	<u>e</u> report		
	01454-CLO	Evidence and Consequences of Persistent Oil Contamination in Pink Salmon Natal Habitats	S. Rice/NOAA	NOAA
<b>I</b>	Project Tas	sks to be Completed this Quarter		, , , , , , , , , , , , , , , , , , ,
	Oct-Dec UNDERWAY DONE-Comp DONE-Comp	-Complete GC/MS analysis of remaining samples lete analysis of growth lete histopathological/MFS analysis of fry		
	<u>Jan-Mar</u>			
	<u>April-June</u>			
	<u>July-Sept</u> NO UPDATE	PROVIDED		
	-Submit manu	report (9/30/01)		
	Conferences -SETAC (\$1.9	<b>9)</b>		
<i>.</i>	<u>FY 00 tasks n</u>	not completed in FY 00:		

Tag cultured fry





<u>Proj.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> Agency
01455	Gulf Ecosystem Monitoring and Research Program Data System	Restoration Office	ALL
Project Ta	sks to be Completed this Quarter		
NOTE: HIRI OR WERE A	NG OF DATA MANAGER WAS POSTPONED TO EARLY PPROVED BY THE TC FOR TRANSFER TO OTHER PR	FALL 2001. THIS PROJECT'S FUN OJECTS.	DS LAPSED
01462-CLO	Effect of Disease on Pacific Herring Population Recovery in Prince William Sound	G. Marty/Univ. of California Davis	ADFG
Project Ta	sks to be Completed this Quarter		
<u>Oct-Dec</u> DONE (SAM DONE-Scale	PLES FROM 100 HERRING)-Collect fall samples (Marty, I analysis for age on fall samples (Carpenter, ADFG)	JC Davis)	
Jan-March DONE-Virolo LSO, MANI PWS Pacific Symposium,	egy & bacteriology of fall samples (Meyers, ADFG) USCRIPT ACCEPTED FOR PUBLICATION: Quinn, et al. In herring. Proceedings of Herring 2000: Expectations for a I Feb. 2000.	n press. Disease and population asse New Millenium, Lowell Wakefield Fish	ssment of eries
<u>April-June</u> DONE (COL BACTERIOL	LECTED 300 SAMPLES; COMPLETED SCALE ANALYSIS OGY WORK)-Collect spring samples (Marty)	S FOR ACE AND VIROLOGY AND	
July-Sept ONLY MART DELAYED-C -Complete so -Virology & b CANCELED 4/15/02-Subr -Submit ms.	TY PROVIDED AN UPDATE complete statistical analysis (Marty) cale analysis of spring samples (Carpenter) acteriology of spring samples (Meyers) BECAUSE PROJECT IS BEING EXTENDED INTO FY 02; mit final report (9/30/00) (DPD lists 5; "funds for these publications have already bee	; FINAL REPORT WILL BE SUBMITT en appropriated through Project /162 a	ED and NSF)
01468-CLO	FEATS: Fundamental Estimations of Acoustic Target Strength	G. Thomas/PWSSC	NOAA
Project Ta NOTE: FUN	<u>sks to be Completed this Quarter</u> DS FOR THIS PROJECT WERE APPROVED BY TC 12/5	/00	
Dec. <u>31, 200</u> DONE 1/31/0	0 01-Submit revised final report		
March 31, 20 MS. ACCEP publication	<u>101</u> TED FOR PUBLICATION WITH REVISIONS IN NAJFM; R	EVISIONS ONGOING-Submit ms. for	journal



Proi No.	Project Title	Pronoser	Lead Agency	
01476	Effects of Oiled Incubation Substra Reproduction	ate on Pink Salmon R. Heintz/NOAA	NOAA	
Project Ta Oct-Dec DONE-Eval DONE-Eval DONE-Beg	asks to be Completed this Quarter uate embryo survival to eyeing uate effect of parental exposure to oil on n incubation of F1	offspring time to mid-hatch	J	
<u>Jan-March</u> -Begin anal	ysis of results & development of life histo	bry model		
<u>April-June</u> UPDATE N	OT PROVIDED			
-Mark & rele	ease F1			
Aug-Oct UPDATE NOT PROVIDED -Complete analysis of gamete viability & fitness model -Conferences				
-SETAC, Na	ashville (\$1.8)			
NOTE: Ann	ual report due 4/15/02.			





### Exxon Valdez Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

Proj.No.	Project Title	<u>Proposer</u>	<u>Lead</u> <u>Agency</u>	
01478	Testing Satellite Tags as a Tool for Identifying Critical Habitat	J. Nielsen/USGS-BRD	DOI	
Project Ta	asks to be Completed this Quarter	· · ·		
DONE-Cap	tivity test on light data arrays using UV tank covers			
DONE-Anal	lyses of halibut physiology, tagging effects and efficier	ncy, & survival trials in captivity at ASL	C	
DONE NOV	/. 2000-Deploy pop-up tag array on stationary buoy (w	ill leave in place 1 year)		
Ion March				
5 OF THE 7	7 TAGGED HALIBUT WERE RELEASED NEAR MOU	TH OF RESURRECTION BAY 12/20-	21/00; REMAINING	
2 STAY AT	ASLC FOR PUBLIC DISPLAY AND EDUCATIONAL	PRESENTATIONS. IN ADDITION, TA		
WERE TAG	WERE TAGGED AND RELEASED WITH POP-UP SCHEDULED FOR 11/01-Release 4 halibut in GOA; surviving fish from			
ASLC will be	ASLC will be used for live releases			
ADDITIONA	ADDITIONAL HALIBUT HAVE BEEN TAGGED FOR POP-UP NOVEMBER 15, 2001; REWARD FOR RECOVERY OF			
TAGS BY F	ISHERY HAS BEEN ADVERTISED-Deploy tags to po	p up in 2-3 months		
April-June				
UNDERWAY-Collect & analyze first data sets (2 tags from ASLC & returns from live releases) UNDERWAY-Develop web page for study results & plot initial data				
UNDERWA	Y-Consult on tagging applications & data interpretatio	n		
ONDERWAY-Develop oceanic temperature & bathymetry database for GOA DELAYED-Analyze final data from tagging recoveries in captivity & in the wild				
NOTE: 1 HA	ALIBUT WITH SATELLITE TAG WAS CAUGHT AND	DELIVERED TO SEWARD 4/7/01.		
July-Sept				
	Y-Compile data; integrate analyses from parallel studi	es of pop-up tags in GOA		
DOLDATE	EXTENDED TO TZIOZ-Submic indireport (3/30/01)			

<u>Conferences</u> American Society of Ichthyologists & Herpetologists

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<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency	
01479	Effects of Food Stress on Survival and Reproductive Performance of Seabirds	J. Piatt/USGS-BRD, A. Kitaysky/Univ. of Washington	DOI	
Project Ta	sks to be Completed this Quarter			
Oct-Dec				
<u>Jan-March</u>				
<u>April-June</u> SUBMITTED DONE-Blood DONE-Set st	6/13/01-Submit annual report (4/15/01) sampling during pre-incubation stage udy plots for experimental work	. • • .		
<u>July-Sept</u> DONE-Blood DONE-Study DONE-Blood DONE-Colon UNDERWAY	sampling during incubation stage plot monitoring sampling during chick-rearing stage y work: implant birds with hormonal implants, monitor parer -Chick rearing at Univ. WA	ntal feeding rates & chick survival		
1481	Documentary Film on the Oil Spill Impacts on Subsistence Use of Intertidal Resources	C. Kompkoff/Chenega Bay IRA Council, P. Panamarioff/ Ouzinkie Tribal Council	ADFG	
Project Tas	sks to be Completed this Quarter	· · · · ·		
DONE-Award DONE-Award DONE-Pre-pi	l contract roduction phase: Develop story line for film			
<u>April-June</u> DONE-Production phase: Film interviews and harvest footage Chenega Bay, Ouzinkie, PWS, Kodiak & Spruce islands				
<u>July-Sept</u> DONE-FILMING IN OUZINKIE SCHEDULED FOR JULY 16-18				
<u>Dec 15, 2001</u> -Deliver 100 (	copies of completed film			
<u>Feb. 02</u> -Public scree	nings in Ouzinkie, Chenega Bay, Anchorage		,	

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<u>Proj.No.</u>	Project Title	Proposer	Lead Agency
01492	Were Pink Salmon Embryo Studies in Prince William Sound Biased?	J. Thedinga/NOAA	NOAA
Project Ta Oct-Dec DONE-Pump DONE-Asse Jan-Mar UNDERWAY April-June July-Sept	sks to be Completed this Quarter 0 & assess eggs at Lovers Cove Creek ss shocked eggs at Auke Creek Hatchery 7-Analysis of egg pumping & egg shocking data from FY 01	field season	
UNDERWAY (1) Detection (2) Ability of	2-Complete 2 ms. of pink salmon eggs killed by hydraulic sampling observers to discriminate shock mortality in pink salmon egg	gs as a function of time after shock	
01513	Exxon Valdez Oil Spill Exhibit: The Continuing Legacy	J. Pfeiffenberger/Alaska SeaLife Center	ADFG
Project Ta Jan-Mar DONE-Comp DONE-Comp DONE-Comp Apr-June DONE Comp	sks to be Completed this Quarter olete design of new exhibit panels & components olete research & writing of audio messages olete recording of audio messages		
DONE-Comp DONE-Comp	plete installation of exhibit		
01534	Comparison of Cytochrome P4501A Induction in Blood and Liver Cells of Sea Otters	B. Ballachey, P. Snyder/USGS	DOI
Project Ta	sks to be Completed this Quarter		
<u>July</u> DONE-Captu	ire & sample sea otters (livers)		
<u>Aug-Sept</u> UNDERWAY UNDERWAY	Y-CYP1A analyses on liver samples from 2001 & 1989 Y-Data analyses	·	
Apr 15, 2002 -Submit final	report		



### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

Proj.No.	Project Title	<u>Proposer</u>	<u>Lead</u> Agency
01535	EVOS Trustee Council Restoration Program Final Report	EVOS Restoration Office	ALL
<u>Project Ta</u> <u>March 1</u> DONE-First	sks to be Completed this Quarter draft of ch. 1, 2, 3 completed		
June 1 REPORT H/ FOR INTER	AS BEEN REORGANIZED INTO 7 CHAPTERS AND CIRC NAL REVIEW 7/31/01	CULATED TO TRUSTEE COUNCIL	AND OTHERS
<u>Sept. 1</u> DONE-Com UNDERWA	plete references & appendices Y-Further editing/rewriting		
01538	Evaluation of Two Methods to Discriminate Pacific Herring Stocks along the Northern Gulf of Alaska	T. Otis/ADFG, R. Heintz/NOAA	ADFG
Project Ta NOTE: THIS	sks to be Completed this Quarter PROJECT WAS APPROVED BY THE TRUSTEE COUNC	CIL 1/16/01.	

<u>Jan-Mar</u>

SELECTED KEN SEVERIN AT UAF; WILL DRAW UP RSA WHEN FY 02 FUNDS ARE AVAILABLE-Contract lab for elemental analysis of otoliths

<u>April-June</u>

DONE-Collect otolith and heart samples from spring spawning herring from Sitka Sound, PWS, Kodiak, Kamishak, and Togiak

July-Sept

DONE-Extract lipids from soft tissue; store samples for processing in FY 02





## *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01543	Evaluation of Oil Remaining in the Intertidal from the Exxon Valdez Oil Spill	J. Short/NOAA	NOAA
<u>Project Ta</u>	asks to be Completed this Quarter		
PHASE 1: C	<u>Dct-Dec</u>		
DONE-Conv	vene design planning workshop		
DONE-Subi	III DED IOI FIIASE 2		
<u>PHASE 2</u> (F	UNDING APPROVED BY TC 12/5/00; AUTHORITY GRAI	NTEDTO SPEND FOR NEP	A ONLY 1/18/01)
Dec-April			
DONE-Pres	ent summary of known remaining oil deposits inside PWS	and canvas communities fo	r local knowledge of
DONE-Iden	ll tify sampling locations of community concern		
DONE-Iden	ary sampling locations of community concern		
<u>April-June</u>			
DONE-Hire	and train field personnel		
M. 0- 1			
<u>May-Sept</u>	act field data and samples		
-	so new wata and samples		
<u> </u>			

Alaska Resources Library and Information Services All Trustee Council Agencies

ALL

#### Project Tasks to be Completed this Quarter

1550

During the quarter ending 9/30/01, ARLIS staff received 3,488 visitors and 1,123 incoming calls, issued 111 new library cards, responded to 2,961 requests for in-depth information, 439 of which were EVOS questions (routine requests for EVOS documents are now handled by the Restoration Office), and processed 3,277 interlibrary loans (210 for EVOS materials). ARLIS staff reviewed, approved, and distributed 4 final reports and 4 annual reports; 348 reports, 3 media sets, and 2 videos are now available. ARLIS staff obtained 148 articles to update the GEM reference files at the Restoration Office. The White House award ceremony to honor ARLIS for receiving the National Award for Library Service, scheduled for 9/17/01, was postponed due to the events of 9/11.
DRAFT



### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title		Proposer	<u>Lead</u> Agency
01551-BAA	Checklist and Distributional Analysis o Species Collected as Vouchers Under F	f Marine Alga Project CH1A	G. Hansen/OSU	NOAA
Project Ta	sks to be Completed this Quarter			
Oct-Dec DONE-Corre DONE-Visit database VISIT COMF LABELS TO the taxonom difficult spec	ect typographic errors & update nomenclature Berkeley for 2 weeks to work on nomenclature PLETE; CORRECTED NOMENCLATURE IN THE SPECIMENS MIKE STEKOLL WILL y of the voucher specimens, distribute & glue imens	e of the vouch ral problems & I DATABASE I DO THIS AT e the annotatic	er specimen database examine type specimens BUT DID NOT HAVE TIME A LATER DATE-Visit Junea In labels, & correct the datat	further update the TO ADD ANNOTATION u for 10 days to check base; borrow particularly
<u>Jan-Mar</u> UNDERWAY DONE-Visit ALSO GOT I ARC-EXPLC	Y-Complete checklists & begin work on analy Juneau for another 10 days to make final cor DATABASE WORKING WELL AS A QUERI ORER SO THAT MAPS WILL BE GENERAT	vses, graphics, rections to the ABLE RELATI ED FROM TH	ms. specimens & database; do ONAL DATABASE AND SE E DISTRIBUTION DATA.	analyses T UP DATABASE WITH
Apr-June )ELAYED-S vouchers du DONE-Give DUE DATE I	ubmit ms. to peer reviewed journal (Checklis ring CH1A; to Botanica Marina) talk at Phycological Society of America (Este EXTENDED TO 11/05/01-Submit final report	st & distributior ss Park, CO \$	nal analysis of marine algal s 1.5)	pecies collected as
July-Sept				
NOTE: Due preparation of	dates for report/ms. not extended, but contra of additional manuscripts, etc computer pu	act extended to urchased unde	o 9/30/02 to allow PI to conti r this project	nue to use for
01552-BAA	Exchange Between Prince William Sour Gulf of Alaska	nd and the	S. Vaughn/PWSSC	NOAA
Project Ta	sks to be Completed this Quarter			
<u>Oct-Dec</u> DONE-Subm DONE-Deplo	nit deployment procedure & initial sample dat by mooring (Nov/Dec)	a collection to	RO	
Jan-Mar				
<u>April-June</u> DELAYED-S DONE-Retrie	ubmit annual report (4/15/01) eve mooring (Mav)			

Vuly-Sept NO UPDATE PROVIDED -Deploy mooring (Sept.)





### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

Proj.No.	Project Title	Proposer	<u>Lead</u> Agency
01555	Can Stress Hormones be Used as an Indication Food Availability and Reproductive Performant Experimental Approach	n of   R. Lanctot/USGS ce? An	DOI
Project Ta Oct-Dec DONE-Corti DONE-Regu DONE-Prelir	asks to be Completed this Quarter costerone analyses urgitated food analysis minary analyses of 1999 data	-	
<u>April 15</u> DONE 4/26/	01-Submit final report		
Conferences DONE-Pacif	<u>s</u> fic Seabird Group, Kauai, 2/01 (\$1.7)		
Manuscripts UPDATE NC -Effects of fo experimenta -Effect of sa	(page charges \$1.0) DT PROVIDED bod availability on corticosterone levels & breeding su al study; to Hormones & Behavior mpling time on measurement of circulating levels of o	uccess in male & female black-legge corticosterone in black-legged kittiw	ed kittiwakes; an akes; to Auk
-01558	Harbor Seal Recovery: Application of New Technologies for Monitoring Health	S. Atkinson/UAF	ADFG
Project Ta	sks to be Completed this Quarter		
DONE-Blood	d sampling		
<u>Oct-Dec</u> UNDERWA` DONE-Colle	Y-Send blood & blubber samples from captive selas f ect blood samples to assess circadian pattern of T3, T	for contaminant analysis F4, & cortisol	
<u>Jan-Mar</u> DONE-Unde	ertake endocrine assays with batches of samples to a	assist with quality control	
<u>April-June</u> DONE-Seals DONE-Perfo	s collected for rehabilitation arrive at ASLC orm circadian sampling		
<u>July-Sept</u> UNDERWA` DONE-Relea	Y-Analyze endocrine & immunology samples ase rehabilitation seals		



ATTACHMENT C

### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	Proposer	<u>Lead</u> Agency
01599-CLO	Evaluation of Yakataga Oil Seeps as Regional Background Hydrocarbon Sources in Benthic Sediments of the Spill Area	J. Short/NOAA	NOAA
Project Ta	sks to be Completed this Quarter		
<u>April 15</u> DONE 6/6/0 <sup>,</sup> DELAYED-S	1-Submit annual report ubmit ms.		
<u>June</u> NO UPDATE -Present resi	E PROVIDED ults at Arctic Marine Oilspill Program, Environment Ca	nada, Calgary (\$1.4)	
<u>FY 00 tasks</u> -Analyze san	not completed in FY 00: nples for hydrocarbons		
01610	Kodiak Archipelago Youth Area Watch	P. Brown-Schwalenberg/CRRC	ADFG
Project Ta	sks to be Completed this Quarter		<b>_</b>
PROJECT W	AS AUTHORIZED TO BEGIN 12/16/00.		
<u>Sept-Dec</u> DONE-Stude DONE-Proto DONE-Stude	ents selected col training completed ents conduct project activities		
<u>Jan-March</u> DONE-Data/ DIDN'T PAR`	samples to PI TICIPATE-Participate in TEK & CRRC Annual Gather	ing (March)	
<u>April-June</u> DONE-Data/ SUBMITTED	samples to PI and reports complete FOR PEER REVIEW 7/3/01-Annual report on 2000-2	2001 school year due (6/30/01)	

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### *Exxon Valdez* Oil Spill Project Status Summary FY 01 Work Plan Quarter Ending September 30, 2001

<u>Proj.No.</u>	Project Title	<u>Proposer</u>	<u>Lead</u> Agency
01630	Planning for Long-Term Monitoring and Research Program	Restoration Office	ALL
Project Ta	asks to be Completed this Quarter	······································	
<u>Oct-Dec</u> DONE-Pres DONE-Anal DONE-Pres	ent draft GEM monitoring plan to EVOS Annual Workshop yze input; develop conceptual outline of a revised draft GEI ent revised draft outline to TC and NRC for discussion	and PICES annual meeting M plan	
<u>Jan-Mar</u> DONE-Revi OUTLINE A DONE-Sma DONE-Reca ALSO, DRA	se outline of draft plan to incorporate feedback from TC and PPROVED BY TC 1/16/01-Present revised outline of draft Il writing groups, reviewers, experts assist in further develo eive interim report from NRC on draft GEM Science Program FTING WORKSHOP FOR GEM PLAN, MAR. 22-23	d NRC to TC for approval; public com ping draft GEM plan m; respond to recommendatior	ment accepted
<u>April-June</u> DONE (8/6/ DONE (9/1/ ALSO, NRC	01)-Present draft GEM plan to TC for discussion and adopt 01)-Submit draft GEM plan to NRC COMMITTEE MEMBERS BRIEF TC ON NRC INTERIM R	ion; additional public comment EPORT, 4/3/01	accepted
<u>July-Sept</u> DONE (9/19 ONGOING-	0/01)-Brief NRC as needed Continue work on other aspects of GEM (data managemen	t, community involvement, etc.	) -

Quarterly Financial Reports

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## Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### MEMORANDUM

TO: Trustee Council

THROUGH: Molly Mc Ammon Executive Director

FROM:

Debbie Hennigh Special Assistant

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DATE: November 30, 2001

**RE:** Quarterly Report for the Period Ending September 30, 2001

The attached reports consolidate the financial information submitted by the agencies for the quarter ending September 30, 2001.

The first report is a summary of activity by restoration category. This report reflects the total adjusted authorization and the total expended/obligated by Work Plan year and restoration category.

The second report displays the financial information by Fiscal Year. This report is used to determine what portion of the unexpended/unobligated balance or lapse is available to off set future court requests. Included are adjustments to reflect unreported interest and other revenue. It is estimated that \$5,859,601 is available to off set future court requests. This estimate includes lapse associated with Fiscal Years 1992 through 2000 and unobligated funds associated with other authorizations for which the purpose has been accomplished.

The third report is a summary of financial information associated with the 2001 Work Plan.

If you have any questions regarding the information provided, please call .

Attachments

Cc: Agency Liaisons Bob Baldauf Bruce Nesslage

#### Exxon Valdez On-spill Trustee Council Quarterly Report as of September 30, 2001 Summary

			WORK P	LAN AND ASS	SOCIATED PR	OJECTS				
· · · · · · · · · · · · · · · · · · ·		-	Adjusted	EVOS	RSA		Unobligated	EVOS	Federal	State
Fiscal Year	Authorized	Adjustments	Authorization	Expenditures	Expenditures	Obligations	Balance	Lapse	Lapse	Lapse
1992	19,211,000	13,058	19,224,058	13,311,903	2,720,100	0	5,912,155	5,912,155	2,292,119	3,620,036
1993	13,963,000	-18,003	13,944,997	10,174,444		0	3,770,553	3,770,553	1,752,480	2,018,073
1994	25,750,500	0	25,750,500	19,826,404		0	5,924,096	3,712,996	1,336,041	2,376,955
1995	26,004,400	0	26,004,400	22,408,052		0	3,596,348	3,596,348	880,818	2,715,530
1996	25,560,900	0	25,560,900	22,947,790		0	2,613,110	2,613,110	921,208	1,691,902
1997	19,827,600	-5,379	19,822,221	18,605,195		0	1,217,026	1,217,026	536,176	680,850
1998	17,281,600	0	17,281,600	16,250,176		0	1,031,424	1,031,424	377,369	654,055
1999	14,591,200	0	14,591,200	13,869,472		0	721,728	726,422	320,528	405,894
Deobligations		-							216,740	2,567,359
2000	10,816,100	32,300	10,848,400	9,787,299		745,889	315,212	315,212	62,912	252,300
2001	7,702,300	11,700	7,714,000	6,294,598		899,698				
TOTAL	180,708,600	33,676	180,742,276	153,475,333	2,720,100	1,645,587	25,101,652	22,895,246	8,696,391	16,982,954
OTHER AUTHORIZATIONS			378,531,643	305,120,121		3,843,621	69,567,901	680,715	307,364	373,351
Total Reported Lapse (Through	Court Request #4	5 & Court Notice	7)		k	, ,,		25,472,814	8,605,989	16,866,825
Unreported Lapse (1992 throug	h 2000)				······			887,246	397,766	489,480
Unreported Interest (as of 9/30/	/01)							4,972,355	735,656	4,236,699
Other Revenue (Posters/Sympo	osium Receipts)							33,592	0	C
Total Available to Offset Futu	ire Court Request	S						5,859,601	1,133,422	4,726,179
			`							

Footnote: The Unobligated Balances have been adjusted to reflect the carry forward of projects. This includes \$2,211,100 in FY 94'.

Federal Lapse includes lapse money that has not been received by the NRDAR account as not all agencies have returned lapsed funds.

Other Authorizations: Includes all large and small parcel acquisitions, the Alutiiq Repository, Prince William Sound and Lower Cook Inlet Archaeological Repository (99154), Construction of the Alaska SeaLife Center, Implementation of the Sound Waste Mgt. Plan (97115), Kenai Habitat Restoration & Recreation (97180, 98180, 99180), Alaska SeaLife Center Fish Pass (97179), Chenega-Area Residual Oiling (96291, 97291, 98291), Kodiak Waste Mgt. Plan (99304), Port Graham Hatchery Reconstruction (99405).



### Exxon Valdez (\_\_\_\_\_pill Trustee Council Quarterly Financial Report As of September 30, 2001 Category

	9	2' Work Plan		9	3' Work Plan		9	4 Work Plan		9	5' Work Plan	
	Adjusted	Expended/	Percent	Adjusted	Expended/	Percent	Adjusted	Expended/	Percent	Adjusted	Expended/	Percent
Category	Authorization	Obligated	Obligated	Authorization	Obligated	Obligated	Authorization	Obligated	Obligated	Authorization	Obligated	Obligated
General Restoration	4,103,070	3,793,459	92.45%	3,126,013	2,172,316	69.49%	5,248,300	3,169,392	60.39%	5,232,695	4,436,734	84.79%
Monitoring							2,883,118	2,571,396	89.19%	3,080,926	2,460,924	79.88%
Research							8,640,710	8,085,273	93.57%	10,726,431	10,107,500	94.23%
Monitoring and Research	2,237,788	2,206,587	98.61%	4,204,925	3,626,649	86.25%	417,200	335,717	80.47%			
Damage Assessment	<u>7,807,100</u>	<u>5.740,168</u>	<u>73.52%</u>	<u>1,991,807</u>	<u>1,570,900</u>	<u>78.87%</u>	Q	Q	0.00%	0	<u>0</u>	0.00%
sub-total	14,147,958	11,740,215	82.98%	9,322,745	7,369,866	79.05%	17,189,328	14,161,778	82.39%	19,040,052	17,005,158	89.31%
Habitat Protection	0	0	0.00%	486,200	156,760	32.24%	3,747,292	1,656,323	44.20%	2,757,322	2,231,447	80.93%
Administration	5,076,100	4,291,788	84.55%	4,136,052	2,647,818	64.02%	4,813,880	4,008,303	83.27%	4,207,026	3,171,447	75.38
Total	19,224,058	16,032,003	83.40%	13,944,997	10,174,444	72.96%	25,750,500	19,826,404	76.99%	26,004,400	22,408,052	86.17%
	9	6' Work Plan		9	7' Work Plan		9	8' Work Plan		9	9' Work Plan	
	Adjusted	Expended/	Percent	Adjusted	Expended/	Percent	Adjusted	Expended/	Percent	Adjusted	Expended/	Percent
Category	Authorization	Obligated	Obligated	Authorization	Obligated	Obligated	Authorization	Obligated	Obligated	Authorization	Obligated	Obligated
General Restoration	4,133,410	3,739,517	90.47%	3,812,538	3,575,827	93.79%	2,413,185	2,249,944	93.24%	2,396,789	2,298,679	95.91%
Monitoring	1,496,871	1,447,703	96.72%	985,022	950,137	96.46%	930,911	893,146	95.94%	1,282,829	1,218,342	94.97%
Research	<u>13,208,019</u>	12.735.656	<u>96.42%</u>	<u>11,430,632</u>	<u>11,183,953</u>	<u>97.84%</u>	<u>10,781,704</u>	<u>10.363,124</u>	<u>96,12%</u>	7,966,482	<u>7.721.742</u>	<u>96.93%</u>
sub-total	18,838,300	17,922,876	95.14%	16,228,193	15,709,917	96.81%	14,125,800	13,506,214	95.61%	11,646,100	11,238,763	96.50%
Habitat Protection	3,304,100	2,045,292	61.90%	1,260,600	819,070	64.97%	851,400	596,353	70.04%	770,400	601,716	78.10%
Administration	3,418,500	2,979,622	87.16%	2,938,207	2,662,617	90.62%	2,796,300	2,531,047	90.51%	2,495,700	2,323,967	93.12%
Total	25,560,900	22,947,790	89.78%	20,427,000	19,191,604	93.95%	17,773,500	16,633,614	93.59%	14,912,200	14,164,446	94.99%
	<u> </u>											
	0	0' Work Plan		0	1' Work Plan							
	Adjusted	Expended/	Percent	Adjusted	Expended/	Percent		I				
Category	Authorization	Obligated	Obligated	Authorization	Obligated	Obligated						
			00 75%	005 504	044.050		<u> </u>					
General Restoration	940,657	816,034	86.75%	985,524	941,053	95.49%						
Monitoring	1,396,603	1,341,884	96.08%	1,335,666	1,314,547	98.42%					<i>ه</i> ــــــــــ	
Research	<u>6.071.439</u>	<u>6.145.891</u>	<u>101.23%</u>	3,624,510	3.376.024	93.14%	· · · · ·					·
sub-total	8,408,700	8,303,809	98.75%	5,945,700	5,631,625	94.72%						
Habitat Protection	405,800	359,884	88.69%	268,100	210,257	78.42%						
Administration	2,033,900	1,869,495	91.92%	1,500,200	1,352,414	90.15%						
Totol	10 848 400	10 533 199	97.09%	7 714 000	7 194 296	93.26%						
Total	10,040,400	10,000,100	31.05%	1,114,000	7,104,200	35.2076						

Support.xls Category Summary

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			Exxon	Valdez Oil Spil					
	·	. 1	For the Period E	nding Septemb	er 30, 2001				
	•	· · · · · · · · · · · · · · · · · · ·	ris		T			1	
Project					Adjusted	Ac of 9/30/01	Ac of 0/20/01	Expanded/	Unabligated
Number	Category	Project Description	Authorized	Adjustmente	Authorization	Expenditures	AS OF 9/30/01	Expended/	Delenee
number	Category		Authonzeu	Aujustments	Authorization	Expenditures	Obligations	Obligated	Balance
		Photographic and Acoustic Monitoring of Killer			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
01012	м	Whales in Prince William Sound and Kenai Fjords	74,500	C	74,500	74,500	0	74,500	0
		Community Involvement/Traditional Ecological			· · · ·				
01052	G	Knowledge	201,900	c C	201,900	116,069	80,447	196,516	5,384
		Monitoring, Habitat Use, and Trophic Interactions of						· · · · · · · · · · · · · · · · · · ·	
01064	M	Harbor Seals in Prince William Sound	22,600	C	22,600	1,008	15,032	16,040	6,560
		Public Information, Science Management and							
01100	A	Administration	1,500,200	C	1,500,200	1,248,126	104,288	1,352,414	147,786
01126	Н	Habitat Protection and Acquisition Support	256,400	11,700	268,100	191,721	. 18,536	210,257	57,843
01131	G	Chugach Native Region Clam Restoration	10,500	C	10,500	0	9,900	9,900	600
01144	M	Common Murre Population Monitoring	46,500	0	46,500	47,980	0	47,980	-1,480
		Surveys to Monitor Marine Bird Abundance in Prince							
01159	. M	William Sound during Winter and Summer 2000	25,000	C	25,000	24,195	0	24,195	805
		Alaska Predator Ecosystem Experiment in Prince							
01163	R	William Sound and the Gulf of Alaska (APEX)	199,600	<u> </u>	199,600	180,918	0	180,918	18,682
		Construction of a Linkage Map for the Pink Salmon							
01190	R	Genome	400,900	0	400,900	190,768	185,756	376,524	24,376
01195	R	Pristane Monitoring in Mussels	55,000	<u>`</u>	55,000	55,000	0	55,000	0
01210	G	Youth Area Watch	107,000	0	107,000	101,453	5,302	106,755	245
		Community-Based Harbor Seal Management and	Í		-				
01245	G	Biological Sampling	40,000	<u></u>	40,000	25,976	9,097	35,073	4,927
01247	G	Kametolook River Coho Salmon Subsistence Project	22,700	<u> </u>	22,700	13,528	3,784	17,312	5,388
01250		Project Management	284,300	0	284,300	253,526	2,500	256,026	28,274
01256B	G	Sockeye Salmon Stocking at Solf Lake	24,400	0	24,400	10,455	13	10,468	13,932
01273	R	Surf Scoter Life History and Ecology	50,100	0	50,100	28,080	730	28,810	21,290
01290	R	Hydrocarbon Database and Interpretation Service	35,000	0	35,000	33,900	0	33,900	1,100
		Pigeon Guillemot Restoration Research at the							_
01327	R	Alaska SeaLife Center	86,900	<u> </u>	86,900	86,900	0	86,900	0
		Survival of Adult Murres and Kittiwakes in Relation to					· ·		
01338	R	Forage Fish Abundance	47,200	C	47,200	46,357	0	46,357	843
		Toward Long-Term Oceanographic Monitoring of the		.					
01340	M	Gulf of Alaska Ecosystem	72,000	C	72,000	21,672	47,125	68,797	3,203
		Harbor Seal Recovery: Controlled Studies of Health							
01341	R	and Diet	82,200	C	y 82,200	47,626	<u>  32,381</u>	80,007	2,193

		· · · · · ·	For the Period E	nding Septemb	er 30, 2001		<u> </u>		
			Fis	cal Year 2001					
Project Number	Category	Project Description	Authorized	Adjustments	Adjusted Authorization	As of 9/30/01 Expenditures	As of 9/30/01 Obligations	Expended/ Obligated	Unobligated Balance
	_	The Exxon Valdez Oil Spill: Guidance for Future							
01360	м	Research Activities	241,600	o	241,600	241,600	0	241.600	o
01366	R	Improved Salmon Escapement Enumeration Using Remote Video and Time-Lapse Recording Technology	11,300	. 0	11,300	10,985	19	11,004	296
	_	Effects of Harbor Seal Metabolism on Stable Isotope		_					
01371	R	Ratio Tracers	92,900	0	92,900	34,428	54,727	89,155	3,745
01385	G	Modeling Biodiversity in Kachemak Bay	11,000	<u>0</u>	11,000	10,999	0	10,999	1
01389	R	3-D Ocean State Simulations for Ecosystem Applications from 1985-98 in Prince William Sound	142,500	<u> </u>	142,500	70,896	26,148	97,044	45,456
01391	м	CIIMMS: Cook Inlet Information/Monitoring System	239,000	<u>0</u>	239,000	190,601	20,173	210,774	28,226
04000		Prince William Sound Food Webs: Structure and	440.000		440.000				
01393	R		119,000	0	119,000	119,100	0	119,100	-100
01396	<u> </u>	Alaska Saimon Shark Assessment	85,000	U	. 85,000	78,000	0	78,000	7,000
01401	G	William Sound	94,400	o	94,400	94,100	0	94,100	300
		Archival Tags for Tracking King Salmon at Sea: Migrations, Biology, and Oceanographic Preferences							
01404	R	In Prince William Sound	75,000	0	75,000	68,793	0	68,793	6,207
01407	IVI	Harlequin Duck Population Dynamics	67,000	<u> </u>	000,10	63,294	1,138	64,432	3,168
01423	R	Selected Nearshore Vertebrate Predators	505,400	o	505,400	492,401	158	492,559	12,841
01441	R	Harbor Seal Recovery: Effects of Diet on Lipid Metabolism and Health	93,500	0	93,500	71,902	20,305	92,207	1,293
01452	R	Assessing Prey & Competitor/Predators of Pink Salmon Fry	57,600	<u>o</u>	57,600	57,600	0	57,600	0
01454	R	Evidence and Consequences of Persistent Oil Contamination in Pink Salmon Natal Habitats	103,200	0	103,200	95,400	0	95,400	7,800
04.055	n	Gulf Ecosystem Monitoring & Research Program	25 700		35 700		0		25 700
01455	<u> </u>	Effects of Discoso on Pasific Harring Deputation	35,700	<u> </u>	35,700			UU	35,700
01462	R	Recovery in Prince William Sound	86,000	0	86,000	41,327	37,451	78,778	7,222
01468	м	FEATS: Fundamental Estimations of Acoustic Target Strength	5,800	0	5,800	5,800	0	5,800	0
01476	R	Effects of Oiled Incubation Substrate on Pink Salmon Reproduction	94,200	<u> </u>	94,200	.92,500	0	92,500	1,700

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		F	or the Period E	inding Septembe	er 30, 2001				
			Fis	cal Year 2001			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Project					Adjusted	As of 9/30/01	As of 9/30/01	Expended/	Unobligated
Number	Category	Project Description	Authorized	Adjustments	Authorization	Expenditures	Obligations	Obligated	Balance
		Testing Satellite Tags as a Tool for Identifying							
01478	R	Critical Habitat (bench fees)	26,800	о	26,800	24 417	22	24 439	2 361
		Effects of Food Stress on Survival and Reproductive			20,000			24,433	2,001
01479	R	Performance of Seabirds	129,600	0	129.600	129.600	0	129,600	0
		Documentary Film on the Oil Spill Impacts on							<b>_</b>
01481	G	Subsistence Use of Intertidal Resources	111,800	0	111,800	48,952	45,470	94,422	17.378
		Were Pink Salmon Embryo Studies in Prince William				<u> </u>	·		
01492	R	Sound Biased?	62,100	0	62,100	59,900	0	59,900	2,200
01513	G	EVOS Exhibit: The Continuing Legacy	50,300	0	50,300	45,678	4,366	50,044	256
		P4501A Induction Comparison of Cytochromein							
01534	R	Blood and Liver Cells of Sea Otters	19,900	0	19,900	17,381	0	17,381	2,519
01535	G	EVOS TC Restoration Program Final Report	73,500	0	73,500	85,582	192	85,774	-12,274
01538	R	Northwest Gulf of Alaska Herring Stock Identification	10 100	0	10 100	2 287	 	2 287	7 813
01000		Evaluation of Oil Remaining in the Intertidal from the	10,100					2,20,	7,010
01543	м	Exxon Valdez Oil Spill	477,200	0	477.200	498.603	2.064	500.667	-23,467
			· · ·			· · · · · · · · · · · · · · · · · · ·			
01550		Alaska Resources Library and Information Services	129,100	o	129,100	125,303	190	125,493	3,607
	i	Checklist and Distributional Analysis of Marine Algal							
01551	R	Species Collected as Vouchers Under CH1A	65,800	0	65,800	65,800	0	65,800	0
		Exchange Between Prince William Sound and the			1				
01552	R	Gulf of Alaska	105,700	0	105,700	105,100	<u> </u>	105,100	600
		Can Stress Hormones Be Used as an Indication of							
		Food Availiability and Reproductive Performance?							
01555	R	An Experimental Approach	18,900	0	18,900		0	18,900	0
01558	R	Harbor Seal Recovery (includes bench fees)	280,200	0	280,200	170,760	90,518	261,278	
		Evaluation of Yakataga Oil Seeps as Regional							
		Background Hydrocarbon Sources in Benthic		_			_		
01599	R	Sediments of the Spill Area	10,500	0	10,500	7,900	0	7,900	2,600
01610	G	Kodiak island Youth Area Watch	61,800	0	61,800	54,218	7,197	61,415	385
	_	Planning for Long-term Research and Monitoring	000.400			404 700	74 000		
01630	R	Program	263,400	0	203,400	194,733	/4,669	269,402	-6,002
			7,702.300	11,700	7.714.000	6.294.598	899 698	7,194,296	519.704
			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			.,,	0.0,104

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### DRAFT AGENDA 11/30/2001 Exxon Valdez Oil Spill Trustee Council Annual Workshop January 22-25, 2002 Egan Convention Center 555 W. 5th Avenue Anchorage, Alaska Please note: most speakers are still in process of being invited and have not yet confirmed

### DAY 1

Tuesday, January 22

8:00 - 8:30 Registration

### MORNING TOPIC: Lingering Oil

8:30 - 8:40	Welcome and Introduction – Molly McCammon, EVOS Executive Director
8:40 - 9:00	Overview of recent findings from the restoration program: ecosystem status and lingering spill effects - Robert Spies, EVOS Chief Scientist
9:00 - 9:30	Status of fisheries in the oil spill affected area - Jeep Rice, NMFS
9:30 - 10:00	Status of bird populations in the oil spill affected area - Dave Irons, USFWS
10:00 - 10:25	Status of marine mammals in the oil spill affected area - Jim Bodkin, USGS & Tom Laughlin, NMFS
10:25 - 10:45	Break
10:25 - 10:45 10:45 - 11:05	Break Lingering oil in PWS and the GOA - Jeff Short, NMFS
10:25 - 10:45 10:45 - 11:05 11:05 - 11:25	Break Lingering oil in PWS and the GOA - Jeff Short, NMFS Are sea otters in PWS still affected by the spill? - Brenda Ballachey, USGS
10:25 - 10:45 10:45 - 11:05 11:05 - 11:25 11:25 - 11:45	Break Lingering oil in PWS and the GOA - Jeff Short, NMFS Are sea otters in PWS still affected by the spill? - Brenda Ballachey, USGS Are harlequin ducks still injured by the spill? - Dan Esler, Simon Fraser University
10:25 - 10:45 10:45 - 11:05 11:05 - 11:25 11:25 - 11:45 11:45 - noon	Break Lingering oil in PWS and the GOA - Jeff Short, NMFS Are sea otters in PWS still affected by the spill? - Brenda Ballachey, USGS Are harlequin ducks still injured by the spill? - Dan Esler, Simon Fraser University Concluding comments - Bob Spies, EVOS Chief Scientist

#### AFTERNOON TOPIC: Finding Ways for Regional Science Programs to Work Together: Common Interests and Approaches to Problem Solving

NOTE: This section co-sponsored by Southeast Sustainable Salmon Fund, North Pacific Research Board? NPAFC? Northern Fund?

#### Session I: Introductions

Theme: Panel of regional programs and entities; who they are and what they do.

- 1:15 1:45 Call to Order and Welcome
  - EVOS Trustee Council and GEM Program Molly McCammon
  - Sustainable Salmon Fund Initiatives Frank Rue
  - North Pacific Research Board David Benton
  - Northern Fund,??
  - AYK Coalition, ??
  - Alaska Board of Fisheries, ??
  - Federal Subsistence Board, ??

Session II: Gulf Ecosystem Monitoring Plan and Southeast Sustainable Salmon Fund Theme: Set the stage for the meeting

- 1:45 2:00 The GEM perspective on SSSF opportunities for cooperation: what GEM is and how and why it should work with regional partners, such as SSSF - Molly McCammon, EVOS Executive Director
- 2:00 2:15 The SSSF perspective on GEM opportunities for cooperation: what SSSF is and how and why it should work with regional partners, such as GEM - Frank Rue, ADF&G Commissioner
- 2:15 2:30 The SSSF Strategic Plan: implementing SSSF, origins, structure and guiding principles, and processes Amy Skilbred
- 2:30 2:45 A common scientific foundation for GEM, SSSF and other regional programs Phil Mundy, EVOS Science Coordinator
- 2:45 3:15 Break

#### Session III: Finding Common Ground

Theme: Exploring things GEM and SSSF have in common such as salmon, the currents, Alaska Coastal Current and Alaska current, nearshore and watershed habitat types and sentinel monitoring sites

- 3:15 3:30 Offshore: BASIS?
- 3:30 3:45 A River Runs Through It: The Alaska Coastal Current and Alaska Current unite southeastern AK to PWS, Cook Inlet and the rest of the gulf Tom Royer

3:45 - 4:00	A River Runs Through It: Salmon Super Highways, the Alaska Coastal Current and the Alaska Current - Jack Helle or other
4:00 - 4:15	Nearshore: Approaches to protection of sentinel marine habitats – ADF&G
4:15 - 4:30	Nearshore: Long-term monitoring for coastal habitats in GEM - Tom Dean, Coastal Resources Associates or Carl Schoch, ADF&G
4:30 - 4:45	Watersheds: Historical linkages between marine environments and watersheds - Bruce Finney
4:45 - 5:00	Watersheds: Long term monitoring under SSSF - Brian Frenette
5:00	Adjourn

### DAY 2 Wednesday, January 23

### **TOPIC: Finding ways for Regional Science Programs to Work Together, continued**

Session IV: Community/stakeholder issues, needs, perspectives Theme: How regional programs respond to needs of public

8:30 – 10:00 Possible:

- Trustee Council Public Advisory Group
- Environmental NGO
- Fishing industry

10:00 - 10:30 Break

#### Session V: How and why GEM and SSSF can work together Theme: What plugs the gaps under SSSF?

- 10:30 noon What plugs the gaps under GEM? What are the opportunities and questions? Watershed & nearshore sentinel sites/core monitoring stations Geographic gaps Alaska Coastal Current Databases/information sharing
- noon 1:30 Lunch provided Keynote speaker
- 1:30 2:30 Continuation of Session V

#### 2:30 - 3:00 Break

#### Session VI: Concluding Panel

Theme: Bringing together priorities from Southeast, north GOA, Bering Sea and Arctic

3:00 – 5:00	Speakers and representatives from all of Alaska's coastal regions to share common concerns/issues
5:00	Adjourn
5:00 - 7:00	Reception and poster session

### DAY 3

### Thursday, January 24

# **TOPIC:** Detecting and Understanding Changes in Nearshore Environments: Exploring Options and Setting Directions

8:30 - 8:40	Welcome - Molly McCammon, EVOS Executive Director
8:40 - 9:00	Nearshore Habitats in the GEM Program, establishing the historical and contemporary context - Phil Mundy, EVOS Science Coordinator
9:00 - 10:30	Approaches to community-based monitoring
10:30 - 10:45	Break
10:45 – 12:15	Presentation of conceptual nearshore monitoring plan, Tom Dean, Coastal Resources Associates, Carl Schoch, ADF&G, Ginny Eckert, UAS
12:15 1:30	Lunch (provided) Keynote speaker?
1:30 - 3:00	Interdisciplinary working groups to tackle the issues
3:30 - 3:45	Break
3:45 - 4:45	Working group reports
4:45 - 5:00	Summation: Working together to monitor the nearshore – where do we go from here? What are the specific steps, schedules, and how may people and agencies get involved?
5:00	Adjourn

### DAY 4 Friday, January 25

MORNING TOPIC: Detecting and Understanding Marine-Terrestrial Linkages in Watersheds

- 8:30 8:45 Welcome and Introductions Bill Hauser, ADF&G
- 8:45 9:00 Watersheds in the GEM Program Phil Mundy, EVOS Science Coordinator
- 9:00 9:20 Paleolimnology studies in progress Bruce Finney
- 9:20 9:40 Approaches to understanding nutrient cycling –Jim Edmundson
- 9:40 10:00 Discussion of paleolimnology and nutrient cycling Jim Edmundson and Bruce Finney – Discussion Leaders
- 10:00 10:20 Break
- 10:20 10:40 Annual precipitation and runoff in Alaska watersheds
- 10:40 11:00 Contaminants entering and leaving watersheds along marine-related pathways

#### 11:00 - noon Watershed case studies

- Copper River
- A southeast river?
- Kenai River overview of project

Noon - 1:00 Lunch – on your own

### **AFTERNOON TOPIC: Kenai River Nutrient Study Planning Meeting**

- 1:00 1:15 Brief overview of Literature Review Asit Mazumder
- 1:15 2:15 Preliminary Outline for Study Plan Asit Mazumder and Mark Johannes
- 2:15 3:15 Needs, Priorities and Schedule Mark Johannes and Asit Mazumder Discussion Leaders
  - Gaps
  - Proposals
  - Principal Investigators
  - Forecast of costs and Funding options
- 3:15 3:30 Break

#### 3:30 - 4:30 Resolve Draft Study Plan - Mark Johannes – Discussion Leader

4:30 - 5:00 Review/ Process – Bill Hauser, ADF&G

- Next product
- Assignments
- Next meeting(s)
- Purpose
- Time/ place
- Participants

5:00

Adjourn

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UNITED STATES EPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

November 13, 2001

Molly McCammon Executive Director EVOS Trustee Council 645 G Street, Suite 401 Anchorage, Alaska 99501-3451

> Re: Request to Add Topic to EVOS Meeting Agenda-Budget Reprogramming/ Ratification, Project 1543

<u>Issue</u>- In FY01, Project 1543, Oil Remaining in the Intertidal (SCAT Project) was overspent in the amount of \$28,000. The primary cause of this error was an accounting oversight related to the failure to reduce the project budget following the approved agency transfer of \$23,000 to the U.S. Forest Service for project support. This error was originally detected in February 2001 and was corrected at the project's financial management level, however the error and subsequent correction was not adequately relayed to the project management level. This gap in communications occurred following the staff vacancy of the NMFS-EVOS project management position. NMFS has put into place procedures to ensure that similar errors can not occur in FY02.

<u>Request</u>- NMFS is requesting the approval of a reprogramming between FY01 project budgets which would reduce the project funding amounts as specified:

Project No.	Project Title	Unobligated Balance	Amount Reprogrammed
1195	Pristane Monitoring in Mussels	\$11,400	\$1,000
1290	Hydrocarbon Database	\$1,500	\$1,500
1396	Alaska Salmon Sharks	\$7,000	\$7,000
1454	Pink Salmon Natal Habitats	\$7,800	\$5,000
1492	Pink Salmon Biased	\$2,200	\$2,200
1538	Herring Stocks	\$6,100	\$6,100
1599	Yakataga Oil Seeps	\$5,200	\$5,200
Total		\$41,200	\$28,000

This reprogramming would have the effect of modifying the FY01 Project 1543 budget as follows:

Object Class	Approved Budget	Amount Obligated	Adjusted
Personnel	\$69,100	\$42,900	-\$26,200
Travel	\$27,200	\$38,000	+\$10,800
Contractual (including charters)	\$284,900	\$284,900	\$-0-
Commodities	\$9,000	\$50,300	+\$41,300
Equipment	\$10,000	\$12,100	+\$2,100
Total	\$400,200	\$428,200	+\$28,000

Thank you for your consideration in placing this item on the December 11, 2001 Trustee Council meeting agenda. Be assured that we place substantial importance on the financial integrity of all EVOS projects entrusted to this agency and do not intend for these errors to be repeated in the future.

hes W. Balsiger

Administrator, NMFS Alaska Region



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## Exxon Valdez Oil Spill Trustee Council

441 W. 5<sup>th</sup> Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### MEMORANDUM

FROM:

- TO: Trustee Council
- THROUGH: Molly McCambron Executive Director

Debbie Henniah **Special Assistant** 

DATE: November 21, 2001

RE: October Investment Reports

Included are the Department of Revenue's reports as of October 31, 2001:

- Statement of Invested Assets,
- Statement of Investment Income and Changes in Invested Assets,
- Asset Allocation Policy with Actual Investment Holdings, and
- Performance Measurement.

Also attached are the following graphs for activity ending September 30, 2001:

- Investment Fund Assets, and
- Earnings (Loss).

Also included are graphs of each investment pool's activity for October 2000 through October 2001, the entire investment fund/benchmark, and each individual pool/benchmark for October 2001. The EVOS Investment Fund earned \$3,449,297 for the period ending October 31, 2001.

Attachments

cc: Investment Working Group



Exxon Valdez Oil Spill Investment Fund

#### STATEMENT OF INVESTED ASSETS

October 31, 2001 and 2000

Investments (at fair value)		<u>2000</u>		
Cash and cash equivalents				
Short-term Fixed Income Pool	\$	255,120	\$ 91,692	
Marketable debt and equity securities				
Broad Market Fixed Income Pool		73,460,139	57,075,942	
Non-retirement Domestic Equity Pool		73,960,245	56,879,447	
SOA International Equity Pool		30,275,491	 23,102,643	
Total invested assets	\$_	177,950,995	\$ 137,149,724	

Page 1

#### STATE OF ALASKA DEPARTMENT OF REVENUE TREASURY DIVISION

#### Exxon Valdez Oil Spill Investment Fund

#### STATEMENT OF INVESTMENT INCOME AND CHANGES IN INVESTED ASSETS

#### For the period ended October 31, 2001

Investment Income	CU M	IRRENT I <u>ONTH</u>		YEAR TO <u>DATE</u>	
Cash and cash equivalents					
Short-term Fixed Income Pool	\$	692	\$	233,563	
Marketable debt and equity securities Non-pooled investments					
Broad Market Fixed Income Pool		1,397,512		4,042,440	
Non-retirement Domestic Equity Pool		1,669,663		(5,333,625)	
SOA International Equity Pool		430,293		(2,556,889)	
Commission Recapture		1,137		2,624	
Total income from marketable debt and equity securities		3,498,604	_	(3,845,451)	
Total investment income (loss)		3,499,297		(3,611,889)	
Total invested assets, beginning of period	17	74,451,698		131,258,825	
Net contributions (withdrawals)		0	_	50,304,059	
Total invested assets, end of period	\$ <u>1</u>	77,950,995	\$_	177,950,995	

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#### DEPARTMENT OF REVENUE - TREASURY DIVISION

#### Exxon Valdez Oil Spill Investment Fund Asset Allocation Policy (effective 4/24/00) with Actual Investment Holdings as of October 31, 2001

· · · · · · · · · · · · · · · · · · ·	Asset Allocation		Fair value	Current Allocation	Variance	
	Policy	Range				
Cash and cash equivalents					·	
Short-term Fixed Income Pool	0.00%		254,428	0.14%	-0.1 <u>4%</u>	
Total cash and cash equivalents	0.00%		254,428	0.14%	-0.14%	
Marketable debt and equity securities						
Broad Market Fixed Income Pool	42.00%	35% - 49%	73,460,139	41.28%	0.72%	
Non-retirement Domestic Equity Pool	41.00%	34% - 48%	73,960 <b>,24</b> 5	41.56%	-0.56%	
SOA International Equity Pool	17.00%	12% - 22%	30,275,491	17.01%	-0.01%	
Total marketable debt securities	100.00%		177,695,875	99.86%	0.14%	
Total holdings	100.00%		177,950,302	100.00%	0.00%	
Short-term Fixed Income Pool Interest Receivable			692			
Total Invested Assets at Fair Value			177,950,995			

Prepared by Treasury Division Printed: 11/14/01 at 8:29 AM Filename: EVOS\_1001 policy

# Exxon Valdez Oil Spill Investment Fund Period Ending October 31, 2001

	<u>Mkt Value (\$M)</u>	Monthly <u>Return</u>	3 Mo. <u>Return</u>	YTD	Fiscal <u>YTD</u>	Inception to <u>Date*</u>
AY02 EVOS Investment Fund	177,950	2.01	-2.30	-5.42	-2.46	<b>-6.63</b>
EVOS Investment Fund Index		2.27	-5.00	-5.04	-7.15	-9.88
Short-term Fixed Income Pool	255	0.27	1.11	4.4	1.51	5.70
91 day T-Bill		0.26	1.01	4.03	<i>1.35</i>	5.17
Broad Market Fixed Income Pool	73,460	1.94	3.97	10.17	6.28	14.46
Lehman Brothers Aggregate Index		2.09	4.46	<i>10.65</i>	6.80	<i>14.56</i>
Non-Retirement Domestic Equity Pool	73,960	2.31	-10.19	-17.10	-11.65	-23.43
Russell 3000 Index		2.33	- <i>12.21</i>	<i>-18.93</i>	<i>-13.66</i>	-25.14
SOA International Equity Pool	30,275	1.45	-9.17	-23.93	-12.58	-22.70
Morgan Stanley Capital Intl. (EAFE)		2.56	-10.16	-24.68	-11.80	-24.93
Source: State Street Bank, Insight.						

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\* Since October 31, 2000

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EVOS Investment Fund Earnings (Losses)									
	SFY 01	SFY 02	Total						
31-Oct-00	\$2,503,034								
30-Nov-00	-\$4,794,990								
31-Dec-00	\$3,042,417								
31-Jan-01	\$2,652,034								
28-Feb-01	-\$5,626,092								
31-Mar-01	-\$4,499,192								
30-Apr-01	\$4,497,983								
31-May-01	\$267,233								
30-Jun-01	-\$1,412,478								
31-Jul-01		-\$203,007							
31-Aug-01		-\$2,442,542							
30-Sep-01		-\$4,465,637							
31-Oct-01		\$3,499,297							

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## Exxon Valdez Oil Spill Trustee Council Investment Fund Earnings (Loss) as of October 31, 2001 \$5,000,000 \$4,000,000 \$3,000,000 \$2,000,000 \$1,000,000 \$0 Jul-01 Jumpj1 May-0 Apr-01 Mar-01 Dec-00 Jan-01 Feb#0 Nov-00 Oct-00-\$1,000,000 Auid≣0. -\$2,000,000 -\$3,000,000 -\$4,000,000 -\$5,000,000







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EVOS Investme	ent Fund - E\	/OS Index									
	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01
Monthly											
Return	2.3	1.96	-4.08	-3.4	3.52	0,2	-1.06	-0.15	-1.86	-2.41	2.01
Monthly											
Benchmark	2.07	2.08	-4.66	-3.6	4.29	-0.02	-1.29	-0.04	-2.37	-4.85	2.27
Market Value											

(\$M) \$135,397 \$138,049 \$132,423 \$127,924 \$132,404 \$132,671 \$131,259 \$131,056 \$128,613 \$174,452 \$177,950



Fixed Income Pool - Lehman Brothers Aggregate Index	

	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01
Monthly	4 75		4.00	0.00	0.50		0.55	0.05	0.00	4.00		
Return Monthly	1.75	2.09	1.69	0.93	0.59	-0.5	0.55	0.35	2.22	1.03	0.94	1.94
Benchmark	1.64	1.86	1.63	0.87	0.5	-0.42	0.6	0.38	2.24	1.15	1.16	2.09
Market Value												
(in \$M)	58,073	59,289	60,291	60,853	61,210	60,906	61,238	61,458	62,822	63,483	72,063	73,460


International Equities Pool - Morgan Stanley Capital Intl (EAFE)

	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01
Monthly												
Return	-2.43	4.16	-0.44	-5.25	-7.47	5.37	-2.15	-3.31	-3.75	-1.26	-9.33	1.45
Monthly												
Benchmark	-3.75	3.55	-0.05	-7.5	-6.67	6.95	-3.53	-4.09	-1.82	-2.53	-10.13	2.56
Market												
Value (\$M)	22,541	23,479	23,375	22,148	20,494	21,593	21,128	20,430	19,664	19,416	29,844	30,275



	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01
Monthly												
Return	-9.20	1.72	3.34	-9.14	-6.49	8.03	0.80	-1.86	-1.63	-5.9	-6.72	2.31
Monthly												
Benchmark	-9.22	1.68	3.42	-9.14	-6.52	8.02	0.80	-1.84	-1.65	-5.89	-8.82	2.33
Market												
Value (\$M)	51,649	52,537	54,290	49,329	46,126	49,828	50,228	49,294	48,492	45,636	72,291	73,960

### Domestic Equities Pool - Russell 3000 Index



# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



### MEMORANDUM

TO: Trustee Council

THROUGH: M6llv Executive Director

FROM: Debbie Hennigh **Special Assistant** 

DATE: December 10, 2001

### RE: November Investment Reports

Included is the Department of Revenue's Performance Measurement report as of November 30, 2001 (all reports are not available until 10<sup>th</sup> working day of the month).

Also attached are the following graphs for activity ending November 30, 2001:

- Investment Fund Assets, and
- Earnings (Loss).

Also included are graphs of each investment pool's activity for October 2000 through November 2001, the entire investment fund/benchmark, and each individual pool/benchmark for November 2001. The EVOS Investment Fund earned \$5,614,000 (approximate) for the period ending November 30, 2001.

Attachments

### Exxon Valdez Oil Spill Investment Fund

Period Ending November 30, 2001

		Monthly	3 Mo.	Calendar	Federal Fiscal	Inception to
	<u>Mkt Value (\$M)</u>	Return	<u>Return</u>	YTD	<u>YTD*</u>	Date**
AY02 EVOS Investment Fund	183,565	3.15	2.69	-2.44	5.22	-3.69
EVOS Investment Fund Index		3.21	0.42	-5.36	5.55	-6.98
Short-term Fixed Income Pool	256	0.22	1.06	4.72	0.49	5.93%
91 day T-Bill		0.22	0.908	4.25	0.48	5.40%
Broad Market Fixed Income Pool	72,621	-1.14	1.74	8.94	0.78	13.16%
Lehman Brothers Aggregate Index		-1.38	1.86	9.12	0.68	12.98%
Non-Retirement Domestic Equity Pool	79.649	7.69	2.77	-10.73	10.18	-17 54%
Russell 3000 Index		5.42	0.50	-12.66	10.21	-19.40%
SOA International Equity Pool	31.039	2.52	-5.70	-22.02	4.00	~20.75%
Morgan Stanley Capital Intl. (EAFE)		3.69	-4.51	-21.91	6.34	-22.16%

Source: State Street Bank, Insight.

\* Federal Fiscal YTD indicates a term beginning October 1, 2001 to current period ending.

\*\* Inception Date: October 31, 2000



NOTE: The increase in assets from August 2001 to September 2001 is due to Exxon's last payment and not earnings.

EV	OS Investment Fun	d Earnings (Lo	osses)		
	SFY 01	SFY 02	Total		
31-Oct-00	\$2,503,034				
30-Nov-00	-\$4,794,990				
31-Dec-00	\$3,042,417				
31-Jan-01	\$2,652,034				
28-Feb-01	-\$5,626,092				·
31-Mar-01	-\$4,499,192				
30-Apr-01	\$4,497,983				
31-May-01	\$267,233				
30-Jun-01	-\$1,412,478				
31-Jul-01		-\$203,007			
31-Aug-01		-\$2,442,542			
30-Sep-01		-\$4,465,637			
31-Oct-01		\$3,499,297			
30-Nov-01		\$5,614,005	unaudited as of <sup>•</sup>	12/10/01	
tal Earnings/Lossos	-\$3 370 051	\$2 002 116	-\$1 367 935		

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Oct	57,075,942
Nov	58,072,794
Dec	59,288,677
Jan	60,291,225
Feb	60,852,550
Mar	61,209,483
Apr	60,905,590
Мау	61,238,245
Jun	61,457,699
Jul	62,822,366
Aug	63,483,499
Sep	72,062,627
Oct	73,460,139
Nov	72,621,000



Note: September's increased amount is due to contributions from Exxon's last payment.

Oct	56,879,447
Nov	51,648,963
Dec	52,536,681
Jan	54,289,747
Feb	49,329,178
Mar	46,126,312
Apr	49,828,183
Мау	50,227,785
Jun	49,293,870
Jul	48,492,162
Aug	45,636,080
Sep	72,290,582
Oct	73,960,245
Nov	79.649.000



Note: September's increased amount is due to contributions from Exxon's last payment.

Oct 23,102,643 Nov 22,540,761 Dec 23,478,963 23,374,808 Jan 22,147,519 Feb Mar 20,493,757 Apr 21,593,395 May 21,128,062 20,429,757 Jun Jul 19,663,491 19,415,611 Aug Sep 29,844,062 Oct 30,275,491 31,039,000 Nov



Note: September's increased amount is due to contributions from Exxon's last payment.

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### EVOS Investment Fund - EVOS Index

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NOTE: The increase in assets from August 2001 to September 2001 is due to Exxon's last payment and not earnings.

	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01
Monthly Return Monthly	2.3	1.96	-4.08	-3.4	3.52	0.2	-1.06	-0.15	-1.86	-2.41	2.01	3.15
Benchmark Market Value	2.07	2.08	-4.66	-3.6	4.29	-0.02	-1.29	-0.04	-2.37	-4.85	2.27	3.21
(\$M)	\$135,397	\$138,049	\$132,423	\$127,924	\$132,404	\$132,671	\$131,259	\$131,056	\$128,613	\$174,452	\$177,950	\$183,565



Fixed Income Pool - Lehman Brothers Aggregate Index NOTE: The increase in assets from August 2001 to September 2001 is due to Exxon's last payment and not earnings.

	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01
Monthly Return Monthly	1.75	2.09	1.69	0.93	0.59	-0.5	0.55	0.35	2.22	1.03	0.94	1.94	-1.14
Benchmark	1.64	1.86	1.63	0.87	0.5	-0.42	0.6	0.38	2.24	1.15	1.16	2.09	-1.38
Market Value (in \$M)	58,073	59,289	60,291	60,853	61,210	60,906	61,238	61,458	62,822	63,483	72,063	73,460	72,621



International Equities Pool - Morgan Stanley Capital Intl (EAFE) NOTE: The increase in assets from August 2001 to September 2001 is due to Exxon's last payment and not earnings.

	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01
Monthly Return Monthly	-2.43	4.16	-0.44	-5.25	-7.47	5.37	-2.15	-3.31	-3.75	-1.26	-9.33	1.45	2.52
Benchmark	-3.75	3.55	-0.05	-7.5	-6.67	6.95	-3.53	-4.09	-1.82	-2.53	-10.13	2.56	3.69
Market Value (\$M)	22,541	23,479	23,375	22,148	20,494	21,593	21,128	20,430	19,664	19,416	29,844	30,275	31,039



Domestic Equities Pool - Russell 3000 Index NOTE: The increase in assets from August 2001 to September 2001 is due to Exxon's last payment and not earnings.

	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01
Monthly Return Monthly	-9.20	1.72	3.34	-9.14	-6.49	8.03	0.80	-1.86	-1.63	-5.9	-6.72	2.31	7.69
Benchmark	-9.22	1.68	3.42	-9.14	-6.52	8.02	0.80	-1.84	-1.65	-5.89	-8.82	2.33	5.42
Market Value (\$M)	51,649	52,537	54,290	49,329	46,126	49,828	50,228	49,294	48,492	45,636	72,291	73,960	79,649





645 G Street, Suite 401, Anchorage, AK 99501-3451 907/278-8012 fax:907/276-7178



#### RESOLUTION OF THE EXXON VALDEZ TRUSTEE COUNCIL RELATING TO DISBURSEMENT FROM THE JOINT TRUST FUND FOR LONG-TERM RESEARCH, MONITORING AND GENERAL RESTORATION

The total amount to be disbursed for research, monitoring and general restoration shall be based on the following schedule:

Fiscal Year 2001 The annual work plan and administrative costs shall not exceed \$7,500,000. Fiscal Year 2002 The annual work plan and administrative costs shall not exceed \$6,500,000. Fiscal Year 2003 The annual work plan and administrative costs shall not exceed \$6,000,000. Fiscal Year 2004 The annual work plan and administrative costs shall not exceed \$6,000,000.

In Fiscal Year 2005, the annual work plan and administrative costs shall not exceed 4.5% percent of the average market value over the past three years of the Joint Trust Fund earmarked for long-term research, monitoring and general restoration. In Fiscal Year 2006, the annual work plan and administrative costs shall not exceed 4.5% percent of the average market value over the past four years of the Joint Trust Fund earmarked for long-term research, monitoring and general restoration. Beginning in Fiscal Year 2007 and in the years following, the annual work plan and administrative costs shall not exceed 4.5% percent of the average market value over the past five years of the Joint Trust Fund earmarked for long-term research, monitoring and general restoration.

Approved by the Council at its meeting of May 22, 2000, as affirmed by our signatures affixed below.

\_\_\_ Dated \_\_\_\_\_ 00/00 <u>\_</u> Dated <u>6/29/c.</u>

DAVE GIBBONS Trustee Representative Alaska Region **USDA Forest Service** 

Secretary for Alaska

Attorney General State of Alaska

Dated 6/23/00 MARILYN HEIMAN Special Assistant to the

may Dated 5- 76-00 STEVEN PENNOYER

Director, Alaska Region National Marine Fisheries Service

U.S. Department of the Interior

Commissioner Alaska Department of Fish and Game

Commissioner Alaska Department of Environmental Conservation

Payout Resolution (May 22, 2000)

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Joint Settlement Fund	104,703,290	130,215,799	170,262,815	180,174,485	189,434,528	199,933,170	211,192,243	223 277 739
Research Program	49,703,290	75,215,799	115,262,815	125,174,485	129,772,607	135,212,272	140,981,494	147,109,569
Habitat Program	55,000,000	55,000,000	55,000,000	55,000,000	59,661,921	64,720,898	70,210,749	76,168,170
		·			· · · - ·		··· -	
Annual Work Plan & Adn	ninistrative Costs		Projected Payout	Years	· · · · · · · · · · · · · · · · · · ·	·····		• •
Fiscal Year 2000	10,500,000		Actual		. 	• •• ·••	•	$\bigcirc$
Fiscal Year 2001	7,500,000		Fixed					
Fiscal Year 2002	6,500,000		Fixed					•
Fiscal Year 2003	6,000,000		Fixed					
Fiscal Year 2004	6,000,000		Fixed					
Fiscal Year 2005	5,553,149		4.50% over 3 years	2001 - 2003				
Fiscal Year 2006	5,686,000		4.50% over 4 years	2001 - 2004				
Fiscal Year 2007	5,817,633		4.50% over 5 years	2001 - 2005				

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Payout Options

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# Projected EVO Funds Available using Endowment Payout

Projec	ted EVOS Fun	ids Available				
Using	g Endowment	Payout				
						<u></u>
Projecte	ed Funds Availa	ble for Budget				
	Base Case	Bottom Quartile	Top Quartile			
FY03	\$ 6.00 million	\$ 6.00 million	\$ 6.00 million			
FY04	\$ 6.00 million	\$ 6.00 million	\$ 6.00 million			
FY05	\$ 5.41 million	\$ 4.64 million	\$ 6.23 million			
FY06	\$ 5.53 million	\$ 4.7 million	\$ 6.41 million			
FY07	\$ 5.64 million	\$ 4.77 million	\$ 6.56 million		· ·	
Beginni	ng Principal Bal	ance				
	Base Case	Bottom Quartile	Top Quartile			
FY03*	\$ 113 million	\$ 102 million	\$ 123 million			
FY04	\$ 122 million	\$ 102 million	\$ 143 million			
FY05	\$ 125 million	\$ 104 million	\$ 148 million	1		
FY06	\$ 130 million	\$ 108 million	\$ 154 million			+
FY07	\$ 135 million	\$ 112 million	\$ 159 million			
* Net of pl	anned expenditures i	n FY03				<u> </u>
<u></u>						
Projecte	d Funds Availal	le for Budget				
	Base Case	Bottom Quartile	Ton Quartile		<u></u>	+
FY03	\$ 5.00 million	\$ 5.00 million	\$ 5.00 million			
FY04	\$ 5.00 million	\$ 5.00 million	\$ 5.00 million		<b>_</b> ,	
FY05	\$ 5.48 million	\$ 4.71 million	\$ 6.3 million		· · · · · · · · · · · · · · · · · · ·	· · ·
FY06	\$ 5.6 million	\$ 4.77 million	\$ 6.49 million	· · · · · · · · · · · · · · · · · · ·		
FY07	\$ 5.72 million	\$ 4.85 million	\$ 6.65 million			
Reginni	ng Principal Bal	2000			<u></u>	 
Deginin	Rose Case	Rottom Quartila	Ton Quartila			
EV03*	\$ 114 million	\$ 103 million	\$ 124 million		·	
EV04	\$ 123 million	\$ 103 million	\$ 144 million			
FV05	\$ 128 million	\$ 107 million	\$ 150 million	· · ·	·	· · ·
EY06	\$ 132 million	\$ 110 million	\$ 156 million			1
FY07	\$ 137 million	\$ 114 million	\$ 162 million		· ·	
1107	φ 107 mmon	ψ 114 11111011	φ 102 minion	<u>  </u>		<u> </u>
* Net of pla	anned expenditures i	n FY03	··· · · · · · · · · · · · · · · · · ·			
A						
Assumptio	ons		<b>F</b> (1) (1)			ļ
1. All sche	eduled cash flows oc	cur at the beginning o	t the month.	-		ļ
2. Expend	litures scheduled for	12/01 paid for with G	EFONSI assets.			<u> </u>
3. Planne	d real estate purchas	es for FY02 are assu	med to occur on 2/1	/02.		<u> </u>
4. Bottom	and top quartile case	es assume differentia	earnings through F	YU3, base ca	ase thereat	ter.

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# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

### MEMORANDUM

- TO: Trustee Council
- FROM: Molly McCammon Executive Director
- RE: FY 02 Work Plan: Deferred Projects

DATE: December 3, 2001

In August the Trustee Council deferred action on 25 projects totaling \$2,037,900. I am recommending that 16 of these projects totaling \$1,370,600 be funded and that three additional projects, totaling \$235,000, be deferred further. You will note that my total recommendation is less than the \$5 million cap set by the Council for the FY 02 Work Plan. This represents a deliberate effort to have more money available for the future operation of GEM.

Recommended for fur	nding	\$1,378.9
Approved by TC in Au	igust	<u>3,113.6</u>
SUBT	OTAL	\$4,492.5
Deferred further		<u>\$_235.0</u>
Т	OTAL	\$4,727.5

I am also recommending that the Trustee Council approve one project that is outside of the Work Plan cap. Project 02514 would provide \$47,900 in start-up funds for implementation of the Lower Cook Inlet Waste Management Plan and is considered a capital project.

My draft recommendation is outlined in the two attachments, both arranged by cluster:

- Spreadsheet (A), the "numbers spreadsheet", presents the recommendation in summary form.
- Spreadsheet (B), the "text spreadsheet", contains the text of the Chief Scientist's recommendation and my recommendation for each deferred project, as well as an abstract of each project.

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Numbers (Spreadsheet A)

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### SPREADSHEET A: EXECUTIVE DIRECTOR'S RECOMMENDATION ON DEFERRED PROJECTS: FY 02 WORK PLAN

Proj. No.	Project Title	Lead Agency	New or Cont'd	Approved in Aug.	Deferred to Dec.	RECOM- MENDATION	FY 03 Estimate	Total FY02-03	Exec. Director's Recommendation
Oil Injury			<u></u>	\$209.1	\$402.4	\$448.8	\$30.0	\$687.9	
02190	Linkage Map for Pink Salmon Genome	ADFG	Cont'd	\$43.1	\$124.9	\$124.9	·	\$168.0	Fund
02538	Methods to Discriminate Herring Stocks	ADFG	Cont'd	\$52.9	\$27.5	\$27.5	\$0.0	\$80.4	Fund contingent
02543	Oil Remaining in the Intertidal	NOAA	Cont'd	\$113.1	\$250.0	\$0.0	\$0.0	\$113.1	See 02585
02585	Lingering Oil: Bioavailability & Effects	NOAA	New	\$0.0	\$0.0	\$296.4	\$30.0	\$326.4	Fund
Spill Rec	overy Monitoring			\$0.0	\$288.9	\$128.1	\$35.3	\$163.4	
02159	Seabird Boat Surveys	DOI	Cont'd	\$0.0	\$194.1	\$33,3	\$0.0	\$33.3	Fund contingent
02574-BAA	Bivalve Recovery on Treated Beaches	NOAA	New	\$0.0	\$94.8	\$94.8	\$35.3	\$130.1	Fund
Ecosystem Recovery & Function				\$0.0	\$35.9	\$2.1	\$0.0	\$2.1	
02320	SEA: Printing Final Report	ADFG	Cont'd	\$0.0	\$6.2	\$2.1	\$0.0	\$2.1	Fund
02659-BAA	Manuscripts: SEA & NVP Avian Predation	NOAA	New	\$0.0	\$29.7	\$0.0	\$0.0	\$0.0	Do not fund
Spill Gen	eral Restoration					· · · · · · · · · · · · · · · · · · ·			
02514	Lower Cook Inlet Waste Management Plan	ADEC	Cont'd						¥47.9 OUTŞUQE
GEM Trai	nsition: Strategies to Improve Monito	oring		\$60.4	\$50.0	-\$10.4	\$0.0	\$50.0	
02556	Mapping Marine Habitats	ADFG	New	\$0.0	\$50.0	\$50.0	\$0.0	\$50.0	Defer
02674-BAA	Pigeon Guillemot Restoration Techniques	NOAA	New	\$60.4	\$0.0	-\$60.4	\$0.0	\$0.0	Rescind funding
GEM Transition: Tools to Improve Monitoring			\$0.0	\$208.4	\$199.2	\$0.0	\$199.2		
02584	Airborne Remote Sensing Tools	ADFG	New	\$0.0	\$75.0	\$78.6		\$78.6	Fund contingent
02624-BAA	Ships of Opportunity: Plankton Survey	NOAA	New	\$0.0	\$133.4	\$120.6	\$0.0	\$120.6	Fund
Page 1				DRAFT				· 12	2/3/2001

### SPREADSHEET A: EXECUTIVE DIRECTOR'S RECOMMENDATION ON DEFERRED PROJECTS: FY 02 WORK PLAN

Proj. No.	Project Title	Lead Agency	New or Cont'd	Approved in Aug.	Deferred to Dec.	RECOM- MENDATION	FY 03 Estimate	Total FY02-03	Exec. Director's Recommendation
GEM Trai	nsition: Synthesis & Retrospective A	nalysis	-	\$0.0	\$273.2	\$220.4	\$212.0	\$432.4	
02578	Macrofauna Annotated List	NOAA	New	\$0.0	\$35.0	\$0.0	\$0.0	] \$0.0	Do not fund
02600	EVOS Synthesis, 1989-2001	ADNR <sup>.</sup>	New	\$0.0	\$151.6	\$133.8	\$212.0	\$345.8	Fund
02622	Digital ESI Maps: Cook Inlet/Kenai	NOAA	New	\$0.0	\$36.6	\$36.6	\$0.0	\$36.6	Fund
02636-BAA	Commercial Fishing Mgt. Applications	NOAA	New	\$0.0	\$50.0	\$50.0		\$50.0	Fund contingent
GEM Trai	nsition: Long-Term Monitoring	<u> </u>		\$16.7	\$350.8	\$233.7	\$0.0	\$250.4	
02552-BAA	Exchange Between PWS and GOA	NOAA	Cont'd	\$0.0	\$102.5	\$102.5	\$0.0	\$102.5	Fund contingent
02603	Ocean Circulation Model	ADFG	New	\$0.0	\$66.6	\$80.0	\$0.0	\$80.0	Fund contingent
02634	STAMP	DOI	New	\$0.0	\$54.9	\$0.0	\$0.0	\$0.0	Do not fund
02667	Citizens' Environmental Monitoring	ADEC	New	\$16.7	\$1.2	\$1.2	\$0.0	\$17.9	Fund
02680	Persistent Organic Contaminants in Fishes	NOAA	New	. \$0.0	\$75.6	\$0.0	\$0.0	\$0.0	Do not fund
02681	Placeholder: Nearshore Monitoring		New	\$0.0	\$50.0	\$50.0		\$50.0	Defer
Habitat P	rotection & Improvements			\$0.0	\$141.0	\$0.0	\$0.0	\$0.0	
02621	Kenai River Flats Conservation Easement	ADFG	New	\$0.0	\$141.0	 \$0.0	\$0.0	\$0.0	Withdrawn
Data Man	agement & Information Transfer			\$0.0	\$16.1	\$16.1	\$0.0	\$16.1	
02668	Water Quality and Habitat Database	ADEC	New	\$0.0	<b>\$16</b> .1	\$16.1	\$0.0	\$16.1	Fund
Community Involvement/Public Outreach/Other				\$108.8	\$271.2	\$375.9		\$484.7	
02052	Community Involvement	ADFG	Cont'd	\$45.0	\$135.0	\$135.0	<del></del>	\$180.0	Defer
02630	Planning for GEM	ALL	Cont'd	\$63.8	\$136.2	\$240.9		\$304.7	Fund

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### SPREADSHEET A: EXECUTIVE DIRECTOR'S RECOMMENDATION ON DEFERRED PROJECTS: FY 02 WORK PLAN

Proj. No.	Project Title	Lead New or Agency Cont'd	Approved Deferred in Aug. to Dec.	RECOM- MENDATION	FY 03 Estimate	Total FY02-03	Exec. Director's Recommendatior
		Total:	\$395.0 \$2,037.9	\$1,613.9	\$277.3	\$2,286.2	

NOTE 1: \$235.0 of the \$1,613.9 recommendation is deferred further. The amount recommended for approval at December's meeting is \$1,378.9.

NOTE 2: Approved by Trustee Council in August: 3,113.6 Recommended fund or defer in December: <u>1,613.9</u> TOTAL: \$4,727.5

FY 02 CAP SET BY TRUSTEE COUNCIL: \$5,000.0

Text (Spreadsheet B)

### HEET A -- EXECUTIVE DIRECTOR'S RECOMMEND

Proj.No.	Project Title	Proposer	Lead · Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03	
Oil Injur	у	inv-			·	\$402.4	\$448.8	\$30.0	\$687.9	
02190	Construction of a Linkage Map for the Pink Salmon Genome	F. Allendorf/Univ. N	Iontana ADFG	Cont'd 7th yr. 8 yr. proje	\$43.1 ect	\$124.9	\$124.9		\$168.0	
	Project Abstract	<u>Chief</u>	Chief Scientist's Recommendation				Executive Director's Recommendation			
This proj conducte linkage r on traits	ject will complete the analysis of experime ed at the Alaska SeaLife Center that use th map to test for effects of regions of the ger that are important to recovery of pink saln	nts This project h ne including a la nome salmon geno non determining t	has already proc rge number of g me. The remai he relationships	duced a lini genes in th ning object s between o	kage map e pink lives, prowth and	Fund balar was appro- pending the capture eff	ice of request (inte ved in August). Th e outcome of the F ort. The necessar	rim funding of ese funds we Y 01 (Summe v number of fi	f \$43,100 re deferred er 2001) sh were	

(e.g., growth and survival). Sexually mature adults from survival and mapped genes, depend entirely on the the 1999 cohorts produced from wild pink salmon collected from Likes Creek are expected to return to Resurrection Bay in August and September 2001. Genotypes in released fry will be compared to returning adults to test for genetic differences in marine survival and other life history traits (e.g., body size, egg number, and egg size). [Note: This project, which was scheduled to close out in FY 02, is now requesting \$80,300 for FY 03.]

success of the project in capturing pink salmon that originated from the 1999 crosses conducted at the Alaska SeaLife Center and returned to upper Resurrection Bay in 2001. Funding for FY 02 was deferred pending capture of at least 200 returning experimental fish. Two hundred and sixty-two returning experimental fish were captured. Fund, with closeout as soon as possible after the data are analyzed.

captured, so the project will proceed in FY 02 as planned with closeout in FY 03. This project is important for understanding the genetic traits of pink salmon that affect growth and survival. In addition, the work being done under this project will lay the foundation for experiments to answer questions important to fisheries management about hatchery/wild fish interactions. For example, are hatchery fish changing the gene pool in a way that makes wild fish maladapted to their environment? Are enough hatchery fish getting into streams to effect productivity of wild fish? How adapted are wild fish to particular streams?

#### HEET A -- EXECUTIVE DIRECTOR'S RECOMMENDA N: DEFERRED PROJECTS / FY 02 WORK PLAN

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02538	Evaluation of Two Methods to Discriminate Pacific Herring Stocks	T. Otis/ADFG, R. Heintz/NOAA	ADFG	Cont'd 2nd yr. 2 yr, proiod	\$52.9	\$27.5	\$27.5	\$0.0	\$80.4

#### Project Abstract

#### Chief Scientist's Recommendation

This project will perform a comparative investigation of two promising stock identification techniques for Pacific herring--elemental analysis of otoliths and fatty acid profile analysis of select soft tissues. Limited samples Kodiak Island, and Togiak will be collected and analyzed to determine if stock differences are detectable by each procedure, and at what scale. Successful results from this pilot study should be followed up with future evaluations of the temporal and structural (i.e., sex, age, maturity) stability of these biomarkers.

The goal of this project, to explore potential geographic composition of spawning aggregations, addresses an important question for management of herring in the oil spill area. The project is on the fall should be made to obtain additional material \$52,900 for analysis of Spring 2001 samples and for stock identification using the experimental techniques of this project. Investigators are from the areas where the herring collections are the elemental analysis of otoliths. Investigators are also encouraged to at least double the amount of otoliths and heart tissue necessary to meet project-specified sampling objectives in order to archive for possible future analysis. A decision on additional funds to analyze Fall 2001 samples was deferred pending review of preliminary results from analysis of Spring 2001 samples. Analysis is currently underway and results are not yet available. Fund contingent on favorable review of Spring 2001 results (expected February 2002).

#### Executive Director's Recommendation

Fund balance of request contingent on (a) favorable review of preliminary results from analysis of Spring 2001 samples (expected February 2002) and (b) submittal of overdue report (99347). These additional from Sitka Sound, Prince William Sound, Kamishak Bay, track as reviewed in FY 01. Collections of herring in funds are for analysis of Fall 2001 samples. Funding of collection of Fall 2001 samples was approved in August. The ability to determine the stock of origin for herring encouraged to compile and use environmental data sampled during field investigations will allow increased understanding of the distribution and mixing of being made in order to better interpret the results of northwest Gulf of Alaska herring stocks and assist in the identification of important habitats and rearing areas for individual populations.

### SPREA HEET A -- EXECUTIVE DIRECTOR'S RECOMMEND N: DEFERRED PROJECTS / FY 02 WORK PLAN

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02543	Evaluation of Oil Remaining in the Intertidal from the Exxon Valdez Oil Spill	J. Short/NOAA	NOAA	Cont'd 2nd yr. 2 yr. proje	\$113.1 ect	\$250.0	\$0.0	\$0.0	\$113.1
	Project Abstract	Chief Scie	entist's Reg	ommenda	<u>tion</u>	Executive Director's Recommendation			
This proje the oil sp FY 01. A intensive estimate oiled sed will be sa and quan project w preparati No fieldw	ect will assess the amount of oil remaining ill on shorelines within Prince William Sou A stratified random sample of shoreline will by sampled for surface and subsurface oil length of oiled shoreline, area and volume liment, and volume of oil. Approximately a ampled by digging about 8,000 pits to disc ntify subsurface oil. In FY 02, Phase III of vill be devoted to data and chemical analys ion of a final report, and journal publication vork is proposed for FY 02.	g from The public and the ind in accurately as can I be that remains in Pr to will provide the ar e of possible. Fund. F 8 km related to remaini over Project 02585. this sis, ns.	e Trustee C be estimat ince Williar iswer in as follow-up w ng oil will b	Council war and the amo m Sound. rigorous a rork on que e conducte	nt to know as ount of oil This project manner as estions ed under	Funds for f (\$113,100 preparation submittal of (00598). A follow-up v preliminary in Summer considered more inforn area and v still contan	this project were ap for data and chemi a, and journal publi of overdue report (C A decision on possi work was deferred, r results of the linger r 2001. That follow d under Project 025 mation. The surver rolume of shoreline hinated with <i>Exxon</i>	pproved in Aug ical analysis, f cations) contin 00195) and ma ble additional pending revie ering oil surve -up work is no 85; see Proje y is assessing in Prince Will Valdez oil.	gust inal report anuscript funding for w of the y underway ow being ct 02585 for the surface iam Sound

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02585	Lingering Oil: Bioavailability and Effects to Prey and Predators	J. Rice, J. Short/NOAA; J. Bodkin, B. Ballachey/USGS; D. Esler/Simon Fraser Univ.	NOAA	New 1st yr. 2 yr. projeci	\$0.0 t	\$0.0	\$296.4	\$30.0	\$326.4
	Project Abstract	Chief Scien	<u>tist's Rec</u>	ommendatio	<u>n</u>	<u>E&gt;</u>	ecutive Director's	Recommenda	<u>ition</u>
About 20 2001 sur	) acres of contaminated beach were found veys of western Prince William Sound ad under Project 01543 Sea otters and	in Following a worksho results from Project Remaining in the Int	op held in 01543/E	early Octobe valuation of C	er, where Dil d and	Fund. This otters and	s project, which inte harlequin ducks wi	egrates studie th continued a lot of a works	s of sea assessment

harlequin ducks have not recovered, raising concerns that continued exposure may be affecting their survival. Biochemical assays and mortality patterns are consistent with continuing oil exposures, but linkages between oil persistence studies and impact studies have and harlequin ducks with continued assessment of not been attempted to date. This project will attempt to identify a greater degree of linkage between oil persistence, exposure, and effects by choosing a common set of sites at which to assess oil persistence and biological effects on sea otters and harlequin ducks. The emphasis will be on bioavailability and impact to sea otters and harlequin ducks, but some effort will be expended on bioavailability and exposure of prey species living in oil patches. The National Ocean and Atmospheric Administration's Auke Bay Lab will lead the studies of oil bioavailability and impacts to prey species. The US Geological Survey/US Department of Interior will lead studies directly on sea otters and harlequin ducks.

information gaps were identified, this project was developed to attempt to identify a greater degree of linkage between oil persistence, exposure, and oil persistence. The aims of the expanded project are to determine if the signs of continued oil exposure in these species are linked to the oil remaining in the intertidal sediments. Fund.

convened by the Chief Scientist in October 2001 to review results from Project 01543/Evaluation of Oil Remaining in the Intertidal and to identify informatic. effects. The project integrates studies of sea otters gaps. The project's objective is to determine if the signs of continued oil exposure in sea otters and harlequin ducks are linked to the oil remaining in the intertidal sediments.

Proj.No.	. Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
Spill R	ecovery Monitoring			· · ·	··	\$288.9	\$128.1	\$35.3	\$163.4
02159	Surveys to Monitor Marine Bird Abundance in Prince William Sound	D. Irons/USFWS	DOI	Cont'd 9th yr.	\$0.0	\$194.1	\$33.3	\$0.0	\$33.3

#### During Winter and Summer 2002

#### **Project Abstract**

#### Chief Scientist's Recommendation

This project will conduct small boat surveys to monitor abundance of marine birds and sea otters in Prince William Sound during March and July 2002. Seven previous surveys have monitored population trends for 65 bird and 8 marine mammal species in the sound. Data collected in 2002 will be used to examine trends from summer 1989-2002 and winter 1990-2002. Data collected in 2000 indicate that bald eagles are increasing project (the earliest surveys were done in 1972-73) in winter and summer throughout the sound, harlequin ducks are increasing in the oiled area in winter, and black oystercatchers are increasing thoughout the sound productivity of Prince William Sound on decadal in summer. Common loons, cormorants, and common murres are showing no trend in the oiled area; pigeon guillemots and marbled murrelets are declining in the oiled areas of the sound; and Kittlitz's murrelet is declining throughout the sound. Results of these surveys through 1998 have been published. [Note: This analysis of the project design needs to be carried project also requested \$25,000 for FY 04.]

This project continues to compare population trends Fund contingent on submittal and approval of a revised in marine birds from oiled and unoiled portions of Prince William Sound. The last boat survey was conducted in 2000 (Project 00159). The patterns found in bird populations indicate slow change or little annual change in many populations. It is also apparent that the long term data from this are becoming increasingly valuable and potentially guite useful in understanding changes in the time scales. The project was not designed to determine the effects of climate, and it is not certain to what effect climatic changes can explain the population patterns observed since the spill. The project has potential value to GEM, but a thorough out in order to optimize sampling frequency for a long-term, low-cost program. Therefore, I recommend postponing the next survey until after a final report can be written that (a) summarizes the project's findings to date, (b) carefully and thoroughly interprets the data in regard to potential sources of change (e.g., oil and climate), and (c) includes an analysis that can be used to design a longer-term, lower-cost survey strategy that preserves features of the current sampling design for comparability purposes. Fund final report only in FY 02. There should be significant cost sharing by the US Fish and Wildlife Service in preparing the final report.

#### **Executive Director's Recommendation**

Detailed Project Description and budget that reduce the scope of work in FY 02 to preparation of a final report only. In order to continue the surveys in FY 02, the proposer offered to reduce the project's scope to summer surveys only and to increase the US Fish and Wildlife Service contribution to the project. However, as recommended by the Chief Scientist, to increase the project's usefulness to GEM, a thorough analysis of the project design needs to be undertaken in order to design a sampling program that optimizes sampling frequency for a long-term, low-cost program. In FY 02, a comprehensive final report that addresses the three points identified by the Chief Scientist should be prepared (to this point, only annual reports have been prepared). If submitted by February 1, 2002, the final report can be peer reviewed prior to the FY 03 project funding cycle and funding for the next survey considered at that time. The Trustee Council has supported boat surveys of marine birds and mammals in Prince William Sound since the time of the spill. These surveys have been the primary means of monitoring the recovery of a suite of coastal birds and other wildlife.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02574-BAA	Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in Prince William Sound	D. Lees/Littoral Eco.& Environ. Services	NOAA	New 1st yr. 2 yr. proje	\$0.0	\$94.8	\$94.8	\$35.3	\$130.1
·	Project Abstract	Chief Scie	ntist's Rec	ommendal	tion	<u>Ex</u>	ecutive Director's F	<u>Recommenda</u>	tion
Studies from 1989 through 1997 suggest that bivalve assemblages on beaches in Prince William Sound with high-pressure hot-water washing remain severely damaged in terms of species composition and function. This project will assess the generality of this apparent injury to these assemblages. A finding that our conclusions are accurate will indicate that a considerable proportion of mixed-soft beaches in treated these beaches are functionally impaired in terms of their ability to support foraging by damaged nearshore vertebrate predators such as sea otters and harlequin ducks. The study will also provide insight into the need for remediation of beaches to restore biodiversity and function on these assemblages.						nitted a revise sses the Chie it of shoreline ults for peer re tend sampling nd Atmospher igram to docu cleanup on p owing the rest graphic range	ed Detailed if Scientist's treatment eviewed i initiated ric ment populations ults to be . This will be		
Ecosyste	em Recovery & Function			·	··	\$35.9	\$2.1	\$0.0	\$2.1
02320	Sound Ecosystem Assessment (SEA): Printing the Final Report	W. Hauser/ADFG	ADFG	Cont'd 8th yr. 8 yr. proj	\$0.0 ect	\$6.2	\$2.1	\$0.0	\$2.1
	Project Abstract	Chief Scie	ntist's Red	commenda	tion	<u> </u>	cecutive Director's	Recommenda	ation
This proje Ecosyste required o mailing th completic funds car unused fu	ect will print, bind and distribute the Sound m Assessment (SEA) final report, which is document. Funding for copying, binding a ne final report was provided in FY 00, but on has been delayed and the encumbered anot be spent after June 30, 2001. The Fy unds will lapse.	Producing the SEA a proposal seeks on nd expired. Fund.	A final repo ly to reaut	ort is essen horize fund	itial, and this ling that has	Fund. Due report, fun- and Game report have those fund the numbe report on t copies orig	to delays in comp ds provided to the <i>i</i> in FY 00 (Project 0 e lapsed. This proj s, but at a reduced or of pages and a de he Web rather thar ginally planned.	letion of the S Alaska Depart 10320) for prir ect simply "re level due to a ecision to pos print the nun	EA final tment of Fish nting the final approves" a reduction in the final nber of

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02659-BAA	Preparation and Publication of Results from SEA and NVP Avian Predation Studies	M. Bishop/PWSSC	NOAA	New 1st yr. 1 yr. proje	_ \$0.0 ect	\$29.7	· \$0.0	\$0.0	\$0.0
	Project Abstract	Chief Sc	ientist's Rec	commendat	<u>tion</u>	<u>E</u> >	ecutive Director's f	Recommenda	tion
This proje the work f study (Pro the work f study (Pro provide in distributio areas. Th relationsh commonly density, o habitat va submitted publicatio currently i	ect will prepare (a) two manuscripts based of from the Avian Predation on Herring Spawn oject /320) and (b) one manuscript based of from the Avian Predation on Blue Mussels oject /025). The first two manuscripts will iformation on avain composition, timing, in, and foraging patterns in herring spawn he third manuscript will examine the hip between abundance of seven bird speci- y found in intertidal areas and blue mussel ther intertidal invertebrates, and intertidal ariables. The three manuscripts will be I to peer reviewed journals for publication. In on avian consumption of herring spawn is in press in <i>Fisheries Oceanography</i> .	on This proposal wo manuscripts bas n Ecosystem Asse (Nearshore Verte projects. The pr publication recor manuscripts. Ho than other work p es	ould fund an ed on work ssment, Pro ebrate Preda incipal inves d and would owever, this olan projects	additional in the SEA oject /320) a ators, Proje stigator has I likely prod work is a lo s. Do not fi	three (Sound and NVP ect /025) a good luce the ower priority und.	Do not fun submittal o (DPD) that material we proposed. budget que project is a	d. This project was f a revised Detailed clarifies what previould be the subject A revised DPD has estions have been r low priority for fun	deferred per Project Desc iously unpubli of the three r s been submi resolved. How ding.	nding cription shed nanuscripts tted and wever, t

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03	
Spill Ge	eneral Restoration					<u> </u>		·	•	
02514	Lower Cook Inlet Waste Management Plan Implementation: Phase 1		ADEC	Cont'd OUTSID PLAN	EWORK	۶K				
	Project Abstract	Chief Sc	ientist's Red	<u>commenda</u>	<u>tion</u>	Executive Director's Recommendation				
This pro and pro lower C Graham Trustee waste n these th The cor relates waste. phase c visits, tr Alaska conjunc Chugac existing Phase I Council needs,	bject will promote recovery of injured resources tect and enhance environmental quality in the book Inlet communities of Nanwalek, Port a, and Seldovia. In FY 99 (Project 99514), the council funded development of a plan for a nanagement program that identifies solutions to aree communities' waste management problems. mponent of the plan proposed for EVOS funding primarily to used oil and household hazardous In FY 02, this project will undertake the first of plan implementation, which will include site raining, and follow-up assistance visits by the Department of Environmental Conservation, in ction with the Kenai Peninsula Borough and the ch Regional Resources Commission, in regard to g waste management equipment and procedures. I will also include recommendations to the on any additional equipment needs, facility and follow-up for possible funding later in FY 02.	This project is the implementation of Management Pla should reduce the hazardous substitute marine environ	e necessary of the Lower an. The impl e amount o tances that o onment. Fu	v prelude to Cook Inlet ementation f waste oil could other nd.	) t Waste n of this plan and other wise reach	Fund Phas training, au Department conjunctio Chugach I existing wa in the lowe Nanwalek recomment additional follow-up f Recomment a Phase II for conside modeled at Prince Will (Project 99 an effort to protect an Cook Inleit the regulat	se I (\$47,900), which and follow-up assists and follow-up assists and of Environmenta n with the Kenai Per Regional Resource aste management er Cook Inlet comm and Port Graham and Port Graham and and Port Graham and and and Port Graham and and and Port Graham and and and and and and and and and and	ch consists of ance by the Al I Conservation ininsula Boron s Commission equipment an iunities of Sele. Phase I will stee Council of facility needs, later in FY 0 cted by Febru be brought to ing 2002. Thi s funded by th ct 96115) and to reduce ma y of injured re- mental quality ect will be fun- of research, needs.	site visits, laska n, in ugh and n, in regard to d procedures dovia, also include on any , and 2. ary 28, 2002; the Council s project, ne Council in Kodiak rine wastes in sources and / in lower ded outside of nonitorin	

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Proj.No.	Project Title	Lea Proposer Age	ad New or ncy Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
GEM Tra	nsition: Strategies to Improve M	lonitoring			\$50.0	-\$10.4	\$0.0	\$50.0
02556	Mapping Marine Habitats: The First Step in a Spatially Nested Monitoring Program	C. Schoch/Kachemak Bay AD NERR	FG New 1st yr. 1 yr. projec	\$0.0	\$50.0	\$50.0	\$0.0	\$50.0
	Project Abstract	Chief Scientist's	Recommendatio	<u>on</u>	<u>Ex</u>	ecutive Director's I	Recommenda	tion
Groups, i	individuals, and programs as diverse as r	natural The GIS database of phy	sical habitat fea	tures for	Continue to	o defer decision on	funding this p	project until

resource agencies, local governments, researchers, conservation advocates in Cook Inlet and Kachemak Bay, and GEM can benefit from a comprehensive, high resolution database of shoreline and nearshore habitats. and from information on the physical changes seen through time. At present, no such detailed database or monitoring program exists within the Gulf of Alaska. This project will use a method adopted along the US west coast to gather such habitat information in a cost-effective yet detailed manner. The method relies on a nested hierarchical nearshore classification based on the physics of the environment to select replicate shore sites for monitoring algal and invertebrate diversity.

be a valuable baseline, and learning how to measure nearshore habitats in Kachemak Bay could provide a good starting point for intertidal monitoring for GEM. However, this project is premature considering the current status of GEM development. A workshop to develop options for long-term monitoring of the nearshore/intertidal under GEM is scheduled for January 2002 (Project 02395), and the proposer of this project will participate in that workshop. Defer decision on whether or not to fund this project until after the workshop.

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### intertidal and subtidal lands in Kachemak Bay could the nearshore/intertidal workshop funded under Project 02395 has been held (scheduled for January 2002). The workshop is designed to develop options for long-term monitoring of the nearshore/intertidal under GEM. This project would build a spatially comprehensive database of the geomorphology and physical attributes of subtidal and intertidal habitats in Kachemak Bay and quantify the physical attributes that force spatial variation in diversity of fish, invertebrate, and algal populations.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02674-BAA	Assessing Pigeon Guillemot Restoration Techniques	J. French/Pegasus Enterprises, G.	NOAA	New 1st vr.	\$60.4	\$0.0	-\$60.4	\$0.0	\$0.0
	·	Divoky/UAF		2 yr. projec	t			•	

#### Project Abstract

#### Chief Scientist's Recommendation

This project will monitor pigeon guillemot restoration projects initiated between 1998-2000. Censuses of Resurrection Bay to determine survivorship and breeding behavior of birds fledged from the Alaska SeaLife Center will be conducted and the occupancy and success of artificial nest sites erected at the Alaska SeaLife Center, Hat Island, North Beach, and Jackpot Island will be monitored. The characteristics of these sites, the nest boxes, and reproductive behaviors observed in the avian habitat at the Alaska SeaLife Center will be assessed to delimit the efficacy of nest boxes as a restoration or monitoring tool.

This project was originally designed to determine Center and provision of artificial nest sites might lead to establishment of an enhanced pigeon guillemot population in Resurrection Bay. The Trustee Council voted to approve funding for the project in August 2001, but since that time the two principal investigators have not been able to agree on project objectives. Each investigator submitted a issues. Overall, and following discussions with the revised proposal. One revised proposal does not have a gualified bird biologist named. The other revised proposal raises technical questions, specifically whether there are enough returning guillemots to test the hypothesis in the proposal. These proposals as revised are lower priority. Do not fund.

#### Executive Director's Recommendation

Rescind funding approval. Shortly after the Trustee whether fledging of guillemots at the Alaska SeaLife Council approved this project in August, the proposers informed us they no longer agreed on the project's objectives. Two revised proposals were submitted (one by each proposer, each with its own objectives) and peer reviewed. The reviewers raised technical concerns about each proposal and also noted concerns about project implementation in light of personnel Chief Scientist, I am no longer confident that the project will be successful. In view of this, I believe that there are now better uses for these funds and I recommend the project be canceled. [NOTE: The Trustee Council approved funds for this project in August. However, in light of the issues raised by the proposers within days of Council approval, NOAA has not entered into a contract with the proposers and no funds have gone to the proposers.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
GEM Tra	Insition: Tools to Improve Monitoring				··· _ ··· -	\$208.4	\$199.2	\$0.0	\$199.2
02584	Evaluation of Airborne Remote Sensing E. B Tools for GEM Monitoring Chu	rown/UAF, J. rnside/NOAA	ADFG	New 1st yr. 3 yr. proje	\$0.0 ect	\$75.0	\$78.6		\$78.6
	Project Abstract	<u>Chief Sci</u>	entist's Rec	ommendal	lion	<u>Ex</u>	ecutive Director's F	<u>Recommenda</u>	<u>ition</u>
This proje for GEM interpreta package and Rang to a maxi map SST AVHRR, (c) two th color (chl schools, digital vic project w and inter 04 cost (t	ect will evaluate airborne remote sensing tools monitoring, including a biological/ecological ation of the data collected. The instrument consists of (a) a pulsed LIDAR (Light Detection ging) to map subsurface biological features day imum of 50 m, (b) an infrared radiometer to Γ (sea surface temperature) day (similar to Advanced Very High Resolution Radiometer), nree-chip digital video systems to map ocean lorophyll), birds, mammals, surface fish and ocean frontal structure, and (d) an infrared deo to map birds and mammals at night. The vill use shipboard and buoy data for validation pretation of remote sensed data. [Note: The FY year 3 of the project) has not been provided.]	The development (Light Detection a sensing techniqu valuable for GEM synoptic mapping phenomenon in the column over large Alaska. The projection broad-ranging, but initial investment reevaluation of the clarification of po- be better evaluate will be better kno- report from another Fund FY 02 only.	t of monitori and Ranging es could be I. These teo of physica he upper 50 e areas of the ect's objection to FY 02 is ne project fo tentially larged, participa wn, and pro- ner project h	ing tools us very hniques co and biolog meters of ne northerr ves are am costs are n recommen r FY 03 fur ge out-year ation by oth poser Brow as been su	sing LIDAR remote puld allow gical the water or Gulf of abitious and nodest. An ided with or agencies whis overdue ubmitted.	Fund revis objectives contingent deploymen data and (k 99375). As commitme time. This instrument <i>02 Invitatio</i> data acquis GEM.	ed proposal, which as recommended b on (a) receipt of a t procedure intended b) submittal of over s recommended by nt to FY 03 funding project will explore ation as a monitorir <i>n</i> invited proposals sition technologies	reduces the p by the Chief S description of ed to insure a due report (Pr the Chief Sci is being mad airborne rem ng tool for GE to develop of that could be	oroject's cientist, gainst loof roject ientist, no le at this note sensing M. The FY ost-effective useful to

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02624-BAA	A CPR-Based Plankton Survey Using S. Ships of Opportunity to Monitor the Gulf W of Alaska	Batten/SAHFOS, D. elch/DFOC	NOAA	New 1st yr. 1 yr. proj	\$0.0	\$133.4	\$120.6	\$0.0	\$120.6
	Project Abstract	Chief Scie	ntist's Rec	ommenda	tion	<u>Ex</u>	ecutive Director's F	Recommenda	<u>ation</u>
This proje plankton r ships of o understoo climate ch the atmos populatior groundfisl many of th of Alaska climate. S platform fe build on re plankton r	ct presents the rationale for developing a nonitoring program for the Gulf of Alaska usi pportunity. Plankton are a critical link in the od chain whose dynamics are poorly od, but respond rapidly and unambiguously to hange and form the link between changes in phere and valuable upper trophic level hs, such as salmon, herring, shrimp, and h. The proposal reviews the evidence that he most valuable marine resources in the Gu are strongly influenced by changes in ocean Ships of opportunity are a cost effective or large scale monitoring and this project will ecent experience gained with CPR (continuo recorders) in the North Pacific to prepare for	This project is inst ng long-term low cost long-term monitori phenomena in the vessels to be used by the weather, so expected. CPR (co broad support from this type of project and mammal data concepts of acquir from ships of oppo planning GEM. Sh level of long-term Fund.	rumental ir ships-of-c ng of biolo Gulf of Ala in this pro- continuous n the scient can also b at low ador ring physic ortunity will ould conce support sh	n establish opportunity gical and p aska. The oject are no is sampling olankton re otific commo be used to ditional cos al and biol be very us opts be pro- ould be co	ing a approach to physical large tanker ot hindered g is ecorders) has nunity, since support bird st. Proof of logical data seful to oven, some onsidered.	Fund at red needed for project will recorder (C Long Beac Vancouver Valdez to L and FY 01 Vessels of method tha place ocea ships of op 02 Invitatio	duced level, which of transfer of equipm fund continuation of CPR) on an oil tank h and on a second , B.C. to Kamchatk ong Beach recorde by the North Pacific opportunity such a at may be useful to nographic instrume portunity were spec- n.	deletes funds ent between of a continuou er traveling fr vessel along a monitoring er was funded c Marine Res s this are a c GEM, and pr entation pack cifically invite	no longer vessels. This is plankton om Valdez to a line. Th d in FY 00- earch fund. ost-effective oposals to ages on d in the FY
						<u> </u>		<u></u>	

GEM Transition: Synthesis & Retrospective Analysis   02578 The Marine Macrofauna of Prince William Sound: An Annotated List N. Foster, H. Feder NC   Project Abstract   Chief Scientist's   This is a worthwhile proj piece of work. In view of funded, I consider this p recommend that it not be of nonindigenous species. This project will make this important information available to a wider group of users, including EVOS stakeholders. Chief Scientist's				\$273.2	\$220.4	\$212.0	\$432.4		
02578	The Marine Macrofauna of Prince William Sound: An Annotated List	N. Foster, H. Feder	NOAA	New 1st yr. 1 yr. project	\$0.0	\$35.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Sc	<u>ientist's Rec</u>	ommendation		Exe	cutive Director's	Recommendat	<u>tion</u>
Data se biogeog animal compile of nonii importa users, i	ets that present basic taxonomic and graphic information at the species level for species from Prince William Sound have t ed as part of research on potential introduc ndigenous species. This project will make ant information available to a wider group o including EVOS stakeholders.	This is a worthw 1,645 piece of work. In been funded, I consident tions recommend that this not fund.	nile project, l view of the er this projec it not be fun	but not an esse other projects l t lower priority ded at this time	ential being and e. Do	Do not fund. availability o This project macrofauna compiled thr species in th	This project wa f funds, and is a would produce a of Prince Williar ough other rese le sound.	is deferred pen- low priority for t publication on n Sound, using arch on non-ind	ding funding. the marine data Jigenous

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02600	Synthesis of the Ecological Findings from the EVOS Damage Assessment and Restoration Programs, 1989-2001	R. Spies/EVOS Chief Scientist, et al	ADNR	New 1st yr. 3 yr. proje	\$0.0	\$151.6	\$133.8	\$212.0	\$345.8
	Project Abstract	entist's Rec	st's Recommendation Executive Director's Recommendation						
This proj 12 years assessm anthropo northern be incorp that will e as a who effort will restoratio GEM. [N for FY 04	and Restoration Programs, 1989-2001 Chief S   Project Abstract Not reviewed (   2 years of post-spill study in the EVOS damage ssessment and restoration programs as they relate to   nthropogenic and natural forcing factors influencing the orthern Gulf of Alaska. The results of the synthesis will   e incorporated into a series of interrelated manuscripts natural for publication   s a whole volume, or to a publisher as a book. This ffort will be one of the major products of the EVOS   estoration program and help set the foundation for SEM. [NOTE: This project has also requested \$184,800   or FY 04.] Image Project Proj			t is propose	e <b>r).</b>	Fund revise three years 02-03) orig pending a be allocate on behalf of project peet this synthe over three his time to will integra decade's w synthesis w public about yet readab GEM.	ed proposal, which (FY 02-04) rather inally proposed. T review of how the 0 d during FY 02 am of the Trustee Cour er review and invita sis proposal). Spre years will ensure a other EVOS activit te what has been le yorth of science foll will fulfill at least two ut the EVOS legacy le volume and (b) p	spreads the p than the two his project wa Chief Scientist ong his variou ncil (primarily tion, GEM pla ading the syn n appropriate ies in FY 02. earned from n owing the oil o purposes: (a y in a scientific provide a four	broject over years (FY is deferred i's time will us endeavors restoration inning, and allocation of This project nore than a spill. Such a a) inform the cally rigorous indation for

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02622	Digital Maps from Existing Seasonal Environmental Sensitive Area Maps:	J. Whitney/NOAA	NOAA	New 1st yr.	\$0.0	\$36.6	\$36.6	\$0.0	\$36.6
	Cook Inlet/ Kenai Peninsula			1 yr. projec	t				

#### Project Abstract

#### A series of national standardized digital map products will be produced form the existing seasonal Environmental Sensitivity Index (ESI) maps for Cook Inlet/ Kenai Peninsula made by the National Oceanic and Atmospheric Administration (NOAA) in 1994. A four product was provided by the contractor for Prince map seasonal series was originally developed for Cook Inlet by the NOAA Hazardous Materials Response and Assessment Division in the ArcInfo digital format with the output and distribution primarily being poster maps at a scale of 1:450,000. Since then, combined with greater demand for digital products, NOAA's digital ESI products have greatly expanded. This project will transform the existing Cook Inlet/Kenai Peninsula digital data into a four-tiered nationally standardized set of digital map products with the deliverable being 100 CDs. These will be the same products that were recently provided for Prince William Sound under Project 99368.

### This project would transform the existing Cook Inlet/Kenai Peninsula digital data into a four-tiered nationally standardized set of digital map products with the deliverable being 100 CDs. A similar William Sound under Project 99368/Prince William Sound Environmental Sensitivity Index (ESI) Maps. Fund lower priority.

Chief Scientist's Recommendation

#### Executive Director's Recommendation

Fund. Satisfactory answers to the reviewers' questions have been provided (the completed maps will be posted on the World Wide Web and other reviewers, e.g., U.S. Forest Service and the Oil Spill Recovery Institute, will be invited to participate in the map review process). This project will convert the existing Cook Inlet Environmental Sensitivity Index (ESI) seasonal summary maps to the 1998 national standardized format (Full GIS, Desktop Mapping, Free ESI Viewer, and PDF ESI Navigator) in an effort to make the maps more accessible.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02636-BAA	Management Applications: Commercial Fishing	K. Adams, R. Mullins/Cordova	NOAA	New 1st yr.	\$0.0	\$50.0	\$50.0		\$50.0

#### Project Abstract

#### Chief Scientist's Recommendation

The goal of securing and sustaining the recovery of the marine system is a first priority for the Trustee Council as well as for the spill-impacted region. The economies and the communities of the spill-impacted region are the community, which is attempting to find a way to use natural partners for realizing this goal. In this regard, commercial fishing has the involvement, resources, and motivation--through long term financial positions and committed financial risks--to be one of the most effective with some predictive capability for plankton partners. This project will develop a plan and demonstrate that a partnership can accomplish significantly more toward our common goal than is possible through the same investments expended independently.

Building a bridge between the scientific community, which is describing and attempting to predict the variation in biological production, and the fishing this new information, is challenging. This project proposes to open a door by bringing together modelers, who have produced a circulation model distribution within Prince William Sound, with fishermen from the sound. It is not entirely clear

how this bridge can be built, but the project should communicate. The proposal is still very vague about (CDFU), the Prince William Sound Aquaculture what specifically is going to be done, and the modeling component is especially unclear. Several workshops and meetings, which should include invitations to a cross section of the fishing and fisheries management communities, would seem to revised proposal with a clear work plan and concrete products.

#### Executive Director's Recommendation

Fund contingent on submittal and approval of a revised proposal (Detailed Project Description and budget) that clarifies the project's objectives and cost (at a cost not to exceed \$50,000). In developing a revised proposal, the proposers should work closely with the commercial fishers on the Trustee Council's Public Advisory Gr (T. Baker, D. Hull) and with Restoration Office staff The focus of the project in FY 02 should be development of a fisheries management applications working group, to include area management biologists from the Alaska Department of Fish and Game, begin to find useful ways for scientists and fishers to commercial fishers, Cordova District Fishermen United Corporation (PWSAC), the Native Village of Eyak, and others. The working group's effort in FY 02 should include a review of SEA (Sound Ecosystem Assessment, Project /320), APEX (Alaska Predator Ecosystem Experiment, Project /163), and other be appropriate. Fund contingent on submission of a restoration projects. The EVOS program can benefit from the commercial fishing community's perspective on restoration results and interaction with fishers on how to incorporate the results into fisheries management practices. In addition, the project corform a foundation for working with Prince William Sund fishers as GEM develops.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
GEM Trai	nsition: Long-Term Monitoring	· · · · · · · · · · · · · · · · · · ·			Funded FY 02   Deferred to Dec.   RECOM- MENDATION   FY 03 Recom.   Total FY02-03     \$350.8   \$233.7   \$0.0   \$250.4     \$0.0   \$102.5   \$102.5   \$0.0   \$102.5		\$250.4		
02552-BAA	Exchange Between Prince William Sound and the Gulf of Alaska	S. Vaughan/PWSSC	NOAA	Cont'd 3rd yr. 3 yr. project	\$0.0	\$102.5	\$102.5	\$0.0	\$102.5

#### **Project Abstract**

#### Chief Scientist's Recommendation

One of the least understood physical processes that influence the biological components of Prince William Sound is the exchange between the northern Gulf of Alaska and Prince William Sound. This project will document the interannual variability in water mass exchange between the sound and the adjacent northern Gulf of Alaska at Hinchinbrook Entrance, and identify mechanisms governing this exchange. The project will deploy an upward looking ADCP (Acoustic Doppler Current Profiler) mooring in Hinchinbrook Entrance to create time series of velocities spanning three years. The mooring will be equipped with a CTD (conductivity temperature versus depth) to create a time series of deep temperature and salinity. To identify the dominant factors that govern Prince William Sound/Gulf of Alaska exchange, the mooring velocity and deep temperature/salinity time series will be combined with meteorological and physical data collected under other research programs already in progress.

Fixed instrumentation in Hinchinbrook Entrance is of Prince William Sound and the Alaska Coastal Current. A workshop was held in November 2001 to address potential oceanographic data needs of GEM. One of the goals of the workshop was to determine the potential future role that the mooring in Hinchinbrook Entrance, funded through this project, might play in better understanding long-term changes in regional oceanography and changes in biological productivity in Prince William Sound. The mooring was redeployed in late October 2001 in the current configuration. New configurations and instrumentation may increase the amount of data available from this mooring in the future. Fund contingent on an agreement on how data from the mooring will be made publicly available in a timely and complete manner.

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#### Executive Director's Recommendation

Fund contingent on submittal and satisfactory review of key to understanding the circulation and productivity a detailed explanation of how the principal investigator will make the data collected under this project publicity, available and on what timeframe. The other technic issues raised by the reviewers were addressed at a modeling workshop convened by the Chief Scientist in November 2001. This project has continued data gathering and analysis from the Hinchinbrook Entrance buoy that was begun under SEA (Sound Ecosystem Assessment, Project /320). A buoy at Hinchinbrook Entrance is expected to be an important component of GEM.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02603	Implementation of an Ocean Circulation J. Wa Model: A Transition from SEA to GEM	ang/UAF	ADFG	New 1st yr. 1 yr. proje	\$0.0 ect	\$66.6	\$80.0	\$0.0	\$80.0
This proje in the Gul order to co biological including horizontal 3.7km at ( Alaska Cu wind stress Environm	<u>Project Abstract</u> ect will establish a 3-D ocean circulation model f of Alaska to lay down a foundation for GEM in ouple this model to a hydrological model and a model. This model will cover the entire gulf, Prince William Sound and Cook Inlet. The resolution of this model is 4'x2' minutes (about 60"N). This model will be forced by tides, the urrent inflow/outflow, freshwater discharge, and ss derived from the National Center for ental Prediction.	Chief Sc This project was November 2001 data needs of GE develop and refir William Sound ar a circulation mod system, and supp are familiar with 6 phenomenon in t working with biol future of GEM. T would compleme provide GEM acc predicting biologi additional funds with other ocean and the wider Gu	ientist's Rec considered to address p EM. The pro ne 3-D circul nd the Gulf of lel within the porting a gro the importar the gulf and ogists, is ver the model pr ent other effor cess to an in ical phenom (\$10,000) fo ographers in alf of Alaska	at a worksl otential oc ject will cor ation mode of Alaska. University oup of mod at biologica have a rec ry importan oposed for orts underw nportant ca enon. Fund r working co	tion hop held in eanographic ntinue to els for Prince Maintaining of Alaska elers who l ord of the gulf vay and pability for d, including cooperatively illiam Sound	Ex Fund contin Detailed Pr new compo oceanogra Gulf of Ala allowed am reviewers ( were addre the Chief S expand the modeldew Assessme 01389/3-D Alaska.	ecutive Director's F ngent on submittal a opect Description and opent related to coor phers in Prince Will ska and that reduce nount. The earlier of related to other post essed at a modeling ocientist in Novembo Prince William Son veloped under SEA nt, Project /320) and Ocean State Simul	Recommenda and approval nd budget tha peration with iam Sound a conference uestions rais sible modelin workshop co er 2001. This und circulatio (Sound Ecos d continued u ationsto the	tion of a revised at include a other nd the wider travel to the ed by th ng optionsy onvened by s project will n system under Project e Gulf of
02634 This projection with a 100 monitoring Monitoring summarize pollutants northern 1 complete collected STAMP politained comprehe- long-term	Integrating the Seabird Tissue Archival D.Ro and Monitoring Project (STAMP) with G.Yo GEM P.Be <u>Project Abstract</u> ect will lay the groundwork for integrating GEM D-year-long sample collecting, banking, and g effort, the Seabird Tissue Archival and g Project (STAMP). The project will ze all existing information on persistent organic s (POPs) and mercury in seabirds in the North Pacific and North Atlantic oceans, analytical work on murre egg samples in the Gulf of Alaska during the 1999-2001 program, and enter these and other recently data and historical information into a ensive database that can be used to design a contaminant monitoring studies for GEM.	seneau/USFWS, ork/BRD, cker/NIST This is a very go long-term archive analyzed for a va tracers. Howeve regard to GEM, a contaminants in not been agreed this concept afte fund.	DOI ientist's Rec od proposal e for tissues ariety of con- er, the projec as a specific higher troph to. It may b r GEM is fur	New 1st yr. 1 yr. project that could that could that could taminants a program f ic level org be appropri- ther develo	\$0.0 ect tion provide a later be and natural ture in or janisms has ate to revisit oped. Do not	\$54.9 <u>Ex</u> Do not fun availability submitted budget add program d temporal v objectives for murre e although e Monitoring is prematu time.	<b>\$0.0</b> <u>eccutive Director's F</u> d. This project was of funds, and is a lo a revised Detailed F dressing the Chief S esign on an analysi ariability of contami related to further co eggs at East Amatu xpansion of the Sea Project (STAMP) r re to initiate collabo	\$0.0 Recommendation deferred per pow priority. T Project Descr Scientist's cor s of the spati finants in seat ontaminant ar in Island). Ho abird Tissue a nay be usefut pration with S	\$0.0 ation hding he proposer iption and hcerns (base al and birds; delete halysis except wever, Archival and I for GEM, it TAMP at this

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02667	Effectiveness of Citizens' Environmental Monitoring Program	S. Mauger/Cook Inlet Keeper	ADEC	New 1st yr. 1 yr. proj	\$16.7 ect	\$1.2	\$1.2	\$0.0	\$17.9
	Project Abstract	Chief Sci	entist's Rec	ommenda	<u>tion</u>	<u>Ex</u>	ecutive Director's F	Recommenda	ation
This proj Cook Info Program commun Alaska. sampling selection objective quality of Partners Waterwa Conserv monitorin commun	ect will analyze five years of past data from et Keeper's Citizens' Environmental Monit , the first consistent, credible, and coordin ity-based water quality monitoring program Keeper's stream ecologist will determine g frequency, methods, parameters, and sit are effective at meeting the monitoring as of detecting significant changes in wate ver time. The results will assist Cook Inle (Kenai Watershed Forum, Anchorage mys Council, Wasilla Soil and Water ation District) in refining their community ng efforts and may lead to future ity-based monitoring programs.	m This project will a oring Keeper's Citizens nated Program to detec parameters. The model for commu- proposal is a goo monitoring within r which clarifies the deferred amount, error at the time o 2001 decision.	nalyze the j ' Environme t change in Keeper pro inity-based d preparatio GEM. Fund e statistical which simp of the Trust	power of C ental Monit water qua ogram is an sampling a on for com d revised p approach. oly corrects ee Council	ook Inlet oring lity n effective and this munity based roposal, Also fund s a budget 's August	Fund addit made at th approval. 1 Keeper to a Environme monitoring at detecting time. The based mor	ional \$1,200, which e time of the Truste This project will prov analyze five years of ntal Monitoring Pro protocols and sam g significant change project is good pre hitoring under GEM	simply corre e Council's A vide funding funding for f data from the gram to deter pling design in water qua baration for c	cts an error August 2001 or Cook Inlet heir Citizens' rmine if the are effec ality over ommunity
02680	Remote Delivery of Persistent Organic Contaminants in Alaska Fishes	S. Rice, J. Short, A. Moles/NOAA	NOAA	New 1st yr. 1 yr. proj	\$0.0	\$75.6	\$0.0	\$0.0	\$0.0
	Project Abstract	<u>Chief Sci</u>	entist's Rec	commenda	tion	<u>E</u> )	cecutive Director's I	<u>Recommenda</u>	<u>ation</u>
This proj organic o different geograp including and chlo known ir measure salmon r measure industria rivers in	ect will determine the distribution of persis contaminants in the flesh and ovaries of year classes of chinook salmon from four hic areas of Alaska. A suite of contamina pesticides, Polychlorinated biphenyls (PC rinated and unchlorinated hydrocarbons, y nplications for aquatic and human health, ed in two age classes of salmon. These w returning after only a year in saltwater and returning after 3-5 years. This will give so e of the extent of atmospheric distribution I and agriculture pollutants over a range of Alaska.	stent This is a good eff characterize cond organic pollutants over a wide geog CBs), interest by GEM i with abundance and d will be Alaska, but these ill be in partnership wit broader geograph me assessment and of This project was of availability of fund sharing has been funding by the Tri recommended.	ort by quali centrations s) in an imp raphic area in collecting listribution of measurem h other fund hic mandate the protection deferred per ding from of put in plac ustee Court	fied investi of POPs (p ortant seat a. There will data rega of POPs in hents will lil ding agence for conta ion of public ending dete ther source e, so at this not	igators to bersistent food product Il be an rding the the Gulf of kely be made cies with a minant ic health. ermination of es. No cost is time	Do not fun determinat sources. N this time fu recommen ovaries of rivers, as v Yukon and consumers and succe that GEM	d. This project was ion of availability of to cost sharing has unding by the Truste ided. This project w salmon returning to vell as two sites out t Unuk rivers. The s; the ovaries are in ss of progeny of the will have a contribu and study of conta	deferred per funding from been put in p e Council is ould sample the Kenai ar iside of the sp flesh is impor nportant to th e stock. It is ting role in the minants.	nding i other place, so the flesh and nd Copper pill areathe tant to e survival anticipated e ongoing

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Totai FY02-03
02681	Placeholder: Nearshore/Intertidal Monitoring	To be determined		New 1st yr.	\$0.0	\$50.0	\$50.0		\$50.0
	Project Abstract	Chief So	<u>cientist's Rec</u>	commendat	lion	<u>Ex</u>	ecutive Director's F	Recommenda	ition
Several p nearshor 02. How developm nearshor options fo under Pr for possil FY 02, sh be invited	proposals to conduct some form of e/intertidal monitoring were submitted for ever, those proposals are premature per ment of a long-term monitoring scheme for e/intertidal area. A workshop to develop or long-term monitoring will be held in FY oject 02395. This project simply reserve ble nearshore/intertidal monitoring work for hould the workshop recommend that suc d.	This project is s r FY nearshore/intert nding depending on th or the under Project 02 workshop. 7 02 s funds ater in h work	imply a place idal monitorin e results of t 2395. Defer	holder for ng work in l he worksho until after J	potential FY 02, op to be held anuary 2001	Continue to the nearsho 02395 has recommen under GEM workshop v preliminary project has	o defer decision on pre/intertidal works been held (schedu dations for nearsho I have been develo vill recommend a s work to begin in F been set aside for	funding this p hop funded u led for Janual pre/intertidal n ped. It is pos mall amount Y 02. The \$5 that purpose	project until nder Project ry 2002) and nonitoring ssible that the of pilot o
Habitat I	Protection & Improvements					\$141.0	\$0.0	\$0.0	\$0.0
02621	Kenai River Flats Conservation Easement and Public Education	M. Kuwada/ADFG	ADFG	New 1st yr. 1 yr. proj	\$0.0 ect	\$141.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief So	cientist's Red	commenda	tion	<u>Ex</u>	ecutive Director's I	Recommenda	<u>ition</u>
This proj wetlands The acqu property sensitive and two educatio The cons Conserva North An easemer natural s developr construc	ect will help protect approximately 600 a on the Kenai River Flats near the city of usition of a conservation easement for the and construction of a boardwalk will prot coastal wetlands, high value waterfowl h anadromous fish streams, and will provid nal and recreational opportunities for the servation easement will be purchased by ation Fund using already-approved funds nerican Wetlands Conservation Act gran ht will specify that the property be preservate tate and protected against incompatible nent. A boardwalk and viewing platform ted using EVOS funds to provide recreat	cres of Project withdrav Kenai. ne ect nabitat, le new public. The from a t. The ved in a will be ional	vn by propos	er.		Project with	ndrawn by propose	r.	
birdwatc boardwa obtaining easemer	hing and educational opportunities. The Ik and viewing platform are essential for g the City of Kenai's support for the const nt.	ervation							

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
Data Mar	nagement & Information Transfer					\$16.1	\$16.1	\$0.0	\$16.1
02668	Developing an Interactive Water Quality J. C and Habitat Database and Making it Kee Accessible on the Web	ooper/Cook Inlet per	ADEC	New 1st yr. 1 yr. proj	\$0.0	\$16.1	\$16.1	\$0.0	\$16.1
The proje to create all citizen: report, an The comr accessibl stakehold committe the Intern watershe user-frien this data threats to	Project Abstract ect partners have formed a database committee a consistent data management system where is groups and agencies can equally share, nd review their water quality and habitat data. mittee's objective is to make data more le and more useful to decision makers, ders, resource managers, and the public. The will uplink a shared interactive database on net where it can be viewed and queried with GIS ed maps, photos, and graphs so that it is holly, educational and meaningful. Access to will help facilitate a better understanding about b, and solutions for, water quality and habitat.	<u>Chief Sci</u> This project was issue of whether the Cook Inlet Inf Monitoring Syster /391). Clarification there is no duplica proposed under t the web browsing for the Cook Inlet fact, compatible.	entist's Rec deferred in it was dupli ormation M m (CIIMMS n has now b ation of effo his project of software d Region and Fund.	ommenda order to re cative of so anagemen database been provid ort. The dat will be acce eveloped to d the two e	tion solve the ome part of it and (Project ded and tabase essible using by CIIMMS offorts are, in	Ex Fund. The the relation database a Manageme which the investment project will participate water quali other citize has good o	ecutive Director's I issues raised by the ship between this p and CIIMMS (Cook ent and Monitoring Trustee Council has to have been satisfa provide funding for in creating a single ity and habitat data en-based monitoring cost sharing with ot	Recommenda ne reviewers i proposed wat inlet Informal System, Proje s made a maj actorily addres r Cook Inlet K a unified datal collected by g groups in C her interested	ation in regard to er quality tion or financial ssed. This seeper to base for Keeper and ook Inlet. It d entities.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
Commu	unity Involvement/Public Outreac	h/Other				\$271.2	\$375.9	\$0.0	\$484.7
02052	Natural Resource Management and Stewardship Capacity Building	P. Brown- Schwalenberg/CRRC	ADFG	Cont'd 8th yr.	\$45.0	\$135.0	\$135.0		\$180.0

#### Project Abstract

#### Chief Scientist's Recommendation

in FY 02, this project will shift its focus to the integration of Tribal Natural Resource Programs with GEM. Communities involved in the project are Tatitlek, Chenega Bay, Port Graham, Nanwalek, Cordova/Eyak, Seward/Qutekcak, Seldovia, Valdez, Kodiak Island Region/Ouzinkie, and the Alaska Peninsula Region/Chignik Lake. In FY 02, the project will focus on three objectives: (a) developing the technical capacity at not been met. In addition, the project is delinquent the local level to allow for meaningful involvement in GEM, (b) identifying specific monitoring activities that fit within GEM, and (c) developing possible pilot projects for FY 03.

The community involvement project is a very valuable part of the restoration program. Community monitoring plans and Tribal Natural Resource Management Plans may have tangible linkages to GEM in the future. However, there are objectives for FY 02 that were also in the FY 01 proposal. There are also FY 00 objectives that have on reports and has not produced a revised Detailed Project Description as requested. The lack of identifiable activity and products for this project not fund.

#### Executive Director's Recommendation

Continue to defer this project. In general, the project seems to have lost some of its focus over the past six months, partially due to staff turnover. In addition, during review of the FY 02 proposal, the reviewers raised a number of questions and identified a number of issues that need further attention. Although the principal investigator has provided some additional information, a number of questions remain unanswered. Interim funds (\$45,000) approved by the Trustee Council in August have not yet been authorized, as the strategy for completion of the Tribal Natural Resource precludes a recommendation for further funding. Do Management Plans is still unclear and several reports are overdue (00052, 00610, 01131). The longer term objectives of the project also remain unclear. Although several discussions with the principal investigator about the future program have taken place, the requested revised proposal has not been submitted. In addition, the Community Involvement Coordinator position, which was vacated in August 2001, has not yet been advertised or filled. Community involvement and development of local stewardship capacity are esse components of GEM, and this project should continue in some form. However, I cannot recommend continuation in its current form. I recommend that we proceed by convening a working group--that broadens the perspective and expertise beyond the current project participants--to develop options for meaningful community involvement and stewardship development under GEM, with the goal of bringing a revised proposal to the Trustee Council in January 2002.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Funded FY 02	Deferred to Dec.	RECOM- MENDATION	FY 03 Recom.	Total FY02-03
02630	Planning for GEM	Restoration Office	ALL	Cont'd 3rd yr.	\$63.8	\$136.2	\$240.9	\$0.0	\$304.7

#### Project Abstract

3 yr. project

Chief Scientist's Recommendation

#### Executive Director's Recommendation

This project will conclude planning and begin initiation of Proposal not reviewed, but Detailed Project the Trustee Council's vision for long-term monitoring and Description and budget have been coordinated with Council approved interim funding for this project in research in the Gulf of Alaska, the Gulf Ecosystem Monitoring and Research program (GEM). Planning and implementation during FY 02 will be based on the draft GEM Program Document until its review by the National Research Council (NRC) is complete. The document describes how a network of monitoring and research activities will be implemented over a five-year period starting in FY 03 using synthesis, research, modeling, and data management/information gathering. As directed by the Trustee Council, the GEM program is closely coordinated with, and complementary to, related large-scale marine science programs and organizations in the Gulf of Alaska and adjacent waters. In FY 02, GEM planning will support the final review of the GEM Program Document by the NRC, develop the FY 03 Invitation to Submit Proposals, and continue development of the draft GEM Strategic Plan for Monitoring and Research.

Chief Scientist.

Fund additional request (\$240,900). The Trustee August (\$63,800). This project will continue the planning necessary to carry out the Trustee Council's decision to dedicate \$120 million of Restoration Reserve funds in support of long-term monitoring and research in the spill area and adjacent northern Guli-Alaska. Activities in FY 02 include finalization of the GEM Program Document, further development of the monitoring and research plan, development of the first GEM invitation, work on a "State of the Gulf Report", and continued consultation and coordination with other marine research efforts.



Project No. & Title: 02674-BAA, Assessing Pigeon Guillemot Restoration Techniques Proposer: George Divoky

#### <u>Technical Feasibility, etc.</u>

This project would address three objectives: survival and recruitment of captive-reared PIGU in relation to a new nest-box array, recruitment of PIGU to new and existing ASLC nest-box arrays, and assessment of PIGU in relation to nest boxes placed near existing colonies. These objectives are reasonably well integrated, though the relationship among the objectives is confusing, as is the relationship between the new and old nest-box arrays.

Will the old next boxes come down? Could lack of interest in those boxes simply reflect the low numbers of PIGU in northern Resurrection Bay? With the possibility of surviving experimental birds now are returning, should the feasibility of the old boxes be tested before a new array is introduced?

Will the surveys of guillemots in Resurrection Bay (Objective 3) also detect experimental birds, or is that only addressed at the ASLC next boxes under Objective 1?

There is a serious problem testing Hypothesis 1/Objective 1. Given the several experimental treatments (diets and levels of oil exposure) of the original work, how many banded PIGU must be resignted (w/supporting data) in order to have a reasonable chance to test this hypothesis with good statistical power? The reality is that this objective may be problematic.

Hypothesis 3 concerns recruitment of PIGU to 65 artificial nest boxes in Resurrection Bay in relation to existing colonies. This hypothesis does not seem to be a very useful in that it is already known that PIGU can be recruited to artificial nest boxes. It might be more useful to compare characteristics of locations and specific sites that would refine understanding of how to effectively place artificial nest boxes. However, it isn't evident that such data are to be gathered, and or that the 65 next boxes were placed with a sample design in mind that would facilitate comparisons among locations (macro scale) and sites (micro scale).

#### Link to Restoration

Conceptually, this project has a reasonable link to restoration in that data on post-fledgling survival of PIGU with known histories could shed light on the recovery status of PIGU in the spill area. Also, data on PIGU preferences and success in artificial nest boxes could help demonstrate the feasibility of supplementing nests as a restoration technique.

As noted above, however, it may be problematic to obtain a sufficient number of resightings of PIGU (with necessary supporting data) to learn anything of substance in regard to postfledgling survival.

In regard to nest supplementation, this approach to restoration is attractive on a very local scale where, for example, a known nesting colony has been displaced. This approach also is attractive because there is excellent potential for public participation and awareness. Unfortunately, nest supplementation is not a feasible restoration technique when PIGU are

faced with a systemic problem on a regional scale, which seems to be the case in the spill area, both pre- and post-EVOS.

#### <u>Investigator</u>

The PI clearly is well trained and experienced in avian biology, behavior and ecology and is an expert on guillemots.

It is also relevant to consider the prior history of the /327 project, which seems to have been plagued from the outset with difficult personnel issues and interactions. The recent change in personnel of the current project (02674) do not inspire confidence that these issues have been resolved in a way that will enhance prospects for its success.

#### <u>Cost</u>

The project budget is relatively modest, though ASLC bench fees will increase real costs.

#### <u>Summary</u>

This project would test hypotheses on post-fledgling survival of experimental Pigeon Guillemots previously subjected to different diets and oil dosings and on use of artificial nests relative to natural nests. In concept, this project has some link to restoration and scientific merit. However, I question the value of next boxes as an approach to restoration in response to a large-scale, systemic problem(s). I also have questions about relationships among objectives (1-3) and the feasibility (1) and value (3) of some objectives as proposed. The PI is an expert in guillemot biology and ecology, but apparently the forerunner (/327) of this project was plagued by personnel issues. Recent changes in personnel do not inspire confidence that similar issues will not arise in execution of this proposal (02674). Overall, the prospects for success of this project are not strong, and I cannot recommend that it be funded. Project No. & Title: 02674-BAA, Assessing Pigeon Guillemot Restoration Techniques Proposer: John French

### Technical Feasibility, etc.

Overall, this project is rather diffuse, with multiple objectives, hypotheses, locations, and methodologies. Conceptually, it is not clear that all the pieces of the proposal are well integrated (e.g., Jackpot *us a us* Resurrection Bay and ASLC *us a us* field). There really are two or even three projects proposed, and it is not clear that any of them will be successful as proposed.

Descriptions of methods are incomplete and the feasibility of some key components is uncertain. For example, there is no discussion of the statistical aspects of testing Hypothesis 1/Objective 1. Given the several experimental treatments (diets and oil exposure) of the original work, how many banded PIGU must be resignted in order to have a reasonable chance to test this hypothesis? The reality is that this objective may be problematic.

In regard to nest supplementation, the PI would test the Hypothesis 3/Objective 2 that PIGU nesting in artificial nests have the same reproductive characteristics as those in natural nests. It seems that interpretation will be complicated by different macro (location) and micro (box specific) site characteristics. It is not clear that the sample design has sufficient control of these variables to allow interpretation. The uncertainty of whether PIGU problems in the field relate to predators or regime shifts is a further complication.

It is not clear how the work inside the ASLC, with predatory TUPU, relates to the field work. Also, in this context, it would seem that one would need to be testing very specific design questions, which are not evident in the DPD.

Mention is made of linkages to work by Roby (01327) and Irons, but these relationships are not spelled out.

### Link to Restoration

Conceptually, this project has a reasonable link to restoration in that data on post-fledgling survival of PIGU with known histories could shed light on the recovery status of PIGU in the spill area. Also, data on PIGU preferences for and nesting success in artificial next boxes could help demonstrate the feasibility of supplementing nests as a restoration technique.

As noted above, however, it may be problematic to obtain a sufficient number of resightings of PIGU (with necessary supporting data) to learn anything of substance in regard to postfledgling survival.

In regard to nest supplementation, this approach to restoration is attractive on a very local scale where, for example, a known nesting colony has been displaced. This approach also is attractive because there is excellent potential for public participation and awareness. Unfortunately, nest supplementation is not a feasible restoration technique when PIGU are faced with a systemic problem on a regional scale, which seems to be the case in the spill area, both pre- and post-EVOS.

### Investigator

The PI clearly is well experienced in fisheries-related biochemistry, but is neither trained nor experienced in avian biology, behavior or ecology. The PI indicates that he will hire an associate investigator who is experienced with alcids (this would be essential), but it is not clear that he has sufficient training or experience to design and lead this project.

It is also relevant to consider the prior history of the /327 project, which seems to have been plagued from the outset with difficult personnel issues and interactions. The recent change in personnel of the current project (02674) do not inspire confidence that these issues have been resolved in a way that will enhance prospects for its success.

#### <u>Cost</u>

The project budget is modest, though ASLC bench fees will increase real costs. I suspect that the cost of carrying out this project would rise significantly if all weaknesses in design and methodology were remedied.

Under commodities, there is mention of a "motion sensitive camera equipment," but this is not justified or described in the methodology.

#### <u>Summary</u>

This project would test hypotheses on post-fledgling survival of Pigeon Guillemots previously subjected to different diets and oil exposure and on nesting success in artificial nest sites relative to natural nests. In concept, this project has potential links to restoration and scientific merit, but I find that the project design is diffuse and not well integrated. Moreover, the feasibility of individual project components is in doubt. Although the PI has tremendous experience in the area of fisheries biochemistry, he is not trained in nor experienced with avian ecology. It is not clear that the PI would be able to provide sufficient leadership to properly design or execute this project, even if additional expertise is recruited. Historically, the forerunner (/327) of this project apparently was plagued by personnel issues, and recent changes in personnel do not inspire confidence that these issues have been resolved in this proposal (02674). Overall, the prospects for success of this project are not strong, and I cannot recommend that it be funded.



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EVOS Trustee Council 441 West 5<sup>th</sup> Avenue, Suite 500 Anchorage, AK 99501-2340

OCT 26 2001

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Thru: Molly McCammon, Executive Director Sandra Schubert

Re: EVOS Project 02674: Assessing Pigeon Guillemot Restoration Techniques

Attached you will find a minimally revised version of the DPD and Budget documents for EVOS Project 02674. The revisions accomplish the following goals: 1) Removal of Dr. George Divoky and his replacement with a senior alcid biologist as Associate Investigator, to be named later. 2) Changes in the timeline for deliverables requested by Sandra Schubert in her e-mail dated 10:39am, July 20, 2001. 3) The change in designation of the two positions to be hired by ASLC bench fees from "interns" to "technicians" to be consistent with their request. and 4) Internal re-budgeting of funds to reflect the change in availability of personnel and the perceived need for improvements in the ASLC nest box arrays and to enhance their monitoring.

Deleted text is struck out while new text is redlined. The hard copy contains only those budget pages which have non-zero entries.

Proposal #02674: Assessing Pigeon Guillemot Restoration Techniques (the project) was to submitted and approved by the Trustees in August, 2001 under my name and my business license. My company, PEGASUS ENTERPRISES, a qualifying small business, and I, are prepared to complete the project as described in the approved DPD and associated "bench fees" to the Alaska SeaLife Center (ASLC). It now appears that Dr. George Divoky is not willing to fulfill his contractual obligations and wishes to usurp those portions of the project in which he has the greatest interest and eliminate my participation.

While I would regret not having Dr. Divoky's long term knowledge and experience on the project, I do not feel that it is irreplaceable. Therefore, I will be requesting that Dr. Divoky be removed from the project as Co-Principal Investigator and be replaced by another qualified alcid biologist as an Associate Investigator to be named later.

The funds saved on Dr. Divoky's transportation and other ancillary expenses have being rebudgeted from within the approved project to provide repairs, renovation and improved monitoring of the nesting site(s) for returning guillemots in the vicinity of ASLC.

There are a number of reasons why this is the most responsible course of action following Dr. Divoky's failure to meet his commitments to the project.

I. The project was initially conceived and developed by me through PEGASUS

ENTERPRISES, and Dr. Divoky was offered the opportunity to participate or compete prior to the original proposal submission.

- A. I was approached by several individuals at the last GEM workshop about my willingness to submit a proposal for the 2002 Work Plan which would follow up on the restoration work of Roby and Divoky.
- B. I later approached Susan Inglis and Amy Haddow, both of ASLC, regarding whether they would be receptive to my submitting a proposal, and whether they new of Dr. Divoky's plans. Both indicated that they did not think Dr. Divoky was planning to submit a new project on the restoration work in 2002.
- C. In deference to his past involvement with the project, and his many years of work with Black Guillemots, I told him that I planned to submit a proposal following up on the 98327-01327 restoration work. I invited him to file a joint proposal with me, or to write a competing project. He said he would be interested in a joint proposal.
- II. At the time the proposal was due Dr. Divoky was insistent that the contaminant and feather work be included. He said he was not particularly interested in more monitoring of Resurrection Bay.
  - A. Dr. Divoky's feather and contaminant work was removed following non-supportive reviews by the Chief Scientist. I rewrote the DPD for re-review and submission to the Trustees in August. The Trustees approved this revision.
  - B. His negative attitude toward monitoring Resurrection Bay continued until after I began developing a set of observations suggesting the return of a significant number of fledged pigeon guillemots to the vicinity of ASLC.
- III. Over the course of Project //327, especially the 2000 and 2001 field seasons, Dr. Divoky was seldom present during surveys or nest box installations. Whereas I have repeatedly surveyed sites in Resurrection Bay (and know how to spell Caine's Head), and have personally placed, surveyed, and repaired the nest boxes on Hat Island and on the old army pier used to access Ft. McGilvery on Caine's Head. Dr. Divoky has not personally been at either site.
- IV. Dr. Divoky has a history of being late or not delivering project reports, contracts, payments and other deliverables. He also has a history of seeking confrontation rather than conciliation and compromise in managing projects.
  - A. Cindy Anderson, Kelly Flynn, and other recent employees on Project //327 can attest to the unpredictable, arbitrary, and capricious nature of trying to work under Dr. Divoky's direction.
  - B. Between Projects 99327 and 00327 the relationship between Co-Principal Investigators Daniel Roby and George Divoky became so hostile it became necessary to split the project into two discrete parts. For better, or worse, Project 02674 was not written in such a way as to facilitate such a division. At least not after Dr. Divoky's feather and contaminant work was removed from the project.
  - C. During the summer of 2001, Dr. Divoky spent less than ten days actually on site in Seward during the peak of observations. He repeatedly called to arrange for various trips or observations to take place only to not make it to Seward. This began with his promise to finalize my contract and assist in arrangements with ASLC in late May. These included opening a project account

so I would have access to funds for surveys etc. Neither contract nor account were to be forthcoming at any point.

- D. Dr. Divoky submitted reports to USFWS based upon his proposed outline on activities for summer 2001 without confirming which had been accomplished and which had not, even though he was aware of the fact that he had been late in making initial arrangements, had not completed my contract, provided any funds before July 25, and had repeatedly failed to do what he said he was going to do.
- Ε. Although Dede Bohn, USFWS, assures me that USFWS has processed Dr. Divoky's initial invoicing (which included \$2,000 for my services), I have yet to see a contract or one cent in compensation for my many hours of work on his project this summer.
- V. Dr. Divoky has consistently insisted on representing himself as an employee of the University of Alaska Fairbanks, but he has equally consistently failed to provide the required paperwork attesting to approval of, and commitment to his participation in this project.
- VI. During the course of recent discussions, Dr. Divoky's position has never been one of trying to make the project work. Since the project was approved Has tried to find justifications for splitting the project, or failing that, to remove me and PEGASUS ENTERPRISES from the project. In seeking alternative management of the project, Dr. Divoky has never presented either the requisite University paperwork to do the project through the University or documentation of the appropriate licenses to work independently.

I submitted the proposal for EVOS Project #02674 in good faith in a manner and timing consistent with the rules for submitting proposals to the Trustee Council under the BAA. The lead entity for this project is my company, PEGASUS ENTERPRISES. The Trustees approved this proposal in August. My company and I are prepared to undertake the proposal as approved. I regret the need to replace Dr. George Divoky since he was the most experienced alcid biologist on the project but I do not feel that his skills are irreplaceable. This is especially true when he has indicated that he expects his long standing project on Cooper Island to command much of his time again during the 2002 field season as it did in 2001.

I must insist that any change that removes either myself, or PEGASUS ENTERPRISES, as the principal managers of this project be returned to the EVOS Trustee Council to approve any such changes. That change must be made in a manner consistent with the rules, regulations, schedule, and associated timeframes required for funding a new project under the Request for Proposals and the Broad Agency Announcement (BAA).

Dr. George Divoky is attempting to usurp a project that was not his in the first place. He has repeatedly tried to force his hand by making projects unworkable for his coworkers. He did this with Project #//327, and now he is trying to do so again with Project #02674. You will be setting a very bad precedent if you succumb to his pressure.

Respectfully yours,

John S. French, Ph.D.

### PEGASUS ENTERPRISES

John S. French, Ph.D., President



December 8, 2001

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**EVOS Trustee Council** & EVOS-Public Advisory Group 441 West 5th Avenue, Suite 500 Anchorage, AK 99501-2340

Re: EVOS Project 02674-BAA: Assessing Pigeon Guillemot Restoration Techniques

On October 25, 2001, on behalf of myself and my company, PEGASUS ENTERPRISES, I submitted minimal revisions to EVOS Project 02674-BAA: Assessing Pigeon Guillemot Restoration Techniques as it was approved for funding at your August meeting. These changes were necessary to accommodate a change in senior meeting. These changes were necessary to accommodate a change in senior personnel. Both the electronic and paper copies were accompanied by the undated letter you have been given. As stated there, the Introduction, Need for the Study, Community Involvement and Traditional Knowledge, and Project Design sections were unchanged from the DPD approved for funding in August. The Schedule section was changed primarily to bring consistency with the e-mail for Sandra Schubert on July 20 and the ASLC bench fees request. The major change was releasing George Divoky from the project and his role as Co-Principal Investigator. The total Budget, including ASLC bench fees, was unchanged, but was redistributed slightly to address the change in personnel and the need to renovate the available nest sites near ASLC.

I am very concerned about events that have occurred since the submission of those revisions. I am concerned about the procedure used, the inaccuracy and lack of consistency in statements made by reviewers and the Executive Director at various stages of the process, and apparent involvement of politics and conflicting personal interests in making the recommendation before you.

There was no need nor precedent for subjecting the project to another peer review. The Trustee Council decision in August was to fund the project. It was not to defer, to seek additional clarification, or to provide 2001 field season data.

I was the initiating Principal Investigator with my company its manager under the BAA. This was stated in the original cover letter to Sharon Kent, and is restated at the bottom of page 3 of my cover letter to Molly McCammon which accompanied the revision which was approved for funding by the Trustee Council. I did not seek to bifurcate the project. Nor did I wish to remove George Divoky from the project. He has left me little choice.

This would not be the first time a change in the senior  $p_{f}$ been made because an investigator has taken another i

O2474 added by John Frenchatthe meeting

otherwise sought to recuse themselves. I do not believe those cases resulted in re-review of those projects, or re-approval by the Trustee Council. Considering the case in hand, did Project xx327 require Trustee Council action when Dan Roby (Principal Investigator) moved from University of Alaska Fairbanks to Oregon State University? What action was taken when Project xx327 was split into a Roby component and a Divoky component? This change certainly had significant effects on how the pigeon guillemot chicks were handled in 2000.

This situation is reminiscent of the antagonistic positions taken by Marilyn Dahlheim against Craig Matkin concerning the management of the orca projects after the transition from NRDA projects to the EVOS Trustee Council process. I was the PAG Science/Academic Representative at the time. As those of you who were also here will remember, Dahlheim was the more established cetacean biologist. She felt that she had the pedigree and the position to dictate how orca research should be done. This included shutting down Matkin s approach which was mostly long term observation from small boats. To their credit the Trustee Council declined to listen to the rants of the established peer but decided to fund the up and coming local scientist, Craig Matkin. This turned out to be a very fruitful choice.

It should also be noted that although George Divoky has chosen to represent himself as a Research Associate at UAF for this proposal as well as his new proposal submitted in October. However, he requested that he be contracted as a private contractor, and has not provided cover sheets signed by the grants office as required by the University. Since this proposal does not include indirect costs for the University, reduced or otherwise, he needs to provide an indirect costs waiver.

The Trustee Council should not encourage their core of established peers and other self interested parties to exercise inappropriate *tortis interference* on the funding process. You judged my project on its merits in August and should reaffirm that decision now.

II. Opinion of the Chief Scientist, and peer reviewer, regarding my qualifications differ substantially from their recommendations for approval to the current recommendation, and also from reality.

In his original recommendation which was reiterated in August the Chief Scientist recommendation stated This is an interesting proposal from well-qualified investigators to do follow-up work on two past EVOS projects. In the new peer review of this proposal, the reviewer states The PI clearly is well experienced in fisheries-related biochemistry, but is neither trained nor experienced in avian biology, behavior or ecology. This is echoed by the Chief Scientist in his new recommendation. One proposal does not have a qualified bird biologist named.

It would be interesting to know where these latter mis-perceptions came from since my resume was not attached and I have not been able to speak to either the Chief Scientist nor Executive Director concerning this project despite repeated attempts to do so.

I do not deny being well experienced in fisheries-related biochemistry. However,

what I am does not define what I am not. One item within the circle doe not mean all others are outside it. When I first met Bob Spies many colleagues regarded him as a polychaete biologist, or Phil Mundy as a salmon biologist. I believe that both these biologists would like you to believe that they have valuable knowledge and expertise in areas beyond worms and salmon. They probably achieved much of this understanding thru avenues other than traditional classes.

Likewise, I have achieved broad recognition in several areas beyond my formal training, most notably fisheries, food science and technology, marine ecology, and oceanography. If you look at my undergraduate training, I was a chemist with a few credits short of a double major in biology. My doctoral thesis was on the structure and function of the cytochrome P-450 system. The study was all in mammals, and mostly in rabbits, however we now recognize the broader application of this system to include avian and fish species. My course work broadly included several areas of toxicology. My postdoctoral research was on the interconversion of the physiologically active forms of folic acid. That is it required knowledge of nutrition.

Twenty-one years ago when I came to Alaska, my skills in biochemical physiology, toxicology, and nutrition were known, but I had no proven skills in fisheries, food science, or food technology. When I retired 18 years later, I was perhaps best known for my research and teaching in those areas. I have a strong sense of the dynamics of the ecology of the North Pacific, its commercial uses, and the information needs required to manage it effectively.

Having worked within the mission of UAF s School of Fisheries and Ocean Sciences, and closely following the EVOS restoration progress, I feel I have developed a strong sense of the contextual basis of the work I have proposed. While it is true that prior to my moving to Seward, my only work with seabirds was observing them in the wild, and picking up their carcasses from the beach. Since that time I have assisted as a volunteer on both halves of project xx327 for three years, and did the preponderance of the field work in 2001. I have assisted with the animals in rehabilitation and interpreted those in the aviary for visitors at ASLC. In order to be fluent at those tasks, I have undertaken extensive reading on seabirds and recent seabird projects, especially alcids.

I do not profess to be a seabird expert. However this project includes nutritional, toxicological, and statistical aspects in which I am well versed. I am a proven fast learner and I believe that I can learn the more specifically avian aspects well enough to successfully complete this project without an additional senior bird biologist. However, I do anticipate that addition of a recognized alcid biologist would add credibility to the project and help assure that sampling protocols and analysis are in a form most useful to the seabird community. I have tried to leave room for George Divoky to rejoin the project, if he should choose to do so. Otherwise, I am confident I can recruit the appropriate personnel.

III. Why have two nearly identical versions of a single proposal received such different reviews? There was not any request to revise or correct specific deficiencies, or to update the DPD for reconsideration. So it is not reasonable to expect the request for change in personnel to correct acknowledged deficiencies in other sections.

The proposal reviewed and funded in August was identical in all the ways listed above to the one submitted and reviewed in October. The latter should not have been re-reviewed, or if it was to be reviewed the pertinent recommendations should not have changed because the criteria and needs have not changed.

In her recommendation the Executive Director states Shortly after the Trustee Council approved this project the proposers informed us they no longer agreed on the project's objectives. A much more accurate statement would have been that shortly following approval George Divoky announced that he wished to bifurcate the proposal, take sole control of all field observations, and re-budget funds to concentrate on identifying the returning birds. For both procedural and technical reasons I wished to leave the scope and management of the project alone. The essence of the disagreement was that I wanted to do what we had agreed we were going to do while George Divoky wanted to make major changes in objectives, personnel and management.

A scientific and technical review was done and it satisfied the Trustee Council members which voted to fund the project. I concur that sections of the proposal could be strengthened. Gaps in the previous data set could be filled. Technical protocols could be spelled out in greater detail. The fact is that I was not asked to clarify, strengthen, or revise specific sections of the proposal. I was asked for a commitment that I would carry out the proposal as approved. Divoky sought to remove himself from the proposal and the prospect of a professional services contract with PEGASUS ENTERPRISES. I proposed the minimum changes necessary to accomplish this.

The peer reviewer's question regarding the use of camera equipment in the budget is another case in point. This is a line in the original budget. It has been increased but not by a large amount. The cameras are to be used to continuously monitor the activity in and around the nest box arrays adjacent to ASLC. Planning has gone well beyond that point but it would have required technical modifications to the proposal to elaborate on them. The objective in submitting a minimally revised proposal was to meet Sandra Schubert's request for a commitment to execute the project as approved by the Trustee Council.

The unwillingness of the EVOS staff, especially the Chief Scientist and Executive Director, to provide assistance, or even to discuss the providing assistance, in keeping the project intact with both Principal Investigators suggests a contravening agenda. The striking similarities between the peer reviews for both Project 02674 and Divoky's new proposal suggests an attempt to provide an even handed excuse to refuse funding for both projects.

A number of parties would appear to benefit from this decision. The peer reviewer, who is presumably a seabird researcher, would avoid having a new researcher and private company gain a foot hold in funded seabird research. Those who look forward to a secure future studying common murres as part of the GEM program avoid strengthening the case for monitoring pigeon guillemots. Agency investigators would succeed in closing down one of the few remaining non-agency seabird projects. Those research teams based in Seattle, Corvallis and elsewhere away from the Gulf of Alaska avoid having a competing small business grow on the shores of the oil spill area. Finally, and unfortunately, there are those who seem willing to resort to inappropriate, and probably illegal, tortis interference to keep me from reestablishing my toe hold in the research community.

IV. In order to base their recommendations on facts rather than rumor and innuendo, the Chief Scientist and Executive Director should have been speaking with me directly. They should not be blindly accepting Divoky s characterization of the situation nor hearsay from biased, and possibly self-interested sources.

I will readily believe that George Divoky has been depicting himself as the driving force in Project 02674. However this is not the case. It is also possible that EVOS Restoration staff knew of his involvement in Project xx327 and chose to discount my protests regarding his misrepresentation because they chose to believe the facts others were misrepresenting.

The truth is that I initiated this project and asked Divoky whether he wished to be part of my proposal. On December 28, 2000, I wrote the attached e-mail to Phil Mundy. I sought advice on how to proceed. The core question was whether it would be best to proceed with my own project, or in collaboration with other investigators or organizations. Although Mundy did not provide a specific recommendation he did provide copies of the materials I requested with the addition of the EVOS bibliography for pigeon guillemots. Additional reports were obtained from ARLIS.

I asked Divoky s friends on the ASLC staff whether they knew what his intentions were regarding the 2002 request for proposals, I was left with the impression that he did not intend to pursue further funding in 2002. I then told him that I was planning to submit a proposal, and asked whether he wished to collaborate on the project, or to submit a competing proposal. He suggested we submit a proposal as co-principal investigators. This was to be outside the University with management through PEGASUS ENTERPRISES. The end of February I shared working draft outline (attached, dated 2/28/01) with George Divoky and Michele Miller, who I was considering as an associated investigator from ASLC. Miller said she did not see a roll for her continued involvement. Divoky wanted to add a fourth objective to monitor feathers and contaminants in association with his similar work on black guillemots. This was where his real interest seemed to lie.

After that we shared the writing and review of various sections. As the deadline approached and review times became more compressed, much of the final drafting fell into Divoky s hands for the version submitted in April. Following the request to revise the proposal without objectives 3 and 4 with a reduced budget, we again discussed how to proceed but almost all the redrafting was done by me. This revised proposal was approved for funding by the Trustee Council in August.

On August 3, 2001, Divoky and I had gone to inspect activity at the nest boxes on Jackpot Island. He unexpectedly told me that he resented the fact that I was to get paid as much from the project as he was, that he resented my company managing the project, and he resented the fact that I was listed first among the principal investigators. Also, he appeared incensed that our letters from EVOS addressed me as Dr. French but him as Mr. Divoky. He finished by saying that

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he did not think he could work with me as co-principal investigator, and that he wanted to split the project as he had with Roby. On August 10 he apparently called Sandra Schubert and Bob Spies. I did not learn about this until Schubert's e-mail to me on August 20. This was in response to my e-mail to Spies and others on August 18. At the close of that message, I reiterate my support for the entire scope of the project as funded. At this time I do not support elimination of either of the other research objectives or the public education aspects of the revised proposal submitted to, and approved by the EVOS Trustee Council. George Divoky speaks for neither PEGASUS ENTERPRISES nor myself in this regard.

This last statement is important because it should have put the EVOS Restoration staff on notice that there were two perspectives on this issue and they were only getting one from Divoky.

The fact is that after three years exposure to the elements the man-made nest sites near ASLC need serious renovation or replacement. Observations of the pigeon guillemots returning to within 200 m and exhibiting foraging or prospecting behavior suggested that a minimum of 22 nesting pairs should be expected to return. This would overwhelm the available secure, predator free nest sites. Although there are many possible nesting cavities in the vicinity, most are in the rip rap along the sea walls with easy access to known predators. In fact we know we lost at least two fledglings to mink during Project xx327. Susan Inglis had told me that ASLC could revise their bench fees request for the Trustee Council meeting in December. So after an initial review of the sighting data, I informed Sandra Schubert and Bob Spies (e-mail, 8/23/01 & 8/24/01) and later Susan Inglis (e-mail, 8/26/01) of the perceived need for improvements to the nest box arrays, better monitoring, and an intern to assist with the public education objectives if Divoky remained insistent that the field personnel could not be spending time in ASLC. Neither Inglis nor her replacement, Kendall Mashburn, chose to continue this conversation.

In my e-mail of August 23, I again reiterate my support for the project as approved. I believe in the project as submitted and approved. The rest of the message is seeking advice from the recipients, Schubert and Spies. The next day Schubert responded with a short e-mail including the following. John, thanks for the response, though we are looking for you and George to have a meeting of the minds, if possible, and reply with an agreed-to approach. Also I will restate what I said in my earlier message below which is that we are not at this time willing to entertain a request for supplemental funds.

By this time I had already asked Divoky to prepare a draft of exactly how he wished to see the project divided so we could review it and try to reach such a meeting of the minds. I had already agreed to meet most of his demands regarding his control of recruitment and management of the field work. He seemed steadfast in his goal of usurping the bulk of the project. By August 30, I had not received any draft nor any payment for my 2001 field work. I had the impression that he was communicating with Shannon Atkinson, Michele Miller, and some EVOS staff, probably Bob Spies, without copying me as agreed. As a result Atkinson and I had a series e-mail exchanges on August 30 in which I sought to open direct communications and to establish ASLCs position on renovating or replacing the East and West Nest Box Arrays since these condos have become part of their public education activities. Newer, more secure,

nesting structures would also become a longterm asset of ASLC. I was not granted the opportunity to meet with Atkinson (or Mashburn). Again Spies was unresponsive.

By the time of the next communication with EVOS, September 18, I still had not received any draft proposal modifications from Divoky, nor had I received the agreed compensation for my 2001 field work. Schubert sent out a reminder, copied to Spies and Stacy Masters, that we could not expend funds without a contract. She went on to say At this point, we are awaiting a joint response from you - either a revised proposal... or confirmation that the project will be implemented as originally proposed and approved by the Trustee Council. I responded on September 20 and reiterated my efforts to seek an amicable way to divide the project to meet his (Divoky) needs. I also twice restated my willingness to implement the project 02674 as approved by the Trustees ... PEGASUS ENTERPRISES and I are prepared to implement the project with, or without, George Divoky. My message ends with the question How easy is it to set up a conference call including other principals including Bob Spies? Spies could have easily stepped in and told Divoky that agreements are expected to be honored so he should tame his ego and get on with business.

On October 11, George Divoky left me a voice message saying he was faxing me a copy of a proposal he had submitted to EVOS. What he faxed me was without budget or supporting materials but it was clear that he had attempted to usurp the whole project except the Jackpot Island and ASLC aviary work, and a de-emphasis on the public education component. He had done this without keeping his word that we share materials prior to submission. It was clear that he had no intention to try to reach the meeting of the minds requested by Schubert. It was equally dear he was not prepared to keep his commitments to the project as we had submitted it.

Schubert s e-mail (October 16) confirmed this perspective. EVOS, at least the Chief Scientist, was giving Divoky the high ground and surrounding fertile lands and I should try to make an viable stand-alone project from the remainders. George has submitted a revised proposal that addresses the observation of birds returning to the ASLC. I am now writing to request that John also submit a revised proposal... that addresses any additional components of the project he believes should take place in FY 02.

I was incensed and sent an immediate response to Schubert and Spies.

I am preparing a more detailed response to be sent to you shortly. For now let me reiterate that I submitted the proposal approved by the Trustees in August under my name and my business license. My company, PEGASUS ENTERPRISES, a qualifying small business, and I, are prepared to complete the project as described in the approved DPD and associated "bench fees" to ASLC. It now appears that Dr. George Divoky is not willing to fulfill his contractual obligations and wishes to usurp the whole project.

While I would regret not having Dr. Divoky's long term knowledge and experience on the project, I do not feel that it is irreplaceable. Therefore, I will be requesting that Dr. Divoky be removed from the I also included much of the justification which was included in the cover letter to my revisions removing him from the proposal.

The Chief Scientist, Bob Spies, responded on the next day with the cryptic message What a mess! Seriously, I will read this over in detail and then you, I and Molly should have a discuccion (sic) on where we should go from here. I smell legal action if French is cut off. That was the entire message, not copied to anyone else.

When I heard nothing further from Spies, I proceeded with the proposal to delete Divoky from the project and provide a detailed letter justifying that action. It was too late to identify specific bird personnel to work on the project before its October 26 deadline. I also wanted to leave the structure open enough to allow Divoky to rejoin the project if the situation changed.

On October 25, I sent Schubert a copy of the July DPD with the minimal additions highlighted and deletions struckout, the cover letter, and minimally revised budget forms. To this Schubert responded John, I need clean copies of your DPD and Budget (that is WITHOUT the changes marked) Can you please send (today, please)? I complied with the request with the additional comments. I have deleted the deletions and reverted the redlined text. The two files which required changes are attached. The other two did not require changes. However, I do wish to emphasize again that this is not a new DPD in the sense of proposing changes in the scope of the project, or how the goals and objectives are to be met. (Emphasis added)

I heard nothing further until I received Notice of the Trustee Council meeting on December 11 from Brenda Hall. I responded with an inquiry to Hall and Schubert as to the status of Project 02674 and whether it was considered a deferred project. If so what were the SC and ED recommendations. Schubert responded the same day with a message including the recommendations and had the peerreviews attached. I responded the next day with a message to Schubert, Spies and McCammon in which I made the following request. FOR THIS REASON I AM REQUESTING COPIES OF THE PEER REVIEWS, CHIEF SCIENTIST RECOMMENDATION, EXECUTIVE DIRECTOR S RECOMMENDATION AND ANY OTHER PERTINENT INFORMATION PROVIDED TO THE TRUSTEES PRIOR TO THEIR DELIBERATIONS AT THEIR AUGUST, 2001 MEETING. (Emphasis in the original). This request has not been met and this is where we stand today.

The e-mail messages cited here are available in their entirety. In the interest of brevity they have not been attached to this letter but will be available at the Trustee Council meeting or upon request.

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This project represents an important opportunity to follow up on four years of effort and over \$500,000 of public money spent on EVOS Project xx327 to condition and fledge 150 pigeon guillemot chicks. This year banded pigeon guillemots were repeatedly sighted within 200 m of the old City Dock and associated pilings in front of ASLC. The maximum concurrent sighting which was verified was nine birds. So at least nine guillemots returned. Assuming the current paradigm that all surviving three year olds and 15% of two year olds return to their fledging site, then a maximum of 21 three year olds and nine two year olds, or 30 pigeon guillemots should have returned in 2001. We sighted 9/30 or 30% of the fledged chicks expected to return in 2001. That suggests a minimum of 45 birds or 22 nesting pairs of pigeon guillemots prospecting to build a new colony near ASLC. At least for the course of Project xx327, there no previous interest shown in this part of Resurrection Bay. This would represent a large colony for Resurrection Bay and one of above average size in comparison to those on Naked Island. This opportunity will not offer itself again without spending another \$500,000 to duplicate the work of Project xx327.

While it is true that no contract has been finalized and no project funds have been spent, the impact of losing a project of this size on a small consulting company, such as PEGASUS ENTERPRISES, should not be trivialized. It usually takes at least six months, and often more than a year, to prepare and secure such projects. Being a small company I do not carry any excess personnel. I can not afford the luxury of writing a continuous stream of proposals and assume a certain number will not be funded. My company has committed the resources necessary to successfully execute this project. If you revoke funding my company will probably not be able to replace the income would have received in 2002.

I strongly encourage you not to reconsider the funding of EVOS Project 02674 but to allow it to continue as described in my revised DPD. If George Divoky wishes to rejoin the project, I will make every effort to accommodate his needs. If not, I am confident I can complete the project and provide you with results in a form which is understood and trusted by a broad spectrum of those interested in seabird resources.

Respectfully yours,

John S. French, Ph.D.

<u>Attachments</u> e-mail from French to Mundy, 12/28/00 draft project outline, 02/28/01 cover letter for revision of DPD, to McCammon, 07/08/01 letter regarding funding of Project 02674, from McCammon, 08/09/01
#### <u>jsfrench</u>

From:"jsfrench" <jsfrench@mtaonline.net>To:"Phil Mundy" <phil\_mundy@oilspill.state.ak.us>Sent:Thursday, December 28, 2000 11:10 AMSubject:PiGu Research

Phil.

When I spoke with Dede at the GEM workshop she suggested that I might want to submit a proposal to continue the survey and monitoring work on PiGus in Resurrection Bay and Jackpot Is. and to assess the return of the chicks fiedged during the last three years of EVOS sponsored research (Robey, Hovey and Divoky). This would make sense since I am located in Seward and was a party to both the most recent nest box installations at the old North Beach Pier (Caines Head), Hat and Jackpot Islands, and to the raising and fledging of the PiGu chicks the last two years. I am also in the process of piecing together a public education video on the PiGu project.

When we spoke briefly as the Trustee Council meeting. You said you had been having difficulty getting the data on parts of the PiGu work. The inference you drew was that PiGus were harder to work with than Murres. This may be true for nest surveys in natural barrows but may be out weighed by the proven propensity of PiGus to use artificial nest sites (old cannerles, nest boxes, etc.). This makes long term tracking of specific predator free (limited anyway) sites and pairs a practical possibility.

The current hypothesis that clutch size in PiGus is a good measure of physiological well being and food availability, and the more limited foraging ranges seem to make PiGus an high quality monitoring tool. I strongly encourage the continued use of Pigeon Guillemots as a key monitoring species in GEM.

Regardless whether they become a GEM focus species local studies should continue to determine the relative success of the habitat enhancement and captive rearing/release components of the last three years of EVOS funding. It would be irresponsible to raise and release 160+ chicks and not to monitor their fate and colony development. The same can be said with regard to the Nest boxes placed for limiting access by land-based predators.

I am interested in seeing this research/monitoring continue and feel competent to lead (or share the leadership) of such a project. My initial reaction would be to submit a joint project with George Divoky because I do not believe in "stealing" projects from others. However Dede suggested that George was a large part of the problem. While I have not had a problem working with him I have seen him alienate others working for him. If he is causing problems on your end also, perhaps I would be wiser to submit a competing project. Will you please share your thoughts on this issue.

To go forward on this project I will need:

Dede's contact telephone and e-mail address.

2. Copies of the proposals and relevant reports from Robey, Divoky et al. for the previous three years of PiGu research and monitoring.

3. Your opinion as to whether it is better to have the project go through the SeaLife center with me as a third party PI, or have ADFG, or another Trustee agency, do the project management directly and subcontract the field work and reports to me? My company, PEGASUS ENTERPRISES, does not have separate financial staff at this time. I think I might be good for the long term growth of ASLC if they started working more directly with the research community themselves. In this case that means me.

4. I am still working on dietary issues in pinnepeds, and will be submitting a project in that realm as well once the pieces come together.

Thank you for your assistance,

John S. French, Ph.D. PEGASUS ENTERPRISES P.O.Box 1470 Page 1 of 2

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Pigeon Guillemot Project 2002 and beyond

DRAFT February 28, 2001

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Principal Investigators:

John French, PEGASUS ENTERPRISES George Divoky, IAB, UAF Michele Miller, Alaska SeaLife Center

#### Objectives

- 1. To document the use of secure artificial nest sites by the captive reared and wild pigeon guillemots.
- 2. To survey the return and nest site usage of captive reared birds.
- 3. To assess the viability of using clusters of secure artificial nest sites in critical habitat areas as a tool for long term monitoring of the PWS/GoAK ecosystem.

#### Approach

1. Document use of enhanced artificial habitat (nest boxes) [continuation from 2001].

- A. Study sites: ASLC, Hat Island, North Beach Pier, Jackpot Island,
- B. Frequency of occupation
- C. Fidelity of occupation
- D. Clutch size
- E. Chick growth rates/survival
- F. Fledge date
- II. Further elucidate breeding behaviors and nutritional responses in captive birds which may be useful as monitoring indices.
  - A. Maturation of captive birds
  - B. Onset of breeding
  - C. Clutch size, chick growth rates/survival, fledge date, with ad lib diet.
  - D. Same parameters with modified/restricted diet.
- III. Evaluate further locations for possible long term monitoring sites.
  - A. Locations
    - 1. Proximity to known nest sites
    - 2. Cost of access
    - Proximity to GEM monitoring sites
    - 4. Possibly old cannery site(s) on Kodiak, and Kachemak Bay
  - B. Sites for nest boxes
    - 1. Ease of access to monitor breeding progress

- 2.
- Limited access by predators Limited likelihood of malicious mischief 3.

IV. Analysis of correlation between study parameters and environmental parameters of other GEM projects.

- Α.
- Β.
- Ocean physics Prey availability/distribution Status of other index species C,

# PEGASUS ENTERPRISES

John S. French, Ph.D., President

P.O. Box 1470, Seward, AK 99664, Telephone: 907-224-4429, E-mail: isfrench@mtaonline.net

July 8, 2001

Ms. Molly McCammon Executive Director EVOS Trustee Council 645 G Street, Suite 401 Anchorage, AK 99501-3451

#### Re: Revised DPD for Project 02674-BAA / Assessing Pigeon Guillemot Restoration Techniques and Feathers as Biomonitors

Dear Molly;

The attached is the revised detailed project description (DPD) you requested for Project 02674-BAA / Assessing Pigeon Guillemot Restoration Techniques and Feathers as Biomonitors in your letter dated June 13, 2001. The budget and scope of the have been in keeping with your request and the recommendation of Chief Scientist, Bob Spies. In keeping with those changes, the project has been retitled "Assessing Pigeon Guillemot Restoration Techniques". I am submitting it on behalf of Dr. George Divoky and myself, since George is presently on Cooper Island studying Black Guillemots.

There have already been some very significant observations from the 2001 breeding season which we feel significantly impact the scope and importance of this project. These observations are on page 4 of the DPD, and excerpted below:

"Observations from 2001 breeding season.

Three important sets of observations have been made so far regarding restoration objectives of project 01327. First, starting June 3, 2001 clusters of up to five (5) Pigeon Guillemots have been seen flying, swimming and foraging in the waters immediately south of ASLC. Early sightings reported at least one bird being banded. Most sightings have been of one (1) to three (3) birds. The most recent report, July 6, 2001, observeded five birds together and that all five had both USFWS with colored bands, although exact combinations were not reported. On July 7, 2001 an ASLC education staff member reported seeing a Pigeon Guillemot descend from the from the western nest box array just off the ASLC viewing platform.

The other two significant early findings from the 2001 season occurred in the ASLC avian habitat where three (3) female Pigeon Guillemots from the 1998 season and four (4) female and six (6) male Pigeon Guillemots from the 2000 season were added to the

resident collection from project 98-00327 rather than being fledged into Resurrection Bay.

Earlier observations of the three birds from the 1998 year class and reports from observations in the wild lead to expectations that first and second year birds would have some white winter plumage mixed with the black breeding plumage giving the immature birds a salt ans pepper appearance. As the spring 2001 molt progressed it became apparent that this was the case for only four (4) of the first year birds. Six of ten first year Pigeon Guillemots in the ASLC habitat now have summer plumage indistinguishable to the untrained eye from the mature breeding plumage of Pigeon Guillemots. This could force revision of our current assumptions regarding the actual age of "mature" Pigeon Guillemots observed in the wild.

The third observation is that only are the third year Pigeon Guillemots actively prospecting for nest sites within the ASLC habitat but they are being joined by first year birds. Indeed, on June 19, 2001, two (2) Pigeon Guillemot eggs found in the habitat. Both the third year female and her mate, a first year low calorie diet male from Couverdon Is., were observed tending the eggs. On July 1, 2001 a Tufted Puffin was observed with the remains after destroying the Pigeon Guillemot eggs. Two puffin eggs have also been destroyed by other puffins this year."

We have made two departures from the letter of your request. We believe they are consistent with the intent of the Chief Scientist and yourself. Although the project could stand without them, we believe they both significantly strengthen the project, especially in light of the recent developments.

First, we have requested funding for one trip to continue monitoring the nest boxes placed on Jackpot Island as part of Project 00327. As stated on page 6 of our DPD we feel these observations are important in providing a broad range of population conditions.

"Our proposed research will examine the use of artificial nest boxes in a range of conditions:

- 1. locations where there are currently no birds (ASLC and abandoned army pier on North Beach within Caines Head SP in Resurrection Bay)
- 2. locations with small numbers of birds (Hat Island in Resurrection Bay)
- 3. locations with increasing populations (Jackpot Island in Prince William Sound).

Examining nest installations in this range of conditions should allow us to determine if nest-site provisioning can be used as a restoration option and in what conditions it would be most useful."

Second, we have proposed broadening our second objective to include observation of nest boxes, and modified nest boxes with the Pigeon Guillemots in the ASLC avian habitat. The reasons for this request are stated starting with the last three paragraphs on page 9.

"The ASLC avian habitat offers a unique opportunity to study and intensive observation

of a group on newly maturing and prospecting Pigeon Guillemots as they choose between a variety of man-made alternatives for nesting. Since there has already been some prospecting behavior during the 2001 breeding season and one pair of eggs laid, the 2002 season should provide excellent opportunities to closely observe prospecting and nest-site choices being made. Since the Tufted Puffins have proven to be actively protecting nesting resources, this provides another natural factor to be considered in both site selection and breeding success.

The placement of nest boxes more similar to those used at other project sites into the habitat would facilitate close observation of interaction of Pigeon Guillemots with those boxes. It would also facilitate the study of design modifications intended to either make the boxes more attractive, or less prone to destructive interaction with other species, such as puffins. Since the habitat pool is not large enough for puffins to fly, it should be relatively easy to place nest boxes where they are inaccessible to puffins.

Since none of the thirteen (13) Pigeon Guillemots in the habitat have established a successful nesting site, the ASLC habitat presents a unique opportunity to study nest site selection. The colony size is within the normal distribution of colonies seen on Naked Island by Oakley and Kulitz (1996). These birds are naive having neither the guidance of successful nesting in the past nor exposure to behavior of more mature nesting pairs. As the maturity and experience of the habitat guillemots increases this opportunity will be lost.

The project staff would work with EVOS representatives, and those of ASLC to assure that any modifications to the ASLC avian habitat are cost effective and meet all the internal requirements of ASLC. Either permanent installment of box attachment points, or the design and construction of appropriate nest boxes would require additional "bench fees" for ASLC. Any contingent funding would have to be in place for installations to be complete by April 2002."

The project has also retained a strong public education / community involvement component. While we believe that this is an important aspect of doing research and in meeting the mission of the EVOS Trustee Council, the pure restoration monitoring can stand without it. Both this component and the use of the ASLC avian habitat will involve significant "bench fees" for ASLC. I have talked with Susan Inglis at ASLC and her analysis of bench fees will include the costs associated with the project's interns. It will not include costs associated with habitat modification. That would have to be requested as a revision in response to this revised DPD and would probably have to be deferred beyond the August Trustee Council meeting.

Restating for the record and excerpted from my original letter of submission.

PEGASUS ENTERPRISES, Alaska Business License #108163, City of Seward Business License #2675, is technical services/support company of which Dr. John French is sole proprietor. Mr. Shane Roy will be contracted for the sole purposes of this project, as will any other project personnel not hired through the Alaska SeaLife Center.

PEGASUS ENTERPRISES is a qualifying small business which was originally licensed ten years ago in Kodiak and has been in Seward since January 1999. Assets of this company include, The digital photographic and video equipment, computer system, marine safety, shop tools, and some climbing equipment to be used by the project.

Finally, in addition to three paper copies of the revised DPD and revised budget, and one electronic copy, I have submitted three copies of a letter of commitment and support from Ms. Amy Haddow, ASLC Education Director, which was received too late to include in the orginal submission, three copies of the ASLC "Intern Cover Sheet" which briefly summarizes the steps and the weighting used by ASLC in recruiting interns, and three black and white copies of the color flyer we are using this year to encourage public reporting of Pigeon Guillemots within the high priority study area.

Respectfully submitted,

John S. French, Ph.D.

*Exxon Valdez* Oil Spill Trustee Council

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

907/278-8012 fax:907/276-7178



August 9, 2001

John S. French, PhD Pegasus Enterprises PO Box 1470 Seward, AK 99664-1470

George J. Divoky 4505 University Way NE #71 Seattle, WA 98105

RE: Project 02674-BAA / Assessing Pigeon Guillemot Restoration Techniques

The Exxon Valdez Oil Spill Trustee Council acted on the Fiscal Year 2002 Work Plan at its meeting on August 6, 2001. I am pleased to inform you that the Council approved funding in the amount of \$60,400 for Project 02674/Assessing Pigeon Guillemot Restoration Techniques. This includes \$39,800 in contractual funds for you, \$2,800 for NOAA's administrative costs, \$16,600 for Alaska SeaLife Center bench fees, and \$1,200 for ADF&G to administer the bench fees. A copy of the Council's action on your project is enclosed.

Before a project may begin, the lead agency for the project must provide documentation to the Executive Director showing that the requirements of the National Environmental Policy Act (NEPA) have been met. The lead agency must also execute a contract or Reimbursable Services Agreement with you. We hope that for most projects this will occur before October 1, 2001. If so, you may receive authorization from the Executive Director to begin the FY 02 project on that date. Any delay in documenting compliance, or in executing a contract, will delay start of the project. For more information, please contact the NOAA representative:

> Stacy Masters National Marine Fisheries Service P.O. Box 21668, Juneau, AK 99802 Phone 907-586-7644/Fax 907-586-7255

Projects approved for FY 02 are approved in the expectation that they will be funded to their completion. However, the Trustee Council will annually evaluate a project's future funding needs based on its progress or results to date, overall restoration needs, and restoration funding constraints. We do not yet have an FY 03 funding projection for your project. Funds for FY 03 may be considered following a review of your FY 02 results.

Thank you for your participation in the Exxon Valdez oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Stacy Masters, NOAA Sharon Kent, NOAA Contracting

mm/pdb

# TRUSTE OUNCIL ACTION (8/6/01) / FY 02 WORK PL

Proj.No. Project Title		Proposer	Lead Agency	New or T Cont'd	TC Approve 8/6/01	Defer to December	FY03 Recom.	Sum FY 02-03
02674-BAA	Assessing Pigeon Guillemot Restoration Techniques	J. French/Pegasus Enterprises, G. Divoky/UAF	NOAA	New 1st yr. 2 yr. projec	\$60.4	\$0.0		\$60.4

#### Project Abstract

This project will monitor pigeon guillemot restoration projects initiated between 1998-2000. Censuses of Resurrection Bay to determine survivorship and breeding behavior of birds fledged from the Alaska SeaLife Center will be conducted and the occupancy and success of artificial nest sites erected at the Alaska SeaLife Center, Hat Island, North Beach, and Jackpot Island will be monitored. The characteristics of these sites, the nest boxes, and reproductive behaviors observed in the avian habitat at the Alaska SeaLife Center will be assessed to delimit the efficacy of nest boxes as a restoration or monitoring tool.

#### Chief Scientist's Recommendation

This is an interesting proposal from well-qualified investigators to do follow-up work on two past EVOS projects. It proposes to determine whether fledging of guillemots at the Alaska SeaLife Center and provision of artificial nest sites might lead to establishment of an enhanced pigeon guillemot population in Resurrection Bay. This proposal will monitor pigeon guillemots returning to Resurrection Bay and other sites, including evaluation of occupancy of various artificial nest sites, which will provide worthwhile performance monitoring of restoration actions. The other components of this project (objectives 3 and 4) seem less compelling, or best carried out in the context of a broader GEM effort in the future. Fund revised proposal, which reduces the project's scope to objectives 1 and 2 only.

#### **Trustee Council Action**

Fund revised proposal, which reduces the project's scope to objectives 1 (survival and recruitment of captive raised birds) and 2 (association of pigeon guillemots with artificial nest boxes and social attraction arrays, including observation of nest boxes in the avian habitat at the Alaska SeaLife Center). This project will evaluate the effectiveness as a pigeon guillemot restoration technique of the 65 nest boxes installed under Project /327. Funds for FY 03 may be considered following a review of the FY 02 results. [Note: Funding includes \$17,800 for Alaska SeaLife Center bench fees.]

	Lingering Oil Project						
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#### November 12, 2001

To: Molly McCammon, Executive Director From: Robert B. Spies, Chief Scientist

Re: Further work on lingering oil in Prince William Sound

#### Introduction

On Monday October 29th I convened a workshop in Anchorage, Alaska on lingering oil in Prince William Sound in relation to any possible follow up. Results of the project (i.e., estimates of the area of the sound intertidal zone that is still oiled and the volume of the oil) were presented, as well as updates on indications and potential implications of lingering oil to two important species, harlequin ducks and sea otters. The first purpose of this memo is to outline a conceptual model of oil weathering and loss and the way in which the remaining oil may be continuing to expose organisms in the sound. The second purpose of the memo will summarize recommendations and findings of the workshop in relation to filling gaps in our conceptual understanding of the pathways that may be active in continuing exposure and effects of the oil. Studies totaling \$250K are recommended below for FY2002 in order to more fully investigate the potential links between remaining subtidal oil and the observed lack of recovery in sea otters and the low survival of female sea ducks in the oiled areas of Prince William Sound.

#### **Conceptual model**

Oil in the beach and mobilization: Based on this summer's sampling and the subsequent statistical projection, the actual area of oiled beach is estimated to be about 20 acres in Prince William Sound. This is more than was estimated in 1993 after the last DEC survey was conducted with different methods. The discrepancy is apparently due to differences in technique, but one of the main surprises, besides the larger estimate of oiled area, was the discovery of significant oil patches in the lower portion of the intertidal (0.0-3.6 ft MLW). This occurred at 17 of the 18 sites that were surveyed. The volume of remaining oil is currently being estimated. It is also clear that there is little relationship between surface oiling and subsurface oil on the scales of meters. Most of the subsurface oil is in the finer unsorted sediments below the armored surface, which is mainly composed of large rocks and boulders in the upper intertidal and by progressively smaller particles at lower intertidal elevations. Because of wave energy dispersion in the boulder armoring, the underlying sediments are not sorted and the oil is not mobilized much by water motion; rather it fills in the gaps between sand grains, pebbles and larger rocks, many times in continuous

masses, and persists. It appears as though the surface area-to-volume ratio of the remaining oil-sand/gravel/rock mixture is relatively low. Oil degradation is active at the oil surface-water interface only, so degradation rates will be limited by the available surface and the rates of degradation at this surface determined by temperature, oxygen and nutrients.

After discussions with Dr. Bruce Richmond, a beach geomorphologist, the probability of down-slope subsurface flow of liquid oil is low. Down-slope movement of dissolved oil components and oil metabolites in water though is still likely, especially on beaches with particularly porous structure. Dye-injection studies done in an intertidal stream mouth two years ago by Auke Bay Laboratory personnel clearly indicated sub-surface flow of interstitial water and release into the overlying water further down slope.

The areas surveyed for oil in the intertidal were not inclusive of the mussel beds that are scattered around the sound in the lower intertidal. Some mussel beds have been shown to have highly contaminanted sediments beneath them and these beds must be recognized as another source of oil in addition to the areas surveyed at higher elevations in the intertidal zone.

*Oil mobilization and bioaccumulation of oil components*: The mechanisms of oil loss and the potential pathways leading to animals such as sea ducks and sea otters are matters mainly of speculation as we have little data in this regard. However, possible mechanisms include direct dissolution and resuspension of oil back to the overlying water with subsequent bioaccumulation, microbial surfactant action, down-slope sub-surface migration and release or outflow, bioturbation by infauna and digging by sea otters and foraging by sea ducks deep in the beach.

*Recent exposure to oil*: Both sea otters and harlequin ducks collected in the oiled areas of the sound in recent seasons have elevated P4501A or EROD activity relative to unoiled areas of the sound. Analyses of PCBs in tissues indicate that there are not detectable differences in these compounds from different areas of the sound, so oil exposure appears to be responsible for such differences. However, we should not discount the possibility that PCBs may play some role in these phenomena and be alert for further assessments of chlorinated hydrocarbons in the food web. The mechanisms of exposure are not known, but possibilities include: direct oiling of pelage or plumage from released oil and ingestions of oil accumulated by bivalves or other invertebrate foods of these species.

*Effects of oil in sea otters and sea ducks*: Sea otters in the Knight Island archipelago have elevated concentrations of gamma-glutamyltransferase (GGT), an indicator of tissue damage in the liver and cholistasis (blockage of bile flow in the liver). Last season's endoscopy on anesthetized animals indicated swollen livers on

several animals from Bay Isles, i.e. the organ edges were not sharp, and the surface of the liver had a nodulized appearance. This is consistent with cholistasis. The liver biopsies taken at the time (15 animals each from oiled and unoiled areas) are still being examined by veterinary pathologists. One consistent link in the cause and effect chain would be oil exposure inducing hepatocellular vacuolization, or lipidosis, leading to swollen livers and then to cholistasis. There are other causes of hepatocellular vacuolization besides oil exposure. Cholistatis could lead to reduced survival of sea otters. Elevations of GGT have also been associated with increases in drug exposure and induction of drug-metabolizing enzymes and this would be consistent with the observed induction of P4501A, which is induced by oil and also metabolizes a variety of compounds, including oil and drugs. GGT is also a leading marker of PCB and other chlorinated hydrocarbon exposures in humans:

(<u>http://www.epa.gov/glnpo/solec/94/health/table\_7.htm</u> or see <u>http://ehpnet1.niehs.nih.gov/docs/1995/Suppl-9/feeley.html</u>) The lack of recovery of sea otters around Knight Island is a continuing phenomenon.

In sea ducks there is not evidence for a link between exposure (elevated EROD activities in liver) and the potential effect of reduced female survival. There has not been a systematic exploration of the possible links to effects, as there has been in sea otters. There is, however, a clear difference in female harlequin duck overwinter survival, with lower survival of harlequin ducks around Knight Island than in the unoiled areas. The divegence in rates of survival of radio-tagged females between oiled and unoiled areas occurs in winter, specifically in early December, based on several years' data. This appears to be an energetic phenomenon, and laboratory studies at the Alaska SeaLife Center are exploring the energetic consequences of oil exposure in harlequin ducks.

#### **Recommendations for further study**

The following recommendations are to fill in gaps or test portions of the conceptual model outlined above. The agencies that can do the work and the additional cost involved are also estimated for each of the suggested activities.

*External oiling of sea otters and sea ducks*: If direct oiling is a significant route of exposure, then it should be possible to detect oil on the pelage or plumage using fabric swipes and detection by synchronous fluorescence spectroscopy, GC/MS or antibodies.

Action/cost: Dan Esler (Simon Fraser University) will take swipes from Harlequin ducks that he will capture in the near future and have them analyzed by Auke Bay Laboratory (NOAA). If sea otter field work is extended into the next field season (see below), then additional swipes can also be taken from animals captured in oiled and unoiled areas. Cost \$5K.

*Mobilization of oil*: Hydrocarbons in water can be detected with rather simple strips of polymers deployed at various positions in the beach around pockets of remaining oil. Analyses of such strips can be done cost effectively with a UV-screening technique.

Action/cost: It is recommended that intensive sampling be carried out at some key sites in western PWS (e.g., Green Island and Bay of Isles with contrasts to Montague Island) where there are known congregations of sea otters and harlequin ducks near large remaining pockets of sub-surface oil. Work to be done under the leadership of Jeff Short of the Auke Bay Lab (NOAA). The approximate cost of this would be \$165K.

*Oil accumulation by invertebrates*: If oil is entering the food chain of sea otters, sea ducks or nearshore fishes then it should be detectable in their prey.

Action/cost: Inverebrates should be gathered at the same sites mentioned above for sampling oil mobilization processes and archived for analysis pending the outcome of water-borne hydrocarbons at these sites. Target invertebrates include: clams, snails and any large amphipods. Also any invertebrate with a significant amount of accumulated lipids is desirable to collect. Starfish gonads are good target organs as they are rich in lipid and accumulate hydrocarbons. Costs: Included in the \$165K above for NOAA Auke Bay Lab.

*Oil accumulation by intertidal fish*: Crescent gunnels were found in the vicinity of the subsurface oil deposits during last summer's surveys. These fish are likely to respond to oil exposure also with P4501A induction, as they have been shown to in the past. If oil is mobilized, then some response by these fish might be expected. Any crescent gunnels encountered in the areas being surveyed for oil next season should be collected and samples of bile retained for spectrofluorometric analyses of hydrocarbons (naphthalenes, flouranthrenenes and benzopyrenes) and several internal organs (liver, gill, kidney and heart) retained for P4501A analyses by immunohistochemistry. Cost to be determined; possible to include costs under the Auke Bay Lab contract for \$165K. Analyses may not be done until FY2003.

*Sea otter exposure and effects studies*: Further studies of sea otters seem warranted given results to date. Pending results from histopathological analyses of liver might reinforce this conclusion.

Action/cost: New efforts in FY02 should focus on collecting animals in the vicinity of identified subsurface concentrations of oil around Knight Island and Green Island (e.g., Bay of Isles). Sampling for liver to evaluate P4501A and histopathology to increase numbers of samples is recommended. Any opportunity to collect bile for spectrofluorometric analyses without compromising the animals should be utilized. Cost: see below.

*Sea duck exposure and effects*: More work on cause and effects linkages should be done in sea ducks.

Action/cost: Liver biopsies in captured sea ducks should be expanded to include a histopatholgical component in order to evaluate whether the same or related phenomenon as occurs in sea otters might also be occurring in sea ducks. There are also archived samples of livers of Barrows and common Goldeneyes that can be evaluated for both histopathology and P4501A induction. Doing these measures in the same individuals is desirable. Samples should be evaluated as soon as possible. Costs to be included in the DOI budget along with sea otters for approximately \$80K total for both species.

#### Additional costs

#### NOAA

External oiling of sea otters and sea ducks		\$5K
Mobilization of oil/oil accumulation by invertebrates & Oil accumulation by intertidal fish	3	\$165K
DOI		
Sea otter exposure and effects & Seaduck exposure and effects		\$80K
	Total	\$250K

Lower Cook Iniet Waste Management

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# LOWER COOK INLET WASTE MANAGEMENT PLAN

Project Number:	02514
Restoration Category:	General Restoration
Proposer:	Tom Turner/ADEC on behalf of Lower Cook Inlet communities
Lead Trustee Agency:	Alaska Department of Environmental Conservation
Alaska SeaLife Center:	No
Duration:	1 <sup>st</sup> yr., 2 yr. project
Cost FY 02:	\$47,900 (Phase I)
Cost FY 03:	To be determined (Phase II)
Geographic Area:	Lower Cook Inlet
Injured Resource/Service:	Intertidal and subtidal organisms, nearshore seabirds shorebirds, marine mammals; also recreation and subsistence

#### ABSTRACT

This project will promote recovery of injured resources and protect and enhance environmental quality in the lower Cook Inlet communities of Nanwalek, Port Graham, and Seldovia. In FY 99 (Project 99514), the Trustee Council funded development of a plan for a waste management program that identifies solutions to these three communities' waste management problems. The component of the plan proposed for EVOS funding relates primarily to used oil and household hazardous waste. In FY 02, this project will undertake the first phase of plan implementation, which will include site visits, training, and follow-up assistance visits by the Alaska Department of Environmental Conservation, in conjunction with the Kenai Peninsula Borough and the Chugach Regional Resources Commission, in regard to existing waste management equipment and procedures. Phase I will also include recommendations to the Trustee Council on any additional equipment needs, facility needs, and follow-up for possible funding later in FY 02.

#### INTRODUCTION

This project is designed to minimize marine pollution from land-based sources, and to promote the recovery of coastal resources damaged by the *Exxon Valdez* oil spill. Three communities impacted by the spill, Port Graham, Nanwalek and Seldovia in lower Cook Inlet, generate a variety of wastes typical of small towns. These include used oil from machines, generators and vessels and household hazardous wastes. These communities currently are building capacity for planning, equipment, training, and development of infrastructure to manage wastes in an environmentally sound manner. However, significant needs remain to be addressed. Consequently, wastes generated within the communities continue to produce a chronic source of pollution that not only hinders full recovery of the marine environment but also has a negative impact on the general quality of life.

Under Project 99514, the Alaska Department of Environmental Conservation (ADEC) contracted with Montgomery Watson to assess the waste management needs in Port Graham, Nanwalek, and Seldovia. These needs are summarized in the Lower Cook Inlet Waste Management Plan. Project 02514 will be the first phase of plan implementation. ADEC's Statewide Public Service/Compliance Assistance, in conjunction with the Kenai Peninsula Borough and Chugach Regional Resources Commission, will conduct site visits, training, and follow up assistance visits in each community. The site assessments will review the recommendations in the Montgomery Watson plan and the Stephl Engineering, LLC reviews of the plan. The site assessments will be specific to used oil collection and household hazardous waste in the communities.

There are some existing collection systems in place for used oil and household hazardous waste through the Kenai Peninsula Borough. However, the collection of household hazardous waste and used oil in these three communities has not been fully effective due to limited knowledge and training. ADEC's Statewide Public Service, with cooperation with the Kenai Peninsula Borough, will provide training on the handling of household hazardous waste and used oil. This training will build upon the existing Kenai Borough collection system while providing base knowledge in communities to implement the Lower Cook Inlet Waste Management Plan. All three communities will receive an initial site visit, training and a follow-up assistance visit.

In addition, ADEC's Statewide Public Service will make recommendations to the Trustee Council on additional activities and/or facilities to improve waste management in these three communities. These recommendations are expected by February 28, 2002 and will be presented to the Trustee Council for possible funding as Phase II in early spring 2002.

This project is modeled after the Prince William Sound Waste Management Plan (Project 96115) and the Kodiak Island Waste Management Plan (Project 99304) funded by the Trustee Council.

#### NEED FOR THE PROJECT

Prepared 12/03/01

#### A. Statement of Problem

The communities of Seldovia, Nanwalek, and Port Graham generate a variety of waste streams that may be entering, degrading and preventing the recovery of the spill area. The project team from Montgomery Watson, based on field visits and on-site interviews, assessed existing waste management practices and problems with village leaders and facility managers. Community facilitators from the Chugach Regional Resource Commission as well as City and Tribal Council representatives provided crucial input and assistance to the assessment.

Findings from the plan include the following:

- Communities annually generate used lubricating oil of more than 1,000 gallons in Seldovia, 250 gallons in Port Graham, and somewhat less at Nanwalek. Communities want to collect and re-use expended oil to generate heat.
- Discharges of oily bilge water may adversely affect marine wildlife. There is an opportunity for a centralized facility for bilge water at Seldovia Harbor.
  - Existing collection facilities and systems could be improved and their use could be enhanced.

#### B. Rationale/Link to Restoration

Pollutants entering marine waters are affecting resources and human uses injured by the oil spill. Human population growth, industrial activities and waste disposal contribute pollutants from local sources. The specific activities in this project would strengthen the communities' technical capabilities and environmental management. The project is designed to increase the communities' control and responsibility for waste management in order to identify, prevent, or limit pollution sources and associated damage.

#### C. Location

The communities in this project are Nanwalek, Port Graham, and Seldovia, which were directly affected by the oil spill. They are located on the southern side of lower Cook Inlet and must be reached by air or ocean; none have roads that connect them to other communities. Nanwalek and Port Graham are connected by a rugged trail with seasonal access for small all-terrain vehicles.

These communities depend upon subsistence resources, commercial fishing, and future development of tourism for their livelihood. Local natural resources are key to the health and well being of the residents. All project efforts will be focused on environmental management improvements and enhanced capability in these three communities.

#### COMMUNITY INVOLVEMENT AND TRADITIONAL KNOWLEDGE

Prepared 12/03/01

People in the areas affected by the oil spill remain highly concerned about the health and recovery of their local natural resources. Each of the three communities has a Community Facilitator and is fully engaged in developing this project through the local governing council and community leaders. Several drafts of the Lower Cook Inlet Waste Management Plan were reviewed and discussed with each community prior to submittal to EVOS.

The Chugach Regional Resources Commission, which aids the environmental coordination needs of communities affected by the oil spill, will participate in the project, working closely with each community and ensuring that local concerns, knowledge, and needs are successfully addressed.

#### **PROJECT DESIGN**

#### A. Objectives

The overall objective of the project is to minimize marine pollution from land-based sources in Port Graham, Nanwalek, and Seldovia. The objectives of Phase I are to:

- 1. Conduct site visits, training, and follow-up assistance visits, with the participation of the Kenai Peninsula Borough and the Chugach Regional Resources Commission, in regard to existing used oil and household hazardous waste management equipment and procedures.
- 2. Develop recommendations to the Trustee Council on any additional equipment needs and follow-up (for a possible Phase II).

#### **B.** Methods

**Conduct Site Assessments:** The community site assessments/visits will review, assist and train the communities on used oil management, hazardous waste identification and handling procedures.

**Develop Procedures:** Procedures will be outlined for the operation and maintenance of equipment and the handling of used oil and household hazardous waste. Trainees will learn and work with more efficient means of managing the flow of used oil and household hazardous waste.

**Conduct Training:** Trainees will learn (a) the best method for storage, handling, filtering, record keeping and disposal procedures for used oil; (b) the advantages and disadvantages of used oil units and projected maintenance costs; (c) assembly and start-up procedures for Smart Ash Burners and the "do's and don'ts " of working with these units; (d) procedures for the proper routine maintenance of used oil burners, including changing oil filters, elimination of water, cleaning, etc.; (e) about household hazardous waste exchanges and other options to reduce household hazardous waste disposal costs; (f) maintenance procedures to reduce used oil leaks and spills; (g) routine inspections for residential home heating tanks, including repair of leaking fuel lines, valves and storage tanks, controlling spills and proper spill reporting procedures; and

Project 02514

(h) about the village's bulk fuel tanks in order to be able to detect a problem and to assist in the event of a spill situation. In addition, trainees will develop local procedures for residents to place their used oil in sheds and collection tanks, develop a community awareness program and teach residents how to prevent spills. Training will also include a site visit to Kodiak to review successful used oil collection centers in communities there; this will be a peer training opportunity with existing operators in Old Harbor and Ouzinkie.

**Review Scrap Metal/Hazardous Material Procedures**: Procedures to identify, remove and dispose of hazardous material in Scrap Metal Pile and junk vehicles will be reviewed.

**Prepare Operating & Maintenance Manuals:** O&M manuals will be prepared for used oil collection and household hazardous waste procedures.

**Review Procedures to Identify, Store and Label Household Hazardous Wastes**: Training will include how to read labels for proper identification of container contents, how to store similar materials together and separate from other possibly incompatible materials, and under what category to label materials for disposal.

#### C. Cooperating Agencies, Contracts, and Other Agency Assistance

Phase I of this project will be carried out in cooperation with the Kenai Peninsula Borough, the Chugach Regional Resources Commission, and the community governments of Nanwalek, Port Graham, and Seldovia.

#### SCHEDULE

#### A. Measurable Project Tasks (Phase 1 only)

Jan. 2002	Site visit to each community
Feb. 28, 2002	Submit recommendations on any additional equipment needs, facility
	needs, and follow-up to Trustee Council that might be addressed in a
	Phase II of the project
Jan-June 2002	Training and follow-up visits in each community

#### B. Project Milestones and Endpoint (Phase 1 only)

Phase I	
By 2/28/02:	Submit recommendations on any additional equipment needs,
	facility needs, and follow-up to Trustee Council
By 6/02:	Complete site visits, training, and follow-up visits in each
	community

#### C. Completion Date

Phase I will be completed by June 2002. Any additional phases (depending on Phase I recommendations regarding any additional equipment needs, facility needs, or follow-up) will be brought before the Trustee Council later in FY 02 and will likely continue into FY 03.

#### PUBLICATIONS AND REPORTS

A written set of recommendations regarding any additional equipment needs or follow-up will be submitted to the Restoration Office by February 28, 2002.

#### PROFESSIONAL CONFERENCES

No attendance at professional conferences is included in this proposal.

#### NORMAL AGENCY MANAGEMENT

The project is not a requirement of state statute or regulation. This project is similar to the Prince William Sound Waste Management Plan (Project 96115) and Kodiak Waste Management Plan (Project 99304) funded by the Trustee Council.

#### COORDINATION AND INTEGRATION OF RESTORATION EFFORT

Because the Kodiak Waste Management Project (Project 99304) is in progress, there will be an opportunity to review and adapt lessons learned from that project. This will help ensure that full benefits to restoration can be achieved and sustained through project activities and community improvements in lower Cook Inlet.

#### **EXPLANATION OF CHANGES IN CONTINUING PROJECT**

Not applicable.

#### PROPOSED PRINCIPAL INVESTIGATOR

Tom Turner, Manager Compliance Assistance Office Division of Statewide Public Service Alaska Department of Environmental Conservation 555 Cordova Street Anchorage, Alaska 99501 907-269-7582 ph 907-269-7578 fx

Prepared 12/03/01

Project 02514

### Tom Turner@envircon.state.ak.us

### OTHER KEY PERSONNEL

Patty Brown-Schwalenberg Executive Director Chugach Regional Resources Commission 4201 Tudor Centre Drive, Suite 300 Anchorage, AK 99508 907-562-6647 phone 907-562-4939 fax Alutiiqpride@acsalaska.net

Prepared 12/03/01

October 1, 2001 - September 30, 2002

	Authorized	Proposed	
Budget Category:	FY 2001	FY 2002	
Personnel		\$20.0	
Travel		\$8.0	
Contractual		\$11.9	
Commodities		\$3.4	
Equipment		\$0.8	LONG RANGE FUNDING REQUIREMENTS
Subtotal	\$0.0	\$44.1	Estimated
General Administration		\$3.8	FY 2003
Project Total	\$0.0	\$47.9	
			Dollar amounts are shown in thousands of dollars.
Other Resources			
Comments:			
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· .			
[ <u></u>			
······································	Project Nur	nher: 0251	4 FORM 3A
		NUCL OVOR CO	ock Inlet Waste Management Plan TRUSTEF
FY02			
	Implementa	ation: Phase	
	Agency: Al	DEC	

Prepared: 11/30/01

October 1, 2001 - September 30, 2002

Personnel Costs:		GS/Range/	Months	Monthly		Proposed
Name	Position Description	Step	Budgeted	Costs	Overtime	FY 2002
						0.0
D. Marcolle			2.0	5.7		11.4
D. Lundine			1.5	5.7		8.6
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
<i>i</i>						0.0
						0.0
	Subtota		3.5	11.4	0.0	各國際運動學家主
				Per	sonnel Total	\$20.0
Travel Costs:		Ticket	Round	Total	Daily	Proposed
Description		Price	Trips	Days	Per Diem	FY 2002
						0.0
Site visits (3 each Seldovia	a, Port Graham, Nanwalek)	250.0	18	24	100.0	6.9
(Marcolle &	Lundine)					
Peer training trip to Kodiak	(Marcolle & Lundine)	325.0	2	4	100.0	1.1
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
					Travel Total	\$8.0
		······		······		·
	Project Number: 02514					FORM 3B
	Ducket Titles Lawer Oach late M	- ata Mana				Dorsonnol
FY02	Project Little: Lower Cook Inlet Wa	aste managel	ment Plan		1	
	Implementation: Phase I					& Iravel
	Agency: ADEC					DETAIL

October 1, 2001 - September 30, 2002

Contractual Costs	3:	Proposed FY 2002
Chugach Reg	ional Resources Commission [NOTE: This contract may be handled through ADF&G rather than ADEC; this is still under discussion.]	11.4
Printing Used	Oil promo.	0.5
When a non-truste	e organization is used, the form 4A is required.	al \$11.9
Commodities Cos	sts:	Proposed
Description		FY 2002
Miscellaneous	tools (wrenches, screwdrivers, transfer pumps, valves, etc.)	1.5
NORA handou	uts .	0.2
Evacuator pur	nps	0.1
Self-priming p	umps	0.4
Miscellaneous	connectors and pipes	0.4
Carrying case		0.3
Smart Media	equipment	0.3
Reprints of Ru	ural Used Oil info.	0.2
	Commodities Tota	1 \$3.4
	Project Number: 02514	
EV02	Project Title: Lower Cook Inlet Waste Management Plan	ontractual &
1102	Implementation: Phase I	ommodities
		DETAIL
L		

# FY 02 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET October 1, 2001 - September 30, 2002

New	Equipment Purchases:		Number	Unit	Proposed
Des	cription		of Units	Price	FY 2002
					0.0
}	Digital camera 4.0 mega pix				0.8
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
			Į –		0.0
					0.0
Tho	se nurchases associated wit	h replacement equipment should be indicated by placement of an R	New Eas	unment Total	\$0.8
	ting Equipment Usage:	The placement equipment should be indicated by placement of arrive		Number	
	crintion	· · · · · · · · · · · · · · · · · · ·		of Unite	Agency
003				01 01113	Agency
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	······		<u> </u>	<u>.</u>	I
[		Project Number: 02514			
		Project Title: Lower Cook Injet Waste Management Plan			
1	FY02	r logeot fille. Lower Oook iniet waste Management Plan			quipment
		Implementation: Phase I			DETAIL
		Agency: ADEC		L	

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October 1, 2001 - September 30, 2002

Rudget Cotegory	Authorized	Proposed						
	<u> </u>	FT 2002						
Personnel		\$6.5						
Travel		\$3.3						
Contractual		<u>\$0.0</u>						
Commodities		\$0.0			3 治疗的病毒。 化疗疗法	运行 路径 5 条 的 计 图		
Equipment		\$0.0	AND COLOR / AND	LONG R	ANGE FUND		EMENTS	ne internetien (die seinen einen
Subtotal	\$0.0	\$9.9	Estimated	[		1		
Indirect	+	\$1.5	FY 2003	i	ļ		1	
Proiect Total	\$0.0	\$11.4						
						SAMES JAMAL		
Full-time Equivalents (FTE)						<b>不可同的</b> 在199		
		Dollar amounts are shown in thousands of dollars.						
Other Resources								
Comments:								
								·
	Project Nur	mber: 0251	4					
	Project Title	a: Lower Co	Nok Inlet Wa	ste Manade	ment Plan			FORM 4A
FY02	Implement	stion: Dhan		ste manager	nontriall		1 1	Non-Trustee
		auon. Phase	;   		!			SUMMARY
<u> </u>	IName: Chi	ugach Regi	onal Resour	ces Commis	ssion			

Prepared:

October 1, 2001 - September 30, 2002

Der	annal Casta				5.0 ··· · 1		
rers	sonnei Costs:			Months	Monthly		Proposed
	Name	Position Description		Budgeted	Costs	Overtime	FY 2002
			1.111111111111111111111111111111111111				0.0
	CRRC rep (for community si	ite visits and peer training trip to Kodiak)	建立的建筑的	8 days			2.9
			学校 から				0.0
	Stipends for 3 trainees (1 ea	, ach from Seldovia, Port Graham,					3.6
	Nanwalek) for 8 days each a	at \$150/day					0.0
		·····,	化学生和国族学				0.0
			使常常素加生活	ļ			
274							0.0
			2. 这些话题。				0.0
			全体的重新。 1993年1月1日 1993年1月1日				0.0
			· · · · · · · · · · · · · · · · · · ·				0.0
							0.0
調整							0.0
		Subtotal	<b>经扣押</b> 的利用的利用	0.0	0.0	0.0	
L					Per	sonnel Total	\$6.5
Trav	vel Costs:		Ticket	Round	Total	Daily	Proposed
	Description		Price	Trips	Days	Per Diem	FY 2002
		•					0.0
100 100 100	Site visits (1 each Seldovia,	Port Graham, Nanwalek)	250.0	3	6	100.0	1.3
	(CRRC repres	sentative)					
開始							
	Peer training trip to Kodiak (	CRRC representative and 1 trainee	300.0	4	8	100.0	2.0
同時為	each from Se	Idovia, Port Graham, Nanwalek)	1				0.0
1983							0.0
國際							0.0
132位		· ·					0.0
開設							0.0
							0.0
						-	0.0
						<b>T</b> . 1 <b>T</b> ( 1	0.0
<u> </u>							\$3.3
	<u></u>						
		Project Number: 02514				F	Form 4b
		Project Title: Lower Cook Inlet Wa	este Manage	ment Plan		1	Personnel
	FY02		aste manaye			•	8 Trovol
		Implementation: Phase I	_				o navel
			DETAIL				

October 1, 2001 - September 30, 2002

Contractual Costs:			Proposed
Description			FY 2002
		Contractual Total	
Commodities Costs			Proposed
Description			FY 2002
· · ·			
		· · · ·	
		Commodities Total	\$0.0
	Project Number: 02514	FC	RM 4B
EV02	Project Title: Lower Cook Inlet Waste Management Plan	Cont	tractual &
FTU2	Imlementation: Phase I	Com	nmodities
	Name: Churach Regional Resources Commission	D   D	ETAIL

October 1, 2001 - September 30, 2002

New Equipment Purchases:		Number	Unit	Proposed
Description		of Units	Price	FY 2002
				0.0 0.0 0.0 0.0
Those purchases associated with	replacement equipment should be indicated by placement of an R.	New Equ	ipment Total	\$0.0
Existing Equipment Usage:			Number	
Description			of Units	
FY02	Project Number: 02514 Project Title: Lower Cook Inlet Waste Management Plan Implementation: Phase I Name: Chugach Regional Resources Commission		F	ORM 4B quipment DETAIL

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<u>Habitat</u>	
Status Report	

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# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

# Habitat Protection Program: Small Parcel Status Report DRAFT November 29, 2001

The *Exxon Valdez* Oil Spill Trustee Council funds the acquisition of land to protect the habitat of resources and services injured by the spill. Since 1993, the Council has committed over \$363 million to protect 643,635 acres of land. Most of the land is in large tracts (generally over 1,000 acres) that protect ecosystems and watersheds, but some is in smaller tracts (generally under 1,000 acres) with unique habitat or strategic value. This is a report on the status of the Small Parcel Habitat Protection Program.

	Acres Acquired	Cost
Large Parcels	635,770	\$343.3 million
Small Parcels	7,865	\$20.5 million
Total:	643,635	\$363.8 million

**Funds Available (Table 1).** By resolution dated March 1, 1999, the Trustee Council has designated \$6.3 million for small parcels through 2002, as outlined in Table 1. The Council has also designated \$25 million for habitat protection beginning October 1, 2002, when spending from the Restoration Reserve will begin.

**Outstanding Offers (Table 2).** This table lists small parcels on which the Council has made purchase offers (\$370,750 to purchase 128 acres). All of these parcels are also listed in Table 1.

**Parcels Under Consideration by the Council (Table 3).** This table lists small parcels that the Council is considering acquiring (roughly 275 acres). The Council has authorized funding for appraisals, but has not authorized funding to purchase these parcels. All of these parcels are also listed in Table 1.

Acquisitions to Date (Table 4). This table lists small parcels that have been purchased with Trustee Council funds. To date, the Council has spent \$20.5 million to purchase 7,865 acres of land in small parcels.



Small Parcel Status Report November 29, 2001

## Table 1. Funds Available

Amount Designated for Small Parcel Acquisitions through 2002:	\$6,314,900
Acquisitions completed	- 1,991,400
Support costs	- 865,600
Outstanding offers:	
Kodiak Tax / Larsen Bay Shareholder - 5 parcels	- 67,750
PWS 05 / Valdez Duck Flats	- 125,000
PWS 06 / Valdez Duck Flats	- 100,000
KEN 294 / Elliot, Anchor River	- 78,000
Under consideration (costs are estimates only):	
KEN 309 / Icicle Seafoods, Ninilchik River	- 112,000
KEN 310 / Swartzes Enterprises, Ninilchik River	- 30,000
KAP 283 / Metrokin (Chiniak Bay, AMNWR)	- 60,000
KAP 285 / Carlson (Hook Bay, APNWR)	- 120,000
Grant to non-profits	- 1,000,000
Designated for PWS 1010 / Jack Bay	- 1,130,000
Designated for additional Kodiak Tax / Larsen Bay parcels	- 135,150
Designated for Tatitlek homesites	- 180,000
Designated for Koniag large parcel acquisition	- 50,000
UNDESIGNATED BALANCE:	\$ 270,000

### Amount Designated for Habitat Protection Beginning October 2002:

\$25,000,000

# Table 2. Outstanding Offers

Parcel ID	Description	Acres	Value	Status
Purchase A	50.0	\$67,750		
KAP 1098	LBS/C.F. (Amook Bay)	9.3	\$13,750	Will be in 12/01 court notice.
KAP 2000	LBS/C.F. (Amook Bay)	10.7	\$15,000	Will be in 12/01 court notice.
KAP 2019	LBS R. Christensen (Browns Lagoon)	10.0	\$12,000	Court noticed 2/5/01.
KAP 2042	LBS D. Abston (Uyak Bay)	10.0	\$15,000	
KAP 2069	LBS J. Johnson (Uyak Bay)	10.0	\$12,000	Will be in 12/01 court notice.
Offers Under Review by Landowners		77.8	\$303,000	
PWS 05	Valdez Duck Flats	33.0	\$125,000	Offer expires 9/1/02.
PWS 06	Valdez Duck Flats	. 25.0	\$100,000	Offer expires 9/1/02.
KEN 294	Eliot (Anchor River)	19.8	\$78,000	Offer expires 9/1/02.
	TOTAL:	127.8	\$370,750	

# Table 3. Parcels Under Consideration by the Council

Parcel ID	Description	Acres	Comments
KEN 309	Icicle Seafoods (Ninilchik River)	4.2	Appraisal approved.
KEN 310	Swartzes Enterprises (Ninilchik River)	0.2	Appraisal authorized 7/5/00.
KAP 283	Metrokin (Chiniak Bay, AMNWR)	110.3	Appraisal authorized 7/5/00.
KAP 285	Carlson (Hook Bay, APNWR) <i>TOTAL</i>	160.0 <b>274.7</b>	Appraisal authorized 7/5/00.
Small Parcel Status Report November 29, 2001

Parcel ID	Description	Acres	Cost	. Comments
Prince William S	ound (PWS)	449.9	\$1,907,300	
PWS 11	Horseshoe Bay (Chenega)	315.0	\$475,000	
PWS 17, 17A-D	Ellamar Subdivision (Tatitlek)	33.4	\$655,500	
PWS 52	Hayward (Valdez)	9.5	\$150,000	
PWS 1056	Blondeau (Valdez)	92.0	\$626,800	
Kenai Peninsula	(KEN)	5,725.4	\$15,896,100	····
KEN 10	Kobylarz Subdivision (Kenai River)	20.0	\$320,000	
KEN 19	Coal Creek Moorage (Kasilof R.)	53.0	\$260,000	
KEN 29	Tulin (Homer)	220.0	\$1,200,000	
KEN 34	Cone (Kenai River)	100.0	\$600,000	
KEN 54	Salamatof (Kenai River)	1,377.0	\$2,540,000	
KEN 55	Overlook Park (Homer)	97.0	\$279,000	
KEN 148	River Ranch (Kenai River)	146.0	\$1,650,000	
KEN 1002/03/04	Stephanka/Moose R. (KNA Pkg.)	3,254.0	\$4,000,000	454 of these acres purchased with \$443,000 in federal restitution funds.
KEN 1005	Ninilchik (Ninilchik State Rec Area)	16.0	\$50,000	
KEN 1006	Girves (Kenai River)	110.0	\$1,835,000	
KEN 1014	Grouse Lake (Seward)	64.0	\$211,000	
KEN 1015	Lowell Point (Seward)	19.4	\$531,000	
KEN 1034	Patson (Kenai River)	76.3	\$450,000	
KEN 1038	Roberts (Kenai River)	3.3	\$698,000	
KEN 1049	Mansholt (Kenai River)	1.6	\$55,000	
KEN 1051	Salamatof (Kenai River)	14.5	\$149,500	
KEN 1052	Salamatof (Kenai River)	6.6	\$33,500	
KEN 1060A-D	Mud Bay (Homer Spit)	68.7	\$422,100	
KEN 1061	Beluga Slough (Homer Spit)	38.0	\$574,000	City of Homer added \$41,000.
KEN 1084	Morris (Ninilchik River)	40.0	\$38,000	Includes \$2.3 from KIB tax pot.
Kodiak/Alaska P	eninsula (KAP)	1,689.9	\$2,661,300	
KAP 91	Adonga (Sitkalidak Strait)	137.0	\$137,000	Native Allotment
KAP 95	Inga (Three Saints Bay)	80.0	\$84,000	
KAP 98	Pestrikoff (Kiliuda Bay)	80.0	\$128,000	Native Allotment
KAP 99	Shugak (Kiliuda Bay)	160.0	\$155,200	Native Allotment
KAP 101	Haakanson (Sitkalidak Strait)	80.0	\$52,000	Native Allotment
KAP 103	Kahutak (Sitkalidak Strait)	40.0	\$66,000	Native Allotment
KAP 105/142	Pestrikoff/Kelly (Three Saints Bay)	88.0	\$168,000	Native Allotment
KAP 114	J. Johnson (Uyak Bay)	55.0	\$154,000	Native Allotment
KAP 115	J. Johnson (Uyak Bay)	65.0	\$110,500	Native Allotment
KAP 126	C. Christiansen (Three Saints Bay)	40.0	\$72,000	
KAP 131	Matfay (Kiliuda Bay)	40.0	\$68,000	Native Allotment
KAP 132	Peterson (Sitkalidak Strait)	160.0	\$256,000	Native Allotment
KAP 134	Ignatin (Three Saints Bay)	80.0	\$72,300	Native Allotment
KAP 135	Capjohn (Kiliuda Bay)	70.0	\$73,500	Native Allotment
KAP 220	Mouth of Ayakulik River	5.4	\$80,000	
KAP 226	Karluk River Lagoon	16.3	\$240,000	
KAP 1089	LBS R. Christensen (Amook Bay)	8.1	\$13,000	
KAP 1090	LBS D. Naumoff (Amook Bay)	7.7	\$16,000	
KAP 1091	LBS D. Easter (Amook Bay)	10.4	\$18,000	

Table 4. Acquisitions to Date

Small Parcel Status Report November 29, 2001

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KAP 1092	LBS/C.E. (Amook Pass)	97	\$12 000
KAP 1092	LBS/C.F. (Brown Lagoon)	10.0	\$12,000
KAP 1090	LBS/C.F. (Brown Lagoon)	13.2	\$15,000
KAD 1005	LBS/C.F. (Brown Lagoon)	8.9	\$18,000
KAD 1000	LBS/C E (Amook Bay)	10.0	\$11,000
KAP 1090	LBS/C E (Amook Bay)	11.0	\$15,000
KAF 1097	LBS/C.F. (Amook Bay)	Q 1	\$15,000
KAP 1099	LBS/C.F. (Anounday)	10.4	\$20,000
KAP 2001	LBS/C.F. (Uyak Bay)	. 83	\$15,000
KAP 2002	LDS/C.F. (Uyak Day)	0.3	\$15,000
KAP 2003	LBS/C.F. (Uyak Bay)	9.7	\$10,000 \$15,000
KAP 2004	LBS/C.F. (Uyak Bay)	7.0	\$10,000 ¢17,000
KAP 2005	LBS/C.F. (Uyak Bay)	6.9 0.5	\$17,000 ¢12,000
KAP 2006	LBS/C.F. (Uyak Bay)	8.5	\$13,000
KAP 2007	LBS/C.F. (Uyak Bay)	12.3	\$14,000
KAP 2009	KIB Tax Parcel (Zachar Bay)	9.9	\$16,000
KAP 2010	KIB Tax Parcel (Zachar Bay)	4.7	\$16,000
KAP 2011	KIB Tax Parcel (Amook Pass)	13.4	\$18,000
KAP 2012	KIB Tax Parcel (Browns Lagoon)	10.0	\$9,000
KAP 2013	KIB Tax Parcel (Arnook Pass)	10.0	\$18,000
KAP 2014	KIB (Amook Pass)	10.4	\$19,000
KAP 2015	KIB Tax Parcel (Amook Pass)	11.1	\$12,000
KAP 2016	KIB (South Uyak Bay)	6.0	\$18,000
KAP 2017	KIB Tax Parcel (S. Uyak Bay)	7.9	\$18,000
KAP 2024	LBS/C.F. (Uyak Bay)	8.6	\$16,000
KAP 2036	LBS J. Penkusky (Carlsen Point)	10.0	\$22,000
KAP 2038	LBS G. Johnson (Uyak Bay)	10.0	\$18,000
KAP 2039	LBS R. Penwarden (Uyak Bay)	10.0	\$18,000
KAP 2040	LBS P. Abston (Uyak Bay)	10.0	\$11,000
KAP 2044	LBS J. Antonsen (Larsen Bay)	10.0	\$22,800
KAP 2045	LBS J. Antonsen (Larsen Bay)	10.0	Included in
	· · · ·		KAP 2044
KAP 2046	LBS V. Abston (Uyak Bay)	10.0	\$15,000
KAP 2048	KIB Tax Parcel (Uyak Bay)	10.0	\$12,000
KAP 2049	KIB Tax Parcel (Uyak Bay)	10.0	\$12,000
KAP 2050	KIB Tax Parcel (Uyak Bay)	10.0	\$11,000
KAP 2052	KIB Tax Parcel (Carlsen Point)	10.0	\$15,000
KAP 2053	KIB Tax Parcel (Carlsen Point)	10.0	\$9,000
KAP 2054	KIB Tax Parcel (Carlsen Point)	10.0	\$9,000
KAP 2055	KIB Tax Parcel (Zachar Bav)	10.0	\$18,000
KAP 2056	KIB Tax Parcel (Larsen Bay)	10.0	\$12,000
KAP 2057	KIB Tax Parcel (Larsen Bav)	10.0	\$14,000
KAP 2058	KIB Tax Parcel (Larsen Bay)	10.0	\$17,000
KAP 2059	KIB Tax Parcel (Larsen Bay)	10.0	\$12,000
KAP 2063	I BS J Johnson (Larsen Bay)	10.0	\$10,500
KAP 2064	LBS N. Johnson (Larsen Bay)	10.0	\$10,500
KAP 2065	LBS P. Hester (Amook Pass)	10.0	\$13,500
KAP 2066	I BS J Johnson (Larsen Bav)	10.0	\$11.500
KAP 2067	I BS J. Wicks (Zachar Bay)	10.0	\$18,000
KAP 2068	I BS J. Wicks (Zachar Bay)	10.0	\$18.000
1011 2000	ΤΟΤΑΙ -	7.865.2	\$20.464.700
		- ,	

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Exxon Valdez Oil Spill Trustee Council

441 W. 5<sup>th</sup> Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

## Habitat Protection Program: Large Parcel Status Report DRAFT November 28, 2001

The *Exxon Valdez* Oil Spill Trustee Council funds the acquisition of land to protect the habitat of resources and services injured by the spill. Since 1993, the Council has committed \$363.7 million to protect 643,585 acres of land. Most of the land is in large tracts that protect larger ecosystems and watersheds, but some is in smaller tracts with unique habitat or strategic value. This is a report on the status of the Large Parcel Habitat Protection Program.

	Acres Acquired	Cost
Large Parcels	635,770	\$343.3 million
Small Parcels	7,865	\$20.5 million
Total:	643,635	\$363.8 million

Large Parcel Acquisitions (Table 1). The Council has committed \$343.3 million to protect 635,770 acres of land in large parcels, including inholdings in Kachemak Bay State Park, land on Afognak Island, commercial timber rights on land along Orca Narrows, a parcel on Shuyak Island, and lands formerly owned by Afognak Joint Venture, Akhiok-Kaguyak, Inc., Old Harbor Native Corporation, Koniag, Inc., Chenega Corporation, English Bay Corporation, Tatitlek Corporation and Eyak Corporation.

Large Parcel Offers (Table 2). In January 2001 the Council offered \$29.95 million to Koniag, Inc. to extend the limited-term nondevelopment easement on 55,402 acres along the Karluk and Sturgeon rivers for another ten years. This offer has been approved by the Koniag Board of Directors. Final closing documents are being prepared and are expected to be signed early in 2002.

**Payment Schedules (Table 3).** Payment for the Eyak and Shuyak Island parcels are being made in installments. About \$68.3 million has already been paid for these parcels. An additional \$18.8 million is due on these parcels and will be paid in installments by October 2002. Payment schedules are shown in Table 3.

Additional Protection Possibilities. In March 2000, the Trustee Council authorized appraisal of approximately 1,850 acres of lands owned by the Karluk Village IRA Council. An appraisal has been completed. The landowner is now considering what type of protection/acquisition package they could support.

**Negotiations Halted.** Port Graham Corporation has officially withdrawn from any further negotiations at this time.



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		Total Price	Trust	Other
Parcel Acquired	Acreage	(Incl. Interest)	Fund	Sources <sup>1</sup>
Afognak Joint Venture (AJV)	41,750	\$74,023,342	\$74,023,342	\$0
Akhiok - Kaguyak, Inc.	115,973	\$46,000,000	\$36,000,000	\$10,000,000
Chenega	59,520	\$34,000,000	\$24,000,000	\$10,000,000
English Bay <sup>2</sup>	32,537	\$15,371,420	\$14,128,074	\$1,243,346
Eyak	75,425	\$45,129,854	\$45,129,854	\$0
Kachemak Bay State Park Inholdings	23,800	\$22,000,000	\$7,500,000	\$14,500,000
Koniag (easement to 12/15/01)	55,402	\$2,000,000	\$2,000,000	\$0
Koniag (fee title)	59,674	\$26,500,000	\$19,500,000	\$7,000,000
Old Harbor <sup>3</sup>	31,609	\$14,500,000	\$11,250,000	\$3,250,000
Orca Narrows (timber rights)	2,052	\$3,450,000	\$3,450,000	\$0
Seal Bay / Tonki Cape	41,549	\$39,549,333	\$39,549,333	\$0
Shuyak Island	26,665	\$42,000,000	\$42,000,000	\$0
Tatitlek	69,814	\$34,719,461	\$24,719,461	\$10,000,000
TOTAL:	635,770	\$399,243,410	\$343,250,065	\$55,993,346

## Table 1. Large Parcel Acquisitions

### Table 2. Large Parcel Offers

		Total Offer	Trust	Other
Parcel	Acreage	(plus interest)	Fund	Sources
Koniag (easement 12/15/01-10/15/02)	(above)	\$300,000	\$150,000	\$150,000
Koniag (easement 10/15/02- on)	(above)	\$29,800,000	\$29,800,000	\$0
TOTAL:		\$30,100,000	\$29,950,000	\$150,000

### Table 3. Payment Schedules

		_AJV	Evak	Shuvak	Total
Amount Paid		\$74,023,342	\$38,129,854	\$30,194,266	\$142,347,462
Remaining Comn	nitment				
Sept. 2002		\$0	\$7,000,000	\$0	\$7,000,000
Oct. 2002		\$0	\$0	\$11,805,734	\$11,805,734
	TOTAL:	\$74,023,342	\$45,129,854	\$42,000,000	\$161,153,196

<sup>2</sup> The Trustee Council's contribution to the English Bay acquisition consisted of a single payment to the federal government. The federal government's first closing on English Bay occurred in November 1997. Subsequent closings will occur through October 2002 to complete the acquisition.

<sup>3</sup> As part of the protection package, the Old Harbor Native Corporation agreed to protect an additional 65,000 acres of land on Sitkalidak Island as a private wildlife refuge.

<sup>&</sup>lt;sup>1</sup> For Kachemak Bay State Park inholdings, other funding is a State of Alaska contribution of \$7 million from the Exxon plea agreement and \$7.5 million from the civil settlement with the Alyeska Pipeline Service Company. For all other parcels, funding from other sources consists of a Federal contribution from the Exxon plea agreement.

#### Large Parcel Acquisitions

Afognak Joint Venture. In November 1998, Afognak Joint Venture transferred to the state and federal governments surface title to about 41,350 acres of land on northern Afognak Island and easements on an additional 400 acres. Surface title was acquired in parcels adjacent to Shuyak Strait, adjacent to the Kodiak Island National Wildlife Refuge, east of Pauls and Laura Lakes, and adjacent to Tonki Bay, and several islands in Perenosa Bay and Blue Fox Bay. Afognak Joint Venture retained timber rights for 15 years in about 2,213 acres acquired to the east of Pauls and Laura Lakes. The acquisition included a conservation easement preserving a 200-foot buffer along the western shores of Pauls and Laura Lakes and easements for the operation of weir sites on the eastern shore of Waterfall Creek and at the mouth of Pauls Creek. The total purchase price was \$74 million.

Akhiok-Kaguyak. In May 1995, the federal government agreed to purchase from Akhiok-Kaguyak, Inc., surface title to 73,525 acres of land and conservation easements on 42,448 acres, for a total of 115,973 acres. These lands are within the Kodiak National Wildlife Refuge. The Council contributed \$36 million to this acquisition and the federal government contributed \$10 million from the federal restitution fund, for a total purchase price of \$46 million.

*Chenega.* In June 1997, the Chenega Corporation transferred to the U.S. Forest Service surface title to 20,968 acres of land and a conservation easement on an additional 22,284 acres. The corporation also transferred to the State of Alaska surface title to 16,268 acres of land in Prince William Sound. The total acreage to be protected is 59,520. Public access is allowed on all the land in the conservation easement except 3,330 acres on the southern portion of Chenega Island in the vicinity of the original Chenega village site. Two parcels acquired in fee simple, the Eshamy Bay and Jackpot Bay parcels, are among the highest ranked parcels in the oil spill area. The Trustee Council contributed \$24 million to this acquisition and the federal government contributed an additional \$10 million from the federal restitution fund, for a total purchase price of \$34 million.

*English Bay.* In February 1997, the Trustee Council authorized funds for the purchase from the English Bay Corporation of land within the Kenai Fjords National Park and the Alaska Maritime National Wildlife Refuge. Surface title to 32,537 acres of land is being acquired for \$15.37 million. Certain access rights for hunting, fishing and gathering activities will be reserved and retained by the English Bay Corporation. The Trustee Council has contributed \$14.13 million to this acquisition and the federal trustees have agreed to provide up to \$1.24 million from federal criminal restitution funds to complete the acquisition. The English Bay Corporation will commit \$500,000 from its proceeds to establish a special cultural conservation fund to survey, protect, curate and interpret archaeological sites and cultural artifacts which are associated with the lands acquired.

The Council's contribution to the English Bay acquisition consisted of a single payment to the federal government. The federal government's first closing on English Bay occurred in November 1997. Subsequent closings will occur through October 2002 to complete the acquisition.

*Eyak.* In July 1997, the Trustee Council authorized \$45 million to purchase 75,425 acres from The Eyak Corporation. The agreement includes surface title to 55,357 acres of land in eastern Prince William Sound, conservation easements on an additional 6,667 acres and timber easements on 13,401 acres. This acquisition protects habitat in the wooded shoreline areas of Nelson Bay, Eyak Lake and Hawkins Island, much of it visible from the City of Cordova. The package also includes Port Gravina, Sheep Bay and Windy Bay, which are considered among the most valuable parcels in Prince William Sound for recovery of species injured by the spill. Most of the land will be administered as part of the Chugach National Forest. One small tract will be managed by the State as part of the existing Canoe Passage State Marine Park. The total purchase price of \$45.1 million is being distributed in a series of payments to the landowner; the final payment is scheduled to occur in September 2002.

Kachemak Bay. In August 1993, the state acquired surface title to 23,800 acres of private inholdings within Kachemak Bay State Park on the Kenai Peninsula. This acquisition protects a highly productive estuary, several miles of anadromous fish streams and intertidal shoreline and upland habitat for bald eagles, marbled murrelets, river otters, and harlequin ducks. The Trustee Council contributed \$7.5 million to this purchase and the State of Alaska contributed \$7.0 million from the Exxon plea agreement and \$7.5 million from the civil settlement with Alyeska Pipeline Service Company.

Koniag. In November 1995, the federal government agreed to purchase from Koniag, Inc., surface title to 59,674 acres of prime habitat for bear, salmon, bald eagles, and other species in the Kodiak National Wildlife Refuge. The Trustee Council contributed \$19.5 million to the acquisition of fee title and the federal government contributed \$7.0 million from the federal restitution fund, for a total purchase price of \$26.5 million. The 1995 agreement also protected an additional 55,402 acres along the Karluk and Sturgeon rivers under a nondevelopment easement that will expire in early 2002. The Council paid an additional \$2.0 million for the original nondevelopment easement. On January 16, 2001 the Council approved a resolution offering to extend the easement (with the addition of Camp Island) at least ten years. The Koniag Board of Directors has accepted the Council's offer and final closing documents are being prepared. The terms of the agreement include establishment of a fund that might be tapped for acquisition at Koniag's sole discretion at some date in the future.

*Old Harbor.* In 1995, the federal government agreed to purchase from the Old Harbor Native Corporation surface title to 28,609 acres of land and the corporation donated a conservation easement on 3,000 acres. These lands are within the Kodiak National

Wildlife Refuge. In addition, the Old Harbor Native Corporation agreed to preserve 65,000 acres of land on nearby Sitkalidak Island as a private wildlife refuge. The Trustee Council contributed \$11.25 million to this acquisition and the federal government contributed \$3.25 million from the federal restitution fund, for a total purchase price of \$14.5 million.

*Orca Narrows Subparcel.* In January 1995, the federal government purchased from the Eyak Corporation commercial timber rights on 2,052 acres of land in Orca Narrows. This parcel is near Cordova in Prince William Sound and contains anadromous fish streams, active bald eagle nests and favorable habitat for marbled murrelet nesting. The Trustee Council paid \$3.45 million for this acquisition.

Seal Bay and Tonki Cape (Afognak Island). In November 1993, the state purchased surface title to 41,549 acres on northern Afognak Island. This mature spruce forest is adjacent to highly productive marine waters, includes anadromous fish streams, and provides excellent habitat for bald eagles and marbled murrelet nesting. The Trustee Council contributed \$39.5 million (including interest) to this acquisition. In 1994, the Alaska State Legislature designated these lands as the Afognak Island State Park.

Shuyak Island. In March 1996, the state purchased from the Kodiak Island Borough surface title to 26,665 acres of prime habitat on Shuyak Island, at the northern tip of the Kodiak archipelago. The purchase price was \$42 million to be paid over seven years, with the final payment scheduled to occur in October 2002. The Kodiak Island Borough agreed to commit \$6 million from the land sale to expansion of Kodiak's Fishery Industrial Technology Center.

The resolution providing funds for acquisition of lands on Shuyak Island also authorized up to \$1 million to purchase small waterfront lots forfeited to the Kodiak Island Borough because of tax delinquency. As a result of the 1980 merger of the former Larsen Bay village corporation with Koniag, Inc., the Larsen Bay Tribal Council received about 2,000 acres of land to be distributed among the shareholders of record. About 10 acres in size, these parcels occupy key waterfront locations along Uyak Bay within the boundaries of land purchased from Koniag, Inc. Kodiak Island Borough acquired some of these lots as a result of forfeitures for tax delinquencies; the rest are held by Larsen Bay shareholders. In June 1998, the Council allocated \$355,000 of the earmarked funds for the purchase of forfeited tax parcels and \$645,000 for the purchase of parcels owned by Larsen Bay shareholders. (See Small Parcel Status Report for further detail.)

*Tatitlek.* In June and October 1998, Tatitlek Corporation transferred to the state and federal governments surface title to 32,284 acres of land and conservation easements on 37,530 acres. The total acreage protected is 69,814. Two of the parcels acquired, Bligh Island and Two Moon Bay, were the third and fourth highest ranked parcels in Prince William Sound. The acquisition includes timber-only conservation easements on the north shore of Port Fidalgo and on land at Sunny Bay. The Trustee Council

The resolution providing funds for acquisition of lands from Tatitlek Corporation also designated homesite lots in the Two Moon Bay and Snug Corner Cove subdivisions as parcels meriting special consideration under the Trustee Council's small parcel process. If the United States or the State of Alaska acquires any block of six or more of these homesite lots from willing sellers, the Tatitlek Corporation will convey, at no cost, the surface fee estate to the acreage immediately behind the block of homesite lots. (See Small Parcel Status Report for further detail.)

#### **Additional Protection Possibilities**

*Karluk.* On March 16, 2000, the Trustee Council authorized the Alaska Department of Natural Resources to move forward with an appraisal, hazardous materials survey, and title search of approximately 1,850 acres owned by the Karluk Village IRA Council. The appraisal, which was completed and approved in February 2001, is \$2.2 million for a total of 2,191 acres. This consists of 1,008 acres within the Karluk River drainage (including the 5-acre Karluk weir site which was first evaluated as KAP 150 in 1994) and 1,183 acres within the Kodiak National Wildlife Refuge around Sturgeon, Grant, and Halibut lagoons (these lands are within large parcels -- KON 05 and KON 06 -- that were previously evaluated). The landowner is now considering what type of protection/acquisition package they could support.

#### **Negotiations Halted**

*Port Graham.* As indicated in a letter from board president Pat Norman, the Port Graham Corporation has withdrawn from any further negotiations with the U.S. Department of the Interior for purchase of 46,170 acres. Most of this land is within the Kenai Fjords National Park.

3 10-Acre Parcel Resolution 02-01

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We, the undersigned, duly authorized members of the *Exxon Valdez* Oil Spill Trustee Council ("Trustee Council"), after extensive review and after consideration of the views of the public, finds as follows:

1.a. In its resolution of December 11, 1995, the Trustee Council agreed to provide funding of up to \$1,000,000 for the acquisition of lands held by the Kodiak Island Borough at key waterfront locations along Uyak Bay within the Kodiak National Wildlife Refuge as a result of forfeitures for tax delinquency. On June 8, 1998, the Council by motion designated these inholdings as parcels meriting special consideration by virtue of their location within the boundaries of a large parcel of land purchased from Koniag Inc. with Trustee Council funding.

b. In its motion of June 8, 1998, the Trustee Council also agreed to authorize funding of up to \$645,000 from the previously dedicated \$1,000,000 for the purchase of privately owned approximately 10-acre parcels conveyed by the Larsen Bay Tribal Council ("Tribal Council") to tribal members. This motion designated these inholdings as parcels meriting special consideration by virtue of their location within and adjacent to the boundaries of a large parcel acquisition of land purchased from Koniag, Inc. with Trustee Council funding.

c. Subject to funding by the Trustee Council, the present owners of the surface estate of certain parcels formerly conveyed by the Tribal Council to its members, and the U.S. Fish and Wildlife Service are negotiating an agreement to sell and purchase, respectively, three such parcels. These parcels and their respective approved appraised values are identified as follows:

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EVOS Parcel	Legal	Descrip	tion	Size	Appraised
KAP# Owner	<u>Twp, I</u>	Rn <u>g, Se</u> c	<u>c-Lot</u>		Value
2071 Nickle, Gary	31S	28W	29-04	10 acres	\$12,000
2072 Fenwick, heirs of	30S	28W	18-11	10 acres	\$16,000
2073 Naumoff, Nikita	31S	28W	05-07	10 acres	\$14,000

d. Appraisals for these three parcels comprising about 30 acres total \$42,000. They have been approved by the Federal review appraiser.

e. As set forth in Attachment A, if acquired, these parcels have attributes which will restore, replace, enhance and rehabilitate injured natural resources and the services provided by those natural resources, including providing habitat for bird species for which significant injury resulting from the spill has been documented, providing key marine access for subsistence and recreational uses on the surrounding public lands.

2. Existing laws and regulations, including but not limited to the Alaska Forest Practices Act, the Anadromous Fish Protection 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 effects from logging and other development 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 natural resources and service, biologists, scientists and other resource specialists agree that, in their best professional judgment, protection of the habitat in the spill affected area to levels above and beyond that provided by existing law and regulation will have a beneficial effect on the recovery of injured resources and lost or diminished services provided by these resources;

Resolution 02-01

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3. There has been widespread public support for the protection of small parcels; and

4. The purchase of small parcels is an appropriate means to restore a portion of the injured resources and services in the oil spill area.

THEREFORE, we resolve to provide funds for the United States Fish and Wildlife Service to offer to purchase and, if the offer is accepted, to purchase all of each seller's rights and interest in the three parcels; and to provide funds necessary for closing costs recommended by the Executive Director of the Trustee Council ("Executive Director") and approved by the Trustee Council and pursuant to the following conditions:

(a) the funds (hereinafter referred to as the "Purchase Price") to be provided by the Trustee Council to the United States shall be the final approved appraised value of the respective parcels, identified above, totaling \$42,000.00;

(b) authorization for funding for any of the foregoing acquisitions shall terminate if the respective purchase agreements are not executed by June 30, 2002;

(c) filing by the United States Department of Justice and the Alaska Department of Law of a notice(s), as required by the Third Amended Order for Deposit and Transfer of Settlement Proceeds, of the proposed expenditure with the United States District Court for the District of Alaska and with the Investment Fund established by the Trustee Council within the Alaska Department of Revenue, Division of Treasury ("Investment Fund"), and transfer of the necessary monies from the Investment Fund to the United States;

(d) a title search satisfactory to the United States and the State of Alaska is completed by the acquiring government and the Seller is willing and able to convey fee simple title by warranty deed, or by limited warranty deed acceptable to the U.S. Department of Justice and the Alaska Department of Law;

Resolution 02-01

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(e) no timber harvesting, road development or any alteration of the land is to be initiated on the land without the express agreement of the acquiring government prior to purchase;

(f) a hazardous materials survey satisfactory to the United States and the State of Alaska is completed;

(g) compliance with the National Environmental Policy Act; and

(h) a conservation easement satisfactory to the U.S. Departments of Justice and the Interior and the Alaska Department of Law shall be conveyed by the seller to the State of Alaska.

It is the intent of the Trustee Council that any facilities or other development on the foregoing small parcels after acquisition shall be of limited impact and in keeping with the goals of restoration and that there shall be no commercial timber harvest nor any other commercial use of the small parcels excepting such limited commercial use as may be consistent with applicable state or federal law and the goals of restoration to pre spill conditions of any natural resource injured, lost, or destroyed as a result of the EVOS and the services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected services as described in the Memorandum of Agreement and Consent Decree between the United States and the State of Alaska entered August 28, 1991 ("MOA") and the Restoration Plan as approved by the Trustee Council ("Restoration Plan").

By unanimous consent and upon execution of the purchase agreement and written notice from the United States Fish and Wildlife Service and the Executive Director that the terms and conditions set forth herein and in the purchase agreements have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the U.S. Department of Justice to take such steps as may be necessary for withdrawal of the Purchase Price for the above referenced parcels from the appropriate account designated by the Executive Director.

Resolution 02-01

Approved by the Council at it meeting of December 11, 2001 held in Anchorage, Alaska, as affirmed by our signatures affixed below:

DAVE GIBBONS Alaska Region USDA Forest Service CRAIG TILLERY Assistant Attorney General State of Alaska

DRUE PEARCE Senior Adviser to the Secretary for Alaskan Affairs U.S. Department of the Interior JAMES BALSIGER Director, Alaska Region National Marine Fisheries Service

FRANK RUE Commissioner Alaska Department of Fish and Game MICHELE BROWN Commissioner Alaska Department of Environmental Conservation

# Attachment A to Resolution 02-01

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## Attachment A

Resolution 02-01 Three 10-Acre parcels (KAP 2071, KAP 2072, KAP 2073)

Resolution 02-01

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	Parcel ID: Gary 1 EVOS Parcel N USFWS Parcel	Vickle 10-acre Parcel Jumber KAP 2071 Number KO-124
RANK: N/A	Acreage: ~10 acres	Agency Sponsor: USFWS
Estimated Value:	\$12,000	
Location:	W <sup>1</sup> / <sub>2</sub> W <sup>1</sup> / <sub>2</sub> SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> T. 31 S., R. 28 W., Sewa District, Third Judicial D	and Fractional SW¼NE¼SW¼ of Section 29, rd Meridian, located in the Kodiak Recording istrict, State of Alaska.
Address:	1893 Holmes Rd. North Pole, Alaska 9970	5

Pursuant to the Alaska Native Claims Settlement Act, certain regional and village Native corporations were organized under Alaska law, including the village corporation for Larsen Bay, Nu-Nak-Pit, Inc., and the regional corporation, Koniag, Inc. In October 1980, these corporations, among others signed a plan of merger which provided that the corporations would merge into Koniag, Inc. and Koniag would receive all the village corporation real estate selection rights and conveyances. Pursuant to the Plan of Merger, Koniag quit claimed its interest in certain lands to Larsen Bay Tribal Council for the benefit of Tribal members. Subsequently LBTC, deeded lands in small parcels of about 10 acres each to individual tribal members. The USFWS has acquired over 50 of these small parcels from landowners willing to sell their land at appraised fair market value.

This property is located along the east shore of Amook Pass, about 10 miles southeast of the village of Larsen Bay on Western Kodiak Island. The parcel is bounded on the west by Uyak Bay. Private 10-acre parcels are located north and south. It is bounded on the east by lands owned by the Larsen Bay Tribal Council. It is encompassed within lands purchased from Koniag by the USFWS in September 1998 as part of the Koniag large parcel acquisition funded by the Exxon Valdez Oil Spill Trustee Council, which was classified as "High" value by the EVOS staff. The lands have excellent access from Uyak Bay.

The shallow water and intertidal lands surrounding this parcel provide valuable habitat for many sea ducks, most notably harlequin ducks, surf scoters and goldeneye. Pigeon guillemots, common murres, and marbled murrelets are found in large numbers throughout the shallow waters of Uyak Bay. There are 3 bald eagle nest territories located within a mile of the parcel.

Camps and cabins used for recreation and subsistence hunting and fishing are scattered throughout Uyak Bay. The potential for intrusive development is significant. Several commercial lodges operate throughout the Uyak Bay area providing clients with hunting, fishing, kayaking and wildlife viewing opportunities. Continued development in this area will adversely impact water quality and fish and wildlife habitat. The acquisition of this parcel will continue the USFWS program of preserving the restoration benefits of the surrounding Koniag large parcel acquistion and enhance sound natural resource management.

#### Parcel ID: heirs of Cynthia Fenwick 10-acre Parcel EVOS Parcel Number KAP 2072 USFWS Parcel Number KO-123

RANK: N/A	Acreage: ~10 acres	Agency Sponsor: USFWS
Estimated Value:	\$16,000	
Location:	Fractional W½SW¼NE½ E½SE¼NW¼SE¼ of Se located in the Kodiak Re Alaska.	4SE <sup>1</sup> /4 and E <sup>1</sup> /2W <sup>1</sup> /2SE <sup>1</sup> /4NW <sup>1</sup> /4SE <sup>1</sup> /4 and ection 18, T. 30 S., R. 28 W., Seward Meridian, cording District, Third Judicial District, State of
Address:	P.O. Box 1417 Sitka Alaska 99835	

Pursuant to the Alaska Native Claims Settlement Act, certain regional and village Native corporations were organized under Alaska law, including the village corporation for Larsen Bay, Nu-Nak-Pit, Inc., and the regional corporation, Koniag, Inc. In October 1980, these corporations, among others signed a plan of merger which provided that the corporations would merge into Koniag, Inc. and Koniag would receive all the village corporation real estate selection rights and conveyances. Pursuant to the Plan of Merger, Koniag quit claimed its interest in certain lands to Larsen Bay Tribal Council for the benefit of Tribal members. Subsequently LBTC, deeded lands in small parcels of about 10 acres each to individual tribal members. The USFWS has acquired over 50 of these small parcels from landowners willing to sell their land at appraised fair market value.

This property is located along the shoreline of Zachar Bay near Carlsen Point about seven miles east of the village of Larsen Bay on western Kodiak Island. The parcel is bounded on three sides, the west, north and east by lands held by the Larsen Bay Tribal Council. The parcel is bounded on the south by a private 10-acre parcel and Zachar Bay. It is encompassed by lands purchased from Koniag by the USFWS in September 1998 as part of the Koniag large parcel acquisition funded by the Exxon Valdez Oil Spill Trust, which was classified as "High" value by the EVOS staff. This parcel has good access from the beach and will provide key marine access.

The waters and intertidal habitat along this portion of Zachar Bay are biologically rich and provide very high value habitat for fish and wildlife. The area is heavily used by pigeon guillemots, common murres, and marbled murrelets. A variety of sea ducks such as harlequin ducks, black scoters, surf scoters and white-winged scoters, long tail ducks and goldeneye use the area throughout the year. The site is also important for marine mammals, with seals using a variety of bars and offshore rocks for haul outs. Black oystercatchers are abundant along the shorelines and offshore rocks. The area and the waters to the north around Carlson Point support healthy populations of sea otters. There are 5 bald eagle nest territories located within a mile of the site.

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Camps and cabins used for recreation and subsistence hunting and fishing are scattered throughout Uyak Bay. The potential for intrusive development is significant. Several commercial lodges operate throughout the Uyak Bay area providing clients with hunting, fishing, kayaking and wildlife viewing opportunities. Continued development in this area will adversely impact water quality and fish and wildlife habitat. The acquisition of this parcel will continue the USFWS program of preserving the restoration benefits of the surrounding Koniag large parcel acquisition and enhance sound natural resource management.

#### Parcel ID: Nikita Naumoff 10-acre Parcel EVOS Parcel Number KAP 2073 USFWS Parcel Number KO-63

RANK: N/A	Acreage: ~10 acres	Agency Sponsor: USFWS
Estimated Value:	\$14,000	
Location:	Fractional SE¼SE¼SE½ Meridian, located in the I State of Alaska.	of Section 5, T. 31 S., R. 28 W., Seward Kodiak Recording District, Third Judicial District,
Address:	P.O. Box 1283 Soldotna, AK 99669	

Pursuant to the Alaska Native Claims Settlement Act, certain regional and village Native corporations were organized under Alaska law, including the village corporation for Larsen Bay, Nu-Nak-Pit, Inc., and the regional corporation, Koniag, Inc. In October 1980, these corporations, among others signed a plan of merger which provided that the corporations would merge into Koniag, Inc. and Koniag would receive all the village corporation real estate selection rights and conveyances. Pursuant to the Plan of Merger, Koniag quit claimed its interest in certain lands to Larsen Bay Tribal Council for the benefit of Tribal members. Subsequently LBTC, deeded lands in small parcels of about 10 acres each to individual tribal members. The USFWS has acquired over 50 of these small parcels from landowners willing to sell their land at appraised fair market value.

This property lies along the eastern shoreline of Brown's Lagoon about seven miles east of the village of Larsen Bay on western Kodiak Island. The parcel is bounded on the north and west by a 10-acre parcel acquired by the USFWS with EVOS funds. The land to the east is Kodiak National Wildlife Refuge lands. The parcel is encompassed within lands purchased from Koniag by the USFWS in September 1998 as part of the Koniag large parcel acquisition funded by the Exxon Valdez Oil Spill Trustee Council, which was classified as "High" value by the EVOS staff.

Brown's Lagoon provides important habitat for a number of wildlife species. Pink, chum and coho salmon spawn in the river. The area is considered very high value habitat for brown bear. There are 5 bald eagle nest territories in the Brown's Lagoon area. A large numbers of oyster catchers use the shoreline of the parcel. High densities of pigeon guillemots use the lagoon year round, and nest in the small hillsides along the lagoon. Sea ducks including goldeneye, harlequin ducks, surf scoters, black scoters, and long tail ducks commonly use the Lagoon. Sea birds, including common murres and marbled murrelets, are common as well.

A cabin is located at the upper end of Brown's Lagoon. Other camps and cabins used for recreation and subsistence hunting and fishing scattered throughout Uyak Bay. The potential for intrusive development is significant. Several commercial lodges operate throughout the Uyak Bay area providing clients with hunting, fishing, kayaking and wildlife viewing opportunities.

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Continued development in this area will adversely impact water quality and fish and wildlife habitat. The acquisition of this parcel will continue the USFWS program of preserving the restoration benefits of the surrounding Koniag large parcel acquistion and enhance sound natural resource management.





