13.08.01 – Reading File

July 2004

509 1st Street P.O. Box 1388 Cordova, Alaska 99574-1388 Ph (907) 424-7738 * Fax (907) 424-7739



10,000 years in our Traditional Homeland, Prince William Sound, the Copper River Delta, & the Gulf of Alaska

Gail Phillips, Executive Director EVOS Trustee Council 441 West 5th. Ave., Suit 500 Anchorage, Alaska 99501-2340

July 26, 2004

Dear Gail

The Native Village of Eyak is continuing the effort to acquire a parcel of land located on Mummy Island; at one time the historic home to hundreds of our people. In September of 2002, and again in 2003, we submitted correspondence to EVOST to have this parcel considered in the next round of small parcel acquisitions. With changes in administration and in the small parcels program, we want to make sure the project is still in the que for consideration. This is an opportunity for the trustees to return land to the native community, a significant contrast to the conservation easements and land purchases done in the past.

This is the only private in holding on a culturally important island that has been a traditional native village site and burial grounds for thousands of years. The area is rich in culturally significant artifacts, and should be returned to the tribal authority for use as a spirit camp, educational facility, healing center and for other similar purposes consistent with its' cultural importance.

Mummy Island is located on Orca Inlet, between Prince William Sound and the Gulf of Alaska, about eight nautical miles southwest of the Cordova boat harbor. In 1794, Vancouver reported a village of about 200 natives. The village was located near the site where, at the turn of the century, a clam cannery was built. The return of this historic site to the Native Village of Eyak tribal authority would further empower our current efforts to preserve, renew and maintain cultural identity; a perfect place for language and spirit camps, archeological studies, and cultural retreats. The Native Village of Eyak owns no traditional land, and Mummy Island would give all tribal members a place they could call their own.

Eyak is seeking partners to complete the acquisition. Ecotrust, has already joined with us, and has helped raise over \$70,000 for the effort. We have been challenged to <u>match funds</u>, and an EVOS contribution of <u>\$50,000</u> would provide the leverage needed to help close on the parcel. As with all projects, time is of the essence. We have a closing date of late fall, 2004, and your consideration would be greatly appreciated. We believe that the repatriation of cultural sites is key to the preservation of the relationship between native communities and the natural resources that have sustained them for thousands of years.

Attached is a previously submitted proposal on this project and NVE's stewardship plan for the property. We request that you please review this proposal and consider funding our request for this important project.

Sincerely,

NATIVE VILLAGE OF EYAK, TRADITIONAL COUNCIL

Robert Henrichs, President

Mummy Island

A proposal to the Exxon Valdez Oil Spill Trustee Council





The Native Village of Eyak P.O. Box 1388 Cordova, Alaska 99574 Tel. 907-424-7738 Fax. 907-424-7739 www.nativevillageofeyak.org

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Returning important cultural sites affirms cultural and spiritual identity, and creates new opportunities for educating native youth about their history and future opportunities.



Mummy Island near Cordova Alaska

¹ Frederica de Laguna, <u>Chugach Prehistory</u>, University of Washington Press, 1956.

We believe that the repatriation of cultural sites is key to the preservation of the relationship between native communities and the natural resources that have sustained them for thousands of years.

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This prospectus describes the unique opportunity for EVOS Trustees to help conserve an important cultural site on Mummy Island.

Mummy Island is located on Orca Inlet, between Prince William Sound and the Gulf of Alaska, about eight nautical miles southwest of the Cordova boat harbor.

Rich in native cultural and historical associations, Mummy Island lies in the middle of the extensive mud flats for which the "Shallow Water People" were named. In 1794, Vancouver reported a village of about 200 natives. Burial caves, looted and vandalized over the past two hundred years, dot the island, and stone adzes, trading beads, and other artifacts are still found. The Native Village of Eyak (NVE) and Ecotrust are collaborating to acquire a parcel of land located on Mummy Island. The small parcel is the only in-holding on a culturally important island that has been a traditional village site and burial grounds for thousands of years.

The coastal temperate rainforest ecology of the island is dominated by mature spruce and hemlock. Nesting bald eagles, peregrine falcons, black oystercatchers and hermit thrushes are among the resident wildlife. Several seabird colonies are located nearby, where pigeon guillemot, tufted puffin, blacklegged kittiwake, cormorants, and other seabirds gather in breeding colonies. Thousands of shorebirds stop over to feed on the mudflats during their annual migrations. Hundreds of sea otters share the area with harbor seals and an occasional stellar sea lion.

For millennia the area has served as a crossroad for cultures. This traditional village site near present day Cordova was one of the many native villages in the region where the Eyak, Tlinget, Alutiiq, Aleut and Ahtnas cultures settled. The Eyak migrated from the north and settled along the coast in the area known as the Copper River Delta. Hunters, gatherers and traders, they bartered goods between other native cultures in the outlying areas. The Tlingit came from the east, and settled as far as Controller Bay, about 60 miles east of Mummy Island on the coast. The Ahtnas, resided in areas 60 or more miles up the Copper River. The Chugachmiut people came from the west, and settled the islands



and uplands of Prince William Sound. In the late 1700's, European explorers in search of riches, empire, and the Northwest Passage, sailed through the area. Soon after, the Russian/American Company established fur trading posts in Prince William Sound to take

advantage of the rich abundance of otter, beaver, bear, and martin. The company forced Aleuts from the Kodiak area to hunt, trap, and settle in the region to supply furs, further diversifying the makeup of the native population.

By the early 1900's, the Eyak people were almost gone, decimated by diseases brought in with the explorers, miners, fishermen and railroad workers. The language is almost lost. Now, many Alaska native cultures are represented within the local community. They are members of The Native Village of Eyak, recognized as the local tribal governing authority. The Native Village of Eyak traditional tribal council is active in a broad range of programs that include; the development of a local health clinic, education and cultural projects involving language, dance and traditional arts; participation in research related to salmon, seals and sea otter, transportation projects, and the development of a cultural center and museum.



Mummy Island from the Mainland Shore

The Native Village of Eyak is located within its' traditional homeland, but is in fact a landless tribe. In the Eyak/Cordova area, traditional village sites have been lost to the pressures of disease, economics and both Russian and American colonialism. Traditional village sites and lands are now owned by utilities, private individuals, federal and state government, regional and local native corporations.

Many involved in the Native Village of Eyak tribal government, although Alaska Natives are not shareholders in the corporations created under the Alaska Native Claims Settlement Act of 1971; those born after December 1971 are not issued stock. Unless a parent, grandparent, or other relative has conveyed shares of their stock, natives under 31 years old have no direct claim or formal right and interest in traditional land. The right to use and occupy land is an important cultural connection.

The return of a historic village site to the tribal authority would further empower current efforts to preserve, renew and maintain cultural identity; a perfect place for archeological studies, and long term, for spirit camps, cultural retreats, marine and natural science education camps and programs. It would give all Native Village of Eyak tribal members a place they could again call their own.

The Native Village of Eyak is seeking partners to complete the acquisition.

Financial Details:



Purchase Price:	\$ 169,000
Estimated legal	1,000
Est Closing	1,000
Est funding costs	2,000
Appraisal	5,000
Contingency	2,000
TOTAL	180,000

Received/Pledged \$20,000 Spirit Foundation \$50,000 Moore Foundation

Balance on property: \$ 110,000

Upon acquisition, the Mummy Island site will return to the

Native Village of Eyak for use as an educational facility, healing center and for other similar purposes consistent with its cultural importance.

We respectfully request EVOS trustees support in the amount of \$50,000. We will leverage these funds at over two to one from other sources. Our partner, Ecotrust has received pledges and contributions totaling \$70,000, however a cash challenge has been issued. The Native Village of Eyak seeks this grant to help provide leverage funds to meet this challenge, and return this land to the native community.



President Robert Henrichs or: Executive Director Bruce Cain Native Village of Eyak P.O. Box 1388 Cordova, Alaska 99574-1388

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Tel. 907-424-7738 Fax. 907-424-7739

"Mummy Island is so named because of burial sites located in the caves on the island, which contained mummified remains swaddled in sea grass mats by the inhabitants during the Pre-European history of the area. Besides the burial caves, seal oil lamps and other artifacts have been recovered in the area over the years. While no such history survives, it would not require much imagination to suppose the island as the home of a local Shaman. There is no doubt the island must have played an important role during the pre-history. The Copper River region was one of both conflict and vigorous trade. Mummy Island is in a strategic location to scout invading parties from the Gulf of Alaska with vistas both to the Gulf, and inland to the sheltered inlet. The surrounding waters are host to basic subsistence resources, which continue to be utilized in the present: salmon, clams, harbor seal, sea otter and sea lions.

The Native Village of Eyak is progressing rapidly in its construction of a small cultural center on the waterfront in Cordova. The name of the center is "Ilanka", or "Family" in the Alutiqii language. Ilanka will have museum displays, and art and cultural programs. To be able to walk out the door, look to the south and the view of Mummy Island, with attendant educational and spiritual programs at that site, would be to enrich not just our Family, but to welcome in fine fashion, participants and guests to our home. "

Sylvia Lange Tribal Member



Mummy Island, between the Gull of Alaska and Prince William Sound From Mt. Eyak, above Cordova



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10,000 years in our Traditional Homeland, Prince William Sound, Copper River & the Gulf of Alaska

NATIVE VILLAGE OF EYAK, TRADITIONAL COUNCIL

Mummy Island Stewardship Plan

Adopted by Resolution of the Native Village of Eyak on November 18, 2003

Establishment of Stewardship Plan and Name

The Native Village of Eyak, a Federally recognized Tribe, formally establishes the "Mummy Island Stewardship Plan" through its inherent authority as a Tribe.

Mission and Scope

The mission of the Native Village of Eyak Mummy Island Stewardship Plan is to monitor, preserve, study, develop and share the cultural and spiritual wealth of the Mummy Islands. This Stewardship Plan shall apply to the Mummy Island tract of property transferred to the Native Village of Eyak by Ecotrust. (Hereafter referred to as "the Property", see attached map). All future use of the Property shall be consistent with the mission of NVE to better understand, protect and utilize the cultural, historic, and natural resources found on the Property.

Area Description:

Mummy Island is located in Alaska at approximately Latitude 60.5 degrees North by Longitude 146 degrees West, on the southern entrance to Orca Inlet between Prince William Sound and the Northernmost corner of the Gulf of Alaska. This area is rich in cultural heritage and has been a village site and traditional use area for thousands of years. Loss of cultural resources has occurred in the recent past. The Native Village of Eyak, in partnership with Ecotrust, will acquire the last remaining private parcel on this island. Clams and other seafood provided sustenance for our ancestors who lived on the island and used it for subsistence. Since the 1964 earthquake and the Exxon Valdez Oil Spill in 1989, clams and other seafood in the area have declined or disappeared, necessitating abandonment of human settlement of the island. This Stewardship Plan seeks to formalize a plan to care for the Property, to insure the safety of the special cultural and spiritual resources and to provide a means to share and teach others about this special place.

Stewardship Goals:

• Safeguard the cultural resources in the district from damage or theft.

- Heal our people through long-term research and education regarding the cultural practices and cultural resources at Mummy Island.
- Safeguard and protect natural resources in the area.
- Restore natural resources, especially shellfish that once were rich in the area.
- Share the special knowledge and spirit of Mummy Island with others.
- Provide employment opportunities for our members in carrying out these goals.

Stewardship Management Objectives:

The Mummy Island Stewardship Plan will be implemented and enforced by the Native Village of Eyak using a variety of tools, as discussed in the following section and the Native Village of Eyak will periodically update these objectives as necessary. The management objectives reflect the needs for the Property as identified by the Council and reflect the paramount concern related to cultural and natural resource protection. These management objectives are:

- Secure title collaboratively with Ecotrust to the last remaining private parcel on the island.
- Protect the health and safety and cultural resources on the site by stabilizing, maintaining, and eventually renovating existing cabin and facilities on the Property.
- Develop program and site plans for spirit camp and other educational opportunities on the Property including scientific, research and a visitor program.
- Establish a watchman program for site monitoring and native stewardship
- Collaboratively explore and develop with Universities and/or other groups a research protocol to further academic as well as cultural knowledge development.
- Establish a well-regulated visitor program that will share the special knowledge and spirit of the island with a limited number of visitors consistent with this Stewardship Plan
- Scientifically research reasons for decline and ways to restore seafood resources that once were rich in the area.

Stewardship Tools:

Stewardship tools are ongoing and permanent protection strategies implemented by the Native Village of Eyak to carry out the Mission, Goals, and Objectives of this Stewardship Plan. With respect to the Property, the following apply:

• All future uses of the Property shall be consistent with the protective provisions of applicable federal, state, and tribal law related to environmental and cultural resources protection. Examples include the Marine Mammal Protection Act with respect to sea otters, which use the Property, as well as the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) with respect to cultural resources and burial sites, and the Archaeological Resources Protection Act, among others. Tribal codes that relate to the protection of the Property include the NVE Cultural Resources Protection Ordinance, NVE Marine Mammal Management Plan and other NVE ordinances, policies and procedures.

• The Native Village of Eyak will, on an ongoing basis, research, study, and implement a set of "best management practices" related to cultural resource site stabilization and study on the Property.

• A Watchman program, or its equivalent, will be developed to include on-site monitoring of the Property's resources, based in part on the design and structure of Watchman programs utilized by other tribes and First Nations.

• Research that is conducted on the property will provide a significant amount of information for the Native Village of Eyak with respect to knowledge of the resources on the Property, placement, hazards and threats, and can therefore be utilized to develop additional stewardship tools into the future.

Reporting

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The Native Village of Eyak issues an Annual Report with audited financial statements that address the goals of this and other programs. This report is distributed annually and is available on request.

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



- DATE: July 31, 2004
- TO: J. Deric Marcorelle Environmental Specialist, ADEC
- FROM: Gail Phillips, Executive Director Exxon Valdez Oil Spill Trustee Council
- THROUGH: Brenda Hall Ramos Administrative Officer, EVOS
- RE: 99304/Kodiak Waste Management Project Request to move line item funds for Ouzinkie

The purpose of this memo is to authorize the budget line item adjustments requested by J. Deric Marcorelle, Environmental Specialist with Alaska Department of Environmental Conservation and Tracy Mitchell, Environmental Specialist with the Kodiak Island Borough and the program coordinator for the EVOS funded, Kodiak Waste Management Project.

The budget adjustments requested are listed below:

• Movement from lines item 3.4C (contingency fund), in the amount of \$14,114 and line item 1.2B (removal or scrap metal), in the amount of \$11,212 be moved to line item 1.2A (consolidation of scrap metal).

The movement of these funds would bring line item 1.2A, consolidation of scrap metal, to a total of \$33,290. The original amount authorized for Quzinkie's scrap metal consolidation will not cover the cost for the removal to do a large increase of scrap metal accumulation in the years since the KIB WMP was first implemented. The movement of this money would also purchase the necessary equipment that would be used to prepare all of the scrap metal for years to come.

The movement of these funds does not alter the underlying scope or objectives of the Kodiak Waste Management Project, nor are these objectives currently obligated or being facilitated by another entity and therefore the adjustments have been approved. 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. We hope that for most projects this will be completed within the next couple weeks. For more information, please contact the project manager for your lead agency.

cc: Tracy Mitchell Environmental Specialist, KIB

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

July 27, 2004

Ms. Betty J. Buchan, Ph.D. 6616 Cimarron Circle Anchorage, AK 99504-3945

RE: EVOSTC Science Coordinator Position

Dear Ms. Buchan: Detty -

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

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It was a pleasure meeting you. Those our pathe pross again in the

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 Alaska Department of Law

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July 27, 2004

Mr. Scott Batchelder 13939 West Lotus Drive Wasilla, AK 99654

RE: EVOSTC Science Coordinator Position

Dear Mr. Batchetder: Acatt -

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law

It was nice meeting you. Thanks for your (interest in ECOS. Quish

a well in the future.

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



July 6, 2004

Mr. Alexander Bychkov c/o Institute of Ocean Sciences P.O. Box 6000 Sidney, B.C. Canada, V8L 4B2

Inustees: FYI In case you are In case you are fait

Dear Mr. Bychkov:

Thank you so much for your invitation to attend the North Pacific Marine Science Organization (PICES) 13th Annual Meeting.

Although it would be wonderful to be in Hawaii in October to attend this very important gathering, I am sorry to inform you that I will not be able to take you up on your gracious invitation.

However, I am forwarding your letter on to the members of the Trustee Council and I will get back to you immediately if any of them choose to attend.

Thank you again for your kind invitation.

Sincerely,

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Executive Director

G.P.: eg

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation

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July 27, 2004

Mr. Joseph C. Talbott 2143 Alder Drive Anchorage, AK 99508

RE: EVOSTC Science Coordinator Position

Dear Mr. Talbott:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law



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June 17, 2004

Mr. Stanley Rice National Marine Fisheries Service, NOAA 11305 Glacier Highway Juneau, AK 99801-8626

Mr. Jeffrey Short National Marine Fisheries Service, NOAA 11305 Glacier Highway Juneau, AK 99801-8626

Ms. Mandy Lindeberg National Marine Fisheries Service, NOAA 11305 Glacier Highway Juneau, AK 99801-8626

Dear Jeep, Jeff and Mandy:

RE: 040740/Lingering Oil: Contaminant Inputs to PWS and CYPIA Induction in Fish

The *Exxon Valdez* Oil Spill Trustee Council acted on the Fiscal Year 2004 Work Plan at its meeting on May 14, 2004. I am pleased to inform you that the Council approved funding in the amount of \$177,300 for Project 040740/Lingering Oil: Contaminant Inputs to PWS and CYPIA Induction in Fish. This includes \$162,700 in project funds and \$14,600 in agency administrative costs. 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. We hope that for most projects this will be completed within the next couple of weeks. For more information, please contact the project manager for your lead agency.

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law Thank you for your participation in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

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Gail Phillips Executive Director

Enclosure

Cc: Pete Hagen/NOAA Project Manager



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June 17, 2004

Ms. Brenda Ballachey USGS/Alaska Science Center 1011 E Tudor Road Anchorage, AK 99503

Mr. James Bodkin USGS/Alaska Science Center 1011 E Tudor Road Anchorage, AK 99503

Mr. David Irons USGS/Alaska Science Center 1011 E Tudor Road Anchorage, AK 99503

Dear Brenda, Jim and David:

RE: 040774/Oil Exposure Biomarkers and Population Trends of PWS Marine Vertebrates

The *Exxon Valdez* Oil Spill Trustee Council acted on the Fiscal Year 2004 Work Plan at its meeting on May 14, 2004. I am pleased to inform you that the Council approved funding in the amount of \$178,000 for Project 040774/Oil Exposure Biomarkers and Population Trends of PWS Marine Vertebrates. This includes \$163,300 in project funds and \$14,700 in agency administrative costs. 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. We hope that for most projects this will be completed within the next couple of weeks. For more information, please contact the project manager for your lead agency.

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law Thank you for your participation in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

a

Gail Phillips Executive Director

Enclosure

Cc: Dede Bohn/DOI Project Manager

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July 29, 2004



read file

Larry Evanoff, President Chenega IRA Council PO Box 8079 Chenega Bay, AK 99574

Dear Larry:

Thank you for your letter of recommendation for the Schoch ShoreZone Mapping proposal.

Mr. Schoch's original proposal had several problems in it. We requested that he send us a revised proposal, which he has done. The revisions he offered are more in line with our original request, and I will be changing my recommendation to fund the proposal.

A copy of your letter was given to the Public Advisory Committee at their July 21 meeting. Your recommendation will also be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail/Phillips Executive Director

Thanks /

JUL-20-2004 TUE 02:29 PM

P. 02



July 20, 2004

Ms Gail Phillips, Executive Director Exxon Valdez Oil Spill trustee Council

fax: 907 276 7178

RE: Comment on the Schoch Prince William Sound Science Center ShoreZone Proposal

Dear Ms. Phillips,

In 2004 the Prince William Sound RCAC sponsored a ShoreZone coastal imaging survey of the western portion of Prince William Sound. Much of this surveyed centered on traditional use areas of Chenega, including surveys of LaTouche, Evans, Elrington, Chenega and Bainbridge Islands.

Habitat mapping associated with this survey and with proposed 2005 surveys are the subject of a proposal (the Schoch ShoreZone proposal) for the EVOS 2005 Work plan; You have not recommended this project to the Trustees, although the Science and Technical Advisory Committee and Science Director did recommend the project.

Chenega hopes that this project will be included in the EVOS 2005 work plan. In addition to the benefits of having the field surveys based in the Sound communities (Chenega and possibly other communities are proposed), the habitat information (a) significantly augments existing spill response tools, (b) provides new data that will be used for environmental planning (like eelgrass and keip occurrence), and (c) will result in improved monitoring and restoration of oil-affected shorelines within the Sound. The public availability of the information is an important element of the proposed program.

The proposed program will be an important community asset and we urge the EVOS Trustees to fund the project.

Sincerely,

President

Post Office Box 8079 Chenega Bay, Alaska 99574* telephone (907) 573-5132 * fax (907) 573-5120 Accounting (907) 573-5134 * Tribal Enrollment (907) 573-5461 * ICWA (907) 573-5386 * FVA (907) 573-5151 Environmental Program (907) 573-5476 * CHR (907) 573-5212 E-mail – chenegaira@starband.net

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July 29, 2004

Michelle Stearns AICP Director Dept of Community Development Kodiak Island Borough 710 Mill Bay Road Kodiak, AK 99615

Dear Ms. Stearns:

Thank you for your letter supporting the Saupe ShoreZone Mapping proposal.

A copy of your letter was given to the Public Advisory Committee at their July 21 meeting. It will also be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail Phillips

Executive Director



Kodiak Island Borough

Community Development Department 710 Mill Bay Road Kodiak, Alaska 99615 Phone (907) 486-9363 Fax (907) 486-9396

19. July 2004

Ms. Gail Philips, Director Exxon Valdez Oil Spill Trustee Council 441 West 5th, Suite 500 Anchorage, AK 99501-2340

BY FAX 907-276-7178

RE: Saupe-FY05-ShoreZone Mapping-Kodiak Island

Dear Ms. Phillips:

On one of my first days in Kodiak last summer, I learned through the local newspaper about the EVOS ShoreZone Mapping project in the Kodiak Archipelago. I was very impressed with the technology being used, the habitat data that has subsequently been collected, and its future application for nearshore and coastal management planning in the Kodiak Archipelago.

I have also visited the user-friendly website that has been set up to access the data and images, and well as attended the March 2004 community meetings in Kodiak that were conducted by the Cook Inlet Regional Citizens Advisory Council. The Borough has requested, and will also be receiving, the completed ArcView coverage and the linked Access database from CIRCAC so that we can integrate this information into our GIS.

The Kodiak Island Borough is very much in support of the current CIRCAC proposal for completion of the ShoreZone mapping on Kodiak Island during FY05. We strongly encourage EVOS to continue the support of this program that will provide island-wide

Page 2. Exxon Valdez Oil Spill Trustee Council, Saupe-FY05 ShoreZone Mapping-Kodiak

coverage of important habitat data that can also be integrated into our GIS system. While we recognize that the project is an important element of the EVOS Gulf Ecosystem Monitoring (GEM) program, the project will also provide the Borough with a powerful planning tool and community resource.

Please do not hesitate to contact me if you require any additional information or have further questions.

Sincerely,

Michelle R. Stearns, AICP, Director Department of Community Development

Cc: EVOS Trustee Council Members: Joe Meade, Chugach National Forest, Fax 907-743-9476 James W. Balsiger, NMFS, Fax 907-586-7249 Drue Pearce, US Interior Dept., Fax 907-219-0229 Kevin Duffy, ADFG, Fax 907-465-2332 Ernesta Ballard, DEC, Fax 907-465-5070 Gregg Renkes, AK Dept. Law, Fax 907-465-2075

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July 29, 2004

Mead Treadwell CEO, Venture Ad Astra Commissioner, US Arctic Research Commission Senior Fellow, Institute of the North 1007 West Third Avenue, Suite 200 Anchorage, AK 99501

Dear Mr. Treadwell: Mead-

Thank you for your comments supporting the Schoch ShoreZone Mapping and Kline Exchange between Gulf of Alaska and Prince William Sound proposals.

Mr. Schoch's original proposal had several problems in it. We requested that he send us a revised proposal, which he has done. The revisions he offered are more in line with our original request, and I will be changing my recommendation to fund his proposal.

Your comments will also be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail Phillips Executive Director

Thanks for your input "Mead-lit helped!

State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law

Cherri Womac

From:Mead Treadwell [meadt@ventureadastra.com]Sent:Thursday, July 22, 2004 1:01 PMTo:Gail PhillipsCc:'Nancy Bird'

Subject: Comment 1 on EVOS 2005 Workplan

July 21, 2004

Gail Phillips Executive Director Exxon Valdez Oil Spill Trustee Council 550 West 4th Ave., Suite 500 Anchorage, AK 99501

Dear Gail:

As you and the Trustees consider public comment on the Draft 2005 Proposal Funding Report, I request your reconsideration of the ShoreZone Mapping Project for Prince William Sound.

We all remember much about the tragedy of Exxon Valdez, but one which has stuck with me was the fact we were rushing, ahead of spreading oil, to get some kind of baseline on the resources about to be creamed. We had so little current information.

It was that experience that convinced me to work for strong, continued observation, modeling and mapping of the Sound's resources. One model we got was from Sullom Voe in the Shetlands, and work done there to measure resources at risk almost continuously. The effort to map the sound, and to keep that up to date, is one that should involve communities, the PWSRCAC, management agencies, resource users and the science institutions working in the Sound, and others. As I understand it, these groups are ready to be involved, and I'm hopeful that EVOS will also be.

In my work in support of science in Alaska and the Arctic I occasionally come across conflicts between "competitive" science, where proposals are reviewed up or down by science peers, and the need perceived by the citizenry for science funding groups to work together in support of infrastructure, staff continuity in our science institutions, and longer term objectives. While the funding process of EVOS Trustees usually takes these factors into account, I feel rejection of the mapping program at this stage would slow down what we have all sought as long term goals.

Thanks again for this opportunity to comment.

Sincerely,

Mead Treadwell

Mead Treadwell CEO, Venture Ad Astra Commissioner, U.S. Arctic Research Commission

Cherri Womac

From: Mead Treadwell [meadt@ventureadastra.com] Sent: Thursday, July 22, 2004 1:01 PM

To: Gail Phillips

Cc: 'Nancy Bird'

Subject: Comment 2 on EVOS 2005 Workplan

Gail Phillips Executive Director Exxon Valdez Oil Spill Trustee Council 550 West 4th Ave., Suite 500 Anchorage, AK 99501

Dear Gail:

The Draft 2005 Proposal Funding Report has a "do not fund" recommendation for the proposal titled "Exchange between Gulf of Alaska and Prince William Sound."

Nancy Bird, President of the Prince William Sound Science Center, and Tom Kline, the PI for the project, have written to you at length, and I can add little to the scientific reasoning in their letters.

My concern, however, is this: The work of the SEA program taught me, as a layman, that the plankton from the Gulf are a primary driver of energy in the Prince William Sound food chain. If currents change, if wind widely distributes a plankton bloom, if temperature stills the bloom, the effect through the food web to Pollock, herring, and salmon is dramatic. It has been this research and correlation that has helped lead us to more advanced understanding and modeling of this ecosystem. That modeling has tremendous impacts on management in the Sound, and frankly, nationally and internationally. (Remember when escapement of the previous year class was about the only indicator for prediction of a salmon run? Now we have much more.)

As I read the STAC comments, the problem with the Kline proposal is easily fixed. It should be funded, with that condition, and this important baseline monitoring should continue this year rather than be postponed.

If EVOS and GEM have any intention of understanding the ecosystem relationships here, and completing this monitoring/modeling program of national importance, we should not forget the most basic building block in the food chain!

Thank you very much.

Sincerely,

Mead

Mead Treadwell CEO, Venture Ad Astra Commissioner, U.S. Arctic Research Commission Senior Fellow, Institute of the North 1007 West Third Ave., Ste. 200 Anchorage, AK 99501 907 278 4800 office 907 223 8128 mobile



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

July 29, 2004

Nancy Bird, President Prince William Sound Science Center PO Box 705 Cordova, AK 99574

Dear Nancy:

Thank you for your letters supporting the Schoch ShoreZone Mapping and Kline Exchange between Gulf of Alaska and Prince William Sound proposals.

Mr. Schoch's original proposal had several problems in it. We requested that he send us a revised proposal, which he has done. The revisions he offered are more in line with our original request, and I will be changing my recommendation to fund his proposal.

Copies of your letters were given to the Public Advisory Committee during their July 21 meeting. Your letters will also be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail Phillips Executive Director

Thanks for your input, nancy. At helped!





P.O. Box 705 - Cordova, AK 99574 (907) 424-5800 - fax 424-5820

July 20, 2004

Gail Phillips Executive Director Exxon Valdez Oil Spill Trustee Council 550 West 4th Ave., Suite 500 Anchorage, AK 99501

Dear Gail:

Thank you for this opportunity to comment on the Draft 2005 Proposal Funding Report. I request reconsideration of the recommendation regarding the proposal titled "Exchange between Gulf of Alaska and Prince William Sound."

While the reviews indicate support for this project at a future date, I note that this project was already recommended for deferred funding in FY04 and that there are significant reasons for it to begin not later than FY05. I summarize those reasons below. Also attached is a more detailed explanation on this project regarding questions and points raised by the reviewers and the STAC (July 20 letter from Thomas Kline addressed to Phil Mundy).

This project needs to begin in FY05 because:

- This project's results will provide a stronger foundation for the successful development of the pink salmon modeling project which is being recommended for FY05 funding (two companion proposals by co-Principal Investigators Ken Adams and Ross Mullins and also by Steve Moffitt).
- A major oceanographic observation program in Prince William Sound commences in the fall of 2004 and will continue for, at least, five years ("Enhancements to the Prince William Sound Observing System: Improving real-time data streams and model output," supported by two separate NOAA grants to the EVOS Trustee Council and the Prince William Sound Science Center and, also by the Oil Spill Recovery Institute). It is critical that the biological observations offered through this project be implemented soon to take advantage of the data that the expanding physical observation program offers. The oceanographic observations focus on investigating the exchange between the Gulf of Alaska and Prince William Sound, and will provide the necessary measurements of inflow/outflow to the Sound and physical variables (temperature and salinity), cited by the STAC reviewers.
- While alternate sources of funding are suggested in the reviews, the GLOBEC program director states that such analysis would have to be highly justified and would

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only be supported by GLOBEC for analysis dealing with salmon survival *after* they leave Prince William Sound. The project proposed to GEM is aimed at better understanding the *recruitment into PWS* of the zooplankton species comprising the majority of the diet of pink salmon fry after they leave the streambeds or are released from hatcheries. This project will provide data necessary to improve predictions of zooplankton populations that would, in turn, benefit both wild stock and hatchery salmon production.

- This project currently has strong potential for two significant leverages of other resources which will not likely be available at a later date. The first is using private foundation funds for the equipment purchase; this represents a substantial institutional investment. The second is that a very strong post-doctoral candidate wanting to work on this project has submitted another proposal (to a Norwegian funding source) that would complement this one. The proposal involves comparing the ecology of a zooplankton species, *Themisto libellula*, common to both PWS and the eastern Arctic waters near Svalbard, Norway; this species is also being used in Norway to understand impacts of oil spills on the marine ecosystem.
- It is important to not let the 10-year time series of *Neocalanus* stable isotope analysis in the Prince William Sound region lapse as Dr. Donald Schell's work indicates stable isotope times series may reveal ecological shifts in Alaskan waters. This time series began with the Sound Ecosystem Assessment program in 1994 and it will be a significant loss if it ends this year as GLOBEC's fieldwork closes out.

Let me close by reiterating that the time series of physical and biological data in Prince William Sound should absolutely not lapse and should receive prime attention because of the extensive use of the Sound by both commercial and sport fishers, and by the transport of oil. No other part of the Gulf of Alaska has a greater combined commercial and recreational use by man or as great of a potential detrimental impact on its resources by man's oil transport activities.

Thanks again for this opportunity to comment.

Sincerely.

Nancy Bird President

cc: Phillip Mundy, EVOS Trustee Council Science Director EVOS Trustee Council Public Advisory Committee members

Enclosure: July 20, 2004 Letter to Phillip Mundy from Thomas C. Kline, Jr.

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P. O. Box 705 Cordova, Alaska 99574 (907)424-5800 (ph.)/(907)424-5820 (fax)

July 20, 2004

Phillip Mundy, Ph.D. Science Director Exxon Valdez Oil Spill Trustee Council 550 West 4th Ave., Suite 500 Anchorage, AK 99501

Dear Phil:

I would like the Exxon Valdez Oil Spill Trustee Council to reconsider my proposal titled *Exchange between GOA* and *PWS* for FY05 funding. I respond below to the issues brought up by the STAC review. Whereas sophisticated physical models for the Prince William Sound (PWS) and adjacent systems already exist, knowledge of many fundamental aspects of the biology of PWS is lacking. There is a great need to overcome this deficiency.

The three *Neocalanus* species play a critical ecological role in PWS. As Ted Cooney showed during the 2004 pink salmon workshop in Cordova, late copepodid stage *Neocalanus* form the overwhelming majority of the diet of hatchery released salmon. In order to model pink salmon survival we need to be able to parameterize their food, which is also the food of their predators, therefore being doubly important. Our modeling efforts will be for naught without this information. The tact I am taking with this project is to sample when the population is least dynamic, the diapause phase. The Sound Ecosystem Assessment (SEA) program demonstrated through stable isotope abundance that the source for the diapausing population varies from year to year. It is unknown whether the total population size also varies, but given the change in source, it seems less likely that the population would not also vary in size. Previous sampling has not been quantitative, for example, sample variance was not determined. Thus many questions remain about the nature of the PWS *Neocalanus* populations.

A goal of this project is to systematically and quantitatively sample populations of diapansing *Neocalanus*. Further refinement of the sampling strategy requires empirical data. Once we know how much the over wintering population varies, we will be able to ascertain whether these inter-annual differences along with inter-annual differences in advection can explain the variability observed in spring plankton. The inter-annual differences in advection can explain the SEA program to be related to the April-May Bakun Upwelling Index. Modeling the plankton population could be initialized using an empirically determined reproductive population size, which would be a result of this project. The reproductive population size, in turn, may be modeled based on Gulf-Sound exchange processes as a future project. The timing aspects of the Gulf influx resulting from this project would provide a starting point. Certainly, the issues associated with the life-history stages leading up to influx are more complex. However, this project is cost effective in studying the diapanse questions and could then lead to more cost effective early life-stage science based on more refined and focused questions than what can be posed today.

The years prior to SEA suggested that the Bakun Upwelling Index during April-May was related to zooplankton processes, in particular *Neocolanus* abundance. Why the switch took place during SEA has not been addressed. Empirical studies directed at the pelagic ecosystem of PWS have been pretty much on hold since March 1998 with the end of SEA project sampling. The GLOBEC project provided a stopgap opportunity for sampling. GLOBEC PWS sampling was done opportunistically because weather in the Gulf prevented sampling operations. It was better to sample in PWS rather than remain anchored in, e.g., Thumb Cove of Resurrection Bay. However, many of the samples collected in PWS during GLOBEC remain unanalyzed without much hope for analysis outside of GEM. The GLOBEC samples that have been identified for analysis in this project have the potential to narrow the time when exchange between PWS and the Gulf takes place. This is an ecologically critical event and will address a question of great importance to PWS as it could be used to develop hypotheses explaining the variable response to the Bakun Upwelling Index.

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<u>STAC:</u> "The use of stable isotope analyses to address the exchange of *Neocalamus* between the Gulf of Alaska and Prince William Sound is of value, however there are doubts regarding the validity of the new sampling program that cannot be resolved without additional data. We recommend that the analysis and work up of the existing samples be made before resubmitting any revised proposal. We further recommend that the stable isotope analyses for the samples gathered since 2001 be submitted to the GLOBEC synthesis announcement of opportunity."

Response: Whereas the STAC thinks positively about the first goal of the proposal, they recommend that this be funded through the forthcoming GLOBEC call for proposals. However, this call for proposals will be for synthesis of data collected during phases I and II of the U.S. GLOBEC Northeast Pacific (NEP) Program and is not aimed at further analyses of samples. I spoke with Hal Batchhelder, the Executive Director of the U.S. GLOBEC NEP Program. He told me that proposals for additional analyses have not been favorably reviewed in past GLOBEC synthesis phases. Any sample analysis proposal would have to be highly justified and would have to address GLOBEC NEP issues and these deal with salmon survival after they leave PWS. The proposed project is aimed at better understanding the recruitment into PWS of the zooplankton species that form the majority of the diet of pink. salmon while they reside in PWS after their release from hatcheries or, for the wild stocks, after they leave streambeds. The goal is to lead to better predictions of zooplankton populations that would benefit both wild stock and hatchery salmon production. EVOS-GEM is thus the appropriate funding source. It should be pointed out that the Black Hole area of PWS was directly in the path of the oil spill. The GLOBEC call for proposals will not be released until December 2004, with proposals due in the spring of 2005. Funding would not likely start before 2006. Assuming that the results would be available until 2007, a revised sampling program would have to be proposed in 2008 to start in 2009. By 2009 the present physical observation program would be at or near an end. The prospects of funding this project through GLOBEC thus appear both remote and distant.

<u>STAC</u> "The results of this analysis should then be used to develop a discussion of the differences between the central Gulf of Alaska and Prince William Sound. This would lead to a better posed sampling design."

Response: There is some urgency to funding this proposal in 2005. One, with GLOBEC sampling at an end, the now ten-year time series of Neocalanus stable isotope analysis that began with SEA could come to an end. Schell has shown that a stable isotope time series may be revealing of ecological shifts in Alaskan waters. Two, this project will be matched with private foundation funds representing a substantial institutional investment. Three, a very strong post-doc candidate (to work on this project) has submitted another proposal that would dovetail with this one. This would involve comparing the ecology of an important zooplankton species that is common to both PWS and eastern Arctic waters around Svalbard, Norway. Furthermore, this organism, Themisto libellula is being used there to understand impacts of oil spills on the marine ecosystem (the prospective post-doc is presently a Ph.D candidate at UNIS, Syalbard). The proposed GEM project could thus segue into better understanding effects of oil spills in the pelagic ecosystem. According to Jeff Short, other than the Ph.D. thesis research on the phototoxicity on Calanus and Metridia to oil by Switgard Duesterloh, there has been no research on the effects of oil on the zooplankton of PWS. Here is a great opportunity to close this gap. Four, a major oceanographic observation program in PWS is about to commence that is virtually devoid of biology. This program will investigate exchange between PWS and the Gulf and would nicely dovetail with the observations being proposed as objectives #3 and #4 of this proposal. Thus a Neocalanus observation program needs to be implemented very soon to exploit the synergism that the physical observation program will have to offer. I propose to work with others, e.g., Ted Cooney, in perfecting the sampling design during the course of the project.

STAC: "It should be noted that this is an interdisciplinary problem that depends on the measurement of inflow/outflow to PWS. However, it is uncertain that the measurements of inflow and outflow have been done correctly in the past. Data from GLOBEC cruises should provide adequate estimates of inflow and outflow."

<u>Response:</u> The proposed project will be using geochemical tracers, i.e., stable isotope abundance, to detect occurrence of copepods originating in the Gulf of Alaska. The inferences enabled by this technique do not depend upon direct measures of inflow (Kline, 1999). Nevertheless, there would be a synergistic relation with the about to be implemented observation program, which would benefit greatly by having some biological observations. For

example, what were the physical conditions that prevailed in years when GOA origin copepods predominated as in 1995? Whereas I was able to show that most of the copepods in 1995 came from the Gulf, I could only speculate, based on published works as to the causal mechanism, for a lack of appropriate physical measurements.

STAC: "A serious problem in the proposed sampling was the lack of physical variables (temperature and salinity)."

<u>Response</u>: One of the advantages to the HBMN pointed out in the proposal is that it can be equipped with probes that measure salinity and fluorescence in addition to pressure, which is required for net actuation. The pressure and salinity data are combined to assess density in sigma-t units. Funds for these instruments and the HBMN will come from private foundation grants. An equipment technician will work on this project to ensure that the instrumentation works and that the resulting data can be integrated with physical data being collected in other projects. The physical variables are not lacking.

STAC: "While the proposal describes the distribution of copepods on depth surfaces, they will actually be distributed on density surfaces that must be determined from depth, salinity and temperature."

<u>Response</u>: The suggestion that the copepods "will actually be distributed on density surfaces" i.e., on layers of constant sigma-t value or isopycnals, cannot be reconciled with data collected on GLOBEC cruises. Due to downwelling in the Gulf, isopycnals are tilted. At diapause depths in PWS, sigma-t values are about 26.0 ± -0.2 . In the Gulf, the 26.0 isopycnal is found within the upper 100m at the offshore stations where diapausing *Neocalanus* are found at depth (we have found them diapausing from 400 to 600m, but 600m has been the depth limit of our sampling). If they were distributed on isopycnals, they would diapause in PWS or the Gulf but not both. This is not true as they diapause in both the Gulf and in PWS. In PWS, they diapause in water that is less dense than in the Gulf.

Additional points addressing individual reviewer points separate from the STAC review:

Present GLOBEC funds are available to analyze a total of 250 diapansing *Neocalanus* sampled at GAK13 (on the continental slope in the Guif of Alaska) and not for PWS. I was not referring to Connell's work with the keystone reference but rather the role of a keystone in an arch. The role of *Neocalanus* as food for both salmon and salmon predators is like a keystone that keeps the left and right side of the arch supporting each other and not collapsing. To save space in the proposal, the data of feeding stage *Neocalanus* collected over several years were shown as one figure. There are data for each year for which diapausing samples will be analyzed that show the isotopic distinction between those from PWS and those from the Gulf. In phase II of GLOBEC (2001 to 2004), feeding stage *Neocalanus* have been sampled several times per year. I will be seeking additional funding to sample the spring-summer post-GLOBEC as suggested. I am not rejecting Mackas's hypothesis but am trying to eliminate several others (see cartoon figure in proposal). Goal #3 is to ascertain whether there are lateral population gradients; until someone goes out and collects the appropriate samples we will never know.

A tacit assumption during the SEA project was that the size of the diapansing population was constant, thus the number of potential offspring was constant. The variable was the removal of offspring from PWS by river-lake processes. We failed to show a river-lake relationship during SEA, unlike the previous years. The study may have been confounded if the population size varied due to differences in the size of the reproductive population when at diapause. The diapause population has not been sufficiently sampled in the past to determine whether or not it does not vary in size from year to year.

The inability to morphologically distinguish early *Neocalanus* stages, e.g. the naupliar stages, will be overcome using genetic tools presently under development and could be used for GEM monitoring or other later studies. The questions being addressed here however pertain to late stages that can be distinguished by morphological differences.

The winches we have were used to deploy CTD's in PWS during the SEA program. They have 1000m of conducting cable and are portable (can be bolted down). There are several potential vessels in Cordova that could be used and will be chosen using a bidding process so we really cannot be more specific about the actual vessel to be used. The HBMN is the only net of its type available on the world market according to the ICES zooplankton

manual. It is possible that others are made but not available for sale. Updating software of older instruments to newer computers is a major problem today. Hydro-Bios has been on the world market for many years as a supplier of oceanographic sampling equipment and thus has a record of support. This may not be the case for smaller suppliers. For example, it is problematic that there is no upgrade available to allow a MOCNESS to be used on newer PCs and OSs (pers. comm. K. O. Coyle, UAF).

Please let me know if you have any questions or would like further explanation on any of these issues. Thank you again for this opportunity to clarify some points in my proposal.

Sincerely.

Thomas C. Kline, Jr., Ph.D.

cc: Gail Phillips, Executive Director, EVOS Trustee Council


P.O. Box 705 – Cordova, AK 99574 (907) 424-5800 – fax 424-5820

July 20, 2004

Gail Phillips Executive Director Exxon Valdez Oil Spill Trustee Council 550 West 4th Ave., Suite 500 Anchorage, AK 99501

Dear Gail:

Thank you for this opportunity to comment on the Draft 2005 Proposal Funding Report. I request your reconsideration of the ShoreZone Mapping Project for Prince William Sound.

It is very surprising to have this project not be recommended for funding in FY05 since the Invitation for Proposals specifically invited this project. While it's great that other regions now have this new and highly recommended tool for their use in the event of another oil spill or natural disaster, as a Cordova resident I find it unreasonable to further delay implementation of this project in Prince William Sound, the heart of oil shipping lanes. No other mapping system provides the kind of biological and geophysical data offered through ShoreZone; its data sets provide an excellent ability to search for specific habitats, species and/or physical data. That's why the system was recognized as the highest priority product for the GEM nearshore program (based on recommendations of nearshore scientists and input from stakeholders at workshops).

Both government and private agencies have already invested their cash support for much of the Kenai Peninsula and Cook Inlet to be mapped. This year, the Prince William Sound Regional Citizens' Advisory Council awarded \$40,000 so that mapping work in Prince William Sound could begin this summer. The Council expected the EVOS Trustee Council to lend its support for the project's continuation because the 2005 invitation specifically invited this project. Some preliminary results of the 2004 survey work is graphically displayed in a recent letter sent to you by one of the project's principal investigators, Carl Schoch. These maps dramatically demonstrate the strengths of the ShoreZone system in comparison to other maps now available. Since the STAC recommends this project for FY05 funding in a slightly revised format, it seems inappropriate to fund other uninvited projects without also supporting this one. As requested, this project's scope of work and budget has been revised to total almost \$120,000 less than originally budgeted.

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Thanks again for this opportunity to comment.

Sincerely, Mancy Bud Nancy Bird

President

cc: Phillip Mundy, Science Director Public Advisory Committee members

Enclosure: Letter to Gail Phillips from G. Carl Schoch



OIL SPILL RECOVERY INSTITUTE

Gail Phillips Executive Director Exxon Valdez Oil Spill Trustee Council 441 W. 5th Ave. Anchorage, AK 99501

Re: response to the STAC Statement of Contingencies

Dear Gail,

The high priority given to Shore-Zone mapping has evolved from a long series of EVOSTC funded workshops and reports including the Habitat Mapping Workshop chaired by Norcross, the Nearshore Monitoring Workshops of Schoch, Eckert and Dean, and the workshop of Dean and Bodkin. There was consensus among all of these efforts that Shore-Zone mapping be given the highest priority to provide a spatially comprehensive habitat inventory over the entire GEM region. Such a habitat inventory would serve as a foundation for making comparisons across large areas by controlling for habitat type and ensuring that future monitoring sites can be selected through a quantitative assessment of habitat similarity. This priority was reflected by the EVOSTC 2005 Invitation, and our proposal is specifically in response to the listed request for nearshore projects.

As requested by the Scientific and Technical Advisory Committee, following their positive recommendation for funding, the Shore-Zone mapping proposal for Prince William Sound has been revised according to the Statement of Contingencies. The proposal and budget have also been revised to reflect a very recent effort to map the western shoreline of Prince William Sound with funding provided by the Prince William Sound Regional Citizens Advisory Council. This critical funding allowed for the continuation of Shore-Zone image acquisition in Alaska during the summer of 2004, and those data will be posted on the internet by the end of this month: http://www.coastalaska.net. While there were not enough funds to produce the GIS maps from this imagery, the 2004 PWS RCAC funding will allow a substantial reduction in the proposed EVOS contribution for completing the remaining portion of the Sound. Further reductions were possible due to the requested elimination of the Copper River Delta and Kayak Island from the proposed project, and the salary contributions from NMFS, RCAC, and OSRI of key individuals participating in the image and data acquisition. These leveraging and partnering opportunities have reduced our proposal by \$183.1K. Importantly, these contributions, and the momentum building among many different agencies and organizations to fund the continuation of Shore-Zone mapping, all point to the

stakeholder need for these data and for the EVOSTC to complete the mapping in the GOA.

The Statement of Contingencies we received specifically requested that we address the use of existing video imagery owned by Alyeska. While the prospect of existing imagery is conceptually appealing to a funding organization, the realities of using these data for Shore-Zone mapping are problematic. The PWS RCAC has worked with Schoch and Harper to assess the availability of this video imagery and the derived data products. While Alyeska will potentially allow access to the data products (contingent on a public needs process, Gail Colby, pers. com.), it is still uncertain if the video imagery is accessible and because of this recalcitrance to release the imagery, it seems unlikely that these data will be allowed for broad public distribution on the internet. However, access to the imagery is but one facet of a more complex process. The objectives for acquiring those video images was considerable different from the objectives of Shore-Zone. This is best shown by using an example from our recent survey of western PWS.

The Sensitive Areas Work Group for Prince William Sound has identified *eelgrass* as a high priority resource that is sensitive to spill impacts; and NMFS also considers eelgrass an important Essential Fish Habitat (EFH) for spawning herring and a nursery for juvenile salmon and pollock. Figure 1A shows the type of data presently available for Prince William Sound (data source: Alyeska Graphical Resource Database 2004). Figure 1B shows the eelgrass distribution recently assembled from July 2004 Shore-Zone survey imagery. We found that of the 126 km of shoreline on Evans Island, 12% of the shoreline contains *continuous* eelgrass shown by a red line, and 14% contains *patchy* eelgrass shown by a green line (total eelgrass = 26% or 34km). The Alyeska GRD does not indicate any eelgrass in the bay north of Chenega village, although we found this to contain one of the largest eelgrass beds on Evans Island during Shore-Zone 2004.





Figure 1A. Eelgrass data for the Evans Island area obtained from the Alyeska GRD 2004. Note that eelgrass beds are depicted as point data with no area or shoreline length.

Figure 1B. The distribution of eelgrass on Evans Is, compiled from 2004 ShoreZone imagery and survey data. Data are depicted as lines with shoreline length. By examining the map of existing Shore-Zone coverage (Fig. 2), you will note that Prince William Sound is one of the last areas within the Gulf of Alaska that remains to be mapped. Interestingly, with all of Washington State, and British Columbia already mapped, there is growing momentum to continue the efforts further north. For example, Glacier Bay National Park has committed to funding Shore-Zone mapping of the outer coast from Icy Strait to Yakutat, and the National Marine Fisheries Service has recently

funded an effort in SE Alaska. This means that the shoreline from Aniakchak (on the Alaska Peninsula) to Johnstone Bay (just west of PWS), and the shoreline from SE Alaska to Yakutat will be mapped with Shore-Zone. Paradoxically, this leaves Prince William Sound, the area most impacted by the Exxon Valdez oil spill, as one of the last remaining shorelines to be mapped.



Figure 2. Gulf of Alaska Shore-Zone Mapping

We understand the limitations of funding such a large project, especially when there are so many other interesting projects being proposed, but nevertheless, we hope you will reconsider your recommendation in the draft 2005 Workplan and encourage the Trustee Council to fund this much needed project.

Best regards,

G. Carl Schoch Prince William Sound Oil Spill Recovery Institute P.O. Box 705 300 Breakwater Ave. Cordova, AK 99574 Tel: 907-424-5800 x 234 Fax: 907-424-5820 Email:



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

July 29, 2004

Linda Freed City Manager City of Kodiak 710 Mill Bay Road, Suite 211 Kodiak, AK 99615

Dear Ms. Freed: Linka

Thank you for your letter supporting the Saupe ShoreZone Mapping proposal.

Your comments will be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail Phillips Executive Director

Thanks !

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration

Cherri Womac

From: ent: o:	Freed, Linda [Ifreed@city.kodiak.ak.us] Friday, July 23, 2004 12:58 PM cherri_womac@evostc.state.ak.us
Cc:	Pat Carlson (E-mail); Michelle Stearns (E-mail); Barbara Stevens (E-mail); Carolyn Floyd (E- mail); Charlie Davidson (E-mail); Dave Woodruff (E-mail); Debbie Marlar (E-mail); Gabriel Saravia (E-mail); Tom Walters (E-mail)
Subject:	EVOSTC's FY05-07 DRAFT Funding Recommendations - Comments

TO: Gail Phillips, Executive Director, EVOSTC Exxon Valdez Oil Spill Trustee Council 441 W. 11th Ave Suite 500 Anchorage, AK 99501

Via E-Mail

FROM: City of Kodiak

DATE: July 23, 2004

RE: Comments on the EVOSTC's FY05-07 DRAFT Funding Recommendations

I am writing, on behalf of the City of Kodiak, in support of the proposal submitted to the Exxon Valdez Oil Spill Trustee Council (EVOSTC) for FY05 - FY07 funding for completion of ShoreZone mapping for Kodiak Island. The proponent of this project (Saupe) has previously completed mapping of about 1,000 miles of shoreline on Kodiak Island, made the results publicly available and has conducted workshops in Kodiak that attracted a broad spectrum of agency personnel, teachers and interested public.

The use of a website to display comprehensive imagery and environmental data is a highly reful planning tool and obviously an important oil spill response resource. Completion of this project will provide the entire region with a data set that can aid in rapid decision making in the event of a spill. As you are aware, knowledge of shoreline types and shoreline resources (for example, island-wide coverage of significant habitat, such as eelgrass and kelp distributions) are key to the determination and implementation of appropriate and effective oil spill response strategies.

The City of Kodiak strongly encourages the EVOSTC to support funding for this proposed FY05 project for the Kodiak area. While the project is an important element of the EVOS Gulf Ecosystem Monitoring (GEM) program, the project also provides an important community asset for Kodiak. If you need any additional information from me, contact information is provided below. Thank you for your consideration of these comments. Linda L. Freed City Manager, City of Kodiak 710 Mill Bay Road Kodiak, Alaska 99615 (907) 486-8640 (voice) (907) 486-8600 (fax) lfreed@city.kodiak.ak.us

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



July 29, 2004

Walter B. Parker 3724 Campbell Airstrip Road Anchorage, AK 99504

Dear Mr. Parker: Walt -

Thank you for your letter supporting the Kline Exchange between Gulf of Alaska and Prince William Sound proposal.

Your comments will be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail Phillips Executive Director

Thanks!

Cherri Womac

F om: ∋nt: ⊥∋: Subject: walter b. parker [wbparker@gci.net] Friday, July 23, 2004 11:45 AM cherri_womac@evostc.state.ak.us Comment on Proposal Funding Report

These comments refer to Project Title: Detecting the Exchange between Gulf of Alaska and Prince William Sound, which was not recommended for funding in the 2004-06 GEM workplan.

Watching the development of the Sound Ecosystem Assessment for over a decade and GLOBEC Northeast Pacific since its inception, one of the great holes it seems to me has been research to tie these two efforts together on an ecosystem basis. Kline's research has been one of the few efforts to do so. I am not quite sure, despite several years of discussion, where Prince William Sound fits in the habitat structure of GEM, Watersheds, Alaska Coastal Current, Nearshore and Offshore. After reviewing the GEM and GLOBEC work programs, I am even more convinced that in addition to the extensive current work underway, there should be a continuation of research to develop the biological ties between the Gulf and PWS. We need more research in this area, and if one of the few scientists working on filling this hole is denied funding, it will hardly attract others to submit proposals. As noted by the reviewers, this is an interdisciplinary problem, but the recommendation for not funding keeps it a basic current measuring problem, without adding information at basic tropic levels.

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Walter B. Parker 3724 Campbell Airstrip Road Anchorage, Alaska 99504 Phone: (907) 333-5189 Fax: (907) 333-5153 mail: wbparker@gci.net

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

July 29, 2004

Dr. Azit Mazumder University of Victoria, Dept of Biology PO Box 3020 STN CSC Victoria, British Columbia CANADA V8W 3N5

Dear Dr. Mazumder:

Thank you for your comments supporting the Mazumder Marine-derived Nutrients in the Kenai River Watershed: Methods for Detecting Change proposal.

Your comments will be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

W

Gail Phillips (Executive Director

> Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration

July 22, 2004

Gail Phillips

Executive Director Exxon Valdez Oil Spill Trustee Council 441 West Fifth Avenue, Suite 500 Anchorage, AK 99501

Re: Comments on Review of Marine-derived Nutrients in the Kenai River Watershed: Methods for Detecting Change

Please find enclosed our comments on the spring 2004 review of the EVOS proposal submission by Mazumder et al. titled "Marine-derived Nutrients in the Kenai River Watershed: Methods for Detecting Change". We would like to respond to each of the reviewers' comments from the EVOS STAC review (Appendix I). We provide the full comments below with four supporting figures (1 to 4) and Appendix I: 2004 EVOS STAC Review (for FY05 funding) and Appendix II: 2003 EVOS STAC Review (for FY04 funding).

However, to summarize, we would like to indicate our disappointment with the review process and outcome. Our work and efforts in the Kenai watershed and directly with EVOS and numerous research and community based proponents have led to the input and development of the EVOS watershed theme and other already funded watershed projects. Many of our ideas and background efforts have led to the phrasing and direction of the initiatives EVOS has taken in understanding the links between the Gulf of Alaska and coastal watersheds. Little of this effort appears to have been considered or understood in this review process. The Kenai project was developed with input from many researchers, community and industry stakeholders with direct partnership to salmon stock and watershed managers and EVOS, as the major research direction needed to address the gaps in knowledge regarding the links between returning salmon, ocean ecosystems and watershed foobwebs and ecosystem processes.

The literature acknowledges that paleolimnological studies (e.g. Finney et al. 2000) with century based time scales, provide no resolution to detect or understand mechanisms related to important marine nutrient inputs into watersheds on annual or even decadel scales important to resource managers, communities and industry. This is particularly evident in the Kenai watershed where the direct examination and annual assessment of marine derived nutrient input can and will have direct implications on management of salmon stocks, salmon habitats and other wildlife and marine based resources in the area. It is for this reason that we had proposed to research a variety of assessment protocols and techniques to develop practical tools for use by resource managers to understand the linkages between oceans and watersheds. We found the reviewers comments totally unaware of the technical issues involved in developing the research to evaluate potential surrogates to understand the

critical links and processes between salmon returning from the Gulf of Alaska (GOA) and foodwebs and ecosystems in coastal watersheds of Alaska. Below we discuss the reviewers' comments.

At this point we would be surprised if the proposal funding recommendations were altered (although we would welcome such an action), but felt it important that EVOS understand the shortcomings in the present review. As a final statement, given the importance of the Kenai River Watershed and its fisheries and aquatic resources to Alaska and GOA ecosystems, it is our desire to see that the proposed marine derived nutrient research in the Kenai River watershed proceeds with the support of EVOS. We have seen unprecedented review, revision and discussion on this work and wish to proceed with EVOS support.

Thanking you for your sincere effort at looking into the justification of review process and funding recommendation on our behalf.

Sincerely,

Kenai Research Team.

Dr. Asit Mazumder Research Chair and Professor

Jim Edmundson ADFG Research Supervisor

Mark Willette ADFG Research Biologist

Robert Clark ADFG Senior Research Scientist

Dr. Mark Johannes. Research Scientist

Contact: Dr. Asit Mazumder University of Victoria 250-472-4789 email: <u>maumzder@uvic.ca</u>

Maumzder et al. comments to EVOS July 23, 2004

2004 EVOS STAC review (bolded) and Proponents' Responses.

1. This proposal is not recommended for funding.

<u>Proponent Response</u>: This recommendation is very disappointing considering the effort and interest the entire group of researchers, community and industry stakeholders have taken and sponsored in promoting research links between watersheds and the GOA. This proposal was recommended for funding in FY03 contingent upon making suitable streamlining of the proposal and upon providing a smaller budget. Proponents made satisfactory changes to the proposal in FY03 and this proposal was invited for resubmission in FY04 competition.

2. There is concern regarding the ability to determine the critical MDN or substances in the KR watershed and how they influence changes the ecosystem. How can the proposers be assured that they have identified the critical components of this ecosystem?

<u>Proponent Response</u>: The main focus of the Kenai proposal was to develop robust surrogate parameters and protocols to assess and quantify input of marine derived nutrients as a direct function of salmon spawner and carcass density (e.g. Figure 1). Our research in the Kenai had intended to explore a variety of surrogate measures to provide practical protocols and assessment tools to be used in managing economically important salmon stocks and habitats. The technical foodweb parameters proposed for measurement in the Kenai were developed by our team of researchers and to some extent used in two EVOS funded proposals (Walker and Cooper). All the existing research and literature supports the study design and analytical protocols we have proposed for this research. We do agree with the notion that this science is complicated and needs careful review and analysis of robust surrogate parameters across a variety of naturally varying systems as proposed for the Kenai.

3. The proposal relies on regression analyses to test the relationships between MDN, biological and physical parameters. This does not establish cause and effect. For example, changes in salmon abundance might be affected by open ocean conditions rather than local watershed conditions.

<u>Proponent Response</u>: Regression analysis had been proposed as one of the possible final summary analyses to test the potential association and variation between salmon carcass deposition and marine derived nutrients and surrogate parameters across phenotypically distinct salmon stocks and watershed units in the Kenai. Correlation and regression analyses are appropriate tools to test the robustness of surrogate variables as a predictor of MDN and spawner density. Bilby et al. (2001) has successfully used this type of statistical analysis to validate the dependence (Y variable) of N-15 as a surrogate for marine derive nutrient input from salmon carcasses (Figure 1 - from Fig. 2 - Bilby, R.E., B.R. Fransen, J.K. Walter, C.J.Cederholm and W.J. Scarlett. 2001. Preliminary evaluation of the use of nitrogen stable isotope ratios to establish escapement levelsfor Pacific salmon. Fisheries 26:6-14.). Finney et al. (2000) used correlation to present the association ofsedimentary N-15 and spawner density (Figure <math>2 - from Fig. 2 - Finney BP, Gregory-Eaves I, Sweetman J, Douglas MSV, Smol JP. 2000. Impacts of climatic change and fishing on Pacific salmon abundance over the past 300 years. Science 290:795-799.).

One of our purposes in proposing the use of regression analysis was to present our results in a manner consistent with existing studies. Use of regression analysis is intended to test the robustness of surrogate parameters as indicators of marine derived nutrient input in unique watershed basins under variable independent spawner densities. Our proposal made it clear that many types of statistical

analyses were needed. The sample design was set, and to some extent the success of our research, data and analysis will determine the appropriateness and use of individual statistical analyses. Regression was suggested as one of those potential techniques. We feel that our study design and approach are valid, and are supported by existing peer-reviewed research, including our own work in this field.

4. The hope is stated here that multiple regression analyses, including non-linear and non-parametric versions will help to find a relationship between MDN supply rates (anadromous fish inputs) and some of the many variables to be extracted from the watershed. This will fulfill what they state is their principal goal, to find one or more proxy variables for rates of MDN supply. Nothing is said, however, about how the fish inputs will be quantified.

<u>Proponent Response</u>: The reviewers may have missed several statements and tables in the proposal where we clearly outline the existing knowledge and extent of annual (ongoing) salmon escapement surveys by ADF&G and other key partners. The salmon stock assessment in the Kenai had been intended as a direct partnership between our research team and salmon and habitat managers to provide valid seasonal estimates of salmon spawner distribution, density and carcass deposition. It should also be noted that the Kenai proposal was authored by key sports and commercial fisheries research and management biologists with ADF&G active in the Kenai watershed.

5. There is no statement of who will carry out the analyses or where they will be done. The inability to measure the sensitivity of the ecosystem to MDN is also worrisome. It is curious that the works of other researchers addressing the MDN distributions in the region such as Finney et al. are not referenced in this proposal.

<u>Proponent Response:</u> The proposal clearly outlines field and laboratory activities and names individuals and teams for analysis and delivery of research products. The Kenai project indicates successful partnership between a research team and salmon stock assessment and management (ADF&G). The proposal outlines that the research team will work with ADF&G, under ADF&G leadership for fieldwork and under UVic leadership for analytical work. The issue of ecosystem sensitivity, foodweb function and structure in response to marine derived nutrients has not been addressed by Finney et al.

6. Are there possibly already accepted protocols for this type of sampling? If not, can they really be established and tested in two years? Decades of sampling will be required to determine the interannual signal of MDN and its strength will be a function of biological and physical factors. It is unclear as to how they will separate these influences.

<u>Proponent Response</u>: The protocols have been developed following two years of consultation with numerous researchers, managers and stakeholders, four years of exploratory research by our team, partnership with two complimentary studies in Alaska and BC, and two ongoing Ph.D. graduate theses. The study approach we developed in the Kenai proposal is also being used in two EVOS funded projects. We agree that two years is not enough time to define clear patterns and mechanism, however the investment from EVOS into Kenai watershed research would have sponsored considerable added research funding (double) from within and outside Alaska to continue this research and management efforts to explore the links between ocean ecosystems and major economic resources in the Kenai watershed.

7. The specific testable hypotheses (p. 4) are not connected with the proposed data set. Statistical testing of these is not possible. They need a model that can be tested with the data sets to be gathered.

<u>Proponent Response:</u> We disagree strongly with the reviewers. This is a casually made statement with no merit. The proposal presents in extraordinary detail the extent and type of data collection, and associated hypotheses (See details from proposal below). At the basis of this discussion there are three points to elaborate.

First is an understanding of research in foodwebs and watersheds. Mazumder, Edmundson, Johannes, Willette and Clark have published extensively on this subject in relation to nutrient flow, structure and mechanism across North America in numerous fish and salmon communities and a variety of ecosystem types. The proposal reflects the experience of these researchers.

Second, the literature on marine derived nutrients, foodwebs and nutrient flow in watersheds uses various parameters and statistical analyses, like regression, to quantify the association between independent and dependent variables like salmon carcass density and (a) juvenile salmon growth (Figure 1, 2), (b) zooplankton and (c) sedimentary nitrogen isotopes (Figure 2), (d) nutrient concentrations, periphyton (chlorophyll) (Figure 3 – from Fig. 10 Johnston, T.N., E.A. MacIsaac, P.J. Tschaplinski and K.J. Hall. 2004. Effects of the abundance of spawning sockeye salmon (Oncorhynchus nerka) on nutrients and algal biomass in forested streams. Can. Jour. Fish and Aquat. Sci 61:384-403.). The hypotheses we detailed in the proposal (presented below) use an understanding that quantified salmon carcass input can be associated with dependent variables like nutrients dissolved in water, nutrients consumed or absorbed by other trophic levels including phytoplankton, juvenile salmon, resident fish, and even wildlife (Figure 4 – from Spencer, C.N., B.R. McClelland, and J.A. Stanford. 1991. Shrimp stocking, salmon collapse and eagle displacement. Bioscience 41:14-21.). The literature establishes that a positive association may exist between salmon carcass density in freshwater and nutrients or foodweb production.

Third, the Kenai is an economically and biologically rich and diverse watershed. Research has established that genetically and phenotypically unique salmon stocks and races exist across individual sub-basins, rivers and lakes systems within the watershed (Edmundson et al. 2003, Schmidt et al. 1995, 1998, Seeb et al. 2000). Further that these unique salmon stocks and races are set within distinct freshwater typed habitats in streams and lakes of the watershed (clear, stained and turbid). We have used these biological and environmental habitat characteristics to develop a study plan to collect statistically independent samples based on the known characteristics of salmon stocks and their density and collected surrogate marine derived nutrient parameters. The proposed study sites within the Kenai River watershed are the basis of ongoing salmon stock assessments by ADF&G. Our intention is to tie these estimates of salmon density to our measures of surrogates for marine derived nutrients to provide clear independent tests of the association between salmon density, spawners and carcasses with parameters potentially measuring the contribution of marine derived nutrients. In our original 2003 proposal, we had presented a study design to test for marine derived nutrients across a series of watersheds in parallel to ADF&G salmon assessments (Appendix II).

Edmundson, J. A., T. M. Willette, J. M. Edmundson, D. C. Schmidt, S. R. Carlson, B. G. Bue and K. E. Tarbox. 2003. Sockeye salmon overescapement (Kenai River Component), *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96258A-1), Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska.

Schmidt DC, Carlson SR, Kyle GB, Finney BP. 1998. Influence of carcass-derived nutrients on sockeye salmon productivity of Karluk Lake, Alaska: importance in the assessment of an escapement goal. North American Journal of Fisheries Management 18:743-763.

Schmidt DC, Tarbox KE, Kyle GB, Carlson SR. 1995. Sockeye salmon overescapement, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 93258). Alaska Department of Fish and Game. Regional Informational Report 5J95-15:46 p.

Seeb, L. W., C. Habicht, et al. (2000). "Genetic Diversity of Sockeye Salmon of Cook Inlet, Alaska, and Its Application to Management of Populations Affected by the Exxon Valdez Oil Spill." <u>Transactions of the American Fisheries Society [Trans. Am. Fish. Soc.]</u> 129(6): 1223-1249.

Please find below the details from Page 4 (Hypotheses) and Page 7 (Sampling protocol and data) From Mazumder et al. 2004 Kenai Proposal Page 4.

Our research plan is driven by the following specific testable hypotheses that:

- A. inputs of MDN to watersheds can be detected in food webs at selected trophic levels as an indicator signature (stable isotope, chemical, biochemical) rather than increased trophic level biomass or productivity;
- B. the occurrence and magnitude of MDN input, as a function of anadromous fish run strength, will be dependent on the habitat type of the sub basin (water type and hydrology) (i.e. clear, glacial, stained) and ecosystem types (i.e. stream, lake, estuary);
- C. inputs of MDN to watersheds are proportional to the run strength (biomass) of anadromous fish entering these watersheds or sub basins and independent of climatic and anthropogenic inputs;
- D. MDN uptake in aquatic foodwebs is primarily through direct consumption of fish carcasses and eggs rather than through bottom-up decomposition and microbial uptake; and,
- E. the isotopic signatures of $\delta^{15}N$ at any trophic level is a consistent indicator of MDN input.

From Mazumder et al. 2004 Kenai Proposal Table 2, Page 7.

Table 2: Proposed sampling protocol using nutrient, isotopic, fatty acid, and contaminant indicators of MDN relative to know salmon run timing and trends in growing summarized from climate data and the Kenai RW hydrograph.

			May		June		July		August		September		October		November		December	
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Kenai RW FY 05 - FY 07																		
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	Nearshore / Estuary***	3			5.83					<u>s 1</u>			<u>81.</u>]		<u>i</u>		- *	
Stable Isotope,Fatty Acid Contaminant Sampling per site	Stream - Grazers Stream - Midges Stream - Scuipins Stream - Rainbow Trout Stream - Salmon sp. Lake - Zooplankton Lake - Sockeye fry Nearshore - Grazers Nearshore - Grazers Nearshore - Scuipins Nearshore - Salmon sp.	Replic	ate Sam; 3 5 5 3 3 3 3 3 5 5 5 5	ples****			Contaminant				∠na sampiing isoiope, raity ∧cias, Contaminant				oiu oanipinig isouope, ⊭any ∧เวเนร, Contaminant			
			1 - Joh	lannes, N Peak spa	Vlazumde wining pe	er and Ed	mundson	2003.	2 - Bog	gs, Davis	s and Milr	ver 1997						

Moderate temperature, precipitation and river discharge

nperature, precipitation & river discharge High temperature and river discharge

Sampling collection period for isotopic, fatty acid and nutrient analysis

Siles - site selection presented in Table 1.

** 2 Sampling stations per lake

*** Nearshore / estuary sampling at low and high tides and spring and neap tides

* Replicates - number of specimens or replicate sample collection used for each analysis from each collection period

Mazumder Reply Figure 1

From Bilby, R. E., B. R. Fransen, J. K. Walter, C. J. Cederholm and W. J. Scarlett. 2001. Preliminary evaluation of the use of nitrogen stable isotope ratios to establish escapement levels for Pacific salmon. Fisheries 26:6-14.



Figure 2. The relationship between the level of enrichment with 15N in the muscle of coho parr and the abundance of carcass material at that site. Carcass abundance is presented as kg wetweight carcass tissue per m² streambed surfacearea. Calculation of enrichment index is described in the text.

Regression statistics: enrichment index = 0.073 ln(carcass abundance) + 0.534; R² = 0.49; p =6.16x10-5.

Mazumder Reply Figure 2



Finney BP, Gregory-Eaves I, Sweetman J, Douglas MSV, Smol JP. 2000. Impacts of climatic change and fishing on Pacific salmon abundance over the past 300 years. Science 290:795-799.

Fig. 2. The influence of SDN loading, as represented by the escapement/lake area ratio (i.e., the density of adult sockeye returning to the lake ecosystem to spawn), on the disN signature of components of the nursery lakes' foodweb (zooplankton and juvenile sockeye salmon)and surface sediments. Relations between the escapement/lake area ratio and (A) the disN ofzooplankton (r = 0.92, P < 0.01), (B) the disN of juvenile sockeye (smolts) (r = 0.88, P <, 0.01), and (C) the disN of sediments (r=0.94, P < 0.01). The arrow on the vertical axis of (C) is the average disN of sediments from 33 lakes in Alaska without salmon ($1.5 \pm 0.9\%$). These nursery lakes span a large gradient in SDN loading and cover a large portion of the range of sockeye in Alaska. Sampling and analytical methods, sample variability, and site locations are described in (18). Samples of zooplankton and juvenile sockeye were not available from all 12 sites.

Mazumder Reply Figure 3

Johnston, T.N., E.A. MacIsaac, P.J. Tschaplinski and K.J. Hall. 2004. Effects of the abundance of spawning sockeye salmon (*Oncorhynchus nerka*) on nutrients and algal biomass in forested streams. CJFAS. 61:384-403.



Fig. 10. Piecewise linear regression (broken line) of postspawning maximum epilithic chlorophyll *a* concentration against salmon (*Oncorhynchus nerka*) carcass biomass per unit discharge. Carcass biomass per unit discharge has been increased by 1 to show reaches that did not receive spawners. Symbols: triangles, Bivouac Creek; circles, Forfar Creek; squares, Gluskie Creek; solid, 1996; shaded, 1997; open, 1998.

Mazumder Reply Figure 4

Spencer, C.N., B.R. McClelland, and J.A. Stanford. 1991. Shrimp stocking, salmon collapse and eagle displacement. Bioscience 41:14-21.



Bald Eagle Sightings vs. Kokanee Spawners

Appendix I

EVOS 2004 (FY-05) Recommendations

WATERSHEDS

FY05 Funding Requested \$179,500.00 FY06 Funding Requested \$168,200.00 FY07 Funding Requested \$165,700.00

Abstract:

Kenai River Watershed (Kenai RW) is recognized as a national treasure for its abundant fish, wildlife and diversity of habitats. Extensive consultation among stakeholders, communities, agencies and other researchers has led to this proposal on the role of marine-derived nutrients (MDN) in sustaining the productivity of Kenai RW. In the first two years, we propose to develop, compare and contrast robust methods and monitoring protocols to detect, understand and predict changes in MDN and its linkage to productivity and biological (salmon) resources. We will test the robustness and validity of several distinct indicators or proxies (nutrients, stable isotopes, fatty acids, contaminants, foodwebs) of MDN across different ecosystem components of Kenai RW. In the 2nd and 3rd year, we will synthesize and publish data, compare results with other complementary watershed projects and produce a final GEM report, and complete the validation of these indicators to quantify the fate/transport of MDN linking various components of the watershed and their implications for the productivity of Kenai RW and its salmon and trout populations. We will actively participate in networking and communication among various research groups looking at watershed level changes in MDN and resource productivity in association with the Gulf of Alaska.

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Location: Kenai River Watershed

PI Name: Asit Mazumder Lead Agency: ADFG

STAC Reviewers: Tom Royer, Charles Miller

STAC: Do Not Fund

Project Title: Marine-derived Nutrients in the Kenai River Watershed: Methods

for Detecting Change

Funding Recommendations:

Science Director: Do Not Fund

Public Advisory Committee:

Trustee Council:

Executive Director: Do Not Fund

Mazumder-FY05-Marine-derived Nutrients

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WATERSHEDS

STAC:

This proposal is not recommended for funding. There is concern regarding the ability to determine the critical MDN or substances in the KR watershed and how they influence changes the ecosystem. How can the proposers be assured that they have identified the critical components of this ecosystem? The proposal relies on regression analyses to test the relationships between MDN, biological and physical parameters. This does not establish cause and effect. For example, changes in salmon abundance might be affected by open ocean conditions rather than local watershed conditions. The hope is stated here that multiple regression analyses, including non-linear and non-parametric versions will help to find a relationship between MDN supply rates (anadromous fish inputs) and some of the many variables to be extracted from the watershed. This will fulfill what they state is their principal goal, to find one or more proxy variables for rates of MDN supply. Nothing is said, however, about how the fish inputs will be quantified. There is no statement of who will carry out the analyses or where they will be done. The inability to measure the sensitivity of the ecosystem to MDN is also

worrisome. It is curious that the works of other researchers addressing the MDN distributions in the region such as Finney et al. are not referenced in this proposal. Are there possibly already accepted protocols for this type of sampling? If not, can they really be established and tested in two years? Decades of sampling will be required to determine the interannual signal of MDN and its strength will be a function of biological and physical factors. It is unclear as to how they will separate these influences. The specific testable hypotheses (p. 4) are not connected with the proposed data set. Statistical testing of these is not possible. They need a model that can be tested with the data sets to be gathered.

Rationales For Funding Recommendation Science Director: Concur with STAC Public Advisory Committee: Executive Director: Concur with STAC Trustee Council: Appendix: Draft 2005 Proposal Funding Report

Appendix II

EVOS 2003 (FY-04) Recommendations

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Mazumder-FY04-Marine-Derived Nutrients \$120,000.00 \$120,000.00 \$120,000.00 Fund Contingent

Gulf of Alaska Ecosystem Monitoring, Draft FY 2004 Work Plan 8/22/2003 77

Project: Mazumder-FY04-Marine-Derived Nutrients

Project Title: Marine-Derived Nutrients in the Kenai and Adjacent Watersheds: Methods for Detecting Change

Location: Cook Inlet drainage basin, Kenai Peninsula, Kenai River watershed

Proposer: Asit Mazumder Proposer Affiliation: Alaskan University

Lead Agency: NOAA

Funding Recommendations:

FY04: \$120,000.00 FY05: \$120,000.00 FY06: \$120,000.00

Abstract:

Kenai River Watershed (KenaiRW) is recognized for its abundant fish, wildlife and diversity of landscapes. Extensive consultation among stakeholders, communities and agencies has led to this proposal on the role of marine-derived nutrients (MDN) in sustaining the productivity of Kenai RW. We propose to develop robust methods and monitoring protocols to detect, understand and predict changes in MDN and its linkage to productivity and resources. We will test the robustness of several indicators (nutrients, stable isotopes, fatty acids, contaminants, foodwebs) of MDN in different ecosystem components of KenaiRW and seven other watersheds around Cook Inlet. In the 3rd year, we will begin testing the validity of these indicators to quantify the fate/transport of MDN linking various components of the watershed and their implications for the productivity of KenaiRW. We will also develop a platform for networking and communication among various research groups looking at watershed level changes in MDN and resource productivity.

STAC Recommendation:

The proposal is well beyond the scope of the Invitation with regard to annual cost and the types of activities that are appropriate to GEM watersheds at this time. The proposal addresses the fundamental measurement questions posed in the Science Plan and the Invitation in objectives 1 - 3 and 8. Objectives 1 - 3 require thoroughly sampling one relatively large and complex watershed, when basic questions of how to measure marine influences in watersheds may best be answered at lower cost by sampling smaller, less complex watersheds that provide more geographic contrast. Objective 8 effects coordination among cooperating parties. Objectives 4 – 7 presume to make choices regarding modeling and selection of MDN measures and indicator species that are not envisioned in GEM planning until late FY 06 to early FY 07 when the results of the current phase of GEM watershed work becomes available. The GEM modeling program that will link the habitat types and guide investment in research is not prepared to handle the output from this ambitious sampling program. It is also not clear present knowledge of the variability in proposed measures of MDN and proxies is sufficient to design sampling of the scale of the proposal. Addition of matching funds would take the three year cost of this project to US\$ 1.2M which is well beyond the level of funding justified by the current state of knowledge of marine-terrestrial linkages in GEM watersheds. Recommend that proposal be revised to eliminate sampling sites outside the Kenai River watershed, and reduced within the watershed to a representative of each habitat type, and to focus on achieving objectives 1, 2, 3, and 8 over a three year period. Fund reduced. Gulf of Alaska Ecosystem Monitoring, Draft FY 2004 Work Plan 8/22/2003 78

Executive Director's Recommendation:

The proposal provides needed measures of marine linkages in a watershed that is at high risk of degradation due to human activities, however its scope is far broader than envisioned in the Invitation for Proposals. A revised proposal incorporating the recommendations of the STAC for an amount not to exceed 120K is needed before this proposal can move forward. In addition, in order to move forward a letter from the PI's is required agreeing

to participate in a watershed workshop will be held at the January 2005 GEM meeting, and to present an up-todate report on progress and participate in comparison and evaluation of methods. Fund contingent on receipt of revised proposal.

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



June 29, 2004

The Honorable William D. Ruckelshaus Commissioner, Ocean Policy Commission 1000 2nd Avenue, Suite 3700 Seattle, Washington 98104

Dear Mr. Ruckelshaus:

Thank you for all the time and effort you spent on the President's Oceans Commission. The work accomplished by the Commission certainly is a valuable tool for all organizations associated with marine biology.

The *Exxon Valdez* Oil Spill Trustee Council, in partnership with NOAA's Steller Sea Lion Initiative, the Northeast Pacific GLOBEC program, the North Pacific Research Board and the Alaska Ocean Observing System cordially invite you to be our keynote speaker at our 2005 Marine Sciences Symposium.

The Symposium is held in Anchorage, Alaska and runs from January 24th through the 26th. We would invite you to give opening remarks on the 24th at about 9:15am. Our time for your remarks could be anywhere from 30 to 50 minutes, whatever you would prefer. We would welcome your comments on any subject you would choose related to marine sciences.

Attached for your information is a copy of our program, abstract book and my remarks from last year's meeting.

We will pick up all your expenses for your participation and will be glad to offer an honorarium, if you desire.

If you are not able to be in Anchorage for the opening day, but could come on the 25th or 26th of January, we would be glad to arrange for your remarks at another time. We certainly hope that you will be able to participate in our Symposium and we would appreciate your earliest response.

Sincerely Gail Phillips

Executive Director

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



July 1, 2004

Prof. Maria Xose Vazquez Rodriguez Faculidade de CCEE e EE A5 Lagoas Marcosende Universidade de Vigo Vigo 36310 SPAIN

Re: Book: Economic, Social and Environmental Effects of the "Prestige" Spill

Dear Prof. Vazquez:

Thank you for the copies of the book on the symposium at which our former Executive Director, Molly McCammon, gave a perspective on the *Exxon Valdez* Oil Spill. Over the years since 1989, we have come to appreciate the importance of learning all that we can from the experience of not only our own oil spill, but from those of others as well. In this regard the Prestige Symposium publication is an important contribution that will help future generations understand the importance of carefully controlling the transportation of oil.

We appreciate the scholarship and careful editorial work that went into producing this most useful reference. It is a welcome addition to our library. Please accept my best wishes for the full recovery of the historic coast of Galicia and the other injured areas as well.

Sincerely,

Gail Phillips, Executive Director

cc: Molly McCammon, AOOS

Phil Mundy, Science Director

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation



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

July 27, 2004

Mr. Sean Thomas 1427 Church Street, Apt. 2 Galveston, TX 77550

RE: EVOSTC Science Coordinator Position

Dear Mr. Thomas:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

> Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture

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July 27, 2004

Mr. Stephen A. Steele PO Box 7212 Golden, CO 80403

RE: EVOSTC Science Coordinator Position

Dear Mr. Steele:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration

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July 27, 2004

Mr. Jason W. Brune 5000 Buckingham Way Anchorage, AK 99503

RE: EVOSTC Science Coordinator Position

Dear Mr. Brune: Jason -

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

You had a great Interview. As soon as you can, please sall me re another idea we

have.

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July 27, 2004

Mr. Robert Evans 1230 Airport Way Fairbanks, AK 99701

RE: EVOSTC Science Coordinator Position

Dear Mr. Evans:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

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July 27, 2004

Ms. Sidney Rogers Fadaoff 300 Ocean Point Drive Anchorage, AK 99515

RE: EVOSTC Science Coordinator Position

Dear Ms. Fadaoff:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips (Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

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July 27, 2004

Mr. Donald E. Haas PO Box 240524 Anchorage, AK 99524-0524

RE: EVOSTC Science Coordinator Position

Dear Mr. Haas:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips (Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration

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July 27, 2004

Mr. Don Jean PO Box 672582 Chugiak, AK 99567

RE: EVOSTC Science Coordinator Position

Dear Mr. Jean:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips (Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

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July 27, 2004

Ms. Julie Ann Neymark PO Box 243724 Anchorage, AK 99524

RE: EVOSTC Science Coordinator Position

Dear Ms. Neymark:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips (Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

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July 27, 2004

Mr. William C. Schneider, P.E. 8450 Swanson Circle Anchorage, AK 99516

RE: EVOSTC Science Coordinator Position

Dear Mr. Schneider:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

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

July 27, 2004

Mr. Stanley R. Schwafel 465 Goldstreak Road Fairbanks, AK 99712-2007

RE: EVOSTC Science Coordinator Position

Dear Mr. Schwafel:

Thank you very much for submitting your application for our Science Coordinator position. We received applications from a number of highly-qualified scientists, which made our job of selecting just one person quite difficult.

This letter is to let you know that we have hired another person for this position and again to thank you for your interest in employment with the Trustee Council.

Sincerely,

Gail Phillips (Executive Director

Cc: Trustee Council Dr. Phil Mundy, Science Director

START OF NEW REVIEW

Review ID: 372

1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?

RATING: 10

This project is a feasibility study to determine the efficacy of PIT tagsto mark juvenile pink salmon emigrating from Prince William Sound. The project will explore techniques for monitoring ecosystem function in relation to early marine mortality of pink salmon and for determining the variation in overall marine survival due to the early marine and oceanic phases of the pink salmon life history. Such information is essential for management application of the SEA model and juvenile censusing to improve forecasting and to manage hatchery release strategies to optimize survival while minimizing impacts of the releases on wild stocks. The ability to partition the variability in survival of release groups into PWS and oceanic stanzas would increase our understanding of mortality processes affecting salmon in the Gulf of Alaska ecosystem, and determine if juvenile censusing can reliably be used as a forecasting tool.

2. Are the methods as likely to be effective as any others available in achieving the solution?

RATING:

9

The project will determine if PIT-tagging at sea is a reasonable approach for secondarymarking of pink salmon emigrating from PWS. The methods are effective and appropriate for a feasibility study. Two major issues will be addressed: 1) the feasibility of marking, including capture, handling, and estimation of short-term mortality; 2)the feasibility of automated detection of tags from processing lines. The number of tags that can be released will be limited by cost and capture and marking rates; a high percentage of the catch must be censused to recover sufficient tags for estimation of mortality, and the detection rate must be well-understood to avoid a negative bias in the mortality estimate. The study is well-designed for examining the feasibility of these issues. Before the approach is advanced from feasibility to implementation, the data from this project must be carefully evaluated to determine if the number of tags that can be affordably released will be adequate to estimate variability in oceanic mortality, given the observed short-term mortality and tag loss, the potential for long-term effects of tagging on survival, the proportion of the catch and escapement that can be surveyed for tags, and the uncertainty in the tag detection rate.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

RATING: 10
The project personel are uniquely suited to carry out the objectives of the study because of their scientific expertise, experience with sampling juvenile salmon in the study area, and their ability to provide equipment and senior staff support. This in-kind support makes the feasibility study extremely cost-effective. This project was been coordinated with the proposal to develop an implementation plan for the SEA pink salmon model; timely completion is essential to provide input to the planning process.

Additional Comments

This project is an important component of the planning process for implementation of the SEA pink salmon model. The project will provide not only insight into the feasibility of secondary marking with PIT tags, but also more information on sampling emigrating juvenile pink salmon for evaluation of hatchery-specific otolith marks, essential for using the pink salmon model for evaluating early marine mortality processes affecting pink salmon.

Exxon Valdez Oil Spill Trustee Council

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



Date 06/22/2004

Re: Response required regarding Konar-FY05-SOP for Long-term Monitoring

Dear Dr. Konar,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by 9:00 AM, Monday July 26, 2004. To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration

State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law

Statement of Contingencies

Please provide a revised project narrative and reduced budget. Propose to write reports and manuscripts on the current GEM work (through summer 2004), propose to work with the Bodkin project to identify long-term permanent monitoring sites. Reduce proposed sampling efforts in the anticipation of the implementation process for GEM being in place. Move closer to the model of Bodkin and Dean. Propose sampling efforts in places where there is not currently sampling and reduce sampling in areas that are over sampled. Work to move efforts closer to the original model of Bodkin and Dean. Address other peer review comments as appropriate.

Reviews:

START OF NEW REVIEW

Review ID: 284

1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?

RATING: 9

The proposal is technically and scientifically sound. I encourage the proposers to contact Alan Bennett of the National Park Service regarding the NPS's nearshore inventory and monitoring program taking place in Kenai Fjords, Katmai and Lake Clark National Parks. 907-644-3681

2. Are the methods as likely to be effective as any others available in achieving the solution?

RATING: 9 Because the proposers have selected tried and true protocol they are well ahead of the curve.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

RATING: 9

The budget appears to be realistic given the nature of the study. Marine studies are logistically challenging and the budget reflects this. The administrative overhead seems very reasonable as well. Project milestones appear well defined and achievable given the qualifications of the proposers.

Additional Comments

I favor this proposal because it does not hinge on development of new protocol. The use of existing methods, consistent with other monitoring efforts, will go a long way to allow for comparability of data and identification of trends.



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July 29, 2004

Gail Vick, Executive Director Gulf of Alaska Coastal Communities Coalition PO Box 201236 Anchorage, AK 99520

Male Dear Ms. Vick:

Thank you for your comments supporting the Vick Alaska Coastal Communities Observer System proposal.

I appreciated your attendance and participation at the July 21 Public Advisory Committee's meeting and your quick written response to their comments and concerns regarding your proposal. Both of your comments will be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail Phillips **Executive Director**

Thanks for your input!

Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law



Gulf of Alaska Coastal Communities Coalition (GOAC3) PO Box 201236, Anchorage Alaska 99520 Phone: (866) 561-7633 or (907) 561-7633 Fax: (907)561-7634 Web: www.goac3.org Email: goaccc@alaska.net

July 19, 2004

TO:

Gail Phillips. EVOS/TC Executive Director Members of the EVOS Trustee Council Members of the EVOS / TC Public Advisory Committee (PAC)

RE:

Comments on proposals for FY05 funding ACCOS / Alaska Coastal Community Observer System

Dear Gail and the members of the Trustee Council and Public Advisory Committee:

On behalf of the Board of Directors for the Gulf of Alaska Coastal Communities Coalition (GOAC3) and myself, as a commercial fisherman in Prince William Sound, as a Director for the Prince William Sound Science Center, and as a member of the North Pacific Research Board Advisory Panel, I am writing regarding specific comments on the proposals for the EVOS/TC FY05 funding related to the Alaska Coastal Communities Observer System (ACCOS) proposed pilot.

This letter expresses our disappointment over the recommendations of the proposal review team to not fund the ACCOS-PWS Pilot Project for FY05. We feel strongly that this program of institutionalized community observation should be funded. There is a growing national concern that coastal communities are disenfranchised from both the scientific data collection and the resulting regulatory action that so heavily impacts them. The National Research Council, the U.S. Commission on Ocean Policy and the Pew Oceans Commission have all recommended a substantially enhanced and institutionalized way to incorporate local and traditional knowledge (LTK or TEK) and to include communities in everything from creating indices to collaborative research efforts.

EVOS itself has specifically stated that "it would have been desirable to see TEK and coordination with the local communities in PWS."¹ We feel that the ACCOS project has tremendous potential to help fill that need.

The proposed ACCOS pilot project in Prince William Sound is just that – a pilot project. If successful, this project can be replicated all over Alaska and other places, integrating local and traditional knowledge with scientific knowledge through a variety of programs and options, and creating, possibly, a truly collaborative way of conducting near-shore research.

However, we are more concerned in outcomes than in pride of ownership and we see an opportunity that we suggest at the end of this letter.

The ACCOS proposal grew out of several concerns:

- to give voice to the frustration that many local community residents have over having no vehicle to report their localized observations
- > to help indicate where current or future research needs might be
- to help develop indices or "alerts" that might not have any other way of being reported
- > to help create better and more sustainable economic opportunities
- to forge new alliances which will hopefully help us all solve problems faster and together- at less expense
- to help buffer our coastal communities from the consequences of managerial decisions based on poor or non-existent science by seeking ways to find out what research may be needed and how soon regarding pending regulatory changes
- to help educate all members of the community regarding their role in habitat protection and restoration
- to foster a better understanding of community dynamics among researchers and regulatory agencies
- to help develop research models that integrate sustained use of local and traditional knowledge (LTK)
- to help educate community members and even visitors in being more "scientific" about their observations and recording of those observation

This would further help communities by:

- Creating greater awareness of near-shore needs or problems through lay observations of:
 - Salmon stream erosion
 - Presence of invasive species²
 - Near-shore depletion of halibut
 - o Debris
 - Marine mammal interactions³, changes in water temperature, increase of indicators such as jellyfish, etc.
 - Near-shore pollution
 - o Gear conflicts that affect habitat
 - o Interactions between high-powered jet skiis, etc., and near-shore habitat
- Helping to provide information to local area planning, such as through the current Sitka Sound Local Area Management Plan (LAMP) and other proposed LAMPs in Prince William Sound and on Kodiak and other areas
- Working with community groups to develop marine-sustainable models for economic development
- Working with environmental organizations to identify or support indices

It is disappointing that the EVOS/TC staff and reviewers have not seen the inherent value of the project. The decision seems to have been based on four issues:

ACCOS/EVOS Response letter July 2004

- 1. lack of statistical model
- 2. lack of appropriate principal investigators
- 3. concern over outcome being prejudiced
- 4. concern that the project was a glorified web site⁴

There can never be a true statistical model for this project. This is not a quantitative process. This is a social, political, economic and humanitarian process. The point of the proposal was to develop a data collection and interpretative model for incorporating local and traditional knowledge into the many phases of scientific investigation.

The proposal's "principal investigators" are most definitely not scientists nor social researchers. That is not what the project calls for. The Pilot Project Team consisted of long-time leaders within the Prince William Sound Community as well as one individual who is a well respected social economic researcher and two other individuals with a long history of credentials in developing related projects. The proposal was specific that this was a team that would be responsible for working with agencies from National Marine Fisheries, Alaska Department of Fish and Game and others to develop a data collection format that would be amenable to joint specific goals and then would be field tested.

More disturbing is that the EVOS / STAC summary indicates that the reviewers may have a built-in bias toward any stakeholder participation. ("With a purpose of GOAC3 to keep the maximum fisheries effort within a sustainable environment it is questionable how objective the observations would be.")

The ACCOS project clearly proposes to include *all* community members – including residents, teachers, students, visitors, subsistence users and sports fishermen, as well as commercial fishermen. The concept of having a "rigged" system is neither possible nor warranted. This is about community observations being recorded in perpetuity. All "lay" observations will be naturally biased but a pattern will emerge that will either substantiate or refute specific claims.

To be taken seriously by the scientific community, to have a framework for relaying information, to forge better working relationships, all of these and more are the perennial problems that communities face. You hear it time and time again. You hear about how disconnected the science community is from the people who need that science in order to have a better quality of life. And why? Because there is an ingrained bias – admittedly on both sides – and there are precious few ways to bridge those gaps. Our coastal communities want and need to know that their observations can be validated and heard by the scientific community, as surely they affect their immediate environment and working world. ⁵

A program like ACCOS must be institutionalized in order to be successful. It can be loosely administered by schools⁶, municipal or tribal governments, regional economic development groups, or other local organizations to ensure that it is, in fact, being used, and it can be monitored on a regular basis by agencies who want that information.

As an alternative to funding the ACCOS proposal in full, we are highly supportive of Lyn McNutt's FY05 Infrastructure for GEM proposal. This proposal is not the same as ACCOS but it utilizes many of the same concepts in the expectation of developing a model. It is extremely important that this project go forward.

It is also a prime opportunity to go one step beyond, creating a model that could be used in a future ACCOS pilot project. I believe Ms. McNutt's project can easily accommodate an additional component that will assist both our goals. I have discussed this in brief with Lyn and she is agreeable to further discussion on how this might work.

Therefore, I hope that you will consider additional funding for Ms. McNutt's project that will help us to develop such a model. Ms. McNutt also has experience working with a Canadian model that may be similar to what we envision. Her knowledge and expertise, as well as the knowledge of the other PIs on this project will be something we cannot replicate. Our combined experience and knowledge will, similarly, aid her project.

Because of time constraints, we have not discussed a scope of work or budget. Since much of the proposed ACCOS project budget was focused on managing the pilot, the amount that would be tailored to Ms. McNutt's project would be significantly less. Our goal, for the moment, would be to develop a model that would assist both our efforts. If the EVOS/TC is amenable, then we can develop a budget and work plan fairly quickly.

I encourage you to strongly consider this option. In a time when are coastal communities are seeking to be heard, in a time when state and national organizations are also encouraging this, in a time when we all need to be working together, we need to find models – and quickly – which can be successful (and relatively inexpensive) in perpetuity. If we keep closing the door to our local (current) and traditional observations, we have not only lost a tremendous amount of collective and valuable knowledge, but we have lost an opportunity to help enlist our coastal communities in creating better local environments. And, we have aggravated a growing political problem. Despite old time and long-held biases against "anecdotal information", community observations have a very important role in our collective knowledge base.

Thank you.

Sincerel

Gale K. Vick, Executive Director Gulf of Alaska Coastal Communities Coalition (GOAC3)

Cc: GOAC3 Board of Directors and Technical Team Lyn McNutt, University of Alaska Fairbanks

ACCOS/EVOS Response letter July 2004

¹ EVOS/TC Director's comments regarding Schoch-FY05-ShoreZone Mapping for PWS

² This was particularly brought home to me two years ago when I was fishing a remote stream in the Cordova area. I caught what I originally thought was a jack king but then, on further inspection, realized was an Atlantic salmon. Because we were traveling by helicopter and had a weight problem, and because the weather was quite bad, I was talked out of keeping it to take back for ADF&G. I regret that decision. Had there been an ACCOS system in place, I would have definitely taken the fish back whole. I did report the sighting to an ADF&G biologist/manager, but having no LTK component for incorporating the "sighting", I am sure it remains very anecdotal, if not lost. However, I have heard of other fishermen catching Atlantics on that same stream. It would be highly useful to have ALL tourists and others fishing rivers to look for and report invasive species. This could be especially helpful in the reporting of Northern Pike as an imported species to localized lakes and rivers.

³ Almost every commercial fisherman I know, including myself, has seen multiple marinemammal and other interaction, such as Orca attacks on sea lions, seals and otter, by-catch of salmon shark (no way to report), marine and wildlife sightings that are atypical.

⁴ The proposed web site is only a mechanism, it is not meant to be an end product. The end product is the *process* that people use to share static and fluid information, integrating with many other programs resulting not just in a data bank of local and traditional knowledge, but in a *useful tool* that helps to identify or support issues.

⁵ Had there been an extensive program like ACCOS in place prior to the lawsuits regarding the Steller sea lions, there might have been sufficient local and traditional information to encourage a more serious review of what was really going on. There might have been collaborative research efforts already working. There might have been enough "anecdotal" data to indicate that there might be other environmental influences beyond the assumed – and now largely disputed – theory that fishermen competing for forage food is causing the decline in the Western herd. The subsequent lawsuits, based on poor science, have had a devastating impact on our community small boat fleets.

⁶ One of the ways that money could be saved is to work with local schools to incorporate monitoring of this program as part of their science curricula, assigning this as a project to students or others during the summer months.

ACCOS/EVOS Response letter July 2004



Gulf of Alaska Coastal Communities Coalition (GOAC3) PO Box 201236, Anchorage Alaska 99520 Phone: (866) 561-7633 or (907) 561-7633 Fax: (907)561-7634 Web: www.goac3.org Email: goaccc@alaska.net

July 22, 2004

TO: Gail Phillips. EVOS/TC Executive Director Members of the EVOS Trustee Council

RE:

Comments on proposals for FY05 funding ACCOS / Alaska Coastal Community Observer System Proposed modification

Dear Gail and members of the Trustee Council:

As you may know, the GOAC3 (Gulf of Alaska Coastal Communities Coalition) - a 501(c)6 non-profit - represents the smaller coastal communities of the Gulf of Alaska as an advocate for community-held fishing rights. As part of our mission, we are also concerned about sustainable fisheries and habitat protections and the need for relevant science that incorporates local and traditional knowledge (LTK.)

Our belief in this is so strong that we created a concept for an Alaska Coastal Community Observer System (ACCOS) and submitted a proposal to EVOS for FY05 funding of a pilot project in Prince William Sound. The project was not recommended for funding by the EVOS scientific team.

On July 19, we submitted a letter – primarily intended for the PAC (Public Advisory Committee) meeting on July 21 – to express our desire to move forward with some kind of option so that the initiative is not lost for another year. We offered a significant reduction of the program so we could focus FY05 on creating a process by which ACCOS might be better defined by integrating with another proposal for Prince William Sound. We suggested Lyn McNutt and Two Crow's (AKA Jim Schumacher) "Building the Infrastructure for the Gulf Ecosystem Monitoring (GEM) Program."

The McNutt/Two Crow project emphasizes an Integrated Management approach to defining and combining objectives for a monitoring and modeling program that includes community stakeholders, managers/policymakers, economic interests, and scientific researchers. Their proposal focuses on developing agreements and partnerships with each of these groups, and defining mutual objectives that will benefit the larger user community. GOAC3 agrees with McNutt/Two Crow in believing that community and other stakeholder objectives form a sound basis for monitoring and management of resources.

GOAC3 proposed modification for ACCOS to EVOS 7/22/04

page

Before defining a monitoring or modeling program, the communities themselves must first articulate their needs and expectations. These can then be integrated into the requirements of resource managers and policymakers to provide clearly-defined objectives for the scientific community.

Because our organization has a strong base in the entire North Gulf, we feel that we can easily coordinate with the North Gulf communities, providing the community stakeholder requirements for the McNutt/Two Crow project. In turn, the McNutt/Two Crow project offers us a framework for our information gathering, and an opportunity to interact with other groups, including other area resource users and managers, in working toward common goals for integrating LTK. Our original proposal anticipated a full-blown pilot project in Prince William Sound only; the modified proposal would be coordinating with communities in the entire GEM area without conducting a pilot.

I have spoken many times with Lyn McNutt who emphasized the need for having a focused component for Community Objectives in their project. As a member of her original proposal's review team, I discussed with her how we can work toward a mutual goal. The ACCOS project fits well with the McNutt/ Two Crow objective of being "responsive to community involvement in that it would bring together stakeholders with modelers to define needed outcomes of the model." (From the EVOS/ STAC review July 2004) While this is not the full ACCOS objective, working with the McNutt/Two Crow project will provide a starting point for our work, as well as a needed component for them.

We are, therefore, proposing the following modifications to our ACCOS proposal for consideration for FY05 funding:

- (1) The project would no longer be focused on undertaking a pilot project in PWS, but instead would consist of preparation of a detailed report on the needs and expectations of community stakeholders within the Integrated Management approach to the McNutt / Two Crow project community component;
- (2) Our team (GOAC3 and additional staff) would work with Lyn McNutt / Two Crow's project by providing a focal point for the definition of the community needs and their integration into the larger GEM Program;
- (3) Project funding need would be greatly reduced to approximately \$40,000 to fund a community coordinator, to develop and implement a recording system, and to help define an information transfer framework, in conjunction, with the project's original review team and others.

To eliminate any accounting burden on Ms. McNutt, and reduce additional indirect costs, money for this portion of the project should be allocated directly to GOAC3. GOAC3 will provide, as an in-kind contribution, all indirect costs (office, administrative staff, accounting, travel, communications and reproduction) for an estimated total of \$20,000. (GOAC3 has internal and external bookkeepers and is subject to an annual audit.) McNutt and Two Crow would provide

oversight to the GOAC3 project as it relates to defining the community objectives as stated in their original proposal.

In conclusion, during the discussions at the July 21 PAC meeting, I was struck by several immediate and common needs:

- (1) The need for a uniform process that all researchers can use to recognize community objectives relevant to their research and to utilize community observation
- (2) The need for community residents and other stakeholders to participate in specific area research
- (3) The need for community residents and other stakeholders to be able to incorporate their observations toward the identification of research needs
- (4) The number of PAC members who expressed their deep concern that such a process be identified quickly

While working within the McNutt/Two Crow project framework is a positive and cost-effective way to begin defining a process for identifying community needs and expectation relevant to local-area research projects, the GOAC3 will also continue to pursue their goal of developing a community observation system, as well as a means by which those observations can contribute to marine science. Ultimately we see our mutual goals as being multi-fold and mutually beneficial.

We hope that you will see our modified proposal as a way of making this first valuable step.

Thank you.

Sincere

Gale K. Vick. Executive Director

Gulf of Alaska Coastal Communities Coalition (GOAC3)

Cc: GOAC3 Board of Directors and Technical Team Members of the EVOS/TC Public Advisory Committee (PAC) Lyn McNutt, Geophysical Institute, University of Alaska Fairbanks

Attachments: GOAC3 Board of Directors Letter of May 19, 2004

GOAC3 proposed modification for ACCOS to EVOS 7/22/04

GULF OF ALASKA COASTAL COMMUNITIES COALITION BOARD OF DIRECTORS & TECHNICAL TEAM July 23, 2004

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Executive Committee

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July 19, 2004

TO:

Gail Phillips. EVOS/TC Executive Director Members of the EVOS Trustee Council Members of the EVOS / TC Public Advisory Committee (PAC)

RE:

Comments on proposals for FY05 funding ACCOS / Alaska Coastal Community Observer System

Dear Gail and the members of the Trustee Council and Public Advisory Committee:

On behalf of the Board of Directors for the Gulf of Alaska Coastal Communities Coalition (GOAC3) and myself, as a commercial fisherman in Prince William Sound, as a Director for the Prince William Sound Science Center, and as a member of the North Pacific Research Board Advisory Panel, I am writing regarding specific comments on the proposals for the EVOS/TC FY05 funding related to the Alaska Coastal Communities Observer System (ACCOS) proposed pilot.

This letter expresses our disappointment over the recommendations of the proposal review team to not fund the ACCOS-PWS Pilot Project for FY05. We feel strongly that this program of institutionalized community observation should be funded. There is a growing national concern that coastal communities are disenfranchised from both the scientific data collection and the resulting regulatory action that so heavily impacts them. The National Research Council, the U.S. Commission on Ocean Policy and the Pew Oceans Commission have all recommended a substantially enhanced and institutionalized way to incorporate local and traditional knowledge (LTK or TEK) and to include communities in everything from creating indices to collaborative research efforts.

EVOS itself has specifically stated that "it would have been desirable to see TEK and coordination with the local communities in PWS."¹ We feel that the ACCOS project has tremendous potential to help fill that need.

The proposed ACCOS pilot project in Prince William Sound is just that – a pilot project. If successful, this project can be replicated all over Alaska and other places, integrating local and traditional knowledge with scientific knowledge through a variety of programs and options, and creating, possibly, a truly collaborative way of conducting near-shore research.

However, we are more concerned in outcomes than in pride of ownership and we see an opportunity that we suggest at the end of this letter.

ACCOS/EVOS Response letter July 2004

The ACCOS proposal grew out of several concerns:

- >to give voice to the frustration that many local community residents have over having no vehicle to report their localized observations
- to help indicate where current or future research needs might be ⋟
- > to help develop indices or "alerts" that might not have any other way of being reported
- ⋟ to help create better and more sustainable economic opportunities
- \triangleright to forge new alliances which will hopefully help us all solve problems faster - and together- at less expense
- \geq to help buffer our coastal communities from the consequences of managerial decisions based on poor or non-existent science by seeking ways to find out what research may be needed and how soon regarding pending regulatory changes
- to help educate all members of the community regarding their role in habitat ≻ protection and restoration

to foster a better understanding of community dynamics among researchers and \triangleright regulatory agencies

- to help develop research models that integrate sustained use of local and traditional knowledge (LTK)
- to help educate community members and even visitors in being more "scientific" about their observations and recording of those observation

This would further help communities by:

 \triangleright

⋟

- Creating greater awareness of near-shore needs or problems through lay observations of:
 - Salmon stream erosion 0
 - \circ Presence of invasive species²
 - Near-shore depletion of halibut
 - o Debris
 - o Marine mammal interactions³, changes in water temperature, increase of indicators such as jellyfish, etc.
 - Near-shore pollution 0
 - Gear conflicts that affect habitat Ο
 - Interactions between high-powered jet skiis, etc., and near-shore habitat 0
- Helping to provide information to local area planning, such as through the current Sitka Sound Local Area Management Plan (LAMP) and other proposed LAMPs in Prince William Sound and on Kodiak and other areas
- ≻ Working with community groups to develop marine-sustainable models for economic development
- ≻

≻

Working with environmental organizations to identify or support indices

It is disappointing that the EVOS/TC staff and reviewers have not seen the inherent value of the project. The decision seems to have been based on four issues:

- 1. lack of statistical model
- 2. lack of appropriate principal investigators
- 3. concern over outcome being prejudiced
- 4. concern that the project was a glorified web site⁴

There can never be a true statistical model for this project. This is not a quantitative process. This is a social, political, economic and humanitarian process. The point of the proposal was to develop a data collection and interpretative model for incorporating local and traditional knowledge into the many phases of scientific investigation.

The proposal's "principal investigators" are most definitely not scientists nor social researchers. That is not what the project calls for. The Pilot Project Team consisted of long-time leaders within the Prince William Sound Community as well as one individual who is a well respected social economic researcher and two other individuals with a long history of credentials in developing related projects. The proposal was specific that this was a team that would be responsible for working with agencies from National Marine Fisheries, Alaska Department of Fish and Game and others to develop a data collection format that would be amenable to joint specific goals and then would be field tested.

More disturbing is that the EVOS / STAC summary indicates that the reviewers may have a built-in bias toward any stakeholder participation. ("With a purpose of GOAC3 to keep the maximum fisheries effort within a sustainable environment it is questionable how objective the observations would be.")

The ACCOS project clearly proposes to include *all* community members – including residents, teachers, students, visitors, subsistence users and sports fishermen, as well as commercial fishermen. The concept of having a "rigged" system is neither possible nor warranted. This is about community observations being recorded in perpetuity. All "lay" observations will be naturally biased but a pattern will emerge that will either substantiate or refute specific claims.

To be taken seriously by the scientific community, to have a framework for relaying information, to forge better working relationships, all of these and more are the perennial problems that communities face. You hear it time and time again. You hear about how disconnected the science community is from the people who need that science in order to have a better quality of life. And why? Because there is an ingrained bias – admittedly on both sides – and there are precious few ways to bridge those gaps. <u>Our coastal communities want and need to know that their observations can be validated and heard by the scientific community, as surely they affect their immediate environment and working world. ⁵</u>

A program like ACCOS must be institutionalized in order to be successful. It can be loosely administered by schools⁶, municipal or tribal governments, regional economic development groups, or other local organizations to ensure that it is, in fact, being used, and it can be monitored on a regular basis by agencies who want that information.

As an alternative to funding the ACCOS proposal in full, we are highly supportive of Lyn McNutt's FY05 Infrastructure for GEM proposal. This proposal is not the same as ACCOS but it utilizes many of the same concepts in the expectation of developing a model. It is extremely important that this project go forward.

It is also a prime opportunity to go one step beyond, creating a model that could be used in a future ACCOS pilot project. I believe Ms. McNutt's project can easily accommodate an additional component that will assist both our goals. I have discussed this in brief with Lyn and she is agreeable to further discussion on how this might work.

Therefore, I hope that you will consider additional funding for Ms. McNutt's project that will help us to develop such a model. Ms. McNutt also has experience working with a Canadian model that may be similar to what we envision. Her knowledge and expertise, as well as the knowledge of the other PIs on this project will be something we cannot replicate. Our combined experience and knowledge will, similarly, aid her project.

Because of time constraints, we have not discussed a scope of work or budget. Since much of the proposed ACCOS project budget was focused on managing the pilot, the amount that would be tailored to Ms. McNutt's project would be significantly less. Our goal, for the moment, would be to develop a model that would assist both our efforts. If the EVOS/TC is amenable, then we can develop a budget and work plan fairly quickly.

I encourage you to strongly consider this option. In a time when are coastal communities are seeking to be heard, in a time when state and national organizations are also encouraging this, in a time when we all need to be working together, we need to find models – and quickly – which can be successful (and relatively inexpensive) in perpetuity. If we keep closing the door to our local (current) and traditional observations, we have not only lost a tremendous amount of collective and valuable knowledge, but we have lost an opportunity to help enlist our coastal communities in creating better local environments. And, we have aggravated a growing political problem. Despite old time and long-held biases against "anecdotal information", community observations have a very important role in our collective knowledge base.

Thank you.

Sincerel

Gale K. Vick, Executive Director Gulf of Alaska Coastal Communities Coalition (GOAC3)

Cc: GOAC3 Board of Directors and Technical Team Lyn McNutt, University of Alaska Fairbanks

¹ EVOS/TC Director's comments regarding Schoch-FY05-ShoreZone Mapping for PWS

ACCOS/EVOS Response letter July 2004

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² This was particularly brought home to me two years ago when I was fishing a remote stream in the Cordova area. I caught what I originally thought was a jack king but then, on further inspection, realized was an Atlantic salmon. Because we were traveling by helicopter and had a weight problem, and because the weather was quite bad, I was talked out of keeping it to take back for ADF&G. I regret that decision. Had there been an ACCOS system in place, I would have definitely taken the fish back whole. I did report the sighting to an ADF&G biologist/manager, but having no LTK component for incorporating the "sighting", I am sure it remains very anecdotal, if not lost. However, I have heard of other fishermen catching Atlantics on that same stream. It would be highly useful to have ALL tourists and others fishing rivers to look for and report invasive species. This could be especially helpful in the reporting of Northern Pike as an imported species to localized lakes and rivers.

³ Almost every commercial fisherman I know, including myself, has seen multiple marinemammal and other interaction, such as Orca attacks on sea lions, seals and otter, by-catch of salmon shark (no way to report), marine and wildlife sightings that are atypical.

⁴ The proposed web site is only a mechanism, it is not meant to be an end product. The end product is the *process* that people use to share static and fluid information, integrating with many other programs resulting not just in a data bank of local and traditional knowledge, but in a *useful tool* that helps to identify or support issues.

⁵ Had there been an extensive program like ACCOS in place prior to the lawsuits regarding the Steller sea lions, there might have been sufficient local and traditional information to encourage a more serious review of what was really going on. There might have been collaborative research efforts already working. There might have been enough "anecdotal" data to indicate that there might be other environmental influences beyond the assumed – and now largely disputed – theory that fishermen competing for forage food is causing the decline in the Western herd. The subsequent lawsuits, based on poor science, have had a devastating impact on our community small boat fleets.

⁶ One of the ways that money could be saved is to work with local schools to incorporate monitoring of this program as part of their science curricula, assigning this as a project to students or others during the summer months.

ACCOS/EVOS Response letter July 2004

Exxon Valdez Oil Spill Trustee Council

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



July 29, 2004

David Banks State Director The Nature Conservancy 715 L Street, Suite 100 Anchorage, AK 99501

Dear Mr. Banks:

Thank you for your letter supporting the Saupe and Schoch ShoreZone Mapping proposals.

Mr. Schoch's original proposal had several problems in it. We requested that he send us a revised proposal, which he has done. The revisions he offered are more in line with our original request, and I will be changing my recommendation to fund his proposal.

Your letter will be included in the meeting packet provided to the Trustees for their August 23 meeting.

Thank you for this public support. I appreciate it.

Sincerely,

Gail Phillips Executive Director

> Federal Trustees U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration

State Trustees Alaska Department of Fish and Game Alaska Department of Environmental Conservation Alaska Department of Law



The Nature Conservancy in Alaska 715 L Street, Suite 100 Anchorage, AK 99501 tel [907] 276-3133 fax [907] 276-2584

nature.org

July, 22, 2004

Gail Phillips Executive Director Exxon Valdez Oil Spill Trustee Council(EVOS) 550 West 4th Ave., Suite 500 Anchorage, AK 99501

Dear Ms. Phillips:

Thank you for the opportunity to comment on the EVOS FY 2005-07 Draft Funding Recommendations. The Nature Conservancy supports funding for two proposals, <u>ShoreZone Mapping for Kodiak and ShoreZone Mapping for Prince William Sound</u>.

The Nature Conservancy has been developing regional conservation strategies for Alaska in a number of areas with formalized ecoregional assessments. The ShoreZone mapping proposals are of significant interest to the Conservancy as we have found this dataset to be of considerable value for conservation planning throughout Washington and British Columbia, where the entire coastline has been mapped.

A ShoreZone map of Prince William Sound is particularly important as it will provide comprehensive coverage in a critical coastal and marine conservation area of Alaska. Prince William Sound is an area in need of mapping, especially for oil spill prevention planning. The mapping project will also provide valuable biological and geophysical data unavailable through any other existing source. That the Invitation for Proposals specifically invited ShoreZone mapping is a recognition by EVOS of this project's unique value.

The Conservancy is also seeking funds from various sources to complete a map of the entire coast of Alaska using the ShoreZone method. Approval of these funding requests by EVOS will help our efforts to leverage additional dollars for unmapped areas of the state.

Thanks again for the opportunity to comment.

Sincerely,

David Banks State Director