Community Involvement, Environmental Education, and Community Outreach in the EVOS Restoration Process

Report to the EVOS Executive Director and the Trustee Council February 20, 2008

The foundation for community involvement, environmental education, and community outreach in EVOS restoration is laid out in the 1994 Restoration Plan. Publicly-owned natural resources and public services were injured, people and opportunities for use of public resources are specifically included as integral to the determination of a recovered ecosystem, specific restoration strategies are relevant, and several policies directly address these types of activities. The relevant policy commitments are to:

- > Meaningful public participation
- ➤ Integration of local advice into annual and long-term decisions about problems, projects, and priorities
- An ecosystem approach which explicitly includes people in the ecosystem
- > Providing the public timely access to all levels of restoration information in a usable form.

Taken together, the emphasis on balancing and integrating scientific research and monitoring activities with public involvement and education activities is clear. Comments on EVOS planning documents by the National Research Council (2002) identified an important rationale for this balance and integration:

The issue of the relationship between the traditional scientific community and the communities of the *Exxon Valdez* oil spill region rests on an equity argument. The (EVOS restoration program) . . . is a result of settlement funds dedicated to restoration of an ecosystem damaged by a human technological disaster. This ecosystem includes resource-dependent human communities and these local communities have strong interest as stakeholders in the outcome of restoration activities. . . Community involvement in scientific research aimed at gaining a better understanding of marine ecosystems can bring benefits. However, communities must have a role in helping to define what will be done and how it will be done. They must be actively involved in conducting the research, analyzing data, and disseminating the results to members of the community and other stakeholders.

Addressing the commitment to meaningful public involvement in the restoration process has taken a number of forms during the history of the restoration process. In 2001, the Trustee Council funded a project to develop a community involvement plan for the Gulf of Alaska ecosystem monitoring and research program (GEM). This plan,

developed by a broad-based steering committee representing the diversity of communities within the spill-affected area, was completed in 2003 (report reference), but was not adopted. The GEM program was not completely developed or implemented. In 2004, the Trustee Council redirected the focus of the restoration plan from GEM to the remaining questions and restoration of the non-recovered resources and services.

A Public Advisory Committee has played an active role in advising the Trustee Council and staff and other EVOS committees throughout the process. In November, 2006, they made a recommendation to the Trustee Council that a committee be formed to address the need to solicit environmental education and community outreach proposals (through the Invitation for Proposal process) from teachers, environmental groups, nonprofit organizations, tribal organizations, and students in order to broaden public involvement in the restoration program. The Trustee Council concurred and directed Michael Baffrey, the EVOS Executive Director, and Stacey Studebaker, the PAC Chair, to convene the committee.

The committee met on December 11, 2006. Stacey Studebaker authored a report based on this meeting that summarized recommendations for a component to be included in the FY08 Invitation for Proposals. The committee distinguished environmental education and community outreach from community involvement in research, monitoring, or Local and Traditional Ecological Knowledge (LTEK) projects, and recommended that the Council invite project proposals for all of these types of activities. The committee agreed that the Invitation must require project proposals to show a direct nexus with the EVOS, the restoration efforts, relevant research, lingering oil, and/or injured resources and services.

In December, 2007, Michael Baffrey contracted Marilyn Sigman, one of the two P.I.s on the 2003 community involvement plan, to: 1) develop a revised plan in the form of a manual for community involvement and environmental education based on the current focus of the Trustee Council and the recommendations of the Environmental Education and Community Outreach Committee, and 2) to develop materials for inclusion in the FY08 Invitation. A draft report was produced on January 14, 2008, and made available for review. Presentations about community involvement in the EVOS restoration programs highlighted the pending review at the Alaska Marine Science Symposium on January 23 and at the Alaska Forum for the Environment on February 14.

This report provides the contracted products. The manual is written in two parts. Part 1 is directed at anyone who may wish to submit a proposal for a community involvement or environmental education project or project component. Part 2 is directed at EVOSTC staff with recommended actions to develop a community-based program. The recommendations for the FY08 Invitation are in the form of text to be included and the recommended review criteria and process.

One of the most important recommendations to come out of the 2003 planning project was that one EVOS staff person have the responsibility and expertise to be the Community Liaison. As a commitment to implement meaningful community participation in the restoration program has languished since the recommendations in the report were submitted, it is now even more important that outreach occur to the community-based and tribal organizations and individuals who have been involved in the program in the past or the some 90 organizations who expressed interest in being a

community partner in the GEM program in 2002. The community liaison would have responsibility for developing and maintaining community contact lists, promoting "marriages" between scientists and communities with a stake in the recovering resource or service that is the focus of a research or monitoring project, assisting community members and organizations in developing proposals, and supporting data and information-sharing in both directions. This position and these staff responsibilities are critical to the success and meaningfulness of Trustee Council efforts to fulfill its policy commitments to the public, particularly to the residents of oil spill-affected communities.

Handbook for Community Involvement in the EVOS Restoration Program

February, 2008

Part I

Legal and Policy Background

The foundation for community involvement and environmental education in EVOS restoration is laid out in the 1994 Restoration Plan, in terms of the publicly-owned natural resources and the public services that were injured, in the inclusion of people and opportunities for use of public resources as integral to the determination of a recovered ecosystem, in specific restoration strategies, and in several policy commitments.

The Restoration Plan, which governs all activities undertaken by the EVOS Trustee Council, requires that restoration funds be used "for the purpose of restoring, replacing, enhancing, or acquiring the equivalent of natural resources injured as a result of the Oil Spill and the reduced or lost services provided by such resources." Recovery is defined as complete when the resource or use is restored to pre-spill status. Determining the completion of the recovery of the ecosystem requires that it provides the same functions and services as would have been provided had the spill not occurred. In some cases the determination of the restoration of public services is based on restoring the resources upon which they depend, but complete ecosystem restoration is defined for people as when they have "the same opportunities for the use of public resources as they have had if the oil spill had not occurred."

The plan lists the resources and services which were determined to have been injured by the spill and this list of resources and services is updated periodically (most recently in 2006) with a determination that each one is recovered, recovering, or is in an unknown status. The updated list serves as the basis and prioritization of expenditures of restoration funds.

The plan sets out restoration strategies specific to each injured resource and service. Many of these strategies require scientific research and monitoring which has been the focus of much of the work supported by the Trustee Council. Research eligible for EVOS funding provides information needed to restore an injured resource or service and may include determining key relationships in an ecosystem that are important for one or more of the injured resource or service. Monitoring activities eligible for funding track the rate and degree of recovery of the injured resources and services. Long-term monitoring is also eligible if it provides an understanding important for restoration of one or more injured resources. A number of restoration strategies in the plan are relevant to community involvement and environmental education. These are summarized in Appendix 1, by injured resource and service.

The Restoration Plan includes broader policy commitments for the injury assessment and restoration program:

- Meaningful public participation
- ➤ Integration of local advice into annual and long-term decisions about problems, projects, and priorities
- An ecosystem approach which explicitly includes people in the ecosystem
- Providing the public timely access to all levels of restoration information in a usable form.

These policy commitments underscore the need to balance scientific research and monitoring activities with public involvement and education activities and to integrate them whenever possible. Comments on EVOS planning documents by the National Research Council (reference) identified an important rationale for this balance:

The issue of the relationship between the traditional scientific community and the communities of the *Exxon Valdez* oil spill region rests on an equity argument. The EVOS restoration program is a result of settlement funds dedicated to restoration of an ecosystem damaged by a human technological disaster. This ecosystem includes resource-dependent human communities and these local communities have strong interest as stakeholders in the outcome of restoration activities. . . Community involvement in scientific research aimed at gaining a better understanding of marine ecosystems can bring benefits. However, communities must have a role in helping to define what will be done and how it will be done. They must be actively involved in conducting the research, analyzing data, and disseminating the results to members of the community and other stakeholders.

Definitions

Restoration - all phases of injury assessment, restoration, replacement, and enhancement of natural resources, and acquisition of equivalent resources and services.

Community - A broad array of entities including tribal and city governments, non-profit organizations, schools, individuals, and stakeholder and resource user groups which includes subsistence users, commercial fisherman, aquaculture organizations, the tourism and recreation industry, and the conservation community.

Community-based – Refers to organizations and programs that are local in nature and focused on a specific site or place (in contrast to a statewide, national, or international focus) and to programs that address issues and concerns identified as community priorities and which involve community partners in substantive ways.

Monitoring – as defined for the purposes of the EVOS restoration program, monitoring tracks the rate and degree of recovery of the resources and services injured by the spill. Long-term monitoring of an ecosystem relationship may be required to provide an understanding important for restoration of one or more injured resources. Monitoring differs from research primarily in the length of time over which measurements are taken, and the nature of methods and devices employed. Monitoring employs methods and devices that are "tried and true" to help assure the quality of the data.

Research – as defined for the purposes of the EVOS restoration program, research provides information needed to restore an injured resource or service. It involves a relatively short time series of new observations to evaluate a testable hypothesis. Research may use experimental devices or novel methods to acquire data.

Education - a proactive and planned process to target and engage specific audiences in a structured way to ensure that they gain specific knowledge, understandings, or skills. This type of learning can occur in a variety of settings - the classroom with its more "captive audience" of K-12 and college students, in "non- formal" educational settings such as museums and outdoor education sites for all ages, in community education settings such as workshops, forums, and one-on-one interactions, and over the Worldwide Web.

Data vs. Information – Data is transformed into information for user groups by using synthesis, modeling, data management, and information transfer.

Opportunities for Public Participation in the EVOS Restoration Program

- Involvement in decision-making about the program
 - o The Public Advisory Committee has citizen members who occupy stakeholder or public-at-large seats.
 - o Individual or community representatives have opportunities to:
 - Receive public notices and announcements by email or mail
 - Attend and/or testify at Trustee Council or committee meetings in person or by teleconference
 - Comment on draft documents, including the Annual Workplan
 - Serve as a peer reviewer on project proposals in their area of expertise
- Receiving information about the program and project results
 - o From the EVOS website, including downloading project reports
 - Attending public presentations (e.g., the Alaska Marine Science Symposium)
 - o Periodic publications by mail, email, or from the website
- Partnering with scientists or resource management agencies to submit research and monitoring proposals in response to the annual Invitation
- Submission of project proposals for community involvement projects, including citizen science, Local and Traditional Ecological Knowledge (LTEK), environmental education, and community outreach project proposals in response to the annual Invitation
- Sharing of information and data
- Opportunity for submission of innovative restoration projects beyond what is invited in the annual Invitation

Guidance for Meaningful Community Involvement

What Works	What Doesn't	
Community Involvement		
Collaboration between the community and	Local hire or contracting services as sole	
scientists during project planning, design,	means of involvement	
implementation, data analysis, and		
application of results		
Scientists and community members share	No opportunity for relevant local or	
scientific data and relevant local and	traditional ecological knowledge	
traditional ecological knowledge	contributions or inappropriate use	
	Requiring a community involvement	
	component for every EVOS research or	
	monitoring project	
	EVOS community coordinators in each	
	community with centralized community	
	liaisons	
Environmental Education		
Involving students in "real science" data	Scientific presentations to students or	
collection or analysis related to EVOS	teachers that not engaging or appropriate to	
research and monitoring projects	the audience.	
Combining classroom activities with	Curriculum without a plan for	
interactions with EVOS scientists – field	dissemination or evaluation and/or lacking	
trips, classroom visits, interactive online	explicit alignment with state and national	
capability	education standards	
Information geared to audience on websites	Hard-copy project summaries	
Community Outreach		
Scientists or resource manager makes	Scientist or resource manager has no or	
appropriate community contacts at outset	minimal contact with anyone in the	
of project proposal and keeps the	community and does not provide the	
community informed about research and	project results.	
monitoring activities		
Community-based outreach organized by	Scientific presentations at community	
community partners	gatherings that not engaging or appropriate	
	to the audience.	
Special sessions geared to the public by	Expectation that the public will attend	
scientists who have made successful	science conferences geared to scientists and	
outreach efforts or whose projects are of	natural resource managers	
particular interest to the public		
Presentations at the Alaska Forum for the	Presentations at the Alaska Marine Science	
Environment or in the community (primary	Symposium (primary audiences are	
audiences are community-based	scientists and natural resource managers)	
environmental organizations and tribal		
environmental specialists)		

Guidance for Developing Proposals for Community Involvement Projects or Project Components

Community Involvement

Meaningful community involvement in the EVOS restoration program is defined as a substantive role for individuals, communities, and community-based organizations in the design and conduct of restoration activities, in the analysis and application of the results, and in information-sharing in ways that ensure the information is both timely and easily understood. The level of involvement may vary widely, from leading a project to receiving information from someone else's work. In either case, the community or communities themselves will best be able to determine the effectiveness and appropriateness of their involvement in individual projects.

Substantive community roles in projects may include any or all of the following:

- Consideration of local resource issues and concerns and natural resources of high value at the local scale in formulating the project within the overall context of the restoration program
- Consultation between and among researchers and affected communities during project planning
- A role or roles for community members to be directly involved in various phases of the project, including paid and/or volunteer participants.
 - Consideration and a careful weighing of the costs and benefits of local hire, including the costs and benefits of training to conduct the project.
 - Direct participation in data collection, review of results, and development of applications to data management.
 - Community partners (including city and tribal governments and local organizations) in the project with significant roles, including sponsorship through in-kind goods and services or matching funds and community outreach (see below) as it relates to the proposed project.

Involvement in Research or Monitoring Projects

Community members may be involved in research and monitoring projects in a variety of ways. Scientists may initiate projects which provide community partners or individual citizens with substantive roles or communities may identify community issues or priorities related to EVOS restoration program priorities and initiate a partnership with a scientist with appropriate expertise. Project proposals may also emerge from collaborative planning processes, such as tribal resource management planning, that incorporates local and traditional ecological knowledge.

Citizen-based or community-based research or monitoring projects, also termed "citizen science" projects or programs, are focused on the collection of data and direct participation in research and monitoring efforts as well as other aspects of project design,

interpretation of data or knowledge, and application of project results. To be meaningful in the EVOS geographic and social context, these projects may also need to encompass the provision and incorporation of local and traditional knowledge.

Projects that involve the community should demonstrate that data management has been designed to provide reasonable access to data by community members.

Types of projects to be considered:

- > Scientist-initiated projects in which community partners have a substantive role
- ➤ Community-initiated projects with scientist advisors or partners
- ➤ Collaborative scientist-community projects
- Community-based or citizen science monitoring projects

Types of projects or project components that will not be considered:

- Notification of community representatives concerning the status of research or monitoring projects or proposals
- ➤ Local hire
 - The conclusion that employing local residents as the sole method of community involvement is not a meaningful was well-stated in a National Research Council review: "Meaningful community participation must consist of more than providing employment to locals (to work on projects conceived and run by others). Seeing local residents only as a potential labor pool ignores the critical factor of who asks the research questions. This does not mean that employing local residents is inappropriate, but rather that the continued identification of involvement exclusively with employment is unnecessarily narrow (NRC 2002).
- Paid positions for the coordination of community involvement in the restoration program

Examples of past EVOS projects

Community-Scientist Collaborations

The project "Investigating the Role of Natural and Shoreline Harvest in Altering the Kenai Peninsula Rocky Intertidal" (EVOS GEM Project 030647) was better known as "the bidarki project" after the local term for the katy chiton (Katherina tunicata) whose ecology was the focus of the study. This research project demonstrated meaningful community involvement throughout the project. The concern about the status and management of chiton harvest emerged during tribal natural resource planning by Port Graham and Nanwalek. Jennifer Ruesink and Anne Salomon, the scientists that became involved in the project, were intertidal ecologists with experience working with communities in New Zealand in the design of marine protected areas and in voluntary fisheries harvest regulation. The scientists and communities collaborated during project design and one scientist was based in the community during the field seasons, becoming well-known as "the bidarki lady." The focus of the research project was on key ecological relationships within intertidal communities, a recovering resource, on natural and human factors driving the population dynamics of an important subsistence resource, and on questions developed by the community to guide sustainable subsistence use of the resource. The study methods integrated hypothesis-driven data collection with the

collection of Traditional Ecological Knowledge (TEK) through interviews of elders. Residents of the communities were hired or volunteered to assist with data collection. Community outreach included information-sharing at community potlucks. Environmental education was provided through classroom visits and field trips to sampling sites and the production of intertidal food web posters by students featuring the role of the katy chiton as a grazer. The final outreach product of the project will be a book published by Alaska Seagrant that was co-written by a team made up of marine and social scientists and community members involved in the project. The results of the project will be applied in a community-based management plan for the subsistence harvest of bidarkis.

Another example of a community-initiated collaboration has involved members of the commercial fishing community, scientists, and natural resource managers in Cordova in the application of the results of the EVOS-funded Sound Ecosystem Assessment (SEA). SEA was a seven-year (1993-2000) ecosystem-scale study of factors affecting recovery and productivity of pink salmon and herring, damaged resources in Prince William Sound. In 2002, Ken Adams and Ross Mullins organized commercial fishing stakeholders to collaborate with scientists and form the Prince William Sound Fisheries Research Application and Planning (PWSFAP). They initiated a series of community workshops to identify issues and needs related to the application of the SEA study (multiyear project __636) to fisheries management. In 2008, they were continuing to work in collaboration with the Alaska Department of Fish and Game, regional aquaculture associations, the Prince William Sound Science Center, local fishing organizations, Native organizations, and researchers at the Universities of Maryland and Alaska to design and implement a synthesis and modeling study (project 060784). The goal of this community involvement is to fully restore the recovering commercial fishery through an understanding of the ecosystem-level processes that were affecting fisheries production and the implementation of survival models to improve forecasting and assessment of ecosystem management.

Other EVOS-funded projects also demonstrated collaborations between scientists and communities or user groups include:

- Tatitlek and Port Graham Wisdomkeeper workshops
- Community-based harbor seal management (multi-year project __245) which involved biosampling by seal hunters
- A community-based forage fish sampling project (project 030561) which evaluated the classification of fish stomach contents by fishermen as a method to collect data on the food habits of seabirds

Community-based or Citizen Science Projects

The GEM Community Involvement Plan report and associated database (http://gemcitizendb.akcoastalstudies.org) provides information on numerous on-going "citizen science" data collection efforts in the oil spill-affected area and model projects from beyond this geographic area. While many of these are more relevant to a long-term monitoring program, citizen science projects can be an excellent strategy for community involvement and environmental education. In these types of projects, the objectives of the monitoring project may be primarily educational, but the data collection should also

contribute to a dataset that has a long-term benefit in the context of the restoration process.

Cultural and economic differences among communities affected by the oil spill have a bearing on whether community-based projects are likely to be successful as volunteer projects or ones in participants need to be paid to participate. While some larger communities have a tradition of volunteer participation in community efforts such as beach and stream clean-ups or water quality monitoring, volunteerism may not be an option for smaller, predominantly Native communities whose economic base requires substantial time spent harvesting subsistence resources supplemented by paid employment.

Examples of past EVOS Projects:

- Connecting with Coastwalk (project 050723), which developed the Kachemak Bay CoastWalk program as a model to implement the community involvement plan for long-term nearshore monitoring of intertidal communities and other injured resources and services that depend on nearshore habitats (project 050750).
- A project to develop an interactive, online habitat/water quality database to support citizen data-sharing (project 02668)

Local and Traditional Ecological Knowledge (LTEK) Projects or Project Components

LTEK projects or project components involve the collection, interpretation, and application of knowledge derived from the experience with the environment and possessed by reliable non-scientists. "Traditional" refers to knowledge that is intergenerational and within a context of aboriginal or indigenous peoples. The EVOS program has approved *Protocols for Including Indigenous Knowledge in the EVOS Restoration Process* (http://www.evostc.us/pdf/admin/protex.pdf).

Similar sensitivities may exist for local knowledge. The following guidelines (adapted from the National Science Foundation's Principles for the Conduct of Research in the Arctic) should be used for all LTEK projects:

- Include informed consent
- Respect local tradition and language
- Respect privacy, dignity, and where appropriate, confidentiality
- Acknowledge local contributions
- Return results to participating communities

Examples of past EVOS projects:

- As described above, the bidarki project integrated TEK with hypothesis-driven data collection.
- The Tatitlek and Port Graham Wisdomkeeper meetings were designed to share LTEK and scientific information to identify community priorities and facilitate joint project design based on pooled and integrated knowledge.
- The Chugach Regional Resource Council (CRRC) received funding for several years to collect TEK.

• Scientists Evelyn Brown, Jody Seitz, Brenda Norcross, and Henry Huntington documented quantitative ecological information about herring and other forage fish in Prince William Sound provided by resource users and area residents.

Environmental Education

Environmental education involves school curriculum and structured educational programs which aim to teach people about the natural world and particularly about the structure and functions of ecosystems. The focus is on understanding ways in which humans and human systems (i.e., the "built world") influence and create impacts to natural systems as well as ways in natural systems influence and impact humans and human societies.

The development of school curriculum and materials will be ineffective absent a plan for its dissemination to teachers and schools and alignment with state and national education standards.

Types of projects or project components to be considered:

- ➤ Development and maintenance of a user-friendly website of lingering oil with links to injured resources, species, services, ARLIS
- > Interpretive projects
- > Family camps
- > Field camps
- > Curriculum components of other Alaska environmental education programs
- ➤ Innovative new EVOS curriculum
- ➤ Vehicle for sharing Local and Traditional Ecological Knowledge (LTEK)
- > Educational tours by boat operators
- > Traveling displays

Types of projects or project components that will not be considered:

- ➤ Projects that lack clear target audiences, learning objectives, and a method to evaluate whether the objectives were reached.
- ➤ Projects with high costs that benefit a small number of people unless the longterm benefits outweigh this consideration
- ➤ Projects targeted at K-12 education that will not be aligned with state and national educational standards

Examples of past EVOS projects

- The Youth Area Watch program for the Chugach School District (multi-year project __0210) have involved K-12 students in EVOS projects combining classroom activities and field trips to meet the scientist and/or participate in "real science" data collection
- Students in Tatitlek interviewed elders about their experience of changes in the
 distribution and use of subsistence resources and developed PowerPoint presentations
 which they showed during a community potluck as part of the Wisdomkeeper Keeper
 meeting.

Examples from other organizations and programs:

- The U.S. Fish and Wildlife Service's Alaska Coastal Program has supported development of the *Sea Ducks of Alaska* teaching materials, multi-media kits, and "hands-on" classroom presentations and teacher trainings in villages in western Alaska in areas of critical habitat for endangered and threatened eider species. They have also supported development of an *Endangered Alaskan Species* teaching activities and multi-media kit featuring the threatened and endangered sea ducks and the threatened southern population of sea otters.
- NOAA's Coastal Restoration Program has supported development of teaching activities related to clean-up and prevention of marine debris as part of an online Alaska sustainability curriculum.

Community Outreach

Community outreach is provided through media, public events, and other methods to disseminate information and foster sustained involvement of both traditional and underrepresented stakeholders and citizens in the oil spill-affected area in the vision, mission, accomplishments, and challenges of the restoration program.

Types of projects or project components to be considered:

- ➤ Projects that link scientists to the community (e.g., Youth Area Watch projects)
- ➤ Projects that link the Trustee Council to the community
- Paid internships associated with EVOS projects for high school or post-high school
- ➤ Participation in the Alaska Marine Science Symposium or organization of local science forums or conferences
 - Special public sessions of science conferences with multiple presentations by EVOS scientists
 - Presentations to highlight examples of effective community involvement in the EVOS restoration program
 - Examples of integration of LTEK and scientific data collection in EVOS projects
- ➤ Presentations or displays at regional or statewide education or environmental stewardship conferences which have significant participation from communities in the oil spill-affected area
- Media projects by students or community-based organizations (e.g., PowerPoint presentations, radio broadcasts, news articles, traveling exhibits)

Types of projects or project components that will not be considered:

- Scientific presentations to communities or in classrooms unless the proposal demonstrates how the presentation will be designed to be appropriate and engaging for the audience.
- > Scientific presentations at the Alaska Marine Science Symposium or other science conferences that do not highlight community involvement aspects of the project

> Scientific information placed on websites or summarized in fact sheets or other publications that are not geared for public information and have no distribution plan to reach target audiences.

Examples

- ShoreZone mapping, which has been supported in different geographic areas in a series of EVOS-funded projects, is available on a user-friendly website,
 <u>www.coastalaska.net</u>, from which GIS map layers for a variety of parameters (including sensitivity to oil spills) and area-specific information about geological and biological community classification can be downloaded. Website visitors can
- Youth Area Watch students have presented their results at poster sessions of the Alaska Marine Science Symposium.
- Census of Marine Life (NaGISA) project scientists Brenda Konar and Katrin Iken visited the classroom in Seldovia and made their visit to a classroom in Seldovia interesting by dressing up one of the students in a diving suit and bringing samples of the marine invertebrates and seaweeds they had collected that day from a local beach. They provided the students hands-on experience with sorting the samples and had eager volunteers to help out in sampling the next day.
- The team of scientists working on the Sound Ecosystem Assessment (SEA) project developed a PowerPoint presentation with excellent graphics and information at an appropriate level for community presentations. Ted Cooney took the presentation on a "road show" to several spill-affected communities to present what the SEA plan was about and what it had accomplished. The EcoPath computer model of the spill was distributed as a user-friendly CD-ROM *Alaska's Aquatic Ecosystems* which is available online at http://www.fisheries.ubc.ca/Projects/PWSound/AlaskaEco/ALASKA.htm.
- EVOS was a sponsor of the Kachemak Bay Science Conference with multiple local organizations. The conference featured presentations by several EVOS scientists and both scientists and community members involved in LTEK or citizen science projects.
- EVOS staff organized a special public session at the EVOS 10th Anniversary Symposium by inviting mini-presentations by scientists who had made successful outreach efforts or who had projects of particular public interest. Media were invited as well as the general public, travel funds were made available to assist community members in attending, and presentations were upbeat and interesting. A poster session for the public to meet the scientists followed the presentations.

Examples from other organizations or programs:

- The Prince William Sound Regional Citizens Advisory Council organizes an annual "Science Night" for its stakeholder Board members.
- The North Pacific Research Board includes a \$2,000 line item in all research proposal budgets that supports the work of NPRB educational staff to develop outreach materials and activities for the project. The RPF requires outreach to at least one specified audience in addition to the scientific community and does not recognize presentations at scientific conferences as outreach.

References

Committee to Review the Gulf of Alaska Monitoring Plan, National Research Council. 2002. A Century of Ecosystem Science: Planning Long-Term Research in the Gulf of Alaska. National Academies Press. Washington, D.C.

All EVOS project summaries and reports are available online through the EVOS Project Database http://www.evostc.ak.us/Projects/SearchStart.cfm.

Part II

Guidance to EVOS Staff

Why should communities be involved in the restoration program?

The basis for community involvement is quite clear in the 1994 Restoration Plan which states that the Trustee Council shall "establish procedures for meaningful participation in the injury assessment and restoration process" and that the public "will be provided timely access to all levels of restoration information". The plan envisioned the involvement to be in "an on-going fashion" with "multiple opportunities for meaningful public participation at all levels – planning, project design, implementation, and review – not just during the public comment periods of officially distributed documents."

The oil spill involved the injury of public resources and public services. The residents of the communities in the oil spill-affected area depend on the sustained productivity of the Gulf ecosystem for livelihoods, recreation, fish and wildlife harvests, and quality of life and their activities and the activities taking place around their communities are a key part of the equation that results in changes in the ecosystem. Community residents often possess important and precise knowledge about specific areas and have the means and opportunity to gather information that would be too costly for scientists to travel over large geographic areas to collect. Their participation in the restoration program will contribute valuable information to assist the restoration process and to inform them about the status of restored or replacement resources or services.

Which Communities Should be Involved?

The geographic area affected by the spill encompasses 23 coastal communities. These communities range in size from several small villages with fewer than 100 year-round residents to Kodiak, with approximately 9,000 residents. The area also has a number of recognized "stakeholder communities" including Alaska Natives, commercial fisherman, aquaculture organizations, the tourism and recreation industry, and the conservation community. Twenty tribal governments are included within the spill-affected area as well as lands of four Native regional corporations. All the Native communities have important subsistence components to the local economies and all were affected by the oil spill.

Who's interested in participating in the restoration program? How are they interested in becoming involved?

Considerable interest was expressed in participating in the GEM program in response to a survey completed in 2002. This survey targeted 164 community-based or regional organizations, local governments, and natural resource agencies within the oil spill-affected area. 89 responded with interest in participating in a variety of ways (Summary of Survey methods and results in Appendix). Although the survey was specific to participating in the GEM program and priorities may have changed in the intervening years, the types of activities that were of most interest to these potential partners are still indicative about the types of involvement desired. These were:

1. Setting program priorities

- 2. Identifying and incorporating specific community issues and concerns
- 3. Providing input to advisory committees
- 4. Participating in annual meetings to hear about program results
- 5. Organizing community forums about the program
- 6. Receiving and disseminating synthesized information
- 7. Providing educational programs based on data and information
- 8. Being on the program email/mailing list for announcements
- 9. Participating in community-based research or monitoring activities

During the development of the community involvement plan for the GEM program, tribal representatives emphasized the special legal relationship between tribes and the federal government be recognized and addressed. This legal relationship is most often called the government-to-government relationship. It is through this relationship that federal departments and agencies have a duty to consult with tribal governments. Consultation includes that Tribes are (among other things): to receive timely notification of proposed Federal actions; to be informed of potential impact on Indian Tribes; to have the input and recommendations of Tribes on proposed action to be fully considered by those officials responsible for the final decision; and to be advised of rejection of tribal recommendations and basis for such rejections. This relationship was recognized by the State of Alaska in the 2001 Millennium Agreement that provided a framework for state agencies and tribes to work together on a government-to-government basis to improve the delivery of essential public services. Administrative Order No.186 was issued to implement the State's recognition and respect for the governmental status of the federally-recognized tribes in Alaska. These principles should ensure that the Tribes are consulted regarding EVOS actions in a manner which may be separate from that of the general public.

Small, Native villages in the oil spill-affected area will require an investment in capacity-building to realize their potential as participants in the program. Larger communities in the area have considerable capacity to participate through community-based organizations, stakeholder groups, and university and agency programs. The EVOS restoration program could provide opportunities for existing organizations and programs to gear their efforts towards oil spill restoration activities and priorities through incentives and leverage funding through matching grants.

What steps should be taken to create opportunities for meaningful community involvement projects, environmental education, and community outreach?

The Community Involvement Plan developed for the GEM program concluded that the EVOS Trustee Council and staff could demonstrate a solid commitment to supporting community involvement across the broad range of desired activities by taking the following actions. The ones that are relevant to the restoration program as a whole are:

- I. Providing effective program support by EVOS staff
- II. Promoting "robust" community-based research and monitoring
- III. Ensuring effective sharing of data and information
- IV. Providing a strong community role in decision-making and program development

The sustained activities of the Public Advisory Committee address the final action. As communities have additional opportunities to participate in the restoration program, additional opportunities may be advisable to involve them in overall program development. Promoting the application of monitoring and research information to management and stewardship is an important aspect of all environmental research done on public resources. In the context of the Restoration Plan, the primary application should be the restoration of injured resources or uses, but additional resource management applications might also be involved in specific projects.

A subsequent convening of a committee in 2006 to make recommendations for the inclusion of environmental education and community outreach under the purview of community involvement identified distinguished environmental education and community outreach from community involvement in research, monitoring, or Local and Traditional Ecological Knowledge (LTEK) projects, and recommended that the Council invite project proposals for all of these types of activities. The committee agreed that the Invitation must require project proposals to show a direct nexus with the EVOS, the restoration efforts, relevant research, lingering oil, and/or injured resources and services.

The two "task groups" that have been convened have focused their efforts on monitoring and research, in the case of the GEM group, and education and outreach, in the case of the Education Committee. The Trustee Council has funded other types of projects with community or tribal involvement, such as habitat restoration or population enhancement projects (e.g., Chugach Native Region clam restoration project, Port Graham Tribe projects to install a fish pass on the Port Graham River and construct rearing ponds for coho salmon), habitat acquisition, and facilities (e.g., Alaska SeaLife Center, Alutiit Repository Museum). This report assumes that these types of projects will be specified in future annual invitations for proposals if desired, and were not reviewed in a comprehensive way for inclusion in the examples of community involvement in the Handbook.

Action Plan

- 1. Support community involvement-related projects and activities with sufficient staff and expertise.
- 2. Integrate community involvement-related activities into the Invitation for Proposals and review process.
- 3. Support sharing of information and data
- 4. Ensure accountability and adaptive management of community involvement-related activities.

Program Staffing

Sufficient staff and appropriate expertise should be devoted to the community involvement aspects of the restoration program. A Community Liaison position should be

created. This person would act as the central contact, organizer, and liaison for the communities or community partners to all aspects of the restoration program. This person would:

- Provide support to a Community Involvement (CI) Committee, the PAC, and the STAC to review community involvement-related proposals. These committees should include scientists and community representatives with expertise in effective community involvement, community outreach, and environmental education.
- Facilitate scientist-community partnerships and encourage and promote collaboration at all stages of a project from project design to date collection to data analysis and interpretation. Scientists require guidance and support in terms of implementing projects collaboratively with communities and communities require guidance and support in partnering with scientists.
- Facilitate the inclusion of local and traditional and local knowledge The contribution of traditional and local knowledge can make a major contribution to the restoration process. A protocol has been adopted by the Trustee Council for the best practices for the inclusion of indigenous knowledge. The information is often qualitative and may require special measures to limit access to sensitive information. Guidelines need to be incorporated into research agreements.
- Publicize the invitation for community involvement-related projects and assist with proposal-writing
- Facilitate sharing of information and data

Sufficient staff and appropriate expertise should also be devoted to managing the flow of information to and from communities and the public. EVOS public outreach staff will need to work closely with EVSO data management staff to ensure appropriate community and public access to EVOS data.

Support for Opportunities for Collaboration

For communities to participate effectively in the restoration process, they must do preparatory work to assess their interests and priorities, to explore the opportunities that the program offers, to make contact with other researchers and communities to identify potential partnerships. This work can be accomplished by:

- Providing opportunities for substantive interactions among citizens, scientists, and resource managers
- Encouraging and providing travel assistance for key community members to make presentations or participate in focused workshops or annual meeting sessions
- Providing planning grants to scientists and communities to support exploration of mutual interests and development of collaborative projects_(e.g., Wisdomkeeper Workshops in Native villages)
- Providing and encouraging the submission of letters of interest prior to proposal submission so that community involvement personnel can help connect communities and researchers with similar interests.
- Making the results of preparatory work available through the web directory described above.

Revised language for Invitation for Proposals (See Appendix 2)

Promoting the Submission of Community-related Proposals

The advertisement of opportunities to submit community-based proposals will require additional effort beyond what has been done to "get the word out" to scientists and natural resource agencies. Ways to reach the audience of environmental organizations, schools, tribal organizations, and interested citizens include:

- Highlighting the opportunity on the EVOS homepage
- Posting announcement to listserves:
 - o Alaska Natural Resources & Outdoor Education news@anroe.org
 - o What's Up? Listserve sponsored by Alaska Women's Environmental Network and Alaska Center for the Environment pegt@gci.net
 - Kachemak Bay Environmental Educators Association kbeea@yahoogroups.com
- Sending announcements to:
 - o Tribal governments
 - Tribal environmental professionals through the EPA IGAP Program
 - o The Alaska Science Teachers Association
 - The National Science Teachers Association network (one teacher in each school who disseminates information about science education opportunities)
 - o Organizations in the Alaska Conservation Foundation Directory
- Presentation and display at the Alaska Forum for the Environment
- Press release to local newspapers and radio stations in the oil spill-affected area

Review Criteria for Community Involvement-related Proposals

- **Responsiveness to the Invitation (10%):** Evaluation of whether or not proposals respond to this Invitation.
- **Project Design/Conceptual Soundness (40%):** Evaluation of applicant's understanding of and effective community involvement strategy, the project's feasibility, and the soundness of the approach/project design and evaluation strategies.
- **Project Management (25%):** Evaluation of capabilities, experience, and past performance of the proposer(s) and key personnel.
- Cost Effectiveness of the Proposal (15%): The justification and allocation of the budget in terms of work to be performed will be evaluated with an emphasis on the costs relative to the number of people to be reached or involved and the long-term benefits. Additional consideration will be given to projects that demonstrate they will leverage matching funds or in-kind services (e.g., volunteer time, school district resources).

• Collaborative/Coordination Efforts (10%): Coordination/collaboration partnerships are highly encouraged and required for projects with budgets larger than \$10,000

The Proposal Review Process

A CI Committee would need to be appointed, made up of people with expertise in all of the aspects of community involvement that have been invited (i.e., community involvement in research and monitoring projects, collection and application of LTEK, effective means to increase publicity and community ownership in the restoration program, provided it does not impose a major time and travel commitment without compensation on the participants.

The CI Committee would provide peer review for both CI proposals and CI components of science projects. All proposals would first be screened by EVOS staff for completeness. Science proposals with a CI component would then go to both the STAC and CI Committee for review. "Stand-alone" CI proposals would go directly to the CI Committee. The recommendations of the CI Committee would go to the PAC who would participate in the review process of science proposals as they currently do and make recommendations concerning CI project proposals to the Trustee Council.

Sharing information and Data

If communities are to be an effective and integral part of the restoration program, there must be good communications not only within and among communities but also between communities and others working in the restoration program. Communications in this context includes making information about interested communities and their specific concerns and priorities available and helping to connect communities and scientists. Several methods should be used, including a web directory with information that can be added and updated and workshops where community members and other researchers can interact.

Although in some cases specific scientific datasets are important to communities, they usually require information that has been synthesized and presented in an engaging and user-friendly fashion. A regular "State of the Gulf" report can provide a comprehensive picture of what has been learned Community science forums and community-based outreach projects are other effective synthesis mechanisms.

Other effective methods for community outreach by EVOS staff include:

- A list serve
- Publications
- WEB site with Interactive forums
- Continuation of annual meeting workshops for the public
- Workshops in Anchorage and other area communities
- Presentations in communities by EVOS scientists with good public outreach skills

The EVOS data management system should provide for data-sharing in a user-friendly manner, for example through graphic interfaces that provide access to GIS (Geographic Information Systems) information using desktop and laptop computers. EVOS data should be shared with other local or regional GIS efforts and linkages should be sought to

connect the EVOS database to other environmental information databases relevant to the oil spill affected area, including databases of community-based monitoring programs.

Accountability for Community Involvement-related Projects

To make sure that the community involvement-related projects are meeting the objectives of the restoration program and serving the interests of the communities, they must be accountable to EVOS staff, the Trustee Council, and to the communities. The success of these types of projects will require a modification of the reporting requirements to gauge the success of individual projects in terms of the number of people reached, the effectiveness of the community involvement strategy for the target audiences, and the degree to which specific project objectives were met.

Quarterly and annual report would be submitted to EVOS staff. The draft final report would be sent to the CI Committee for a peer review and the final report would then go to ARLIS for format review, printing, and archiving. As with current projects, future funding would be contingent on meeting report deadlines.

The periodic evaluation of completed projects should examine the degree to which they have been successful in stimulating and supporting community involvement. Following the strategy of adaptive management, activities should be modified based on the results of the evaluation process.

Application of the Results to Management and Stewardship

Promoting the application of EVOS data and information to management and stewardship will require ongoing partnerships and feed-back loops to share "success stories" and "lessons learned". Applications should be promoted among a broad network that includes scientists, managers (including tribal councils and natural resource programs), educational institutions and organizations, and schools.

Becoming a Community-based Program

Two federal programs – the NOAA Community-based Restoration Program and the U.S. Fish and Wildlife Service Coastal Program can be considered community-based restoration programs.

- The NOAA CRP program applies a grass-roots approach to restoration by actively engaging communities in on-the-ground restoration of fishery habitats. The CRP emphasizes partnerships and collaborative strategies built around restoring NOAA trust resources and improving the environmental quality of local communities. Examples of projects: 1) Restoration of riparian habitat at Eagle River State Campground and associated educational experiences; partners were the Anchorage School District, Chugach State Park, and Anchorage Waterways Council; 2) Youth Conservation Corps education program an stream restoration projects; 3) Copper River clam restoration projection using adult relocation and clam bed seeding; partners were Prince William Sound Science Center, and the City of Cordova.
- The U.S. Fish and Wildlife Service Coastal Program focuses on Southcentral Alaska as one of two priority areas in the state. Projects are evaluated on how well the project provides specific, quantifiable benefits to coastal resources, migratory

birds, anadromous fish, marine mammals, and endangered species and their habitats and how well the projects build innovative partnerships for coastal conservation. Examples: Research and monitoring on the success of an artificial reef structure as fish habitat (partners Prince William Sound Science Center, NOAA Fisheries, local Whittier dive community, and Whittier school), support to land trusts for prioritizing acquisitions of high-value coastal habitat areas, fish passage restoration projects, streambank restoration projects, support for watershed planning groups, and curriculum projects on topics such as Alaska's sea ducks, Alaska's endangered species, and amphibians.

These programs thus focus primarily on habitat restoration efforts which often include educational components and also fund stand-alone outreach and education projects. They define community involvement in the form of participation by community partners in multi-partner efforts. Priorities revolve around the high-value habitats (e.g., fish streams, coastal wetlands), and high-value resources (e.g., waterfowl) that the agencies are mandated to protect and manage. The programs require non-federal matching funds or services (which can be the in-kind volunteer time or services of the community partner) at ratios from 40-100% of the federal grant funds requested.

Due to the nature of EVOS impacts and the complexity of decisions surrounding removal of lingering oil, it's unlikely that community groups or school groups would participate in hands-on habitat restoration related to the direct impacts, particularly 20 years after the spill occurred. Situations may still exist, however, where habitat restoration projects could replace injured resources or services (e.g., removal of a barrier to salmon migration, restoration of eelgrass beds as herring spawning habitat, artificial reefs). The EVOS program staff should begin to work with the staff of the NOAA and U.S. Fish and Wildlife Service programs to identify and cost-share community-based projects that address joint priorities of the respective programs (e.g., intertidal habitats as injured resource and NOAA trust responsibility) which could be the basis for joint funding, particularly because EVOS funding can match and leverage the federal funding. The timing of the individual grant review processes makes this difficult for grant applicants to put together, so EVOS staff could work on the coordination of funding for individual projects.

A truly community-based EVOS restoration program would involve many community partners, citizens, and community decision-makers in the conduct and direction of the program as a whole and in outreach, education, and information-sharing in every oil spill affected community.

A major "jump start" will be needed at the outset of the effort to move the EVOS restoration program in this direction. A major challenge exists because the program has lost its visibility in the communities and is perceived as inconsistent due to the delay in implementing a structured, focused, and visible suite of community involvement opportunities. A significant effort will be required to contact potential community partners and publicize opportunities for involvement broadly. This portion of the handbook directed at the EVOS staff provides guidance for beginning this effort.

Appendix 1.

General Restoration Strategies

- 1. An ecological approach to restoration; recovery of single species and resources provide the basis for evaluation the recovery of the overall ecosystem; its functions and the services it provides to people.
- 2. Protect natural recovery
 - a. Management of human use, e.g., redirect harvest, reduce human disturbance around sensitive areas such as bird colonies
 - b. Reduction of marine pollution protect by removing a source of stress (to be considered where marine pollution is likely to affect the recovery of the injured marine ecosystem or injured resources and services and where the activity will not duplicate existing agency activities.
- 3. Monitoring and research focused on understanding the factors affecting recovery from the spill
- 4. Manipulation of the environment e.g., fish passes, replanting seaweed

Recommended Language for Invitation for Proposals and Proposal Forms

Draft Language for Invitation

Add a New Invitation Category:

Community Involvement

The Council is committed to meaningful community involvement in the restoration program and ensuring that communities and stakeholders affected by the injury to resources and services by the oil spill are provided access to all levels of restoration information. Meaningful community involvement is defined as a substantive role for individuals, communities, and community-based organizations in the design and conduct of restoration activities, in the analysis and application of the results, and in information-sharing in ways that ensure the information is both timely and easily understood.

Community monitoring may take the form of direct participation in a research or monitoring project, environmental education, community outreach, and/or the inclusion of local or traditional ecological knowledge (LTEK).

Community-based organizations, tribal and municipal governments, and school groups are particularly encouraged to apply in this category, alone or in partnership with scientists where appropriate.

Citizen-based or Community-based Monitoring and Research Projects – also termed "citizen science" projects, these projects involve the collection of data and direct participation in research and monitoring efforts in addition to other aspects such as project design, data interpretation, and information sharing. Priority will be give to projects that address the research and monitoring categories included in this Invitation.

Local or Traditional Ecological Knowledge (LTEK) Projects – projects that involve the collection, interpretation, and application of knowledge derived by experience with the environment and possessed by people who are reliable sources of observations or other forms of knowledge. "Traditional" refers to knowledge that is inter-generational and within a context of aboriginal or indigenous peoples. Any collection or use of traditional knowledge should follow the Protocols for Including Indigenous Knowledge in the EVOS Restoration Process (http://www.evostc.us/pdf/admin/protex.pdf). Additional guidelines to protect the sensitivity of local knowledge are included in the CI Handbook.

Environmental Education Projects – projects that produce and deliver structured educational programs, including school curriculum, that aim to teach people about the natural world and particularly about the structure and function of ecosystems. The focus is on understanding the interrelationships of natural and human systems and the ways in which they impact and influence one another.

Community Outreach Projects – projects that employ media, public events, and other

methods to disseminate information and foster sustained involvement of both traditional and underrepresented communities and stakeholders in the oil spill-affected area in the vision, mission, accomplishments and/or challenges of the restoration program. Community outreach projects may focus on new, multi-year, or previously-completed EVOS projects.

Projects may combine two or more categories. More information on the types of projects or project components being invited, examples, and review criteria are available in the EVOS Restoration Program Community Involvement Handbook (add web link). The handbook does not contain an exhaustive list of what will be considered. Proposals for projects in this category could include, but are not limited to the specific types of projects in the handbook.

If you would like assistance in	finding partners for your project or in developing your
proposal, contact	, the Community Liaision, at the Trustee Council
Office.	

For project proposals with a budget of less than \$10,000, the short form proposal format should be used.

Revise Section V.D. as follows:

V. Considerations Applicable to Project Proposals

D. Community Involvement and Revitalization

The Council encourages proposals in any invited category that involves communities whose services have been impacted as a result of an injured resource or who would benefit from the exchange of information about the restoration program. Scientists. community groups, stakeholder group, and municipal and tribal governments are encouraged to collaborate in the design and conduct of projects, incorporation of local or traditional ecological knowledge (LTEK), environmental education, and community outreach. Scientists are also encouraged to form partnerships to carry out a community involvement component of a research or monitoring project. For guidelines on community involvement projects or project components, see the Community Involvement Handbook (web link). The Council is also interested in local community based proposals which would address community revitalization objectives.

If you would like assistance in finding partners for your project or in developing a community involvement component of your proposal, contact ______, the Community Liaision, at the Trustee Council Office.

Add sections to the Proposal Forms specific to Community Involvement projects:

V. Considerations Applicable to Project Proposals

D. Community Involvement and Revitalization

The Council encourages proposals in any invited category that involves communities whose services have been impacted as a result of an injured resource or who would benefit from the exchange of information about the restoration program. Scientists. community groups, stakeholder group, and municipal and tribal governments are encouraged to collaborate in the design and conduct of projects, incorporation of local or traditional ecological knowledge (LTEK), environmental education, and community outreach. Scientists are also encouraged to form partnerships to carry out a community involvement component of a research or monitoring project or to include a budget item of \$2,500 to work collaboratively with EVOS staff to design and implement an effective outreach component for a project. For guidelines on community involvement projects or project components, see the Community Involvement Handbook (web link). The Council is also interested in local community based proposals which would address community revitalization objectives.

Add sections to the Proposal Forms specific to Community Involvement projects:

Project Plan for Community Involvement Projects (15 pages maximum)

NEED FOR THE PROJECT

Statement of Problem or Community Issue

Identify how the project will address a community issue or problem or will further community involvement in the restoration program. Describe the background and history of relevant successful community involvement projects in the restoration program or other science-based natural resource management programs.

Relevance to Program Goals and Community Involvement Priorities

Describe how the project addresses the priorities identified in the Invitation. Describe the results you expect to achieve during the projects, the benefits of success as they related to the category under which the proposal is being submitted, and the potential recipients of the benefits. Describe how this project addresses meaningful community involvement as defined in the Invitation and the restoration of services or resources or sharing information related to the restoration program.

PROJECT DESIGN

Objectives

List the objectives of the proposed project, the target audiences, and learning objectives if it is an environmental education or community outreach project, and briefly state why the intended project is important.

Outcomes of Community Involvement Projects and How They will be Evaluated Describe the anticipated benefits of community involvement projects in terms of target audiences, numbers of people reached, and learning outcomes for environmental education projects. Describe project evaluation methods.

Coordination and Collaboration with Other Efforts (no change in text)

SCHEDULE

Include a community involvement project example:

Objective 1. Design oil spill restoration teaching activities

To be met by December 2008

Objective 2. Provide teacher training workshops in use of curriculum

To be met by March 2009

Objective 3. Pilot field trip activities

To be met by May 2009

Objective 4. Deliver final units online

Measurable Project Tasks

FY09, 1rst quarter (October 1, 2008 – December 31, 2008)

October 1 Project funding approved by Trustee Council
December 31 Complete draft K-6 unit and circulate for review

Coordinate logistics for Chugach School Disrict staff tranining

FY09, 2nd quarter (January 1, 2009 – March 30, 2009)

January 1-31 Schedule teacher training workshops for Cordova, and Valdez

school districts

January 23-27 Annual Marine Science Symposium and training for Chugach

School District staff

February 1-28 Revise draft units based on review comments
March 1-30 Provide teacher trainings in Valdez and Cordova

FY09, 3rd quarter (April 1, 2009 – June 30, 2009)

April 15-May 31 Lead five school field trips at Peterson Bay Field Station,

Kachemak Bay

FY09, 4th quarter (July 1, 2009 – September 30, 2009)

September 1 Post final units on website

RESPONSIVENESS TO KEY TRUSTEE COUNCIL STRATEGIES

Community Involvement and Local and Traditional Ecological Knowledge (LTEK)

This section is required for all project proposals. Authors of proposals in the Community Involvement category may refer to other sections of the project proposal if the questions listed below have already been addressed.

Describe the coastal communities and the communities of commercial and sport fishers and subsistence harvesters, local science interests such as public schools, environmental education organizations, and university operations that could be involved in the project and a list of representatives of these communities that have been contacted during proposal preparation or who are partners in the project. In making contact, proposal authors should consider that local community knowledge of, and interest in, natural resources may extend beyond the physical boundaries of the communities themselves to harvest areas and beyond.

Although not every proposal will have circumstances that allow involvement with local communities or incorporation of local or traditional knowledge (LTEK), reviewers will give additional consideration to proposals that demonstrate substantive community

partnerships and meaningful community involvement, which may involve LTEK. For definitions and examples of the types of project components invited, see the Community Involvement Handbook (web reference).

Use this section to answer the following questions, if applicable: Who will be affected by your proposed activity? Where will your research or monitoring activities be conducted in relation to communities and natural resource harvest or use areas? What is the ecological and/or cultural significance of the species, biological community, or natural resource issue that is the focus of your research or monitoring?

Describe the specific types of local consultation and with whom it has occurred for this project. Describe how communities will be involved in various phases of the project development and implementation and strategies for maintaining scientific standards for data collection or interpretation by non-scientists.

Describe any significant local issues that your proposed project will address and how the local issue was determined.

If LTEK is collected, describe the method of collection and how it will be handled appropriately in terms of respect, acknowledgement, and appropriate confidentiality.

If data will be collected by community members, describe how community partners or members will be accorded reasonable access to the data and the results of data analysis.

Describe the project's outreach strategies for affected communities and specific activities.

For guidelines in preparing this section of your proposal, see the Community Involvement Handbook. If you would like further assistance in developing a community involvement component of your proposal, contact _______, the Community Liaison, at the Trustee Council Office.

X. How Proposals are Reviewed

Technical Review of Scientific Proposals

Add new section:

Review of Proposals under the Community Involvement Category

Proposals will be evaluated on the following aspects:

- Responsiveness to the Invitation (10%): Evaluation of whether or not proposals respond to this Invitation.
- **Project Design/Conceptual Soundness (40%):** Evaluation of applicant's understanding of and effective community involvement strategy, the project's feasibility, and the soundness of the approach/project design and evaluation strategies.
- **Project Management (25%):** Evaluation of capabilities, experience, and past performance of the proposer(s) and key personnel.
- Cost Effectiveness of the Proposal (15%): The justification and allocation of the budget in terms of work to be performed will be evaluated with an emphasis on the costs relative to the number of people to be reached or involved and the long-term benefits. Additional consideration will be given to projects that demonstrate they will leverage matching funds or in-kind services (e.g., volunteer time, school district resources).
- Collaborative/Coordination Efforts (10%): Coordination/collaboration partnerships are highly encouraged and required for projects with budgets larger than \$10,000

Community Involvement Projects

Proposal Format for Projects with a Budget of less than \$10,000

- 1) Project Title
- 2) EVOS Funds Requested
- 3) Total Cost of Project and Source of Matching Funds or Services
- 4) Project Abstract (What your project is and what it will accomplish in 100 words or less)
- 5) Project Description (Limit to a maximum of three pages)
 - Describe the project in detail:
 - O What the project goals and objectives (include learning objective is applicable)
 - O What communities or audiences will be targeted (e.g., grades K-12, K-6, 6-12; adults, all ages, specific user or stakeholder groups, specific communities)
 - What methods will be used?
 - o How many people will be reached?
 - What are the short-term and long-term benefits of the project?
 - o How will the success of the project be evaluated?
 - Describe how the project will address EVOS restoration. Which of the
 injured species or services are the focus of the project? What types of
 information about restoration strategies, results of restoration projects, or
 other aspects of the EVOS restoration program will be shared with
 communities affected by the spill or provided through environmental
 education?
 - Describe all project partners, the nature of each partner's contributions, and any monetary or in-kind matching resources that will be contributed. Include the value of in-kind services and how the value was reached.
- 6) Summary Budget (*This needs to meet EVOS program requirements*)
- 7) Name of Project Coordinator:

Organization or School:

Address:

Email Address:

Phone Number/Fax Number:

8) Project Timeline. Please note that quarterly and annual reports are required.

9) Briefly describe your capability to carry out the project and administer the project budget. Provide information about your fiscal agent if you are an individual or organization that is not incorporated as a non-profit organization.

Revisions of budget forms and instructions will also be required.