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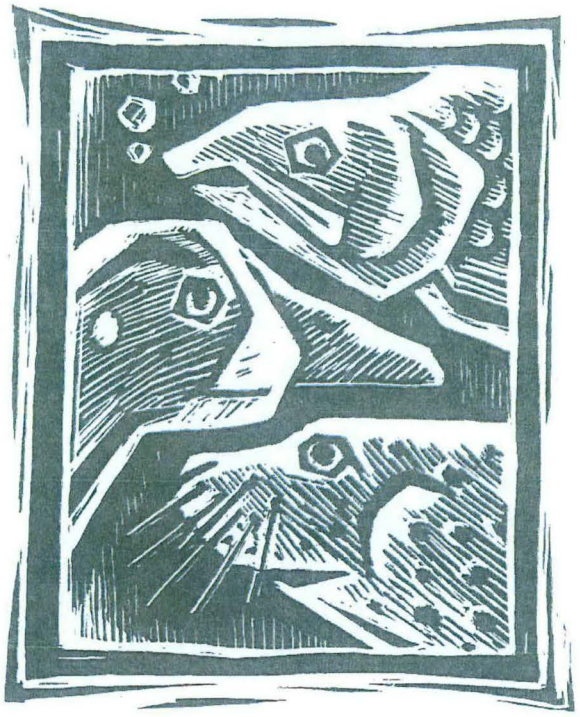
Exxon Valdez Oil Spill Trustee Council



Invitation for Proposals
Federal Fiscal Year 2012

Released October 1, 2010
September 8 DRAFT

Glossary of Terms

Fiscal Year – The Council operates on a federal fiscal year (FFY) that begins on October 1 and ends on September 30.

Focus Area – The Council has selected five areas on which to focus the remaining funds, four of which are addressed in this Invitation: herring, long-term monitoring of marine conditions and injured resources, harbor protection and marine restoration and lingering oil.

Plan – is a multi-year program request for funding that includes all administrative and costs to run each program area.

Preferred Proposer – after reviewing proposals submitted under this Invitation, the Council will identify a Preferred Proposer for each focus area and direct Council staff to work with each Preferred Proposer to revise the subject proposals to satisfy any scientific, technical or programmatic concerns. This identification is not a commitment to fund.

Program – is a 20-year plan for spending the funds for each program area.

Program Science Panel – a panel of scientific experts to review potential projects and give guidance and oversight on the direction of the program; is not required to be independent from the program.

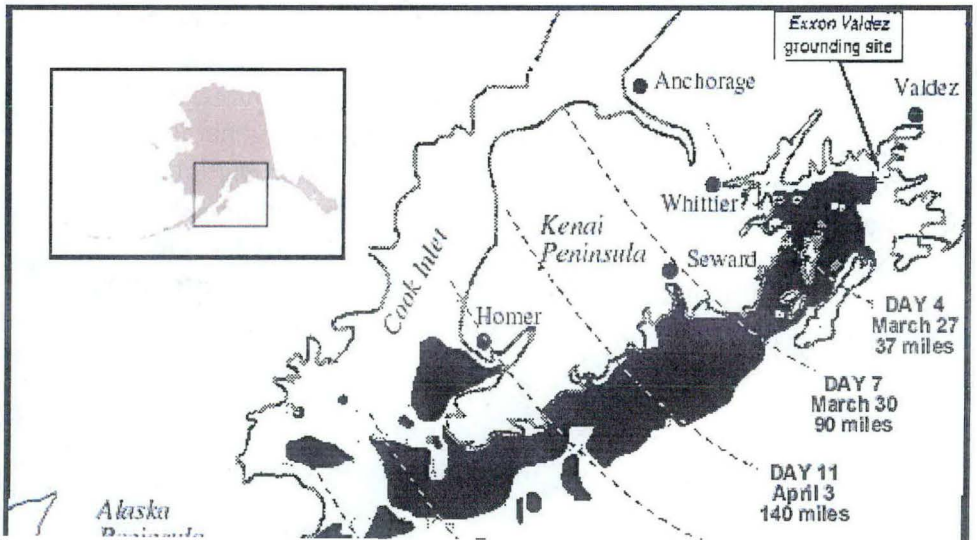
Program Technical Panel – a panel of technical experts to review potential projects and give guidance and oversight on the direction of the program; is not required to be independent from the program.

Project – An individual task that is led by a primary investigator and is attempting to address a specific scientific hypothesis.

Team Leader – Individual who represents proposed program and is responsible for communicating with the Council.

Workplan – an annual request for funding that includes all administrative and project costs.

Spill Area – see map below:



I. Background and Purpose of the FFY12 Invitation for Proposals

In 1992, the *Exxon Valdez* Oil Spill Trustee Council (Council) was formed by six trustees, three State of Alaska trustees and three federal trustees, to oversee restoration of the natural resources and ecosystem damaged by the 1989 *Exxon Valdez* oil spill (EVOS). The Council was funded by settlement of civil claims brought against Exxon Companies by the State of Alaska and the United States. The Council initiated an extensive public process to begin the work of restoration using these joint trust funds and, in 1994, adopted a Restoration Plan to guide restoration through research and monitoring, habitat protection, and general restoration.

As part of this effort, the Council also adopted an official list of resources and services injured by the spill. When the 1994 Plan was drafted, the distinction between the effects of the spill and those of other natural or human-caused stressors on injured resources or services was not fully understood. Through the hundreds of studies conducted over the last twenty years, the Council has come to recognize that ecosystem restoration is not easily addressed. The interactions between a changing environment and the injured resources and services are only beginning to be understood, and, as time passes, the ability to distinguish the effects of the oil from other factors affecting fish and wildlife populations becomes more difficult. These complexities and the difficulties in measuring the continuing impacts from the spill result in some inherent uncertainty in defining the status of a resource or service for an updated list of injured species and services.

The 1994 Plan also outlined an ecosystem-based approach to restoration, a more integrated view that has become increasingly recognized as essential. Even before the Plan was final, the Council began efforts to better understand the coastal marine ecosystem. This approach has provided and continues to provide an abundance of information on fish, marine birds, and mammals.

Of the approximately 780 million dollars of joint trust funds initially funding the Council, more than 180 million dollars have been used for research, monitoring and general restoration and more than 375 million dollars have funded habitat protection. Council annual program development, implementation and administration have cost more than 45 million dollars. Approximately 76 million dollars remain available for research, monitoring and general restoration and 24 million dollars remain available for habitat acquisition and protection. Recognizing that funding for future restoration is limited and that it is becoming increasingly difficult to distinguish between spill impacts and other effects in measuring recovery, the Council is considering an organized and strategic transition to a modest ecosystem restoration process that would focus the remaining funds on the following focus areas: herring; long-term

monitoring of marine conditions and injured natural resources; harbor protection and marine restoration; lingering oil; and habitat acquisition and protection.

This Invitation calls for proposals in the four focus areas of 1) herring; 2) long-term monitoring of marine conditions and injured resources; 3) harbor protection and marine restoration and 4) lingering oil. This Invitation uses a several-step process, as detailed below in *Schedules and Cycles of Review and Funding*, to assist in refining preferred proposals into final proposals submitted and reviewed by the Council for funding in late summer 2011.

With the exception of Lingering Oil, this Invitation requires proposals for multi-year programs administered by a single or multiple entities in each of these focus areas. For these multi-year programs, the Council asks for proposals from a single entity or an organization of multiple entities, such as teams or consortiums, that are capable of directing and implementing the component studies for these applicable focus area(s). Proposing entities may submit proposals in more than one focus area, and organizations and individuals may participate in more than one competing proposal within a single focus area.

PLEASE NOTE: Council funding is based upon an annual approval by the Council. In addition, funding is also dependent upon investment funds which are affected by market fluctuations.

II. Schedule and Cycles of Review and Funding

The schedule for the receipt, review and approval of FFY12 proposals and proposals is shown below:

November 8, ...2010Invitation for Proposals issued
November 19, 2010.....Proposers' Teleconference for Q & A session (see website for call-in information)
January, 7, 2011 .....2nd Proposers' Teleconference for Q & A session (see website for call-in information)
March 1, 2011 .....**FFY12 Proposals Due by 5:00 PM**
By Mid-April 2011 .....Reviews completed, Preferred Proposers Notified, FFY12 Draft Work Plan issued
April ~~16~~ – July 31, 2011.....EVOSTC staff works with Preferred Proposers to revise proposals
August 1, 2011 .....Proposal Revision Period Closes
September 2011 .....**Funding decision made by Trustee Council**

The *Exxon Valdez* Oil Spill Trustee Council operates on a federal fiscal year. The FFY12 fiscal year begins on October 1, 2011 and ends on September 30, 2012. *See each Focus Area for additional schedule and funding review information.*

III. Project Invitation by Focus Area

Building on its past efforts, the Council has identified five areas of focus for its remaining work: (1) herring; (2) long-term monitoring of marine conditions and injured resources; (3) harbor protection and marine restoration; (4) lingering oil; and (5) habitat acquisition and protection. The following sections elaborate on the details of the first four of these proposed areas of focus that are the subject of this Invitation.

HERRING

The Council has classified the Prince William Sound (PWS) population of Pacific herring (*Clupea pallasi*) as a resource that has not recovered from the effects of the 1989 oil spill. The PWS herring population was increasing prior to 1989 with record harvests reported just before the spill. The 1989 year class was one of the smallest cohorts of spawning adults recorded and by 1993 the fishery had collapsed with only 25 percent of the expected adults returning to spawn. The PWS fishery was closed from 1993 to 1996, but reopened in 1997 and 1998, based on an increasing population. Numbers again declined in 1999, and the fishery remains closed today. The 1993 collapse can be explained by several competing hypotheses; however, data uncertainty makes it unlikely that the reasons will be fully understood.

The Council recognizes the uncertainty over the role of the 1989 spill in the current and ongoing depressed state of the PWS herring population. However, herring are considered a keystone species in the marine ecosystem and play a vital role in the food chain of many injured species. Thus, rebuilding the herring population has the potential to support the restoration of these injured species. Species injured by the spill included fishable species such as salmon. Supporting a healthy herring population may also compensate for some of those losses in fishing opportunities that resulted from the spill. In April 2006, prompted by public comments about the continuing impacts to communities and commercial fishermen from herring losses, the Council convened scientists and researchers, commercial and subsistence fishermen, and natural resource managers for a herring workshop. One of the most important outcomes of the workshop was reaching consensus that a long-term strategic herring restoration program was needed if viable herring recovery activities were to be implemented. From 2006 to 2008, Council representatives met with natural resource managers, commercial fishers, scientists, the Public Advisory Committee (PAC), and Alaska Native residents of spill-area communities to gain sufficient input to draft a cost-efficient, scientifically credible, and coordinated program. This effort produced the first draft of the Integrated Herring Restoration Program (IHRP) in December 2008.

The goal of the IHRP is to determine what, if anything, can be done to successfully restore PWS herring; to determine what steps can be taken to examine the reasons for the continued decline of herring in the Sound; to identify and evaluate potential recovery options; and to recommend a course of action for restoration. This document is appended to this Invitation and serves as a general road map for the Council's herring-related funding decisions. Proposals in this area of focus should be responsive to the topics and issues within the IHRP.

The Council has proposed to begin funding this program with $___ over the first five-year multi-year contract period. ~~use approximately 11% - 21% of the available funding for research in this area over a twenty-year period.~~ **PLEASE NOTE: Council multi-year funding is must be**

approved annually by the Council. In addition, projections of future funding are dependent upon investment funds which are affected by market fluctuations.

Considerations Applicable to Proposers

The following are mandatory requirements for potential proposers. Proposals that do not meet each of these criteria will be considered non-responsive to the Invitation and excluded from the review process. Proposers must demonstrate that they have:

1. A proposal which is focused within the oil spill-affected area;
2. A proposal which responds to the Herring focus area, as described in this Invitation.
3. A proposal for a program that complies with the Council's founding documents and related policies and procedures. *See References.*
4. An existing administrative structure to manage funds and projects; the proposer may be an existing organization or collaboration among existing entities and individuals.
5. A structure to communicate with the Council through a single Team Leader; regardless of the structure of the proposers, they must produce a single, comprehensive proposal.
6. A Team Leader who will work with and be responsive to Council's objectives and requirements.
7. A Team Leader who will facilitate the most cost-effective and scientifically-supportive stream of funding among the parties and projects involved.
8. A program science panel to review potential projects and give guidance and oversight on the direction of the program.
9. The ability and commitment to make all data, documents, annual and final reports available electronically to the public.
10. A mechanism for public outreach and opportunities for public comment on program activities.

The following are preferred requirements for potential proposers. Proposers that meet these requirements will be rated more highly during the review process. The Council is seeking a Herring Program that:

1. Continues to reassess the program's progress and relevancy and considers newly-available technologies.
2. Demonstrates an understanding and synthesis of existing scientific literature, research results, and scientific knowledge that includes outcomes of prior Council work and which recognizes the available research infrastructure.
3. Demonstrates an effective and balanced use of funds, including establishing appropriate collaborations with other organizations and experts, achieving the most efficient use of funds, and taking advantage of existing infrastructure.
4. Provides a detailed plan for local and native community involvement in the program.
5. Provides a detailed public outreach plan that describes specific products. These could include the creation and dissemination of simple web-accessible exhibits, newsletters disseminated to spill communities and other data users, real-time data streaming for use in public settings like aquaria and visitor's centers, and submissions to public data consortiums.

6. Establishes realistic and detailed timelines and milestones specific to the individual projects and the overall program.
7. Demonstrates a credible, feasible, and detailed administrative structure and scientific implementation of the program, including project team qualifications (education, experience, related work efforts, proposed time commitment, past performance), and availability of facilities and other requirements necessary for project success.

The following are mandatory requirements for each fiscal year of the program. The submitted budget for each year shall include the staffing and funds necessary to meet these requirements.

1. An annual report must be presented to the Council and will include the following:
   a. A financial accounting of any Council funding received in the past year including a comparison of the requested budget versus the actual budget.
   b. A summary of the projects funded, including brief annual reports from each.

2. A funding request must be presented to the Council each fiscal year and will include the following:
   a. An administrative budget that details the costs of running the program.
   b. An executive list and summary of projects proposed for funding and the scientific basis thereof.

Herring Program Cycles of Review and Funding

The Herring and Long-Term Monitoring focus areas under this Invitation will be funded as a single program for each focus area (one for Herring, one for Long-Term Monitoring. Proposing entities may submit proposals in more than one focus area, and organizations and individuals may participate in more than one competing proposal within a single focus area.

Funding Review of Program: Five-Year Contract, subject to annual Council Approval

These Herring and Long-Term Monitoring programs are administered as multi-year contracts renewable every 5 years for a total of twenty years. Below is a draft schedule for science and funding review for the 5-year contracts:

Year 1:	Sept. 2011:	Fund Program, with organizations and individual projects identified
Year 2:	June 2012:	Program submits proposed FFY13 workplan for Council review
	Sept. 2012:	Funding decision made by Council on FFY 2013 workplan
Year 3:	June 2013:	Program submits proposed FFY14 workplan for Council review
	Sept. 2013:	Funding decision made by Council on FFY14 workplan
	Winter 2014:	Workshop with Herring and Long-Term Monitoring individual researchers' presentations and presentations by proposers on cross-disciplinary syntheses. *See Scientific Review of Program, below, for details.*
Year 4:	June 2014:	Program submits proposed FFY15 workplan for Council review
	Sept. 2014:	Funding decision made by Council on FFY 2015 workplan

Year 5:
May 2015: Program submits Five-Year Plan for FFY17-22 and workplan for FFY16.
Sept. 2015: Funding decision made by Council on FFY16 workplan and review of Five-Year Plan for FFY17-FFY22
June 2016: Program submits proposed FFY17 workplan
Sept. 2016: Funding decision made by Council on FFY17 workplan
(Cycle repeats until approximately 2032)

Scientific Review of Program

As outlined above, a Council science panel selected by the State and Federal Administrators will review the progress of the Herring Program's five-year contract in the third year of funding. The selected proposer's Team Leader will be responsible for providing written cross-disciplinary syntheses to the Council's science panel and the Administrators at least three months prior to the review meeting. These syntheses should address fundamental drivers, trends, and status in a way that contributes to the Council's and public understanding of the effects of EVO. These may include such topics as a synthesis of retrospective data, climate drivers, lingering oil recovery, and the effects of human interventions.

In the third year of funding, the Council will also fund a workshop at which these cross-disciplinary syntheses will be presented. Individual researchers funded under the five-year contracts will also provide brief presentations. These presentations should include information about the availability of data to user groups and how this information can be or is being used to further Council goals and with respect to program objectives and also its utility beyond the program. As noted above, this workshop will also include parallel presentations by the Long-Term Monitoring researchers to allow for an even broader ecosystem-based consideration of the ongoing research.

The Council's science panel may provide written recommendations to the Council for any potential changes to the scope of the program that may be required and a consideration of whether the program is meeting its objectives. This information will be shared with the Herring Program Team Leader for discussion and response before any actions are taken by the Council.

LONG-TERM MONITORING OF MARINE CONDITIONS AND INJURED RESOURCES AND SERVICES

In the twenty-one years since the *Exxon Valdez* oil spill, it has become apparent that the ocean ecosystem can undergo profound changes and such changes may hinder a return to pre-spill conditions. The 1994 Restoration Plan (Plan) recognized that recovery from the spill would likely take decades. A Restoration Reserve was created from the Plan in part to provide for long-term observation of injured resources and services and for appropriate restoration actions into the future. To further this effort, in 1999 the Council also supported the development of a long-term research and monitoring program.

Long-term monitoring after a spill has two components: monitoring the recovery of resources from the initial injury and monitoring how factors other than oil may inhibit full recovery or adversely impact recovered resources. This second type of monitoring collects data on physical

and biological environmental factors that drive ecosystem-level changes. The information that is produced from such monitoring may be used to manage individual injured species and resources. However, such data are increasingly valuable in illuminating the larger ecosystem shifts that impact and influence a broad variety of species and resources injured by the spill.

By monitoring these changes, agencies and interested parties may be able to adjust their activities and management strategies to adapt to what may lay ahead and to further support injured resources. The Council has a history of supporting oceanographic monitoring by helping to establish and fund long-term data collection projects. In this initiative, the Council envisions developing partnerships with scientific entities or consortia able to sustain those data collections, to maximize the Council funding, to develop science-based products that will inform the public of changes in the environment and the impacts of these changes on injured resources and services.

The Council proposes to ~~fund this effort with~~ begin funding this program with $___ over the first five-year multi-year contract period. **PLEASE NOTE: Council multi-year funding is must be approved annually by the Council. In addition, projections of future funding are dependent upon investment funds which are affected by market fluctuations.** ~~approximately 15% -25% of the available funding over a twenty-year period.~~

The Council has discussed specific ecosystem components that are of particular interest and include environmental drivers, pelagic monitoring, and benthic monitoring. The following are examples of the types of projects in each area that could potentially be part of a comprehensive monitoring program. The list is based on projects that have been funded in the past or work that may provide further insight into the current status of PWS. This list is not comprehensive and the projects listed are not mandatory.

Environmental Drivers:

1. Oceanographic conditions – These include water temperature, salinity, and turbidity and potentially alkalinity. Perpetuation of an existing long-term oceanographic monitoring station relevant to the spill area is favored, especially in cooperation with co-funding partners. Proposers may want to consider information gathering at Hinchinbrook Entrance and Montague Strait that would allow inference on fluxes in and out of Prince William Sound (PWS).

2. Weather stations – Small, inexpensive land-based weather stations may be considered as a method to obtain data. Current station locations and historic data collection should be assessed prior to any new weather station deployment.

3. Continuous plankton recorder data to measure zooplankton abundance, productivity, and quality as food. The proposer may want to consider using a ship of opportunity that would provide a transect within PWS and intersect the current transect being conducted by the Sir Alister Hardy Foundation for Ocean Science. The zooplankton data should include information on high-and low-lipid species.

4. Satellite observation monitoring – This would include surface temperature, salinity and color, providing insight into primary production, ocean surface conditions, and other drivers over multiple geographic scales including broader scales than can be achieved from moorings and ship-based instrumentation.

Pelagic Monitoring

1. Pelagic seabird monitoring – This would include the PWS monitoring of nearshore pelagic foraging birds including pigeon guillemots and murrelets (marbled and Kittlitz's). These surveys are currently being conducted on a three-year interval and this schedule is expected to continue, using the same design and methodology to ensure ability to sustain the trend lines and analyses. If the proposer feels that this timeline should be altered, there should be an explanation in the proposal of why and what the modified timeline would include.

2. Forage fish surveys – A comprehensive survey of the forage fish available in the PWS to determine if a lack of high-quality forage fish could be a limiting factor in the recovery and restoration of several injured resources and services. Presumably this survey would include sand lance, capelin, and eulachon, with herring information provided by the Herring Program. It is critical that this work be conducted in a cooperative fashion with the Herring Program.

3. Humpback whale monitoring – This would include an estimate of the numbers and seasonal residency of whales in the PWS, observations on what they are eating, and estimates of how much. It is critical that this work be conducted in a cooperative fashion with the successful proposer for the herring Program.

4. Killer whale monitoring – A continuation of monitoring of resident pods and transient populations of PWS killer whales that addresses potential recovery from EVOS injury, ranges occupied, habitat preferences, feeding locations and prey species on a pod-by-pod basis.

Benthic Monitoring

1. Sea otter monitoring – Sea otters have been a key indicator species for lingering oil in PWS. Monitoring must include: sustaining the annual spring survey of sea otter carcasses with tooth extraction to determine age-of-death and matching the previous sampling design and methodology; continuing aerial surveys of abundance and distribution that have been conducted every 3 years in a fashion that allows rigorous analysis of the temporal trends; sustaining the survey of foraging behavior to examine diet and foraging success as a function of location and habitat; and collecting and analyzing tissue samples to assess levels of P450 induction.

2. Benthic foraging seabirds – This should include the monitoring of PWS abundance and distribution of benthic foraging birds, including black oystercatchers, harlequin ducks, and Barrow's goldeneyes. These surveys, which include tissue sampling to assess P450 induction to assess hydrocarbon toxicity exposure, are currently being conducted at three-year intervals and this schedule is expected to continue. If the proposer feels that this

timeline needs to be altered, there should be a discussion of why and what the modified timeline would include.

3. Monitoring of area coverage of seagrass and kelp habitat in the shallow subtidal zone together with select associated fauna, including stichaeid fishes, seastars, and large crabs like Telmesus. This monitoring should be conducted approximately every 3 years.

4. Intertidal invertebrates and algae – Data are needed to determine the abundance and distribution of intertidal invertebrates and algae. Use of vertical transects on intertidal rocky shores in protected coasts in PWS is anticipated to quantify abundances of dominant epibiotic members of the intertidal community, including mussels, barnacles, rockweed, limpets, and chitons. Size frequencies of mussels and limpets will be recorded and mussel tissue samples collected to examine PAH concentrations. Additional quadrant samples in mixed sand-cobble beaches will also be taken to assess abundance and size frequency distribution of clams, including butter clam, littleneck clam, and others. Continued sampling of previously studied sites to be able to perpetuate time series of information is preferable. If methods are different from historic sampling, then some rigorous methods contrasts are expected. Frequency of sampling should be justified within the proposal. Results of this monitoring should be disseminated in a user-friendly form to subsistence communities in the area of study.

Considerations Applicable to Proposers

The following are mandatory requirements for potential proposers. Proposals that do not meet each of these criteria will be considered non-responsive to the Invitation and excluded from the review process. Proposers must demonstrate that they have:

1. A proposal which is focused within the oil spill-affected area;
2. A proposal which responds to the Herring focus area, as described in this Invitation.
3. A proposal for a program that complies with the Council's founding documents and related policies and procedures. *See References.*
4. An existing administrative structure to manage funds and projects; the proposer may be an existing organization or collaboration among existing entities and individuals.
5. A structure to communicate with the Council through a single Team Leader; regardless of the structure of the proposers, they must produce a single, comprehensive proposal.
6. A Team Leader who will work with and be responsive to Council's objectives and requirements.
7. A Team Leader who will facilitate the most cost-effective and scientifically-supportive stream of funding among the parties and projects involved.
8. A program science panel to review potential projects and give guidance and oversight on the direction of the program.
9. The ability and commitment to make all data, documents, annual and final reports available electronically to the public.
10. A mechanism for public outreach and opportunities for public comment on program activities.

The following are preferred requirements for potential proposers. Proposers that meet these requirements will be rated more highly during the review process. The Council is seeking a Long-Term Monitoring Program that:

1. Continues to reassess the program's progress and relevancy and considers newly-available technologies.
2. Demonstrates an understanding and synthesis of existing scientific literature, research results, and scientific knowledge that includes outcomes of prior Council work and which recognizes the available research infrastructure.
3. Demonstrates an effective and balanced use of funds, including establishing appropriate collaborations with other organizations and experts, achieving the most efficient use of funds, and taking advantage of existing infrastructure.
4. Provides a detailed plan for local and native community involvement in the program.
5. Provides a detailed public outreach plan that describes specific products. These could include the creation and dissemination of simple web-accessible exhibits, newsletters disseminated to spill communities and other data users, real-time data streaming for use in public settings like aquaria and visitor's centers, and submissions to public data consortiums.
6. Establishes realistic and detailed timelines and milestones specific to the individual projects and the overall program.
7. Demonstrates a credible, feasible, and detailed administrative structure and scientific implementation of the program, including project team qualifications (education, experience, related work efforts, proposed time commitment, past performance), and availability of facilities and other requirements necessary for project success.

The following are mandatory requirements for each fiscal year of the program. The submitted budget for each year shall include the staffing and funds necessary to meet these requirements.

1. An annual report must be presented to the Council and will include the following:
    a. A financial accounting of any Council funding in the past year including a comparison of the requested budget versus the actual budget.
    b. A summary of the projects funded, including brief annual reports from each.

2. A funding request must be presented to the Council each fiscal year and will include the following:
    a. An administrative budget that details the costs of running the program.
    b. An executive list and summary of projects proposed for funding and the scientific basis thereof.

Long-Term Monitoring Program Cycles of Review and Funding

The Herring and Long-Term Monitoring focus areas under this Invitation will be funded as a single program for each focus area (one for Herring, one for Long-Term Monitoring). Proposing entities may submit proposals in more than one focus area, and organizations and individuals may participate in more than one competing proposal within a single focus area.

Funding Review of Program: Five-Year Contract, subject to annual Council Approval

These Herring and Long-Term Monitoring programs are administered as multi-year contracts renewable every 5 years for a total of twenty years. Consistent with this, the programs are expected to submit a Five-Year Plan to the Council for approval. In addition, the programs must also submit for Council review annual workplans which are based upon the Five-Year Plan. Below is a draft schedule for review for the Five-Year Plans and annual workplans:

Year 1:	Sept. 2011:	Fund Program, with organizations and individual projects identified
Year 2:	June 2012:	Program submits proposed FFY13 workplan for Council review
	Sept. 2012:	Funding decision made by Council on FFY 2013 workplan
Year 3:	June 2013:	Program submits proposed FFY14 workplan for Council review
	Sept. 2013:	Funding decision made by Council on FFY14 workplan
	Winter 2014:	Workshop with Herring and Long-Term Monitoring individual researchers' presentations and presentations by proposers on cross-disciplinary syntheses. *See Scientific Review of Program, below, for details.*
Year 4:	June 2014:	Program submits proposed FFY15 workplan for Council review
	Sept. 2014:	Funding decision made by Council on FFY 2015 workplan
Year 5:	May 2015:	Program submits Five-Year Plan for FFY17-22 and workplan for FFY16.
	Sept. 2015:	Funding decision made by Council on FFY16 workplan and review of Five-Year Plan for FFY17-FFY22.
	June 2016:	Program submits proposed FFY17 workplan
	Sept. 2016:	Funding decision made by Council on FFY17 workplan
		(Cycle repeats until approximately 2032)

Scientific Review of Program

A Council science panel selected by the State and Federal Administrators will review progress of the Long-Term Monitoring Program's five-year contract in the third year of funding. The selected proposer will be responsible for providing written cross-disciplinary syntheses to the Council's science panel and the Administrators at least three months prior to the review meeting. These syntheses should address fundamental environmental drivers, trends, and status of resources and services in ways that contribute to Council's and public understanding of the effects of EVOS. These may include such topics as a synthesis of retrospective data, climate drivers, lingering oil recovery, and the effects of human interventions.

As outlined above, in the third year of funding, the Council will also fund a workshop at which these cross-disciplinary syntheses will be presented. Individual researchers funded under the five-year contracts will also provide brief presentations. These presentations should include information about the availability of data to user groups and how this information can be or is being used to further Council goals and with respect to program objectives and also its utility beyond the program. As noted above, this workshop will also include parallel presentations by

the Herring Program researchers to allow for an even broader ecosystem-based consideration of the ongoing research.

The Council's science panel may provide written recommendations to the Council for any potential changes to the scope of the Program that may be required and a consideration of whether the Program is meeting its objectives. This information will be shared with the Long-Term Monitoring Program Team Leader for discussion and response before any actions are taken by the Council.

HARBOR PROTECTION AND MARINE RESTORATION

Damage to natural resources occurs not only with an initial oil spill, but also potentially through additional injury to the affected environment. This subsequent insult can result from well-intended but ultimately damaging spill response efforts. In addition, additional pollution from human uses in and around the spill area can further compromise the recovery of the natural resources initially injured by the spill. Thus, the following three components focus Council efforts to mitigate sources of additional pollution in the spill areas and to organize, preserve and pass on information gained in the response to EVOS.

a. Storm water, wastewater, and harbor projects

Each harbor, marina, boatyard and vessel in Alaska has the potential to generate some incremental pollution. This type of non-point source pollution, if unmitigated, ultimately affects the water quality in the marine coastal environment. Incremental pollution can stress the health of the ecosystem needed to support recovering resources resulting from the spill. Chronic marine pollution stresses fish and wildlife resources, possibly delaying recovery of resources injured by the oil spill. For example, with regard to the worldwide mortality of seabirds, the effects of chronic marine pollution are believed to be at least as important as those of large-scale spills. In the 1994 Restoration Plan, Council identified reduction of marine pollution as a type of general restoration: removal of a source of stress that may delay natural recovery.

The pollutants that might be generated at a marina and enter a marina basin include nutrients and pathogens (from pet waste and overboard sewage discharge), sediments (from parking lot runoff and shoreline erosion), fish waste (from dockside fish cleaning), petroleum hydrocarbons (from fuel and oil drippings and spills form solvents), toxic metals (from antifoulants and hull and boat maintenance debris), and liquid and solid wastes (from engine and hull maintenance and general marina activities).

The construction of a marina can create a condition of reduced water circulation. Installation of bulkheads and jetties, which are necessary to ensure the safety of vessels, docks, and shoreside structures, can cause water circulation in the basin to be below what it was before the marina's construction. Over time, reduced circulation and increased pollutant generation can increase pollutant concentrations in the water column, sediments, and aquatic organisms.

The fact that a marina is present does not mean that water quality is poor. Many marinas may have fair to excellent water quality. Despite this, their aquatic habitats might not be healthy enough to support a natural diversity of aquatic organisms, and may still have sediments

contaminated by pollutants from storm water runoff or by antifoulants leached from ship hulls or piers.

The implementation of effective pollution reduction projects and techniques will be dependent upon the individual harbor and marina. Many coastal communities in the spill area have a limited ability to collect and properly dispose of waste, such as oily bilge water, used engine oil, paints, solvents, and lead-acid batteries. Improper disposal of these wastes in landfills adversely affects the quality of nearby marine waters through runoff and leaching. In some cases, these wastes are discharged directly into marine waters.

The Council has approved the funding of several projects to prepare waste management plans and has contributed to their implementation. These projects resulted in the acquisition of waste oil management equipment and the construction of environmental operating stations for the drop-off of used oil, household hazardous waste and recyclable solid waste in Cordova, Valdez, Chenega Bay, Tatitlek and Whittier, Kodiak and lower Cook Inlet. Best management practices for both storm water and harbors also exist for minimizing potential environmental impacts to the marine environment. Activities may include, but are not limited to best management practices listed in the Alaska Storm Water Guide and Alaska Clean Harbors Guide. *See References*.

The Council seeks to further reduce pollution in the marine environment to contribute to the recovery of injured natural resources and proposes to fund this program with $___ over a two to three multi-year contract period. **PLEASE NOTE: Council multi-year funding is must be approved annually by the Council. In addition, projections of future funding are dependent upon investment funds which are affected by market fluctuations.** ~~proposed funding this effort with approximately 3% - 13% of the available funding.~~

b. Marine debris removal

Marine debris is an issue in the marine and near-shore environment in Alaska, where it is likely that thousands of tons of marine debris exist within three nautical miles of the Alaska coastline. Marine fish and wildlife become entangled in and ingest debris from foreign and domestic sources that may be a day or decades old and that range from small plastic items to very large fishing nets. Approximately 175 metric tons of debris was collected from Alaska coasts by citizen cleanup projects in 2007. Marine debris removal projects can result in an immediate improvement to the coastal habitat.

Coastal communities are effective in marine debris cleanups due to their intimate knowledge of the locations of debris accumulation. In addition, when communities participate in marine debris cleanups, they often alter the common practices that led to marine debris as their awareness of the effects of the debris on their coastline and the fisheries upon which they depend increases. Marine debris removal reduces marine pollution affecting injured resources and services and, thus, further supports natural restoration.

For the purposes of this invitation, marine debris is defined as any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment located within the area of focus. Because of the

ocean currents and weather patterns in this region, a significant amount of debris found is likely to have originated outside of the area. The Council is interested in receiving proposals from an organization or team that will develop and implement a community-based marine debris removal program.

The Council proposes to fund a marine debris removal program with $___ over a one to two multi-year contract period. **PLEASE NOTE: Council multi-year funding is must be approved annually by the Council. In addition, projections of future funding are dependent upon investment funds which are affected by market fluctuations.** ~~with approximately 7% of the available funding.~~

Activities may include, but are not limited to:

1. Assessment of existing debris in the region for prioritization and planning of specific actions, as well as selection of best practices for accomplishing program goals.
2. Detection, assessment, and/or removal of persistent debris, including derelict fishing gear, such as abandoned crab pots, fish nets, and monofilament line, from coastal habitats and removal of debris washed up on shorelines.
3. Detection, assessment, and/or removal of debris from marine, estuarine or beach environments resulting from point-in-time events (i.e., vessel groundings, storms, etc.).
4. Use of strategies, methods, priorities and plans for the detection, safe removal, and responsible disposal of derelict fishing gear and associated marine debris impacting or expected to impact habitat affected by the spill. Applicable management practices and local or regional protocols may already exist and, where possible, these should be applied. However, the program may also include defining best management practices and local or regional protocols where necessary.
5. Prevention, outreach, education and/or volunteer activities. Proposers are encouraged to include education and outreach as a component of removal activities. These activities should include the public and other stakeholders, such as the fishing industry, fishing gear manufacturers, other marine-dependent industries, and the plastic and waste management industries.

c. Response, Damage Assessment and Restoration Implications

Damage to natural resources occurs not only with an initial oil spill, but also potentially through spill response efforts. Damage assessment from the 1989 spill has yielded information that can assist in mitigating damage from spill response activities in future spills. Skilled damage assessment also quantifies the extent of injury and allows for the accurate monitoring and measurement of restoration after a spill. Organizing, preserving, and passing on such information will help responders and those conducting future damage assessments. These efforts ensure that restoration efforts are truly effective. Outreach efforts could include a conference or series of papers sharing information to be used by future responders, including natural resource assessment, the long-term costs of high-pressure washing, use of dispersants in the near-shore, sub-arctic environment, and the effects of potential burning scenarios.

The Council proposes to fund this effort with $___ over a one to two multi-year contract period. **PLEASE NOTE: Council multi-year funding is must be approved annually by the**

Council. In addition, projections of future funding are dependent upon investment funds which are affected by market fluctuations.
~~with approximately 5% of the available funding.~~

Considerations Applicable to Proposers

The Harbor Protection and Marine Restoration focus area contains three subject areas to be funded under this Invitation: "Storm Water, Wastewater, and Harbor Projects," "Marine Debris Removal" and "Response, Damage Assessment and Restoration Implications." These three, separate subject areas will be administered as multi-year contracts with a Council-funded program for each subject area. There is no required length of contract, though the Council has contemplated implementation over a 2-5 year period, as appropriate. Proposing entities may submit proposals in more than one focus area, and organizations and individuals may participate in more than one competing proposal within a single focus area.

The following are mandatory requirements for potential proposers. Proposals that do not meet each of these criteria will be considered non-responsive to the Invitation and excluded from the review process. Proposers must demonstrate that they have:

1. A proposal which is focused within the oil spill-affected area;
2. A proposal which responds to one of the Harbor Protection and Marine Restoration subject areas described under this focus area.
3. A proposal for a program that complies with the Council's founding documents and related policies and procedures. *See References.*
4. An existing administrative structure to manage funds and projects; the proposer may be an existing organization or collaboration among existing entities and individuals.
5. A structure to communicate with the Council through a single Team Leader; regardless of the structure of the proposers, they must produce a single, comprehensive proposal.
6. A Team Leader who will work with and be responsive to Council's objectives and requirements.
7. A Team Leader who will facilitate the most cost-effective and scientifically-supportive stream of funding among the parties and projects involved.
8. A program technical panel to review potential projects and give guidance and oversight on the direction of the program.
9. The ability and commitment to make all data, documents, annual and final reports available electronically to the public.
10. A mechanism for public outreach and opportunities for public comment on program activities.

The following are preferred requirements for potential proposers. Proposers that meet the requirements will be rated more highly during the review process. The Council is seeking a proposal in each of these three subject areas that:

1. Implements a reduction and removal program with clearly identified goals (broad in scope) and specific, measurable objectives, including realistic and detailed timelines and milestones.

2. Continues to reassess the program's progress and relevancy and considers newly-available technologies.
3. Demonstrates an understanding and synthesis of existing technical and scientific literature, research results, and technical and scientific knowledge that includes outcomes of prior Council work and which recognizes the available technical and research infrastructure.
4. Demonstrates an effective and balanced use of funds, including establishing appropriate collaborations with other organizations and experts, achieving the most efficient use of funds, and taking optimal advantage of existing infrastructure. This includes collaborations among entities such as public and nonprofit organizations, corporations and businesses, and federal, state, and local government to cooperatively implement the proposed projects.
5. Provides a detailed plan for local and native community involvement in the program.
6. Provides a detailed public outreach plan that describes specific products. This could include the creation and dissemination of simple web-accessible exhibits, newsletters disseminated to spill communities and other data users, real-time data streaming for use in public settings like aquaria and visitor's centers, and submissions to public data consortiums.
7. Demonstrates a credible feasible, and detailed, realistic and detailed administrative structure and technical and scientific implementation of the program, including project team qualifications (education, experience, related work efforts, proposed time commitment, past performance), and availability of facilities or other requirements necessary for project success.
8. For Marine Debris:
    a. provides a final report with the total amount of debris removed, total areas cleaned or restored, types of debris encountered, and volunteer hours involved;
    b. presents a written safety plan for all project related activities, including management of volunteers. The safety plan should consider safety at the site during and after project implementation, and potential safety concerns with regard to the current and future use of the site; and
    c. provides a public outreach plan that can effectively educate the public with the goal of altering debris-creating human practices and habits.

The following are mandatory requirements for each fiscal year of the program. The submitted budget for each year shall include the staffing and funds necessary to meet these requirements.

1. An annual report must be presented to the Council that includes the following:
    a. A financial accounting of any Council funding in the past year including a comparison of the requested budget versus the actual budget.
    b. A summary of the projects funded, including brief annual reports from each.

2. A funding request must be presented to the Council each fiscal year and will include the following:
    a. An administrative budget that details the cost of running the program.
    b. An executive list and summary of projects recommended for funding and the technical and scientific basis thereof.

LINGERING OIL

One of the most surprising revelations from two decades of research and restoration efforts since the 1989 spill is the persistence of subsurface oil in a relatively un-weathered state. This oil, estimated to be around 97.2 metric tons (or 23,000 gallons), is contained in discontinuous patches across beaches that were initially impacted by the spill. The patches cannot be visually identified on the beach surface, but their presence may be a source for continued exposure to oil for sea otters and birds that seek food in sediments where the oil persists. The survey work completed to date indicates that the oil is decreasing at a rate of zero to four percent per year, with only a five percent chance that the rate is as high as four percent. As a result, it may persist for decades.

Passive and subsistence uses were significantly impacted by the spill and this has affected the overall health of the communities in Prince William Sound. The presence of lingering oil has also impacted the public's perception of the spill area, who no longer view it as the pristine environment that was present before the spill occurred. This perception has continued to preclude full recovery for some passive and subsistence uses. It may require additional resources to evaluate, monitor, and redress the impact of lingering oil on these uses in the spill area. An important function of this information gathering would be to pass this information back to the communities and the general public.

In an effort to address the issue of lingering oil, the governments developed a Restoration Plan under the terms of the Reopener provision in the Consent Decree with Exxon, http://www.evostc.state.ak.us/facts/reopener.cfm. Efforts to date include the development of a spatial probability model to identify beach segments with a high likelihood of persistent oil, and investigations of the reasons for the persistence of oil as a means to consider options that may accelerate the oil degradation. Under the Lingering Oil Initiative, the Council envisions completion of current studies to reach a decision point on further efforts for active remediation.

Upon receiving additional information from these current lingering oil studies and the resolution of the Reopener, the Council will evaluate the need for restoration of related services and, thus, no prospective funding amount has been proposed.

Lingering Oil proposals funded under this Invitation may be proposed as single-year projects or multi-year projects or programs. All multi-year projects or programs require funding to be re-authorized annually by the Council. There is no required length of contract in this area.

Considerations Applicable to Proposers

The following are mandatory requirements for potential proposers. Proposals that do not meet each of these criteria will be considered non-responsive to the Invitation and excluded from the review process. Proposers must demonstrate that they have:

1. A proposal which demonstrates a clear linkage to injured natural resources;
2. A proposal which is focused within the oil spill-affected area.
3. A proposal which responds to the Lingering Oil focus area, as described in this Invitation.
4. The ability and commitment to make all data, documents, annual and final reports available electronically to the public.

5. If the proposal is for a multi-year program:
   a. A proposal for a program that complies with the Council's founding documents and related policies and procedures. *See References.*
   b. An existing administrative structure to manage funds and projects; the proposer may be an existing organization or collaboration among existing entities and individuals.
   c. A structure to communicate with the Council through a single Team Leader; regardless of the structure of the proposers, they must produce a single, comprehensive proposal.
   d. A Team Leader who will work with and be responsive to Council's objectives and requirements.
   e. A Team Leader who will facilitate the most cost-effective and scientifically-supportive stream of funding among the parties and projects involved.
   f. A technical review panel to review potential projects and give guidance and oversight on the direction of the program.

The following are preferred requirements for potential proposers. Proposers that meet the requirements will be rated more highly during the review process. The Council is seeking Lingering Oil projects that:

1. Are hypothesis-driven and which address the effects of factors such as the functional interrelations of organisms, climate drivers, lingering oil recovery and the effect of human impacts on the affected ecosystems.
2. Continue to reassess the project's progress and relevancy, considers newly-available technologies and provides data that are accessible to the public and other potential users.
3. Demonstrate an understanding and synthesis of existing technical and scientific literature, research results, and technical and scientific knowledge that includes outcomes of prior Council work and which recognizes the available technical and research infrastructure.
4. If the proposal is for a multi-year program, the program:
   a. Demonstrates an effective and balanced use of funds, including establishing appropriate collaborations with other organizations and experts, achieving the most efficient use of funds, and taking optimal advantage of existing infrastructure. This includes collaborations among entities such as public and nonprofit organizations, corporations and businesses, and federal, state, and local government to cooperatively implement the proposed projects.
   b. Provides a detailed public outreach plan that describes specific products. This could include the creation and dissemination of simple web-accessible exhibits, newsletters disseminated to spill communities and other data users, real-time data streaming for use in public settings like aquaria and visitor's centers, and submissions to public data consortiums.
   c. Demonstrates a credible, realistic and detailed administrative structure and technical and scientific implementation of the program, including project team qualifications (education, experience, related work efforts, proposed time commitment, past performance), and availability of facilities or other requirements necessary for project success.
   d. Provides detailed methodology for meaningful public comment.

e. Provides a detailed plan for local and native community involvement in the program.

The following are mandatory requirements for each fiscal year. The submitted budget for each year shall include the staffing and funds necessary to meet these requirements.

1. An annual report must be presented to the Council that summarizes the individual project's findings.
2. For those proposing a multi-year lingering-oil program or project:
   a. the annual report must include:
      i. a financial accounting of the past year including a comparison of the requested budget versus the actual budget; and
      ii. a summary of the project(s) funded, including a brief annual report from each project(s) funded.
   c. A funding request must be presented to the Council each fiscal year that includes:
      i. an administrative budget that details the cost of running the program or project; and
      ii. For a program, an executive list and summary of projects recommended for funding and the technical and scientific basis thereof.

IV. Additional Evaluation of Proposals

A. Policy and Legal Review

To be eligible for funding, proposals must be designed to restore, replace, enhance or acquire the equivalent of natural resources injured as a result of the oil spill or the reduced or lost services provided by these resources. In addition, proposals must be consistent with the policies contained in the 1994 Restoration Plan. Council staff will also review each proposal for responsiveness to this Invitation, completeness and for adherence to the format and instructions contained in this document. A legal and policy review of each proposal submitted pursuant to this Invitation may be conducted by the Alaska Department of Law and the U.S. Department of Justice.

- Proposers should also note that the following activities, in general, will not be considered for use of Council dollars: (1) activities that constitute legally required mitigation for the adverse effects of an activity regulated or otherwise governed by local, state or federal law; (2) activities that are required by a separate consent decree, court order, statute or regulation; and (3) activities that constitute activities of government agencies. *See also,* Memorandum of Agreement and Consent Decree between the United States & the State of Alaska (Aug. 29, 1991).

B. Council Science Review

Members of the Council's Science Panel, Long-Term Monitoring working group or other science advisors to the Council will review the proposals, meet with the Preferred Proposers during the revision process, and provide recommendations to the Executive Director.

C. Public Advisory Committee Review

The Council's Public Advisory Committee, representing a cross-section of interest groups affected by the oil spill, will review the proposals and provide the Council with funding recommendations.

D. Public Comment and Funding Decision
The Council's Executive Director will use the recommendations of the Council's Public Advisory Committee, Science Panel and Long-Term Monitoring working group, other Council advisors and Council staff to develop a proposer listing for the Council's review. This recommendation will be circulated for public comment as the FY12 Draft Work Plan. The Executive Director and Council staff will be tasked with refining proposals from each of the Preferred Proposers for the Council's final review.

E. Trustee Council Decision
The Council will take into consideration the recommendations of the Executive Director and the Public Advisory Committee in making its decision as to which proposals will be selected as preferred and which will be selected for funding. Unanimous agreement of all six Council members is required to fund a proposal. Please note that the Council is not legally bound to abide by recommendations, including those of science advisors, the Public Advisory Committee or the Executive Director. It is anticipated that funding decisions for FFY12 will be made at a Trustee Council meeting in the September 2011.

V. Instructions for Submitting a Proposal

A. What to Submit
Please submit ten (10) paper copies and one electronic copy of the proposal package to:

Executive Director
Exxon Valdez Oil Spill Trustee Council
441 West 5th Avenue, Suite 500
Anchorage, AK 99501-2340
Phone: 907-278-8012 or 1-800-478-7745

Electronic versions of the narrative sections of the proposal must be composed using Microsoft Word 2002 (XP) or lower with figures and tables embedded. The document should be **numerically tabbed** as reflected in the request below:

Please provide the following information for the organization or each member of the consortium:

1. **Information on Consortium or Organization**
   a. Years in existence
   b. Current and future sources of funding
   c. Current staff size by area of expertise (e.g science management, administration, IT, etc.)
   d. Audited financial statement covering past three years
   e. Information about facility, including location, ownership, authority to use, size, and resources available

f. Statement confirming proposal and related activities are consistent with the founding, authorizing documentation of the Proposer's organization.
g. Number of members of existing science or technical review panel
h. Number of members of existing public advisory committee or mechanism for public involvement
i. Name and resume of the Team Leader and any key staff. This should include a summary of the experience of the Team Leader in managing large and complex scientific programs.
j. Capabilities of existing IT infrastructure to make data and reports publically available.

2. **Experience with EVOSTC Program**
   a. Amount of funding received from EVOSTC programs currently or in the past and listing of projects funded
   b. A statement that the proposer has read and clearly understands the Council's founding documents and related policies and procedures. Any conflicts between the Council's policies and procedures and the proposer's should be addressed in this tab.

3. **Current Focus Areas and Funding Sources**
   a. Listing of current focus areas and amount of funds released for each area
   b. Experience with Invitation area(s) addressed in the proposal. This should include the total amount of funding that has been released for the program area of interest.

4. **Collaboration/Coordination**
   a. Experience working with state, federal, and private entities to complete projects
   b. Experience working with local and tribal communities in the spill area
   c. Outreach plan that details the types of outreach envisioned and the audience for each type.

5. **Budget Request** ***(If proposer is a consortium, provide ONE budget request for the entire program)***
   a. Provide a five-year request for funding for the administration of the program (please see attached worksheet). The request should include:
      - Indirect costs as a separate line item. (If proposer is consortium, only one indirect rate will be accepted)
      - Costs of all required personnel including administrative, science review, public involvement and outreach, and IT. This request should only be for those directly working with EVOSTC funding.
   b. The request should not include:
      - Costs of any individual projects or project personnel.
      - Cost for services not specifically requested in this Invitation

VI. Instructions for Non-Trustee Council Agency Proposals

If you represent a private organization, a non-profit group or a university from a state other than Alaska, you should submit your proposal through the Broad Agency Announcement (BAA) process, as well as to the Trustee Council. In most instances, requirements of state and federal law preclude Council funds from being awarded directly to such organizations. Rather, a

competitive solicitation process is required. This solicitation can occur before the Council approves funding for a project through a BAA issued by the National Oceanic and Atmospheric Administration (NOAA). Using the BAA approach, if the Council approves funding for your project, you can begin contract negotiations with NOAA without the further competitive solicitation that is required if you do not apply through the BAA.

As part of this invitation, NOAA is issuing a BAA on behalf of the Council, and is requesting proposals for any of the topics identified in this invitation. To submit your proposal through the BAA process, submit an electronic copy, as well as one paper copy, of your proposal to NOAA at the address below by **5:00 p.m. Pacific Daylight (Seattle) time on** _____. This is in addition to the copies of the proposal that must be submitted to the Council. Include the words "submitted under the BAA" as part of your project's title. Faxed proposals will not be accepted.

More information is contained in the Broad Agency Announcement itself (**BAA #**_____), available from NOAA:

Ms. Sharon Kent
NOAA, WASC, Acquisition Management Division, WC31
7600 Sand Point Way NE
Seattle, WA 98115-6349
Telephone (207) 526-6035
Sharon.S.Kent@noaa.gov

Proposals submitted to NOAA under the BAA will be evaluated by the Trustee Council at the same time as other proposals submitted to the Council.

REFERENCES:

(to be added -lists examples of Council-funded projects in each topic area)

EVOSTC Founding and other Documents:
Are available at the Council's website at:
http://www.evostc.state.ak.us/Publications/KeyDocs.cfm

These include:

- Memorandum of Agreement and Consent Decree between the United States & the State of Alaska (Aug. 29, 1991)
- Agreement and Consent Decree between the United States, the State of Alaska, and Exxon Corporation (Sep. 20, 1991)
- Governments' Memorandum in Support of Agreement and Consent Decree (Oct. 8, 1991)
- Exxon Valdez Oil Spill Restoration Plan (Nov. 1994)
- 2010 Status of Injured Resources & Services available at: http://www.evostc.state.ak.us/recovery/status.cfm

Harbor/Wastewater:
The Alaska Storm Water Guide is available for download at http://dec.alaska.gov/water/wnpspc/stormwater/Guidance.html and is intended for use to help contractors and storm water practitioners better manage storm water under the unique conditions encountered in Alaska. The guide addresses some of the unique challenges posed by the diversity of Alaska's geography, geology and climate and makes some generalized recommendations about the design and selection of storm water best management practices in an effort to optimize their effectiveness.

The Alaska Clean Harbors Guidebook is accessible for free download at (http://seagrant.uaf.edu/bookstore/pubs/SG-ED-68.html) from the Alaska Sea Grant Bookstore, University of Alaska Fairbanks. It is intended for Alaska harbormasters and community leaders as a management tool for designing and operating harbors in an environmentally sound way. It includes best management practices and certification checklists to foster creation of an Alaska Clean Harbors certification program (note: the actual certification entity and process is still under development). It increases a focus on spill prevention steps that can be taken by fishing and recreational boaters. Partners in the clean harbors project include the Alaska Department of Environmental Conservation, Alaska Sea Grant College Program, Conoco Phillips Earth Energy Partners Program, Cook Inlet Regional Citizens Advisory Council, and Nuka Research and Planning Group, LLC. The book was originally prepared for the Alaska Department of Environmental Conservation through a grant from the Cook Inlet Regional Citizens Advisory Council. Additional information can be found at the Project website: http://www.nukaresearch.com/projects/cleanharbor/index.shtml.

There are also a number of additional resources for best management practices for storm water and harbors that can be found at EPA, NOAA and other sites as well.