Exxon Valdez Oil Spill Trustee Council



Invitation for Proposals Fiscal Years 2022 - 2031

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Glossary of Terms

Council – Exxon Valdez Oil Spill Trustee Council or EVOSTC

EVOS – Exxon Valdez oil spill or Spill

EVOSTC - Exxon Valdez Oil Spill Trustee Council

Fiscal Year – The Council operates on a fiscal year (FY) that begins on February 1 and ends on January 31.

Focus Area – A specific area of interest for which the EVOSTC anticipates providing funding under a potential long-term plan. This Invitation represents the third and fourth five-year funding cycles under that 20-year plan, as discussed in Section I.

LTRM - Long-Term Research and Monitoring Program. A program that combines elements of the Long-Term Monitoring of Marine Conditions and Injured Resources (Gulf Watch Alaska), Herring Research and Monitoring Program and Data Management Program.

PAC – EVOSTC Public Advisory Committee

Program – A comprehensive suite of projects that seeks to address activities and/or hypotheses related to a specific focus area.

Program Science or Technical Panel – A panel of scientific or 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. This Panel is in addition to and independent of the EVOSTC Science Panel.

Project – An individual task that is led by a principal investigator and is attempting to address a specific scientific hypothesis or Program objective.

Principal Investigator - An individual who is the lead investigator of a proposed project.

PWS - Prince William Sound

Spill– Exxon Valdez oil spill or EVOS

Spill Area – see map below (Figure 1). Restoration activities will occur primarily within the Spill Area. At the Council's January 19, 2021 meeting, the Council approved a limited extension of the oil spill area boundary eastward to incorporate the Copper River Delta and the Bering River, including its headwaters (see Resolution 21-03).

Trustee Agency – One of the six state and federal agencies represented on the Council

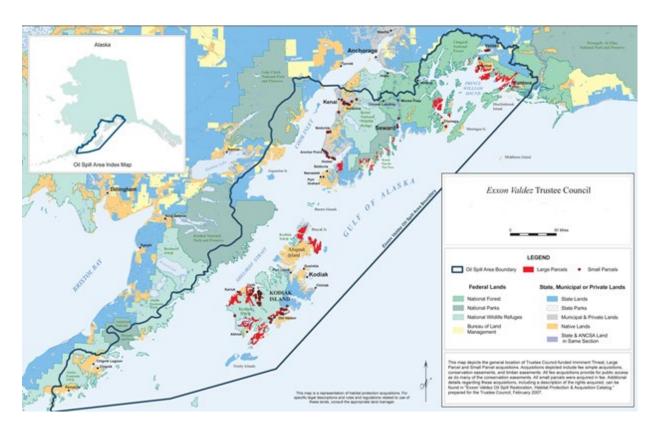


Figure 1. Map of the Exxon Valdez Oil Spill Area boundary. Restoration activities will occur primarily within the Spill Area. At the Council's January 19, 2021 meeting, the Council approved a limited extension of the oil spill area boundary eastward to incorporate the Copper River Delta and the Bering River, including its headwaters (see Resolution 21-03).

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I. Background and Purpose of the Invitation for Proposals

In 1992, the *Exxon Valdez* Oil Spill Trustee Council (Council) was formed consisting of six natural resource trustees (composed of three State of Alaska trustees and three federal trustees) to take the actions necessary to restore the natural resources and natural resource services injured, lost, or destroyed as a result of the 1989 *Exxon Valdez* oil spill (EVOS or Spill). The Council was established to administer funds from the settlement of civil natural resource damages claims brought against Exxon Corporation and related 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 (Plan) to guide the Council's restoration mission through research and monitoring, habitat protection and general restoration.

As part of this effort, the Council also adopted an official list of natural resources and natural resource 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-eight 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 the ability to distinguish the effects of the oil from other factors affecting fish and wildlife populations can be difficult. Furthermore, the recovery status of injured services is inextricably linked to the state of the resource on which it depends. Thus, full recovery of the Spill Area cannot occur until both resources and services are restored. These complexities and the difficulties in quantifying 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 most recent update published in 2014 (See Section XI. References). Many species have recovered, and their recovery objectives met. However, several have yet to recover. The status of recovery for Kittlitz's murrelet is unknown. Marbled murrelet, pigeon guillemot, Pacific herring and the AT-1 population of killer whales have not recovered. Although the AB pod has been considered to be recovering (2014 Status of Injured Resources and Services), recent data show that numbers of whales in the AB pod have declined and are now similar to numbers directly after the Spill (C. Matkin pers. comm). Human services such as non-herring commercial fishing, passive use of natural resources, recreation and tourism and subsistence are recovering.

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 finalized, the Council began efforts to better understand the coastal marine ecosystem. This approach has provided, and continues to provide, an abundance of information on marine resources.

Numerous restoration projects were funded by the Council and by 2010 approximately ten percent of the civil settlement funds remained for future use. To more efficiently and effectively manage the remaining funds, the Council refined the scope of its restoration efforts to five defined restoration categories: (1) herring, (2) lingering oil, (3) long-term monitoring of marine conditions and injured

resources, (4) a short-term focus area of harbor protection, marine restoration and lessons learned/outreach and (5) habitat protection. The Council streamlined the implementation of its restoration activities by establishing a 20-year strategic plan implemented in four five-year increments. In addition, the Council reduced its administrative costs by adopting the management practice of using third-party leads (i.e., outside of Council staff) to coordinate the Herring Research and Monitoring Program and Long-Term Monitoring of Marine Conditions and Injured Resources Program. These adjustments were achieved through a lengthy process with numerous public and Council meetings in 2010-2011.

In spring 2011, the Council issued the first Invitation for FY12-16, under the new 20-year Program requesting project proposals in the following Focus Areas: a long-term herring Program; a long-term Program for the monitoring of marine conditions and injured natural resources; projects in harbor protection; a marine debris Program; and projects assessing lingering oil. (The Council administers the habitat protection program separately.)

Many excellent proposals were submitted in response to the FY12-16 Invitation. Some involved collaborations among entities in several areas, including two aimed at establishing comprehensive long-term herring and monitoring of marine conditions and injured resources Programs. In fall 2011, the Council approved projects in the FY12-16 Invitation Focus Areas, including the two long-term Programs: the Herring Research and Monitoring Program and the Gulf Watch Alaska. This marked the beginning of a new era for the Council, defined by reduced administrative costs and an emphasis on supporting the Focus Areas.

Similar to the FY12-16 Invitation, the FY17-21 Invitation continued and further refined the Council's long-term monitoring, herring and data management activities, as well as addressing lingering oil. The FY12-16 short-term projects in the marine debris, and harbor protection and marine restoration Focus Areas were completed under the FY12-16 Invitation and not included in the FY17-21 Invitation.

This FY22-31 Invitation continues to address elements of the Council's herring research and monitoring, long-term monitoring and data management work under the umbrella of a single long-term research and monitoring program. In addition, this Invitation includes two new Focus Areas identified by the Council: the development of mariculture (excluding finfish farming) and education and outreach.

At the January 19, 2021 Trustee Council meeting, the Trustees approved the release of a new 5-year <u>Invitation for FY22-26 General Restoration</u> projects which includes General Restoration and Habitat Protection.

Please note that proposals that do not address either Invitation (unsolicited proposals) will not be accepted. Proposals submitted in response to this Invitation will only be accepted during the submission window (see FY21 anticipated scheduled below). Project proposals may be submitted

under only one current Invitation. A project that is submitted under both Invitations may be disqualified from consideration.

EVOSTC FY22-31 Invitation II. Program History

II. EVOSTC Long-Term Program History

In the 31 years since the Spill, it has become apparent that the ecosystem can undergo profound changes, which may hinder a return to pre-Spill conditions. The 1994 Restoration Plan recognized that recovery from the Spill would likely take decades. The Plan set aside a Restoration Reserve from the natural resource damages settlement funds to provide for long-term observation of injured resources and services and for appropriate restoration actions into the future.

Long-Term Monitoring of Marine Conditions and Injured Resources Program

In 1999 the Council supported the development of a long-term research and monitoring program. The Council's goals for post-Spill long-term monitoring include 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 recovering resources. This second type of monitoring involves collecting data on physical and biological environmental factors that drive ecosystem-level changes including bottom-up and top-down forces. The information that is produced from such monitoring may be used to manage individual injured species and resources. Such data are also increasingly valuable in illuminating the larger ecosystem shifts that impact and influence a broad variety of species and resources affected by the Spill.

Monitoring these changes over an extended period of time is an overarching goal, and provides useful data to natural resource management agencies and interested parties that allows for adjustment to their activities and management strategies to adapt to current conditions and further support the recovery of EVOS-affected resources. The Council has a history of supporting biological and oceanographic monitoring by helping to establish and fund long-term data collection projects. In this initiative, the Council envisions maintaining and developing partnerships with scientific entities or consortia able to sustain those long-term data collections, to maximize Council funding, to develop science-based products that will inform the public of changes in the environment and the impacts of these changes on resources and the services which depend upon them.

An integrated monitoring program requires information on environmental drivers and pelagic and benthic components as well as nearshore and offshore areas of the marine ecosystem. Additionally, while extensive monitoring data have been collected thus far through Council-funded projects and other sources and made publicly available, much of that information needs to be assessed holistically to understand the range of factors affecting individual species and the ecosystem as a whole.

In 2012, during the first cycle of this invitation process, the Council selected a multi-disciplinary team headed by multiple organizations to work on a five-year integrated Long-Term Research and Monitoring Program, also known as Gulf Watch Alaska (GWA). This Program was largely continued for a second five-year term in 2017. The existing GWA Program includes nearshore, pelagic, and environmental drivers components. Data from these components have been included in North Pacific Fisheries Marine Council reports to fisheries managers and industry. Current investigations include analysis of over 100 biological

EVOSTC FY22-31 Invitation II. Program History

time series which showed that the Gulf of Alaska biological communities were markedly different during and after the onset of the marine heatwave in 2014 compared to before. Successful proposals for the next ten-year period will need to extend and enhance the long-term data sets initiated in 2012-21, some of which date back four decades or more, including explicitly evaluating evidence for top-down forcing.

Herring Research and Monitoring Program

The Prince William Sound (PWS) population of Pacific herring (*Clupea pallisi*) declined dramatically since the Spill but the causes for the decline are still not fully understood. The PWS herring population was increasing prior to 1989 with record harvests reported just before the Spill. The Spill occurred just prior to spawning; the 1989-year class was severely impacted, and the 1989 cohorts failed to appear in the population in succeeding years, unlike any other year. By 1993, the fishery collapsed with only 25% of the expected adults returning to spawn. The PWS fishery closed from 1993 to 1996, but reopened briefly in 1997 and 1998, based on an increasing population. Numbers again declined in 1999 and the fishery closed again that same year. The PWS herring fishery has been closed for 25 of the 31 years since the Spill. The cause for the 1993 collapse is still unknown and may be attributed to the spill, disease, climate change, predation, natural cycles, or a combination of all these factors.

The Council recognizes the uncertainty over the role of the Spill in the decrease and continued low abundance of the PWS herring population. However, herring are a key species in the marine ecosystem and play a vital role in the food web of many EVOS-affected species. Thus, an increase in the herring population biomass has the potential to support the restoration of other injured species. The Council received public comments about the continuing impacts from the lack of herring recovery to communities and commercial fishers which led to a herring workshop in November 2006. This workshop consisted of scientists, commercial and subsistence fishermen and natural resource managers. One of the most important outcomes of the workshop was the consensus that a long-term strategic herring program was needed. From 2006 to 2009, Council representatives met with natural resource managers, commercial fishers, scientists, the PAC and Alaska Native residents of Spill Area communities to gain sufficient input to draft a cost-efficient, scientifically credible and coordinated Program. The result was the Integrated Herring Restoration Program (IHRP) document that included information on past and current projects, known limiting factors and a list of potential restoration options. The goal of the IHRP was 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 PWS; to identify and evaluate potential recovery options; and to recommend a course of action for restoration.

In 2010, the Council adopted the final version of the IHRP and the IHRP-recommended restoration option of Enhanced Monitoring as the preferred approach based on the state of herring science at the time. Enhanced monitoring provides information to the Council that allows for a comprehensive review of the continued lack of recovery and provides information that can be used by herring management agencies. The FY12-16 Invitation for Proposals requested the submission of a comprehensive Program plan that would seek to enhance the current monitoring program of the Alaska Department of Fish and Game (ADF&G) and provide further insight into the continued lack of recovery.

EVOSTC FY22-31 Invitation II. Program History

A long-term herring Program proposal for this area was designed to address this option and in 2012 the Council funded the first five-year term of the Herring Research and Monitoring Program. In 2017, the Council funded the Herring Research and Monitoring Program for FY17-21. The currently funded Program provides important information such as predictors of relative recruitment, trends in disease, investigations on how ocean conditions affect recruitment and investigations into the relative productivity of various nursery bays. Research in this Program has also led to a better understanding of the role of disease, predictability of disease outbreaks and potential disease management practices that could reduce disease impacts on herring biomass.

The overarching goal of the Herring Research and Monitoring program is to extend and enhance the long-term data set that spans over five decades. This period includes the oil spill, cold and warm years, and changes in predator populations. While resumption of a fishery in the near term seems unlikely, the herring population is also monitored in support of the general ecosystem and other species. The ability to assess changes in the status of herring and their continued contribution to the ecosystem is supported by a triad of monitoring population, disease and other drivers in ecosystem monitoring.

Monitoring studies that provide insight into factors limiting herring recruitment, their success, herring movements (including the Kayak Island area), assessments of good growth years, top-down predation and disease, and other studies will contribute to our understanding of PWS herring dynamics and support potential future management.

<u>Data Management Program</u>

Critical data and the products of Council programs and projects are made available to the general science and natural resource management communities, both now and into the future. The data must also be useful for gaining an effective understanding of the effects of the Spill, recovery status of affected ecosystems and the potential for restoration and/or management actions to facilitate the support of EVOS-affected resources and the services which depend upon them.

In 2012, the Council selected the Alaska Ocean Observing System (AOOS), with support from the National Center for Ecological Analysis and Synthesis (NCEAS), to build and maintain a data management system that would serve the needs of the Herring and Long-Term Monitoring Programs and the Council. In 2017, AOOS continued to serve as the data manager along with its technical partner, Axiom Data Science, for the two long-term monitoring and research Programs for FY17-21. The current data system, Research Workspace, is a platform for file sharing between and among Programs and projects and also with the Trustee Council office and Science Panel. Information on the data collected as part of the FY12-16 and FY17-21 Data Management Program can be found on the Council's website and on the Gulf of Alaska Data Portal (See Section IX. References). Starting in FY20 the Data Management Program provides data sharing and archiving support and services to all Council-funded science and technical programs and projects.

III. Focus Areas, Schedule and Cycles of Review and Funding

A. Focus Areas

This Invitation calls for proposals for FY 22-31 in three Focus Areas:

- 1. a multi-year FY22-31 Program for the long-term monitoring of ecosystem conditions in Prince William Sound and the Gulf of Alaska, incorporating elements of the existing Gulf Watch Alaska Program, Herring Research and Monitoring Program and Data Management Program hereafter named the Long-Term Research and Monitoring Program (LTRM Program);
- 2. individual habitat enhancement projects, habitat restoration projects and research projects supporting the development of mariculture (excluding finfish); and
- 3. individual projects for education and outreach that go beyond the education and outreach efforts included within projects under Focus Areas (1) and (2).

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.

B. Schedule and Cycles of Review and Funding

The Council operates on a fiscal year that begins on February 1 and ends on January 31.

Long-Term Research and Monitoring Program (LTRM) proposers must submit a proposal detailing the activities and budgets for the ten-year period of FY22-31. The Council will review the FY22-31 proposals and approve funding for projects at their Fall 2021 meeting. Proposers approved for funding are required to submit annual reports to the EVOSTC Science Director to review project and program progress toward meeting their goals and objectives as well as those of the Council. These annual reports will be forwarded to the Trustees for their informal review. Synthesis reports will be required in FY24 and FY28. A final report will be required at the end of the total project cycle. The programs are anticipated to be administered by NOAA as multi-year cooperative agreements.

Individual projects may or may not require funding for the ten-year potential funding period. If a proposer anticipates requesting more than one fiscal year of funding, any proposal submitted shall include future years' funding and activities. After submission of a proposal, the Council may require individual proposers to collaborate and resubmit as a Program or joint effort. Approved multi-year programs and projects will be reviewed biennially (every two years). Additionally, annual, synthesis and final reports are required (see above). Funding approved for an EVOSTC fiscal year cannot be used outside of that fiscal year without approval in accordance with the Council's financial procedures policy (See Section VIII. References). Partial funding releases for multi-year projects approved by the Council may be approved subsequently by the Executive Director in sequential amounts based on progress

reports submitted by the project. The following describes the schedule and cycles of proposal review and Council funding decisions for the three Focus Areas of this FY22-31 Invitation.

Proposal Deadline and Anticipated Review for all Focus Areas

FY20

November 4, 2020	Invitation for FY 22-31 Proposals issued
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FY21 (Anticipated schedule).

March 29, 2021	FY 22-31 Proposals Due by 5:00 PM ASDT
April-May 2021	Proposal review including Council staff, Trust Agency Staff, and EVOSTC Science Panel, and may also include Peer Review. Proposals will be circulated to individual Trustees.
June 1, 2021	Revisions/comments added to the Draft FY22-31 Work Plan which will be sent to proposers for revising final proposals.
August 13, 2021	Final Proposals DUE by 5:00pm AKDT
Fall 2021	Review by TC, Council staff, Trust Agency staff, EVOSTC Science Panel, and PAC. Funding decision made by TC

IV. Proposal Invitation by Focus Area

Building on its past efforts and public input, the Council has identified three Focus Areas to be administered under this Invitation: 1) long-term monitoring of ecosystem conditions in Prince William Sound and the Gulf of Alaska, incorporating elements of the existing Gulf Watch Alaska Program, Herring Research and Monitoring Program and Data Management Program - hereafter named the Long-Term Research and Monitoring Program; 2) the development of mariculture (excluding finfish farming as per Alaska Statute 16.40.210); and 3) education and outreach that go beyond the education and outreach efforts included within projects under Focus Areas (1) and (2). The following sections elaborate on the details of the proposed areas of focus that are the subject of this Invitation.

1) LONG-TERM RESEARCH AND MONITORING PROGRAM

See Section II for EVOSTC Long-Term Science Program History.

The FY22-31 Invitation is an open, competitive invitation and seeks to continue a Program that maintains continuity and builds upon the efforts of the previous FY12-16 and FY17-21 cooperative agreements. Specific to Data Management, the Council acknowledges that funding requests may fluctuate depending on the number of Council projects active in each fiscal year.

The overarching goals of the existing Gulf Watch Alaska Program, Herring Research and Monitoring Program and Data Management Program are to (1) provide sound scientific data and products that inform management agencies and the public of changes in the environment and the impact of these changes on injured resources; (2) monitor changes in herring stocks, which reflects the current status of herring in PWS and also the overall health of the PWS ecosystem; and (3) provide critical data management to support all Council-funded programs and projects. Proposals must address these goals and the continuity of data sets is encouraged. Please see the <u>EVOSTC website</u> for information on past and current projects.

In addition to addressing these goals, the LTRM Program is required to fulfill community outreach requirements as part of the effort to restore natural resources and additional consideration will be given to proposals that include Traditional Ecological Knowledge (TEK) (See Section VI. B). The oil Spill Area includes resource-dependent communities which have a strong interest in stakeholders in the outcome of restoration activities. People living in Spill Area communities have detailed knowledge about the condition of resources which can add value to the projects and may enhance the success of restoration efforts. For example, an extensive project incorporating TEK resulted in the historical distribution of forage fish which could not have been obtained from other historical sources or from current data collection efforts. More recently, the existing GWA program held listening sessions with Spill Area communities and both scientists and community members found this exchange of information valuable. The inclusion of community involvement and TEK works to restore confidence in people's knowledge and provides information for making decisions about the safety of using subsistence resources. Thereby, the LTRM program is also supporting the recovery of injured natural resources.

Integrated Program Management and Administration

As with the current EVOSTC science programs, it is expected that the LTRM program funded under this Invitation will establish a Program Management Team to explicitly provide program coordination and oversight of science syntheses of data collected (See Section V). Program coordination includes program planning and circulating information among principal investigators, other Trustee-funded programs and non-Trustee organizations. High-quality products and science synthesis efforts will help communicate monitoring results by delivering reports, archiving data, publishing scientific papers, supporting outreach and integrating information across the entire program. Proposals should also include science synthesis reporting in Years FY24 and FY29 (See Section V. G (4)).

For FY22-31, the Council anticipates funding RESEARCH AND MONITORING OF ECOSYSTEM CONDITIONS IN PRINCE WILLIAM SOUND AND THE GULF OF ALASKA up to \$5,000,000 annually (not including 9% GA). This amount may be adjusted for reasonable annual inflation.

Areas of interest for this Focus Area (in no particular order)

The LTRM Program will incorporate elements of the existing Gulf Watch Alaska Program, Herring Research and Monitoring Program and Data Management Program as described in the areas of interest below.

The overall goal of the existing Gulf Watch Alaska Program is to provide sound scientific data and products that inform management agencies and the public of changes in the environment and the impact of these changes on injured resources. The Proposals must address this goal and the continuity of data sets is encouraged. The following components (a) – (d) include Gulf Watch Alaska projects that have been funded in the past and provided important information, and new work that may provide further insight into the current status of the Spill Area. This list also includes examples of the types of projects in the Environmental Drivers, Pelagic, Nearshore and Lingering Oil Components that could potentially be part of a LTRM Program. Please see Section V. References for websites that list previous and existing project information. This list is not comprehensive, and the projects listed are not mandatory.

(a) Environmental Drivers Component

The monitoring of oceanographic conditions in the Spill Area, including water temperature, salinity, turbidity, nutrients, seawater pH and also plankton populations with a sampling design that yields insight into either the broad region of the Spill Area or meaningful sub-regions of the Spill Area, particularly in support of biological studies conducted by the Programs. Existing long-term data sets are used in climate studies such as biological responses to changes in oceanographic conditions. These data sets are also used in fisheries research and applications to fisheries management and ecosystem-based management.

(b) Pelagic Monitoring Component

- 1. Projects, including monitoring in the Spill Area, covering pelagic species such as killer whale, humpback whale, seabirds, pollock, pink salmon and forage fish. Over the years, Council-funded projects have provided information on population trends of pelagic species to better understand how underlying predator-prey interactions influence recovering species and pelagic ecology within PWS and the Gulf of Alaska.
- 2. Projects that aim to understand the factors limiting the recovery of marbled and Kittlitz's murrelets, and pigeon guillemots.

(c) Nearshore Monitoring Component

Monitoring projects in the Spill Area, including intertidal and subtidal populations and communities. Previous and current projects provide insight on intertidal community responses to changes in environmental conditions.

(d) Lingering Oil Monitoring Component

The Council monitors lingering EVOS oil in the spill area. Previously Council-funded projects have contributed to the Exxon Valdez hydrocarbon database on oil persistence that tracked oil periodically for more than 25 years. Continued monitoring efforts will maintain and enhance the long-term time series that extends back prior to the Spill when baseline samples were collected in the early 1970's. Long-term monitoring of lingering oil in Prince William Sound. For example, continued monitoring of previously sampled sites on a five-year cycle to determine presence/absence of lingering oil, maintain the oil chemistry time series, and evaluate any changes, including collecting samples and analyzing for additional biomarkers to evaluate the state of weatherization. Reanalysis of archived samples may be considered if biomarker analysis is incorporated.

(e) Herring Research and Monitoring Component

The overall goal of the current herring program is to monitor changes in herring stocks, which reflects the current status of herring in PWS and also the overall health of the PWS ecosystem. Herring are a major food resource for predators such as other fish, birds, and marine mammals, including at critical life stages and times of the year. Herring are also an important subsistence, cultural, and commercial resource. Research and monitoring studies provide necessary information to understand changes in the PWS herring population and address assumptions of the current population model. Proposals must address this goal and the continuity of data sets is encouraged. This component is required to have a population model project that continues to incorporate other project results and continues to explore ways to incorporate new information. Proposals must continue with population monitoring, to support the population modeling and to continue the long-term data set and should propose other research that sheds light on factors limiting the recovery of herring, including bottom up and top down forces.

Research on limiting factors of early life stages is appropriate. Integrating and coordinating data collection efforts with ecosystem-focused studies is encouraged, particularly where they improve understanding of the limiting factors. Retrospective studies and syntheses of long-term data sets are encouraged. The following includes projects that have been funded in the past and provided important information, or new work that may provide further insight into the current status of the Spill Area. This list also includes examples of the types of projects in the Herring Research and Monitoring Component that could potentially be part of a comprehensive LTRM Program. This list is not comprehensive, and the projects listed are not mandatory.

- 1. Continued monitoring of the distribution and abundance of the herring population using established metrics from continued long-term data sets (acoustic studies, age-weight-length sampling, mile days of spawning), as well as evaluating testable hypotheses about herring using these data.
- 2. An evaluation of the impacts of changes in piscivorous fish and seabird populations on herring recovery in PWS following the spill and the potential impacts of changes in ecologically important species, such as groundfish and other species may be considered.
- 3. Continued analysis of temporal and spatial variation in spawning in PWS, including reference to historical survey data and analyses of changes in spawn timing and distribution in response both to possible climate change and anthropogenic factors.
- 4. Calibration of biomass estimates from aerial surveys, acoustic surveys with dive egg deposition surveys. Dive surveys are also sought that characterize spawning habitat for all survey areas and expand surveys and studies to include Kayak Island.
- 5. A comparative and retrospective analysis of biological and oceanographic data from PWS and other Pacific herring populations (e.g. Alaska, British Columbia, US West Coast) to assist in determining the mechanisms for continued lack of recovery of PWS herring populations. This analysis may include a retrospective investigation of historical fishery data to examine potential impacts on herring populations. This analysis may also include topics such as herring abundance, recruitment, growth, and disease resistance/susceptibility of herring populations. Other analytical topics for consideration include the relationship between physical and biological oceanographic factors and environmental food web drivers, including spatial and temporal patterns of these factors and relationships that could affect PWS herring.
- 6. A study on adult herring movement between PWS and the Continental Shelf. Examples include microchemistry, acoustic tagging, disease and genetics studies. The role of Kayak Island spawning to PWS populations should be considered.
- 7. The continuation of the work to study the effects of oil exposure, the effects of disease and their potential interactive effects, on herring health and fitness. Disease plays a continual and critical element in periodically impacting herring populations. Continuing studies on disease, oil exposure, and genomic

expression may help in understanding the initial crash, and the role of disease in continuing to impact the present depressed population. These studies would complement the disease monitoring studies, an important part of herring research and monitoring component. Disease challenge experiments, with and without oil exposure, at different stages of early life history (embryo, larvae, juvenile) and their interactive effects on herring health, growth and fitness will be considered.

Top-down forces that may limit herring recovery

- 8. Continued study of the role of disease in herring recovery and the potential for developing tools to aid management agencies in the detection and management of disease outbreaks, including research of other vectors of disease transmission such as egg predation (ovivory).
- 9. The continued examination of the role of humpback whale population dynamics and changes in whale foraging behavior on herring mortality and the potential limitation of herring recovery.
- 10. An expanded examination of the role of hatchery-produced pink salmon, wild pink salmon, other salmon species, other interacting species such as seabirds and killer whales on herring ecology and pelagic food web dynamics in Prince William Sound and the Gulf of Alaska.

Bottom-up forces limiting the recovery of herring

- 11. Limiting factors on recruitment continue to be a challenging issue relative to herring, a very difficult process to study and evaluate. Studies coordinated with or using projects and data from the ecosystem studies are encouraged. Studies focused on evaluating juvenile recruitment success, their health, and overwinter survival will be considered.
- 12. Continue to develop and refine the age-structured assessment model to investigate the effect of disease on herring stocks and for future adoption and implementation by ADF&G.

(f) Synthesis and Modeling Component

Synthesis continues to be a priority for the EVOSTC and all PIs are expected to contribute. The involvement of junior scientists and postdoctoral researchers into these efforts is encouraged. The inclusion of postdoctoral scholars provides an opportunity to include young scientists with fresh perspectives who could synthesize data across projects, both through interaction with the experienced investigators and by bringing new training and experience (e.g., statistical and ecological modeling) to the program.

A plan for up to five postdoctoral fellow positions or equivalent within the Program to introduce young scientists, current research techniques and new ideas to the Program. The project led by a postdoc position must focus on synthesis and/or modeling. Topics may include an evaluation of the possible effects of climate change on the pelagic and nearshore ecosystems and forecasting models. Additional topics may also include products that are directly used to manage fisheries within PWS such as stock assessments or forecasting models for species that are of management concern. Each position should include travel funds for events such as training workshops, PI meetings and professional meetings to

present their work. For each position, funding for up to three years may be requested. The post-doctoral fellow or equivalent must be supervised in their Program-related work by the Program Lead or project PI.

(g) Data Management Project

The overarching goal of the Council's existing Data Management Program is to provide critical data management to support all Council-funded programs and projects. Proposals must address this goal. The continuity of existing data platforms is encouraged. A successful Data Management Program must meet the data needs of all Programs and their individual researchers and individual Council projects that are not within a Program. Data management includes data and metadata storage on Research Workspace and long-term preservation and dissemination into publicly accessible repositories such as the AOOS Gulf of Alaska Data Portal and DataONE. This all-inclusive data management project will help facilitate data sharing between all Council Programs and individual projects. Potential proposers are required to provide a coordinated and collaborative plan created in consultation with the Program Lead(s) from each team and any existing and future PIs of individual Council projects. The existing Data Management Program has evolved into an efficient, high-functioning program since its inception in 2012. The current data sharing platform and tools are sufficient for the effective management and publication of Council project data. Thus, it should be reviewed by any proposer in this component as an example of sufficient data services. For this Invitation, the Council is not requesting the development of new tools for data analysis and management.

Requirements for the Long-Term Research and Monitoring Program

- 1. Project proposals that seek to continue to contribute new data to the data sets collected in previous years using the same protocols and project design must provide a description and justification that the data are valuable and will remain valuable, and that past project design is still appropriate, based on the objectives and proposed uses for the data collection activities. If changes are needed based on current information or if a new project design is proposed, a justification for the changes must be provided, including rationale based on statistical analyses such as power or sensitivity analysis of the proposed sampling design. Detailed study design including sampling design and protocols, sample sizes based on power or sensitivity analysis, methods and statistical analyses is required.
- 2. Project proposals that seek to begin work that was not undertaken in previous years must provide a justification of how the project will provide data useful to addressing management objectives and Program hypotheses.
- 3. Proposals must contain clearly stated hypotheses, describe how these hypotheses contribute to natural resources and services in the Spill Area, and explain how the hypotheses support the monitoring efforts.

- 4. Clear description of objectives, explanation of how these objectives support the management objectives of natural resource managers and their services in the Spill Area and how such objectives further the Council's mission of recovering injured natural resources and their services.
- 5. A structure to communicate with the Council through a qualified individual regardless of the structure of the individual proposers; they must produce a single, comprehensive proposal.
- 6. A justifiable, detailed and efficient administrative structure (individual's education, experience, related work efforts, proposed time commitment, past performance) that provides the following services:
 - Facilitate the most cost-effective and scientifically supportive stream of funding among the parties and projects involved in a manner that minimizes administrative costs,
 - Integrate data from all individual projects to inform the program's reports,
 - Provide administrative assistance with primary efforts toward compiling reports and budgets, tracking progress and program accomplishments,
 - Develop integrated data products across the program that contribute to the broad understanding of environmental conditions that drive ecological functions, and
 - Ensure effective and efficient uses of funds and leveraging the right relationships to improve the impact and relevance of program data to Trustee Agencies and Spill affected communities.
- 7. A Program Science Review Panel or Oversight Group to review potential new and existing projects and give guidance and oversight on the Program's design and implementation. The panel cannot include members who are participating in projects funded through the program in FY 22-31.
- 8. Established realistic and detailed timelines and milestones specific to the individual projects and the overall Program. The proposal must demonstrate a credible, feasible and detailed scientific implementation of the Program, including availability of facilities and other requirements necessary for Program success. This would include an analysis of statistical power for sample sizes or a sensitivity analysis of the proposed sampling design required to meet objectives for each individual project.
- 9. A public outreach plan focused on providing information to the Trustee Agencies for use in their respective outreach and education materials. This plan should address how data and information will be shared with communities. This information may include a summary of Program highlights or summary of key points for the agencies to incorporate in their ongoing outreach efforts. A list of Trust Agency outreach contacts will be provided to the Program proposer selected by the Council for funding. Outreach efforts by the Program should focus on developing and maintaining accurate and timely content for the Program's website as a primary source of information on the Program. Any additional outreach materials that include information not contained in publicly available proposals or annual reports must be approved by the Council office prior to public circulation. Materials should be brief and direct the target audience to the Program's website. The cost of outreach efforts for this Program should not exceed \$30,000 per year.

10. Provides a detailed plan for local and Alaska Native community involvement in the projects and programs. The degree to which the activities of the proposal allow involvement with local communities and incorporation of local knowledge will vary, but interaction with communities is required. Reviewers will give additional consideration to proposals that demonstrate meaningful community involvement and/or make use of local and traditional ecological knowledge.

Requirements for the Data Management Project

A proposal for a Data Management project must address the following:

- 1. The project should be prioritized to meet the needs of all Council Programs and projects with respect to data accessibility and preservation. Detailed information on how the Data Program meets the needs of all Council Programs and projects will be required. For this invitation, the Data Management project will include oversight of individual Council projects which will ensure that data from all Council projects are consistently maintained, archived and made publicly available through AOOS and DataOne data portals.
- 2. Any data collected by Council Programs and projects and provided to the Data Management project for processing must be able to be transferred to the Council at its request with no further cost. An explicit statement of how data will be delivered at the end of the term or the termination of the contract must be included.
- 3. Data collected must be made publicly available upon written approval by the lead program administrator and individual project PIs.
- 4. Data and any associated infrastructure must be archived at a minimum of two independent off-site locations. The locations of the archives must be geographically distributed to guard against data loss from natural disasters or technical failure.
- 5. The technical infrastructure and experienced personnel required to make all data, documents, annual and final reports available electronically both to the researchers and to the public based on a clearly defined timeline of deliverables.

2) THE DEVELOPMENT OF MARICULTURE (EXCLUDING FINFISH FARMING)

This Invitation is an open, competitive invitation and seeks to support projects related to the development of mariculture in Alaska. The goal of this Focus Area is to work toward the restoration or enhancement of EVOS-affected resources and the Spill ecosystems through mariculture activities and to provide needed research data that support the development of mariculture in the Spill Area. For this Focus Area, the areas of interest to the Council include mariculture activities that restore and/or enhance habitat and research supporting the development of mariculture. Projects are limited to species historically found in the Spill Area or shellfish species currently cultured in Alaska that can meet the State of Alaska's licensing and permitting requirements (i.e., including Pacific oyster and Kumamoto). Culturing non-native species such as Pacific oysters offers multiple ecosystem restoration services including nutrient bioremediation, sediment stabilization, shoreline protection, and improvement of water quality and water clarity. Projects may also be subject to State of Alaska mariculture licenses and permitting. Results from all projects are non-proprietary and should have broad applications in Alaska.

For FY 22-31, the Council anticipates funding activities and research supporting the DEVELOPMENT OF MARICULTURE (EXCLUDING FINFISH) at up to \$2,500,000 annually (not including 9% GA). Funding may be proposed for less than 10 years and may be allocated unevenly among the proposed years, as appropriate to the proposed annual activities. This amount may be adjusted for reasonable annual inflation.

Habitat Restoration and Enhancement through Mariculture

The Spill contaminated approximately 1,500 miles of Alaska's coastline and disrupted the ecosystem in the path of the oil (see Section X. References). General restoration activities are a principal tool used to focus on the restoration of individual injured resources and services and include a wide variety of specific restoration activities. One of these activities is to enhance the environment to support or improve the rate of natural recovery of the ecosystem. Restoration activities may also support subsistence activities. Examples include replanting seaweed to restore the intertidal zone to pre-Spill conditions or growing kelp species that may also be commercially valuable. Proposers are encouraged to contact existing entities to learn what approaches have been successful or have failed to increase the probability of success. When evaluating projects that enhance the environment, the potential for adverse effects on the ecosystem need to be considered. Thus, for projects to be consistent with the Council's restoration goals, it is important that projects effectively work towards restoration objectives while also mitigating adverse effects on the ecosystem such as low genetic diversity.

Research Supporting the Development of Mariculture

In 2016, the Alaska Mariculture Task Force (AMTF), developed a comprehensive plan for the development of a viable and sustainable mariculture industry that produces shellfish and aquatic plants for the long-term benefit of Alaska's economy, environment and communities. However, challenges include research and environmental monitoring needs on factors such as ocean acidification, sea level rise, climate change and predation on farmed species. The Council is interested in funding research to

support the development of mariculture in the Spill Area. Projects are limited to species historically found in the Spill Area or shellfish species currently cultured in Alaska that can meet the State of Alaska's licensing and permitting requirements (i.e., including Pacific oyster and Kumamoto).

Specific components that are of particular interest to the Council for the mariculture focus area include ecosystem restoration through kelp farming, recovery of shellfish resources and subsistence activities and research projects supporting the development of mariculture. The following include examples of the types of projects identified as research needs in the <u>Alaska Mariculture Development Plan</u> and based on the <u>Executive Order signed May 7, 2020.</u> This list serves as examples of potential research projects and is not comprehensive or mandatory. Projects may be subject to State of Alaska licenses and permits. Please see the Alaska Department of Fish and Game Aquatic Farming <u>website</u> for information.

Areas of interest include (in no specific order)

- (a) <u>Habitat Enhancement and Restoration Projects</u>
- 1. Ecosystem enhancement and restoration through kelp farming.
- 2. Use of seed stocking and habitat enhancement as a means for clam restoration.
- (b) Research Supporting Mariculture
- 1. Examination and identification of suitable areas for mariculture with the Spill boundary and impacts of mariculture siting.
- 2. Climate change effects (including ocean acidification) on, and adaptations of, shellfish and algae.
- 3. Examination of the effects of sea level rise on areas suitable for mariculture.
- 4. Determination of optimum conditions for placement of shellfish seed into ocean beds to ensure success of shellfish farming production.
- 5. Identification and research on genetic diversity and disease issues that may constrain shellfish mariculture.
- 6. Development of breeding protocols to ensure appropriate genetic diversity is maintained (shellfish and kelp).
- 7. Development of culture techniques for native species (including hatchery facilities).
- 8. Examination of differences between hatchery-reared and wild shellfish (behavioral, morphological and physiological) and potential competitive interactions.

- 9. Potential ecological effects of hatchery-reared shellfish on the surrounding environment.
- 10. Development of water quality monitoring, harmful algal bloom monitoring and tissue sampling protocols to ensure cultured species are safe for human consumption.
- 11. Population genetics of seaweeds and shellfish to better understand how seaweed and shellfish farms might affect the natural populations, including the degree of potential spread out of the farming area.
- 12. Determination of optimal conditions for growth of shellfish (to harvest size) and seaweeds.
- 13. Investigation co-culture of mariculture species for the purpose of mitigating negative impacts (e.g., nutrient loading), or enhancing production.
- 14. Examination of using seaweeds as bioindicators of heavy metal contamination in proposed farming sites.
- 15. Investigation into the dynamics between herring spawn events and seaweed mariculture.
- 16. Evaluation of ecosystem services provided by mariculture, including integrated multi-trophic mariculture systems such as co-locating shellfish and seaweed farms to enhance restoration benefits.
- 17. Examination of multi-species mariculture activities in marine and coastal waters in the Spill area.
- 18. A plan for a postdoctoral fellow position or equivalent to introduce young scientists, current research techniques and ideas to mariculture research. The project led by the postdoc must seek to address the Council's mission of restoration. Each position should include travel funds for events such as training workshops, PI meetings and professional meetings to present their work. For each position, funding for up to three years may be requested. The postdoctoral fellow or equivalent must be supervised in their mariculture research-related work by the project PI.

Requirements for Mariculture Projects

- 1. Provide a clear description of objectives, explain how these objectives support the management objectives of natural resource managers and their services in the Spill Area and how such objectives further the Council's mission of recovering injured natural resources and their services.
- 2. Provide an outline of specific restoration objectives (in the field) independent of mariculture objectives, and also outline deliverables or measurements of success.

- 3. Species of interest are limited to species historically found in the Spill Area or shellfish species currently cultured in Alaska that can meet the State of Alaska's licensing and permitting requirements (i.e., including Pacific oyster and Kumamoto).
- 4. Provide clear justification for any administrative costs.
- 5. Projects may be subject to State of Alaska licenses and permits. Please see the Alaska Department of Fish and Game Aquatic Farming website for information.
- 6. Projects may be subject to Federal permitting, consultation (e.g., ESA and EFH), and environmental compliance (e.g., NEPA) requirements.

3) EDUCATION AND OUTREACH

This Invitation is an open, competitive invitation and seeks to support education and outreach projects related to the Spill and projects and programs in this Invitation. Individual projects for this focus area must go beyond the education and outreach efforts included within projects under Focus Areas (1) and (2). The overarching goals include the dissemination of information, increased public knowledge of the Spill, community involvement in research and restoration activities, and infrastructure development to support these education and outreach goals.

Although the Spill occurred more than 30 years ago, the effects of the Spill remain an important part of Alaska's history. The Council continues to inform and educate the public, coastal communities in the Spill Area and younger generations about the Spill and current restoration activities, including providing updates on the status of injured and EVOS-affected resources, including archaeological resources, and encouraging community involvement in research and restoration activities. The Council also recognizes the value in leveraging and supporting the education and outreach resources that already exist in centers of research expertise in Alaska.

Previous Education and Outreach projects funded by the Council include several projects which involved students in working with scientists while making a meaningful contribution to research and restoration in oil spill affected communities (see Section IX. References). The Council also funded conferences for elders and youth on subsistence and the oil spill, which brought together, from all of the oil spill-affected communities, elders and other traditional knowledge bearers and youth, as well as principal investigators from Council-funded research projects to create a forum for the exchange of information between Western scientific ways of knowing and traditional ways of knowing (see Section IX. References).

For FY 22-31, the Council anticipates funding the EDUCATION AND OUTREACH Focus Area at up to \$2,500,000 annually (not including 9% GA). Funding may be proposed for less than 10 years and may be unevenly allocated among the proposed term as appropriate to the proposed activities. Proposal budgets should include reasonable funding for staff to carry out the project goals, travel, and materials. This amount may be adjusted for reasonable annual inflation.

Note: Any outreach or education materials that include information not contained in publicly available proposals, annual, final or synthesis reports as described in this document must be approved by the Council office prior to public circulation.

Proposers funded under this Focus Area will provide a list of Outreach and Education Program contacts in the proposal and will include professional educators, communication specialists and/or interpretive specialists. The EVOSTC Science Director will then circulate a list of these contacts, as well as those from Trust Agencies and the LTRM and Mariculture Programs funded under this Invitation, among these respective entities to facilitate communication and collaboration.

Proposals under this Focus Area will develop outreach and education materials to present and effectively convey to a strategically selected audience, such as impacted community members and entities and pre-K-graduate students and/or summer camp and internship participants, scientific information and data produced by the EVOSTC-funded LTRM and Mariculture Programs, as detailed below. The Proposal should outline the intended audience and methods of circulation/distribution of the Programs' products. All components will include an evaluation process to determine the impact of the education and/or outreach methods in increasing knowledge, skills and/or community involvement. Specific components that are of particular interest to the Council for education and outreach projects include the development of audience-appropriate materials, educational opportunities, providing EVOSTC science projects and program information to spill-area communities and archaeological repositories. Suitable outreach products may include websites, on-line and print media, and interpretive signage. Suitable education products may include curriculum development, public presentations to communities and in conference/symposia formats, classroom and/or camp demonstrations and presentations. Audiences may also include tourists. All education and outreach projects must include an evaluation process to measure component effectiveness and a dissemination and sustainability plan. The following include examples of the types of projects contemplated for this Focus Area. This list is not comprehensive, and the projects listed are not mandatory.

Areas of interest (in no particular order)

(a) Outreach and Education related to the EVOSTC Long-Term Research and Monitoring Program

See Section II and IV (1) for information on the EVOSTC Long-Term Monitoring Program.

The Long Term Research and Monitoring Program includes a component for public outreach and education to facilitate providing information to the Trustee Agencies and to Council-funded projects under this Focus Area (see above, Section IV (1)) for use in the agencies' and funded entities' respective outreach and education materials. Proposals under this designated Outreach and Education Focus Area will expand on the Program's relatively limited scope of Outreach and Education activities as outlined above in Section IV (1), including:

- 1. Development of student-friendly education materials for any age range, such as engaging elementary student materials and exploratory educational materials for high school and college-age students that investigate the impacts of EVOS over time.
- 2. Development of outreach materials for the general public, such as displays and brochures, public facilities.
- 3. Development of multimedia materials such as websites, short videos and podcasts.

- 4. Outreach and educational materials or activities that increase the awareness of community members, including youth, long-standing and new residents, regarding the effects of the Spill and encourage their involvement in research and restoration activities.
- 5. Outreach and educational materials or activities that are developed in collaboration with community members and include local and traditional knowledge and/or community-based research.
- 6. Development of a science communication training program to increase the impact and effectiveness of communicating research findings to the public.

Requirements for Education and Outreach Projects

- 1. Coordinate with projects and programs in Focus Areas 1 and 2.
- 2. Identify an appropriate audience, communicate with the target audience to identify needs and address the needs of that audience.
- 3. A plan that evaluates and measures the success of the project.
- 4. Demonstrate a need for education and outreach materials and describe a detailed dissemination plan.

V. Requirements for Proposers

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 Spill or the reduced or lost services provided by these resources. Proposals should address how this project will contribute to the support of EVOS-affected species, ecosystems and resources. In addition, proposals must be consistent with the policies contained in the 1994 Restoration Plan. Please also refer to the 2014 Injured Resources and Services List Update for detailed information. (See References)

A. Mandatory Requirements for All Proposals

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

- 1. Be consistent with the legal requirements applicable to potential uses of EVOSTC restoration funds. The joint trust funds are used by the governments for purposes of restoring, replacing, enhancing, rehabilitating, or acquiring the equivalent of natural resources and services lost or injured as a result of the oil spill, as required by the Consent Decree entered in 1991 resolving the governments' civil claims related to the oil spill ("Consent Decree"), the Memorandum of Agreement and Consent Decree entered in *United States v. State of Alaska*, No. A91-081 CIV (D. Alaska) on August 28, 1991 ("Memorandum of Agreement"), the Restoration Plan adopted by the Council, and governing statutes. See Legal Requirements on use of Funds.
- 2. Be focused within the Spill Area. Restoration activities will occur primarily within the Spill Area. At the Council's January 19, 2021 meeting, the Council approved a limited extension of the oil spill area boundary eastward to incorporate the Copper River Delta and the Bering River, including its headwaters (see Resolution 21-03).
- 3. Respond to the call for a Focus Area, as described in this Invitation.
- 4. Provide a detailed plan for local and Alaska Native community involvement.
- 5. Provide a clear justification for the need of proposed projects.
- 6. Comply with the Council's founding documents and relevant policies and procedures. (See References.)
- 7. Describe the existing administrative structure to manage funds and projects; the proposer may be an existing organization or collaboration among existing entities and individuals.
- 8. Describe a plan that ensures individual project compliance with reporting, data submission and quality policies (See References). This plan should include making all data, documents, annual, final and

synthesis reports available electronically to the public according to explicitly stated timelines and reporting guidelines.

B. Preferred Requirements for All Proposals

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

- 1. Partner with one or both of the Centers of Excellence founded in part by historic EVOSTC investments. These two Centers of Excellence are the Alaska Sealife Center and the Prince William Sound Science Center. If not collaborating with either of these Centers, please provide information as to the inquiries and efforts extended to ASLC and PWSSC center researchers.
- 2. Leverages existing research and development infrastructures.
- 3. Partners with other stakeholders (such as farmers, hatcheries) and other projects (including non-Council funded projects).
- 4. Considers newly available technologies.
- 5. Demonstrates an understanding and synthesis of existing scientific literature, research results and scientific knowledge that includes outcomes of prior Council work.
- 6. Demonstrates an effective and balanced use of funds, including establishing appropriate collaborations with other organizations and experts and achieving the most efficient use of funds.

C. Reporting Requirements for Funded Proposals

The following are mandatory requirements for funded proposals. The submitted budget for each year shall include the staffing and funds necessary to meet these requirements. (See the Council's Reporting Procedures and Budget Forms for details.)

- 1. An annual report is required to be submitted to the EVOSTC Science Director on March 1 of each fiscal year (except FY22) and would include the following:
 - a. A completed Program Summary Status Form and Budget Form (Attachments D and F of Reporting Procedures); and
 - b. A completed Project Reporting Form and Budget Form for each project in the program (Attachments C and E of Reporting Procedures).
- 2. All funded projects are required to submit data and metadata for publishing, archiving and public access. The Data Management Project will work with individual project PIs to facilitate compliance.

- 3. A final Project report to be submitted on March 1 in the year following the fiscal year in which project work was completed.
- 4. Additional Reporting Requirements for the LTRM Program: Synthesis reports will be submitted in FY24 and FY29. The report addresses fundamental ecosystem drivers, trends and status in a way that contributes to the Council's and the public's understanding of the effects of the Spill and the identification and development of possible management or restoration efforts that may benefit injured resources and services. These may include such topics as, but not limited to, a synthesis of retrospective data, climate drivers, lingering oil recovery and the effects of human interventions. Similar to the FY12-21 synthesis reports, the LTRM synthesis report may consist of several manuscripts that address the topics previously mentioned for a broad ecosystem-based consideration of the ongoing research.

EVOSTC FY22-31 Invitation VI. Additional Evaluation

VI. 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 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 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 federal and State attorneys.

- Proposers should also note that the following activities, in general, will not be considered for use of Council funding: (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 "normal agency activities" that the government would have conducted had the Spill not occurred. (See Memorandum of Agreement and Consent Decree between the United States & the State of Alaska, Aug. 29, 1991).
- Program or project proposers that have received funding previously from the Council will be evaluated on their past performance. Proposers that are delinquent in submitting any required interim and final reports to the Council or that have otherwise performed unsatisfactorily will not be considered for continued or future funding. Submitting all overdue deliverables to the Council by **September 1**, **2021** requalifies the proposer for funding.

B. Council Science Review

Council staff, Trust Agency staff and the EVOSTC Science Panel review the proposals and, as appropriate and as schedules may allow, may provide written comments for project refinement to the proposers. These reviewers will provide funding recommendations to the Executive Director.

C. Public Advisory Committee Review

The Council's PAC, representing a cross-section of interest groups affected by the Spill, reviews the proposals and provides the Council with funding recommendations. Evaluation factors to be considered by the PAC include, among other criteria that may be identified by the PAC, whether and how the proposal achieves the requirement of restoring, replacing, enhancing or acquiring the equivalent of natural resources injured as a result of the Spill or the reduced or lost services provided by these resources.

EVOSTC FY22-31 Invitation VI. Additional Evaluation

D. Annual Work Plan

The Annual Work Plan will provide any available recommendations and comments of the Council's Public Advisory Committee, EVOSTC Science Panel, other Council advisors and Council staff for the Council's review. This Annual Work Plan compiles all of the items comprising the Council's Restoration Program budget for the current fiscal year including Program and project proposals, as well as Council administration costs.

E. Trustee Council Decision

To assist in their decision as to which proposals will be selected for funding, the Council may take into consideration the recommendations of the Executive Director, Science Director, public comment, Public Advisory Committee, Trust Agency staff and EVOSTC Science Panel. These recommendations are purely advisory in nature and the final decisions are at the sole discretion of the Council members. Unanimous agreement of all six Council members is required to fund a proposal. It is anticipated that funding decisions for this Invitation's FY 22-31 term (i.e., approval of the Work Plan) will be made at a Council meeting in Fall 2021 and funding will be released Feb. 1, 2022.

VII. Instructions for Submitting a Proposal

A. What to Submit

The EVOSTC website has a webpage for information, updates about this Invitation and submittal forms for each Focus Area at: https://evostc.state.ak.us/publications/invitations-for-proposals/fy22-31-invitation/

LTRM Program and project proposal packages should be transmitted together. All other proposals should be transmitted individually by the project PI. Please submit an electronic copy of the proposal package by March 29, 2021, 5:00 PM AKDT to:

Shiway Wang, Science Director at shiway.wang@alaska.gov and

Linda Kilbourne, Administrative Manager at linda.kilbourne@alaska.gov

Proposal forms must be composed using Microsoft Word with figures and tables embedded. Budget forms must be composed using Microsoft Excel. The proposal and budget forms should not be modified to include additional information not specifically requested. PDF files will not be accepted.

For submissions by a consortium or organization, please provide the following information in addition to the Program and Project Proposal forms (Appendices A-E) 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 the past three years.
- e. Information about facility, including location, ownership, authority to use, size and resources available.
- f. Institutional statement confirming that the proposal and related activities are consistent with the founding and authorizing documentation of the Proposer's organization.
- g. Number of members of the organization's existing science or technical review panel. If no panel currently exists, please note as such.
- h. Number of members of the organization's existing public advisory committee or mechanism for public involvement. If no group currently exists, please note as such.

- i. Name and resume of PIs and any key staff. This should include a summary of the experience of key staff in managing large and complex scientific programs.
- j. Capabilities of existing IT infrastructure to make data and reports publicly available.

2. Experience with EVOSTC

- a. Amount of funding received by the organization or individual PI's from EVOSTC currently or in the past and listing of projects funded. Prior experience with EVOSTC is not a requirement to be eligible to receive funding.
- b. A statement that the proposer has read and clearly understands the <u>Council's founding documents</u> and the <u>policies and procedures</u> that are relevant to the proposal. Any conflicts between the Council's policies and procedures and the proposers should be addressed in this section.

3. Current Areas of Study and Funding Sources

- a. Listing of the current areas of study for each organization and amount of funds released for each area annually.
- b. Experience of each organization with the Focus Areas of this Invitation must be addressed in the proposal. However, past experience with the Focus Areas is not a requirement for a proposer to be eligible for Council funding.
- c. Amounts and funding sources for any matching funds that would be available in support of the proposed program or individual projects.

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.

EVOSTC FY22-31 Invitation VIII. References

VIII. References

EVOSTC Founding and other Documents are available at the Council's website (evostc.state.ak.us), including the items listed below.

Information, proposal forms and updates for this Invitation can be found at:

https://evostc.state.ak.us/publications/invitations-for-proposals/fy22-31-invitation/

The following can be found at: http://evostc.state.ak.us/index.cfm?FA=pubs.listKeyDocs

- 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)

2014 Status of Injured Resources & Services:

http://evostc.state.ak.us/index.cfm?FA=status.injured

EVOSTC Policies and Procedures:

http://evostc.state.ak.us/index.cfm?FA=policies.home

Integrated Herring Restoration Program (IHRP):

http://evostc.state.ak.us/static/PDFs/IHRP%20DRAFT%20-%20July%202010.pdf

FY12-21 Herring Research and Monitoring Program including Data Management:

http://evostc.state.ak.us/index.cfm?FA=projects.herringResearch

FY12-21 Long-Term Monitoring Program:

http://evostc.state.ak.us/index.cfm?FA=projects.gulfWatch

FY12-21 Gulf of Alaska Data Portal:

http://portal.aoos.org/gulf-of-alaska.php

EVOSTC FY22-31 Invitation VIII. References

Examples of previously funded Education and Outreach projects:

 $\underline{https://evostc.state.ak.us/restoration-projects/project-search/eldersyouth-conference-on-subsistence-and-the-oil-spill-98286/$

https://evostc.state.ak.us/restoration-projects/project-search/youth-area-watch-040210/

 $\underline{https://evostc.state.ak.us/restoration-projects/project-search/kodiak-archipelago-youth-area-watch-\\040610/$

https://gulfwatchalaska.org/resources/educational-resources/

https://gulfwatchalaska.org/resources/educational-resources/virtual-field-trips/

https://vimeo.com/133696379

IX. Non-Discrimination Statement

The Exxon Valdez Oil Spill Trustee Council administers its programs free from unlawful discrimination against any persons based on race, religion, color, national origin, age, sex, physical or mental disability, marital status, pregnancy, or parenthood. Each state and federal agency that implements programs funded by the Council also has legally mandated anti-discrimination policies that apply to any contracts entered into as a result of this FY22-31 Invitation. To obtain more information about the anti-discrimination policies of individual agencies, see the links provided below for that agency.

USDA: http://www.usda.gov/wps/portal/usda/usdahome?navid=NON DISCRIMINATION

NOAA: http://www.eeo.noaa.gov/

USDOI: http://www.doi.gov//pmb/eeo/index.cfm

ADF&G: http://www.adfg.alaska.gov/index.cfm?adfg=home.oeostatement

ADOL: http://doa.alaska.gov/dop/eeo/

ADEC: http://doa.alaska.gov/dop/eeo/

EVOSTC FY22-31 Invitation X. Proposal Forms

X. Proposal Forms

Electronic forms are available for download **HERE**.

Long-Term Research & Monitoring Program Proposal Form

Long-Term Research & Monitoring Project Proposal Form

Mariculture Project Proposal Form

Education and Outreach Program Proposal Form

Education and Outreach Project Proposal Form

Program and Project Budget Form