

Appendix IVB: Memoranda of Agreement

Memorandum of Understanding

BETWEEN

**U. S. Department of Commerce
National Oceanic and Atmospheric Administration**

AND

The Alaska SeaLife Center

AND

The North Pacific Research Board

CONCERNING THE

Establishment of the North Pacific Marine Research Institute

AND THE

Administration of the Environmental Improvement and Restoration Fund

I. PURPOSE AND SCOPE

A. Introduction

Pursuant to 33 U.S.C. §2738, the Secretary of Commerce is directed to establish a North Pacific Marine Research Institute to be administered at the Alaska SeaLife Center by the North Pacific Research Board. This memorandum constitutes an agreement between the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA); the North Pacific Research Board (the Board), and the Alaska Sea Life Center (ASLC) to form a collaborative association which will provide a framework to create the Institute for the purposes of conducting research, carrying out educational projects and carrying out demonstration projects on or relating to the North Pacific marine ecosystem.

In addition, 43 U.S.C. §1474d creates the Environmental Improvement and Restoration Fund (EIRF) which authorizes the Secretary to make grants to Federal, State, private or foreign organizations or individuals to conduct research activities on or relating to the fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean based on recommendations by the Board.

In furtherance of these statutory initiatives, Congress amended 33 U.S.C. §2738 to provide for the joint administration by the Board of the projects authorized under the Institute and projects authorized to be funded under the EIRF. Public Law 106-554, Miscellaneous Appropriations, Div. B, Title I, Sec. 144 (c).

B. Scope

The projects of the Institute will relate to the North Pacific marine ecosystem, with particular emphasis on marine mammal, seabird, fish, and shellfish populations in the Bering Sea and Gulf of Alaska including populations located in or near Kenai Fjords National Park and the Alaska Maritime National Wildlife Refuge. In an effort to avoid duplicating other research activities administered by the Board, the Parties agree that the Institute and its location, the Alaska SeaLife Center, shall jointly serve as a regional and national center for the Board to administer sub-awards with funds made available to the Secretary of Commerce under the Environmental Improvement and Restoration Fund (43 U.S.C. §1474d) for cooperative marine research projects and activities on or relating to the fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean, including lesser-related bodies of water.

The projects of the Institute and the projects funded under the EIRF shall be administered jointly.

II. AUTHORITY

In accordance with 33 U.S.C. §2738, the Secretary of Commerce is directed to establish a North Pacific Marine Research Institute to be administered at the Alaska SeaLife Center by the North Pacific Research Board. In addition, the Secretary acting through the National Oceanic and Atmospheric Administration is authorized to conduct research and to provide financial assistance in support of the Institute on issues relating to the North Pacific marine ecosystem. Assistance is also authorized for costs associated with the lease, and to maintain, operate, and upgrade research equipment and related facilities necessary to conduct research at the Alaska SeaLife Center. The Institute is not empowered to use Federal funds to initiate litigation or to acquire any interest in real property other than establishing a lease with the Alaska Sea Life Center.

The Board is an advisory panel as defined under 16 U.S.C. §1852(g) and formed pursuant to 43 U.S.C. §1474d to be an administrative arm and recommending body to the Secretary of Commerce to implement a competitive grant program using a portion of the interest earned and covered from the EIRF. The Secretary is authorized to make grants to Federal, State, private or foreign organizations or individuals to conduct research activities on or relating to the fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean based on recommendations by the Board. Congress expanded the Board's functions to include the administration of the North Pacific Marine Research Institute under 33 U.S.C. §2738.

Congress amended 33 U.S.C. §2738 to give discretion to the Board to provide for the joint administration of the projects authorized under the Institute and projects authorized to be funded under the Environmental Improvement and Restoration Fund (EIRF). Public Law 106-554, Miscellaneous Appropriations, Div. B, Title I, Sec. 144 (c); 33 U.S.C. §2738(e).

III. ESTABLISHMENT

The U. S. Department of Commerce hereby establishes, and the Parties agree to establish the North Pacific Marine Research Institute as follows:

A. Location

The Institute will be located at the Alaska SeaLife Center and at such other locations as agreed between the North Pacific Research Board and the Alaska Sea Life Center.

B. Administration

The Institute will be administered by the North Pacific Research Board at the Alaska SeaLife Center.

No more than ten percent (10%) of funds made available to conduct research and carry out education and demonstration projects under 33 U.S.C. §2738(b)(1) may be used to administer those 33 U.S.C. §2738(b)(1) programs of the Institute. No more than five percent (5%) of funds made available for grants under 43 U.S.C §1474d may be used to administer those 43 U.S.C. §1474d grants. The percentages allotted for administration of §2738(b)(1) programs and §1474d grants respectively may be combined and used to jointly administer those same programs and grants of the Institute. A separate accounting must be maintained to ensure compliance with the statutory limitations imposed on the administrative funds.

The Federal Advisory Committee Act (5 U.S.C. app. §2) does not apply to the Institute as mandated by 33 U.S.C. §2738(c).

C. Responsibilities of the Parties

1. NOAA

- a. NOAA will facilitate the transfer of §2738 funds and §1474d funds in accordance with law; approve or reject EIRF grants recommended by the Board to the Secretary of Commerce pursuant to 43 U.S.C. §1474d; have access to any pertinent books, documents, papers and records concerning the administration of funds by the Institute whether written, printed, recorded, 'produced or reproduced by any mechanical, magnetic or other process or medium, in order to make audits, inspections, excerpts, transcripts or other examinations as authorized by law; ensure compliance with federal law and regulations; provide technical assistance to the Board in matters pertaining to EIRF grants; and designate one or more individuals within the agency to serve as NOAA Liaison(s) for the Institute.
- b. The NOAA Liaison(s) will ensure communication and coordination between Institute activities and the agency's broader trustee responsibilities to implement and ensure compliance with the intents and purposes of 43 U.S.C. §1474d and 33 U.S.C....§2738.

2. North Pacific Research Board

- a. The North Pacific Research Board will make policies for the operations and administration of the North Pacific Marine Research Institute; appoint an Executive Director for Institute affairs; approve budgets for the operations and administration of the Institute; approve research, education and demonstration projects in accordance with 33 U.S.C. §2738; develop criteria and priorities for EIRF grants in a manner that avoids duplication and provides coordination of marine research; make recommendations to the Secretary of Commerce for EIRF grants; provide for scientific guidance and scientific peer review of grant requests and grant administration; provide for oversight of funded projects and funded grants; ensure a public process of communications and outreach; and administer other marine research that may come within its purview from time to time
- b. The Board is composed of the representatives or their designees identified at 43 U.S.C. §1474d(e)(3). The five voting members are the Secretary of Commerce, the Commissioner of the Alaska Department of Fish and Game, the Chairman of the North Pacific Fisheries Management Council, the Director of the Alaska Sea Life Center, and the person appointed by the Secretary of Commerce to represent fishing interests.
- c. The five voting members of the Board may act on behalf of the entire Board in all matters of administration, including the disposition of research funds and administration of research projects not made available through EIRF. All decisions of the Board concerning the EIRF, including grant recommendations, shall be by majority vote of the five voting members, in consultation with other members. The five voting members of the Board shall decide all administrative matters pertaining to the Institute, including the disposition of research funds and administration of research projects. The five voting members of the Board shall decide all administrative matters pertaining to the EIRF program, but shall first consult with the other members of the Board before deciding any non-administrative matters of the EIRF program, such as the establishment of criteria and priorities, and the development of recommendations to the Secretary of Commerce.

3. Alaska SeaLife Center

- a. The Alaska Sea Life Center will provide administrative infrastructure for the implementation of the policies and priorities of the Board; develop budgetary information for Board consideration and adoption; act as fiscal agent for the Institute; provide the infrastructure and administration of scientific guidance and peer review to ensure the scientific integrity of grants and projects; implement grant administration and the oversight of Institute projects; implement a public process of communications and outreach approved by the Board; implement the administration of other marine research, projects and programs that may come within the purview of the Board from time to time; and, direct its executive director to report to the Board in all matters pertaining to the Institute.
- b. Subject to the availability of funds appropriated by Congress and subject to the ordinary budgetary and administrative procedures described in section IV below, NOAA will provide the Alaska SeaLife Center financial assistance for such facilities, including equipment and buildings necessary to conduct the research, education and demonstration projects sponsored by the Institute.
- c. The parties agree that the Alaska Sea Life Center shall be appointed fiscal agent to provide a separable, identifiable operating budget with separate accounts maintained for each major research activity in an operating account for the North Pacific Marine Research Institute. The North Pacific Research Board will use these funds to carry out the research, education or demonstration projects and the grant administration at the Alaska SeaLife Center in accordance with 33 U.S.C. §2738(b)(1) and (2), 43 U.S.C. §1474d, and such other laws and regulations as may apply.

D. Projects and Grants

1. The Institute will conduct research, carry out educational projects, and carry out demonstration projects relating to the North Pacific marine ecosystem, with particular emphasis on marine mammal, seabird, fish, and shellfish populations in the Bering Sea and the Gulf of Alaska including populations located in or near Kenai Fjords National Park and the Alaska Maritime National Wildlife Refuge, as provided at 33 U.S.C. §2738(b)(1).
2. The Institute will also provide and jointly administer sub-grants to Federal, State, private or foreign organizations or individuals to conduct research activities on or relating to the fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean (including any lesser related bodies of water), as set forth at 43 U.S.C. §1474d(e)(1) and in accordance with criteria and priorities for grants established by the North Pacific Research Board, as set forth at §§1474d(e)(2) and (e)(4)(B).
3. The Institute will implement and administer such other grants, programs and projects, and perform such other functions as may come within its purview from time to time.

IV. FINANCIAL COMMITMENTS

This MOU does not constitute a financial commitment on the part of any Party. Financial support for the Institute shall be contingent upon the availability of funds appropriated by Congress and subject to the ordinary budgetary and administrative procedures of NOAA, the Board and the Alaska SeaLife Center, as applicable. NOAA funds shall not be obligated directly or indirectly, without written approval of either a NOAA Grants Officer (federal assistance) or Contracting Officer (procurements), to which this Memorandum of Understanding does not replace the need for a financial assistance award, procurement award or other transactions pursuant to 31 U.S.C. § 6301. et. seq., to legally authorize and obligate federal funds to the Board or the Alaska SeaLife Center for any authorized costs or activities for the North Pacific Marine Research Institute

V. TERM

This Memorandum is effective on the date of signature by the Executive Director of the Alaska SeaLife Center, the Chair or Interim Chair of the North Pacific Research Board, and the designee of the Secretary of the Department of Commerce. The parties will review this agreement at least once every five years to determine whether it should be revised, renewed or canceled. It can be modified only in a writing signed by all parties.

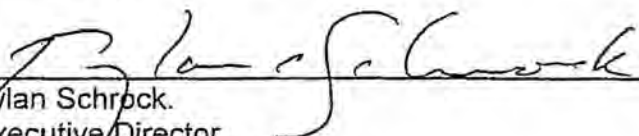
VI. SURVIVAL OF TERMS

If any terms or conditions of this Memorandum are inconsistent with existing directives or law, those terms or conditions shall be invalid. However, the remaining terms and conditions not affected by the inconsistency shall remain in full force and effect.

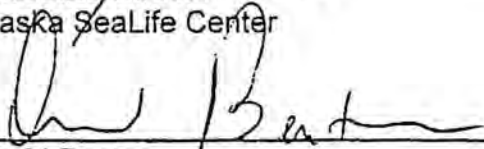
VII. CONCILIATION

If disagreements arise concerning the interpretation of the provisions of this Memorandum of Understanding, its amendments and/or revisions, and if those disagreements cannot be resolved at the operating level, then those disagreements shall be stated in writing by each party and presented to the other party for consideration. The parties to this Memorandum of Understanding agree to negotiate any disagreements, diligently in good faith, before initiating or resorting to any other formal dispute resolution process.

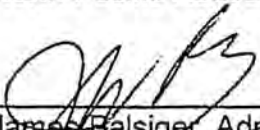
DATED this 29th day of June, 2001.



Tylan Schrock,
Executive Director
Alaska SeaLife Center



David Benton,
Interim Chairman
North Pacific Research Board



James Balsiger, Administrator,
Alaska Region, NMFS and
Designee of the Secretary,
U.S. Department of Commerce

Memorandum of Agreement: Exxon Valdez Oil Spill Trustee Council, North Pacific Research Board, and University of Alaska

Section I. Parties

This Memorandum of Agreement ("MOA") is entered into by the Exxon Valdez Oil Spill Trustee Council, the North Pacific Research Board, the University of Alaska, and any other marine research and monitoring entities that may become signatories to this agreement in the future (the "Parties").

Section II. Purpose

Alaska's oceans and related watersheds are among the most productive ecosystems in existence and the Nation's greatest natural resources. There must be a concerted effort and commitment to maintain, monitor, and protect the long-term health and sustainability of these ecosystems, their habitats and resources. This can be accomplished, in part, through collaborative, coordinated efforts by the Parties to this MOA, each of which conducts, as part of its mission, scientific research and monitoring of the fish and wildlife resources of these waters. This MOA will provide a framework for the Parties to work cooperatively to more effectively accomplish their individual and common missions and provide for the long-term health and sustainability of Alaska's oceans and related watersheds.

Section III. Findings

The Parties find the following:

1. Alaska's oceans and related watersheds are extensive and contain fish and wildlife resources of great economic, social, cultural, and scientific value;
2. Populations of many commercial and non-commercial species in these waters are changing for reasons not well understood;
3. Alaska's oceans and related watersheds can best be managed and understood through an ecosystems-based approach, which is directed toward understanding how habitats and communities of species function together in response to environmental and anthropogenic factors;
4. Improved scientific understanding of marine and marine-related ecosystems will improve management of the region, thereby increasing the sustainability and efficiency of human use;
5. While each Party has its own mission and operates independently, together they share common interests in Alaska's oceans and related watersheds;
6. Scientific understanding of these waters can best be achieved through cooperation and collaboration of the various entities involved in marine research; and
7. Comprehensive, cooperative planning for marine research in Alaska's oceans and related watersheds is necessary to coordinate the efforts of Parties in order to maximize the benefits to the people who use and depend on Alaska's marine resources.

Section IV. Cooperative and coordinated research planning

The Parties agree to cooperate and coordinate in developing research and monitoring plans for their respective geographic regions. They shall strive to (1) establish shared research priorities and work jointly towards attaining the priorities, (2) coordinate, to the extent permitted by governing legal mandates, the timelines and processes for proposal solicitation, review, and decision-making, and (3) cooperate in developing a network of people to assist with proposal and program reviews upon request.

Section V. Information and data

To enhance communications and availability of information, the Parties agree to:

1. Share information regarding: (a) public meetings and newsletters, (b) timelines and processes for proposal solicitation, review, and decision-making, (c) ongoing and proposed research and monitoring activities, (d) invitations for proposals, and (e) results and data from all scientific research;
2. Cooperate in formulating procedures and mechanisms through which such information can be effectively shared;
3. Develop compatible data standards and quality control procedures so data are of the highest quality and compatible between participating agencies; and
4. Cooperate in jointly synthesizing the results of ongoing monitoring and research efforts undertaken by the Parties and other research entities.

Section VI. Shared resources

To reduce costs, increase efficiency, and avoid duplication of effort, the Parties agree to expedite access to and sharing of each other's facilities and equipment, pooled inventories of costly technology development projects, and scarce human skill sets, consistent with each Party's policies and regulations.

Section VII. Joint meetings

The Parties agree to meet jointly at least annually. The date for each succeeding meeting, as well as the Party (ies) responsible for planning, coordinating, supporting, and reporting on it, shall be established at the annual meeting. These meetings will help to foster cooperation among the parties, share findings with other participatory agencies, evaluate research plans and progress in implementation, and coordinate in establishing priorities for research.

Section VIII . Participation of other entities and facilities

The Parties recognize that adding to this MOA new participatory organizations involved in marine issues relating to Alaska's oceans and related watersheds will better enable participatory organizations to reach shared goals. The Parties agree to:

1. Recognize and promote the participation of other organizations that may contribute to the shared interests of monitoring and research in Alaska's oceans and related watersheds; and
2. Establish a mechanism through which new participants can participate in planning for research and monitoring.

Section IX. General provisions

1. Effective date. This MOA becomes effective upon the date of the signature of the third Party to execute it. This MOA may be executed in counterparts, each of which will be considered an original document.
2. Withdrawal. Any Party to this MOA may withdraw without obligation upon thirty days written notice to the other Parties.
3. Termination. This MOA shall remain in effect until it is terminated by agreement of the Parties.
4. Authority. Nothing in this MOA shall be construed to limit or modify the authority or responsibility of any participating agency.
5. Third parties. This MOA is not intended to, nor shall it, vest rights in persons or entities who are not Parties.
6. Amendment. This MOA may be amended in writing by the unanimous written agreement of the Parties.
7. Antideficiency. Nothing in this MOA shall be construed as obligating the United States, the State of Alaska, or the University of Alaska, their agents or employees, to expend funds in excess of that authorized by law.
8. Effect. This MOA is intended to express the good faith plans and general intentions of the parties, but does not create any legally enforceable obligations.
9. Notice. Any notice, request, order, or communication to the Parties pursuant to this MOA shall be in writing to each Party at the address that follows:

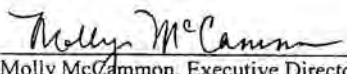
Molly McCammon, Executive Director
Exxon Valdez Oil Spill Trustee Council
441 West 5th Avenue, Suite 500
Anchorage, AK 99501-2340

David Benton, Chairman
North Pacific Research Board
441 West 5th Avenue, Suite 500
Anchorage, AK 99501-2340

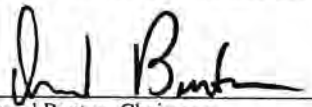
Mark Hamilton. President
University of Alaska
P.O. Box 755000
Fairbanks. AK 99775

Or to such other addresses as any Party may designate in writing.

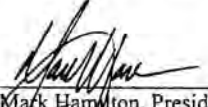
Accepted as affirmed by our signatures below.


Molly McCammon, Executive Director
Exxon Valdez Oil Spill Trustee Council

11/26/02
Date


David Benton, Chairman
North Pacific Research Board

5/21/03
Date


Mark Hamilton, President
University of Alaska

12/19/02
Date

Memorandum of Agreement: GEM Data Management

To: Gail Phillips and Clarence Pautzke
From: Rob Bochenek
cc: Phil Mundy, Igor Katrayev, and Michael Schlei
Date: July 8, 2004
Re: MOA Concerning Combined Linux Server Purchase and Use Stipulations

This MOA defines the terms and funding commitments of the collaborative effort between NPRB and GEM to purchase and utilize a Linux based server. This agreement, once ratified by all parties involved, will act as a binding historic record concerning the use, modification, location, and upkeep of the device outlined in this MOA.

Using funds from NPRB and EVOSTC, GEM Data Management will purchase and configure a Linux based server for the development of a data management system for regional oceanographic data sets. The purchase of this server was authorized in the GEM FY 2004 Work Plan. Attached to this memo is a document detailing the hardware configuration and total costs of the device. Total costs for the unit will amount to \$7,654.03. NPRB will provide funding for the server in the amount of \$3000 with GEM being responsible for the deficit of \$4,654.03.

Section VI. Shared Resources, of the Memorandum of Agreement signed by EVOSTC (11/26/02), NPRB (5/21/03), and UAF(12119/02), provides for the following:

To reduce costs, increase efficiency, and avoid duplication of effort, the Parties agree to expedite access to and sharing of each other's facilities and equipment, pooled inventories of costly technology development projects, and scarce human skill sets, consistent with each Party's policies and regulations.


The combined purchase and utilization of the above defined server configuration will provide an environment akin to one outlined in the MOA. The following policies and stipulations concerning the location, use, upkeep, and modification of the server are outlined below.

1. Location. The server will reside at the GEM office until it is agreed upon by all parties involved to move it to a more relevant location.
2. Use. All Parties involved with have full use and administrative control over the server. Though housed at the EVOS GEM office, the server may be administered remotely from NPRB.
3. Upkeep and Maintenance. All Parties involved will be responsible for maintaining and managing the server. This includes costs associated with upgrades and repairs in addition to time and manpower required to assist in maintaining a healthy and productive server.
4. Server Software/Hardware Modifications. Any major change in server configuration must be unanimously ratified by the data systems managers of all parties involved. A major change is defined as installation of new software, removal of software, or modifications to the server configuration which would affect network connectivity, large scale performance, or functionality of the device. Minor changes, which would include changes in settings to promote small increases in performance/functionality, can be performed without the need of unanimous authorization.
5. Termination of Joint Project. Should either party cease to use the device for the purposes described in this MOA prior to the end of its useful life, the device may continue to be used by the other party. If both parties cease to use the device for the purposes described in this MOA prior to the end of its useful life, it shall be disposed of in accordance with the financial procedures of the parties.

Accepted as affirmed by our signatures below.


Gail Phillips Representing EVOSTC -GEM

7-08-04
Date


Clarence Pautzke Representing NPRB

7/08/04
Date

NPRB-NSF Management Plan for a Study of the Bering Sea Ecosystem

Purpose

The National Science Foundation (NSF) and North Pacific Research Board (NPRB) are entering into a partnership to support a comprehensive vertically-integrated investigation of the Bering Sea ecosystem during 2007-2012. The scientific foundation for this partnership is the 2005 Bering Ecosystem Study (BEST) Program implementation plan and Bering Sea Integrated Ecosystem Research Program (BSIERP) which is based on the NPRB 2005 Science Plan. Both programs seek to support meritorious scientific research that will improve understanding of how the highly productive marine ecosystem of the Bering Sea may respond to climate change, particularly as mediated through changes in seasonal sea ice cover.

BEST has an immediate goal of improving understanding of the role of changing sea-ice conditions on the chemical, physical, and biological characteristics of the ecosystem and human resource use activities. BSIERP has an overarching goal of identifying and better understanding the key processes regulating the production, distribution and abundance of marine organisms in the Bering Sea, how they may change quantitatively under various natural and human-induced scenarios (particularly climate change), and the associated economic and sociological impacts. Both organizations have identified specific questions about how the various levels of the marine ecosystem might be impacted (Appendix 1).

NSF anticipates providing tools and understanding needed for improved prediction of climate impacts on the ecosystem as moderated by sea ice, but not the actual predictions. In contrast, NPRB anticipates providing tools for prediction as well as developing assessments or predictions of impacts on fish species and human populations. Each organization understands the advantages of having a well-coordinated, end to-end joint program that leverages the other's available funds. Such a joint program would serve as a central hub to which other science programs such as NOAA's NPCREP and LOSI, as well as other regional programs, could link to make an even stronger program. The Bering Sea Interagency Working Group would be helpful in providing communication and coordination.

This NSF-NPRB partnership has the potential to provide a firm foundation for improving our understanding of key processes at work within the food web of the Bering Sea. To achieve that potential, there needs to be firm agreement between NSF and NPRB on key program elements such as each organization's funding commitment to its separate program, geographic scope of the programs, division of emphasis on ecosystem components, review and selection of proposals, scientific team building and maintenance, planning and coordination of field and modeling activities, data collection, sharing and archival activities, and analysis, synthesis and reporting. This management plan attempts to identify the responsibilities and intentions of each organization regarding those program elements. It will serve as a guide for future activities and interactions of NSF and NPRB in making this partnership successful.

Funding Commitments

NPRB is committing approximately \$14 million to its program, which includes ship time. That amount is to last for the full six fiscal years starting in 2007 and NPRB anticipates there will be a planning year, three major field seasons during calendar years 2008-2010, and two years for analysis, synthesis and reporting. NSF is committing approximately \$21 million to its program, which includes \$11 million for ship time. That amount is to last for four fiscal years beginning in 2007, with three major field seasons envisioned during calendar years 2008-2010, and one year for analysis and reporting, though it is anticipated that requests for no-cost extensions will take the program into a fifth fiscal year. The combined funding of \$35 million will support a very robust combined program. All funding is dependent on continuing availability of funds to the respective organizations

Geographic Scope

The joint research program will take place on the eastern Bering Sea shelf between the Aleutian Islands and St. Lawrence Island. There may be oceanographic data collection in the Aleutians, if required to satisfy input needs for a better understanding of the oceanography of the shelf ecosystem of the eastern Bering Sea, but the main program will be north of the Aleutians. Individual Program Emphasis Individual Program Emphasis

Individual Program Emphasis

This partnership envisions a vertically-integrated program that provides for end-to-end coverage of the Bering Sea ecosystem from atmospheric forcing and physical oceanography up through humans and communities, with the attendant economic and social impacts of a changing marine ecosystem. NSF and NPRB both realize this proposed cooperation and leveraging of resources will allow for a much more comprehensive ecosystem study than if each organization were to pursue something similar on its own.

Toward that end, NSF will provide support for the lower trophic levels (LTL), up to and including macro-zooplankton and benthic infauna, as well as social science projects focused on relationships between a changing marine environment and the communities residing around the Bering Sea. NPRB will provide support for upper trophic levels (UTL) above macro-zooplankton and benthic infauna up to and including humans, their communities, and social and economic impacts. The assumption underlying this approach is that work done below the macrozooplankton and benthic infauna level likely will be responsive to any particular array of macrozooplankton and benthic infauna species and thus to any particular focus of the UTL team. There are likely, at the macro-zooplankton and benthic infauna level, a few key species or species groups, with differing life histories that make them susceptible to climate variability in different ways. There is a need to identify, understand, and know the implications of these differences because they may have very major impacts on the pathways of energy flow in the shelf ecosystem.

If appropriate, NPRB may choose to fund some L TL studies, if the research is necessary for a successful BSIERP and the same work is not being funded by NSF, depending on availability of funds.

Announcements of Funding Opportunities

1. NPRB anticipates releasing its request for pre-proposals (RFP) in mid-October and invitations for full proposals in mid-December (to coincide with the NSF solicitation). NSF anticipates releasing its solicitation in mid-December. Though the solicitations will be separate, both organizations will indicate that they are striving for a fully integrated and coordinated program between NSF and NPRB and will be sharing proposals and making their recommendations in consultation with each other. The NPRB invitations for full proposals will include reference to ship schedules identified in the NSF solicitation and will encourage NPRB investigators to leverage NSF ship time and carefully explain any additional ship/cruise requirements. The NSF solicitation will state that 'Additional opportunities to collect field data may become available through coordination with the winning team from the NPRB competition. Through a confidential process, the cognizant program officers from each organization will solicit comments from the cognizant program officers of the other organization concerning drafts of their proposed solicitations in order to ensure consistency with this partnership agreement.
2. As noted above, the linkage between the NPRB UTL and NSF LTL programs will be at the macro-zooplankton and benthic infauna level. Both organizations will include that level in their solicitations, with NPRB coming at it from the top, and NSF from the bottom, including physical oceanographic studies. Proposals to NPRB for the UTL must clearly identify the types of outputs needed from lower trophic level studies and models. Proposals to NSF for the LTL must clearly identify how their outputs could be used in UTL studies and models, and what outputs are needed from the UTL studies, e.g., grazing rates, etc.
3. NPRB is seeking applications from multi-disciplinary, multi-institutional teams of scientists and anticipates selecting one team to carry out the study. NSF is seeking applications from individual investigators or groups of investigators and will develop a team from the successful applicants. NSF anticipates that between seven and fifteen projects will constitute the final team.
4. If NSF receives and funds macro-zooplankton and benthic infauna proposals that respond to the needs of the UTL team, then NPRB may choose to redirect macro-zooplankton and benthic infauna funds to strengthen other parts of UTL research. NPRB also may choose to fund some LTL studies, if deemed necessary to the comprehensive program and not funded by NSF.
5. The respective solicitations will state that NSF and NPRB do not anticipate funding new climate modeling studies. Applicants will need to state clearly in their proposals which of the IPCC model outputs (though others might be used if there is sufficient justification) they will use in developing their own models and assumptions about climate driven impacts on the ecosystem. Funded principal investigators will need to agree on a set of common climate scenarios and assumptions for both LTL and UTL modeling studies. Outputs of current climate models may need to be down-scaled to the appropriate grid size in the study region.

6. The respective solicitations will state that successful applicants will be expected to agree to comply with provisions of the project management plan that will be developed by the assembled teams based on requirements identified by NSF and NPRB (see below).

Proposal Review

1. Sharing of Proposals. Proposals will be shared between organizations. Each organization will apply its respective confidentiality procedures to the proposals submitted to that organization under its solicitation. However, NSF proposals shared with NPRB will be treated by NPRB according to NSF rules of confidentiality. In particular, proposals and portions of proposals will be provided to the full Board for purposes of discussions leading to final recommendations. These will be provided on compact discs or other suitable media that will be destroyed after the discussions. NPRB will destroy all documents relating to the NSF proposals not recommended for funding and related documents after the review process is complete. NSF will provide to science panelists electronic access to all proposals submitted to NSF in response to its solicitation. If FOIA or other requests for information are received by NPRB concerning proposals submitted in response to the NSF solicitation, these will be treated in consultation with NSF according to NSF guidelines.
2. Evaluation Criteria. Each organization will use its current criteria for evaluating proposals with jointly agreed additions to better serve the partnership (Appendix 2). At the very least, criteria for both organizations must be explicit in the full RFP and solicitation and defensible against claims of being arbitrary or capricious should there be a legal challenge to the final decisions. Proposals will be evaluated on the basis of meritorious science and how well they contribute to the integrated NSF-NPRB program.
3. Ecosystem Model Criteria: As appropriate, model evaluation criteria developed by the NPRB Ecosystem Modeling Committee (EMC) will be incorporated in the NSF solicitation, especially those addressing model skill, calibration, and error. NSF also expects its proposal review panel to carefully review the modeling components for the LTL proposals in light of those or similar criteria. In addition, two EMC members will be invited as ad hoc mail reviewers of all NSF modeling proposals.
4. Technical Reviewers: Each organization will select their own technical reviewers (ad hoc mail reviewers) for the proposals they receive. These reviewers will be used in accordance with each organization's normal review procedures and conflict-of-interest rules. Names of technical reviewers will remain confidential in accordance with organization operating procedures.
5. Joint Science Panel Review: The joint science review panel will consist of the NPRB science panel (to discuss UTL proposals) and experts appointed by NSF (to discuss LTL proposals). The panel will meet at NSF headquarters in June 2007. All panelists will be appointed as NSF panelists, sign NSF conflict-of-interests forms, and abide by NSF confidentiality rules. If NPRB chooses to impose additional restrictions on their panelists, they will do so. The process will begin with joint instructions to the panel concerning the goals of the partnership. Each day, the panels will discuss proposals submitted to their respective programs. While the LTL proposals are being discussed according to NSF criteria, the UTL panelists will listen to the discussion. While the UTL proposals are being discussed according to NPRB criteria, the LTL panelists will listen to the discussion. Conflicted panelists will leave the room during these discussions. After each group has ranked their respective proposals according to their criteria, the combined panel will discuss how well the highly ranked proposals fit into an integrated ecosystem study and provide advice to the two organizations concerning how to optimize such a study. This joint panel will arrange meritorious proposals into as many good programs as possible and rank their scientific merit. If two or more programs are believed to be equally meritorious from a scientific perspective, the joint panel will provide a final ranking based on their view of the societal importance of the programs, e.g., their importance to managers, subsistence hunters, and commercial fishermen.

Proposal Selection

1. Technical reviews and advice will be provided to NPRB and NSF by the technical reviewers (ad hoc mail reviewers) and the joint panel.
2. The full NPRB and appropriate NSF cognizant program officers will meet jointly in June 2007 (exact date TBA) to determine which projects to recommend for the integrated program and if additional studies or principal investigators are needed to improve the overall program. In order to maintain NSF confidentiality commitments to proposers and conflict-of-interest requirements, the Board will meet in closed session when deliberating any NSF proposals. When deliberating proposals received by the Board through its BSIERP RFP, the Board will follow its own confidentiality procedures, while ensuring that

it does not disclose any confidential information (as defined by NSF) about the LTL proposals received by NSF. Any Board members affiliated with an organization proposing to either the UTL or LTL programs will recuse themselves from voting on those proposals.

Proposals will be evaluated on the basis of meritorious science, societal importance, and how well they contribute to the integrated NSF-NPRB program. There will be no joint funding or transfer of funds between organizations. Each organization will make declines and awards in accordance with its procedures. Principal investigators will be individually informed of the decision.

3. Following the recommendation of successful applicants, and review and approval by the Secretary of Commerce (for NPRB projects) and NSF, a joint NSF-NPRB announcement (likely) will be made. If only NPRB releases an announcement of the new joint program, NSF will be given the opportunity to review it.

Contingency Plan

If NPRB and NSF fail to agree on a fully integrated program, NSF retains the option of proceeding to fund proposals of its choosing. NPRB retains the option to fund L TL proposals received by either organization or release an out-of-cycle RFP for new LTL proposals. If appropriate, both organizations may choose to not fund any proposals.

First Year Planning and Organizational Meetings

Fall Meetings. All investigators will be required to meet as necessary between July and December 2007 to develop agreed-upon procedures for working as an integrated team. This will require a minimum of two face-to-face meetings with all investigators, plus teleconferences and email exchanges between meetings as necessary. The first session will be an initial get-together to introduce PI's to one another and identify team leadership. The second session will be a rigorous planning meeting to schedule ship time and work out other program details concerning issues such as field research coordination, modeling and data management. NSF and NPRB will support travel of their respective PIs to these planning meetings. Cognizant program officers from NSF and NPRB will attend also.

Links to Other Programs. The combined teams will meet at least once, and hopefully annually, with the Bering Sea Interagency Working Group to explore other partnerships with ongoing research efforts in the Bering Sea and how communication and coordination can best be achieved among them and duplication minimized. If possible, this annual coordination meeting will be scheduled in conjunction with the annual program review meeting to reduce travel costs.

Project Management Plan. By December 2007, the teams will need to demonstrate clearly to both NSF and NPRB that a coordinated, integrated program has been developed and will be managed as such. Team members will need to develop and agree to a project management plan, based on requirements identified by NPRB and NSF program staff. At a minimum, the project management plan will include:

1. Identification of project and team leadership and individual program responsibilities.
2. Protocols and procedures on working together as a seamless team.
3. Schedule of meetings and other activities.
4. Plans for field seasons and selection of chief scientists for cruises: It is anticipated that an NPRB-funded scientist would be chief scientist on a cruise that NPRB funds and an NSF-funded scientist would be chief scientist on a cruise that NSF funds. Members of the NPRB team would have priority, of course, for uncommitted berths on the NSF-sponsored cruises and vice-versa.
5. Communications protocols between modelers and field programs, including a detailed plan that will outline when different data sets will be available to the rest of the team and how and at which point they can inform the models and in turn how and when new model outputs will inform the fieldwork.
6. Equipment sharing and ship time scheduling, including icebreaker time and other platforms. NPRB and NSF may provide support to enable NSF investigators to participate in NPRB-funded cruises. NPRB proposers, though, will assume that no NSF ship time will be available, when preparing their budgets.
7. Coordination with other programs, e.g. NOAA NPCREP and LOSI.
8. Implementation and monitoring of required data sharing protocols (see below).
9. Coordination of education and outreach programs to achieve maximum synergies.
10. Plans for annual reviews, progress reports, data analysis, synthesis, and reporting to be responsive to individual program requirements. These annual reviews may be coupled with the January Alaska Marine Science Symposia and may include a more nationally prominent scientific meeting.

11. Identification of product deliverables from the research, especially as it pertains to synthesis reports, and who will be responsible for such.
12. Dispute resolution.

In the case that a project management plan is not successfully completed to the satisfaction of NPRB and NSF, funds may be withheld until all issues and concerns are resolved.

Data Sharing Protocols

Both organizations will require data sharing in their respective solicitations and organizational meetings. When the teams are identified and organized, they will need to clearly specify milestones and expectations for the types of data and schedule of availability, and how data will be exchanged between modelers and field researchers. NSF expects that some applicant(s) may be funded solely to perform data management for the LTL program and sharing amongst programs to ensure it gets done.

The combined teams will use a data policy developed on the basis of the U.S. GLOBEC Data Policy (GLOBEC Report No. 10, February 1994), existing OPP data policies, and proposed SEARCH data policies. The specifications of the exact data protocol will be available at the time of the NSF solicitation and the invitation of full proposals for the NPRB competition.

Program Adjustments

NPRB plans on annually reviewing this comprehensive program and may request adjustments as necessary if something is going wrong. NSF also plans to closely monitor the program and its progress, and will facilitate adjustments, if needed, and attempt to fill gaps, as necessary.

Program leaders will schedule annual meetings of all principal investigators for planning purposes and to determine if program adjustments are necessary. NSF and NPRB expect such attendance costs to be incorporated in the overall budget for their proposals.

Program leaders will identify protocols for making adjustments in the program, if necessary. NSF and NPRB cognizant program officers (defined below) may be consulted also.

Evaluation: The cognizant program officers at NPRB include the Executive Director and the Program Manager. The cognizant program officers at NSF include the Head of the Arctic Sciences Section, Office of Polar Programs, and Program Officers for the Arctic Natural Sciences Program and Arctic Social Sciences Program, Office of Polar Programs. These officers will meet after the annual review meetings to assess the status and success of the program to date. If corrective action is deemed necessary, the cognizant program officers will take the following escalating steps as necessary and appropriate:

- (1) Negotiate corrective action to the principal investigator(s) and receive a signed acknowledgement from that investigator that the action will be taken; and
- (2) If no corrective action is taken, consider not releasing any additional funds for that investigator's work until the problem is resolved.

At the end of the program the cognizant program officers (in consultation with NPRB) will decide on the merits of seating a panel of independent and objective individuals to assess the strengths and weaknesses of the coordinated approach to support for ecosystems studies.

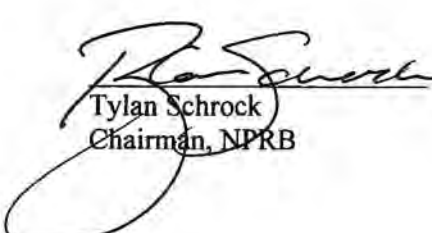

Approximate NSF Schedule

December 15, 2006	Release solicitation
March 15, 2007	Proposals due
April 6, 2007	Complete internal review and send to science panel
May 18, 2007	Science Panel completes review
Mid-June, 2007	Joint Science Panels meets in Washington, D.C.
Late June 2007	NSF Program staff meets with NPRB to select recommended proposals
Early July 2007	Internal NSF final approval
Mid July 2007	Announcement of recommended proposals

Approximate NPRB Schedule

October 20, 2006	Release call for pre-proposals
November 22, 2006	Pre-proposals due
November 28-29, 2006	Science Panel meets (includes EMC review)
December 4, 2006	Board meets to review pre-proposals
December 15, 2006	Invitations for full proposals
March 15, 2007	Deadline for full proposals
Mid-April 2007	Technical reviews completed
Mid-April 2007	EMC review completed
Mid-June, 2007	Joint Science Panels meets in Washington, D.C.
Late June 2007	NPRB meets with NSF Program staff to select recommended proposals
Early July 2007	Secretary of Commerce review and approval
Mid July 2007	Announcement of recommended proposals

NPRB-NSF Management Plan accepted as affirmed by the signatures below:

	<u>10/27/06</u>		<u>10/31/06</u>
Tylan Schrock Chairman, NPRB	Date	Simon N. Stephenson Section Head Arctic Sciences Section Office of Polar Programs, NSF	Date

Appendix 1. Major questions identified in the NSF BEST and NPRB BSIERP programs.

The following questions underpin the BEST scientific program:

1. How does external forcing affect the timing, extent, thickness, and coverage of sea ice over the eastern Bering Sea shelf?
2. How does climate variability, particularly the variability of sea ice character, affect the transfer of primary productivity to the zooplankton, benthos, and higher-trophic predators on the eastern Bering Sea shelf?
3. Has the loss of ice cover in the eastern Bering Sea affected the structure and function of the planktonic and benthic communities by exposing the upper ocean to wind earlier in the season or for a longer period of time?
4. How does climate variability, particularly the variability of sea ice character, affect the balance of top-down v. bottom-up control of the zooplankton and benthic infaunal communities?
5. How will subsistence and economic activities in the Bering Sea change in response to variability in sea ice character?
6. What will be the social implications of the consequent potential changes in subsistence activities?
7. How can studies of past climate, ecological, and social responses to changes in sea ice extent and character illuminate present trends and future potential?

The following questions underpin the BSIERP scientific program:

1. How are the distributions (range, spawning and breeding locations) and abundances of species in the Bering Sea ecosystem changing in response to climate change?
2. How are the physical and chemical attributes of the ecosystem changing in response to climate change?
3. Is lower trophic level production (quantity and form) changing in response to climate change?

4. What are the principal processes controlling energy pathways in the Bering Sea? What is the role of climate change in these processes?
5. What are the linkages between climate change and vital rates of living marine resources in the Bering Sea?
6. What are the economic and sociological impacts of a changing ecosystem on the coastal communities and resource users of the Bering Sea?

Appendix 2. Present technical evaluation criteria of proposals by NSF and NPRB. Both organizations may expand their proposal evaluation criteria to ensure that proposals are evaluated on their scientific merit and on their contribution to the larger comprehensive program envisioned under this agreement.

NSF Criteria

All NSF proposals are evaluated through use of the two National Science Board (NSB)-approved merit review criteria: intellectual merit and the broader impacts of the proposed effort. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two NSB-approved merit review criteria are listed below. The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which the reviewer is qualified to make judgments.

What is the intellectual merit of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

What are the broader impacts of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

NSF staff will give careful consideration to the following in making funding decisions:

Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

Additional Criteria:

Language will be added to the NSF solicitation stressing the importance of a proposal's contribution to the integrated program, which will be used as an additional decision criterion. Such language might look like the following, subject to approval by the NSF policy and legal departments:

"In addition to the two NSB-approved merit review criteria, proposals will also be evaluated on the basis of their contribution to an integrated ecosystem program. This program will integrate from the physics of the system through the food web to a top predator and interactions with humans. Our ultimate goal will be to develop, in collaboration with the NPRB-funded BSIERP, an integrated ecosystem study that provides understanding an important food chain over the eastern Bering Sea shelf, how this food chain responds to climate variations (particularly variations in sea ice character) and how these changes effect and/or are mediated by humans."

NPRB Criteria

All proposals that pass initial screening will undergo independent, anonymous, technical peer review, conducted by regional and national experts. NPRB reviewers will be asked to provide comments and qualitative assessments of the technical aspects for each proposal, as indicated below, and an overall summation:

- a. Project Responsiveness to BSIERP (section C in the Research Plan): Does the project have the potential to significantly enhance our understanding of each of the following: (1) the major ecosystem processes that regulate the distribution and abundance of upper trophic level organisms, including at least one commercial/subsistence fish species; (2) quantitative changes of these processes under various climate scenarios; (3) the resultant economic and sociological impacts; (4) the interaction between direct and indirect human induced impacts and these ecosystem processes, and (5) does it provide a good and clear description of why and how the program will be relevant to management?
- b. Soundness of Project Design/Conceptual Approach (section D in the Research Plan): Applications will be evaluated on the applicant's comprehension of the problem(s); the overall concept proposed for resolution; justification of species, parameters, locations temporal and spatial scales to be investigated, whether the applicant provided sufficient information to evaluate the project technically; and, if so, the strengths and/or weaknesses of the technical design relative to securing productive results. Particular attention will be given to the inclusion of a clear statement of hypothesis to be tested or objectives to be addressed, the presence of a detailed experimental design with associated power analysis as appropriate, and a list of data sources or requirements. Model criteria may also be evaluated as appropriate, but will also be screened separately by the EMC (see below).
- c. Program Management (sections E-H in the Research Plan): Evaluation will include the following: Is there a clear description of proper organization and management of the project, including data management, and do the project's program leader, team leaders, principal investigator(s) and other personnel have the necessary experience and qualifications for the tasks they have been assigned to? Are a clear schedule and appropriate milestones and deliverables identified in tabular form in the proposal, and an appropriate plan of how the results will be disseminated? Is a data management plan identified and is it structured appropriately to achieve the proposed data management goals? Does the project plan to coordinate and collaborate with other projects and leverage their proposals with support from other sources and are the mechanics of how this will occur well described?
- d. Project Costs (Budget Summary and Budget Narrative): The justification and allocation of the budget in terms of the work to be performed will be evaluated. Unreasonably high or low project costs will be taken into account.

Ecosystem Modeling Committee Review. All modeling aspects of your proposal, and specifically the criteria outlined in sections 4D(3) will be reviewed by the EMC, who will make recommendations to the Science Panel and Board on this particular component.

Joint Protocol for North Pacific Research Board and Oil Spill Recovery Institute

Background

The North Pacific Research Board (NPRB) was created by Congress in 1997 to support marine research activities on or relating to the fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean (including any lesser related bodies of water), especially research designed to address pressing fishery management or marine ecosystem information needs. The mission of NPRB is to build a clear understanding of those ecosystems that enables effective management and sustainable use of marine resources, and its science plan envisions a broad range of integrated ecosystem research from basic oceanography and lower trophic level productivity studies up through fish and invertebrates, seabirds, marine mammals, and man, including their habitat. NPRB also may support research on contaminants, harmful algal blooms, invasive species, aquaculture, and climate change impacts on the marine environment.

The Oil Spill Recovery Institute (OSRI) was established by the Oil Pollution Act of 1990. The mission of OSRI is to better understand the effects of oil pollution on arctic and sub-arctic marine environments, and to seek new techniques and technologies that may prevent, mitigate or recover oil spills in those environments through research, education and demonstration and/or application. OSRI is supportive of marine research that will help develop ecological applications for its ocean observing system, for example, habitat distributions and the functional role of various habitat types on different life stages of important fish, invertebrate and plant species.

Both NPRB and OSRI have science plans that encourage research partnerships. Section 4.2.3 of NPRB's science plan directly responds to a strong recommendation of the National Research Council to seek partnerships with other entities to support joint research and funding of projects of mutual interest. Similarly, Section IV.A.5.b.i of OSRI's science plan identifies a potential partnership with NPRB to support ecological research projects in arctic and sub-arctic climates, generally within the NPRB geographic area of interest, but with particular emphasis on the Gulf of Alaska and Prince William Sound. While both organizations have a strong interest in ocean observing, habitat, and ecological studies, other research priorities of mutual interest may be identified during the life of this protocol which potentially could be supported under this partnership.

Purpose

The purpose of this joint protocol is to facilitate the NPRB-OSRI partnership. It describes the general approaches that will be used to develop and process joint requests for proposals (RFP) for biologically oriented projects in arctic and sub-arctic climates, but particularly in the Gulf of Alaska and Prince William Sound. It identifies the general steps that will be taken to review and approve proposals and strives to accommodate the procedural requirements of both organizations. The overriding goal is to provide a clearly stated, mutually-agreed foundation for a constructive partnership that will help to leverage funding for meritorious research projects on topics of mutual interest.

Identification of Joint Research Priorities

NPRB and OSRI have science and implementation plans that provide the foundation for defining research priorities of mutual interest in any given year. As noted above, ecological studies in the Gulf of Alaska and Prince William Sound, particularly habitat studies related to the ocean observing system in Prince William Sound, provide the initial priorities for a potential joint RFP to be released in October 2005. In later years, however, other topics may be identified for incorporation into a joint RFP.

Mutual research priorities will be identified by a joint committee of three members from each organization. The committee will review current activities and research priorities of each organization and work with the respective science panels to develop potential priorities for consideration by each organization. This process will begin each spring and culminate with consideration by both organizations in September or early October prior to release of the annual RFP. A joint meeting of the OSRI STC and NPRB's Science Panel may be convened as appropriate to identify priorities of mutual interest, but in any case, the joint committee will be responsible for developing the final recommendation that is presented to the parent organizations.

Approval of Joint Request for Proposals

Each organization will consider the joint committee recommendations and separately must approve those provisions of the annual RFP relevant to the partnership. The joint RFP likely will be a section of a larger RFP released by NPRB in early October. Those provisions that pertain to the partnership will be identified clearly in the RFP along with potential funding amounts that will be contributed by each organization.

Scientific Review of Proposals

Each proposal received in response to the joint RFP will be provided with at least three anonymous technical reviews, using reviewers assigned by mutual agreement of the NPRB Executive Director and the OSRI Science Director. These anonymous reviews, using mutually agreed evaluation forms, will be provided to the respective science panels, or a joint committee of panel representatives, for joint evaluation and development of recommendations for consideration of the parent organizations. The goal is to identify proposals that are scientifically meritorious in accordance with the standards of each organization.

Approval of Proposals

The recommendations of the joint science committee identified in the previous section will be forwarded to a joint committee of the parent organizations, which in turn will develop recommendations for the parent organizations. The parent organizations may meet separately (or together if appropriate) in March or April to consider approving proposals of mutual interest and their funding levels. All recommendations of NPRB are subject to final approval of the U.S. Secretary of Commerce.

Confidentiality Provisions

The summary pages for each proposal will be disclosed to the public. The summary page includes title, project period, names of applicant and principal investigators, legislative criteria and research priorities addressed by proposed research, a summary of work (250 words or less), requested and matching funding by year for all entities, and the signature of an official authorized to legally bind each submitting organization. The full text of proposals that are not funded will remain confidential and will only be disclosed to NPRB and OSRI board members, their respective science panels, and staff (as well as the selected technical reviewers during the anonymous reviews). Those proposals that are funded will be made available to the public in full (except for suggested peer reviewers and proprietary salary information).

Conflict of Interest Procedures

Each organization will adhere to its respective standard operating procedures for avoiding conflicts of interest in considering proposals for funding.

Joint Funding Approaches

Joint support of projects of mutual interest is the goal of this protocol. Either of two approaches may be used as appropriate to jointly support projects: (1) related but separate proposals may be funded by separate contracts with each organization, or (2) funds may be pooled by both organizations under one contract for a particular project. In the latter case, both organizations must agree on contract provisions and administration of funds, as well as program oversight.

Prospective Annual Schedule

June-August	Develop mutual research priorities through separate or joint meetings of science panels or committees as described above
September	Organizations approve joint RFP
Early October	Joint RFP released to public and posted on respective web sites
Early December	Proposals due
December-February	Proposal reviews
Early March*	Science panels/joint committees review and develop funding recommendations
Mid-March	NPRB and OSRI meet separately or jointly to consider proposals
April	NPRB recommendations forwarded to NMFS
April	Final notification of PIs
April-May	Grant and contract arrangements with successful PIs
May or June	Possible commence research

(*Note: this schedule starting in March may be delayed one month if an excessive number of proposals is received and cannot be processed in time.)

General Provisions

1. Effective date. This protocol becomes effective upon the date of the signatures of both parties.
2. Withdrawal. Either party to this protocol may withdraw without obligation upon thirty days written notice to the other party.
3. Termination. This protocol shall remain in effect until it is terminated by agreement of the parties.
4. Authority. Nothing in this protocol shall be construed to limit or modify the authority or responsibility of either party.
5. Amendment. This protocol may be amended in writing by the unanimous written agreement of both parties.
6. Effect. This protocol is intended to express the good faith plans and general intentions of the parties, but does not create any legally enforceable obligations.
7. Notice. Any notice, request, order, or communication to the parties pursuant to this protocol shall be in writing to each party at the address that follows:

Clarence Pautzke, Executive Director
 North Pacific Research Board
 1007 West 3rd Ave, Suite 100
 Anchorage, AK 99501

Nancy Bird, Executive Director
 Oil Spill Recovery Institute
 P.O. Box 705
 Cordova, AK 99574

Accepted as affirmed by the signatures below:



 Tylan Schrock, Chairman
 North Pacific Research Board

Resigned

 April 1, 2008
 Date



 John Calder, Chairman
 Oil Spill Recovery Institute

Resigned

 April 1, 2008
 Date