

**North Pacific Research Board: 2012 Request for Proposals**

**INTRODUCTION**

The North Pacific Research Board (NPRB) was created by Congress in 1997 to recommend marine research activities to the Secretary of Commerce. Approved research projects are funded through a competitive grant program using part of the interest earned from the Environmental Improvement and Restoration Fund. These funds must be used 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). NPRB must strive to avoid duplicating other research activities and must place priority on research designed to address pressing fishery management or marine ecosystem information needs. The Board's long term vision is to build a clear understanding of the marine ecosystems off Alaska that enables effective management and sustainable use of marine resources.

Since 2002, the Board has released ten requests for proposals (RFPs), resulting in the funding of 276 projects totaling \$44.8 million. Descriptions of the projects can be found at <http://project.nprb.org/> and fall into seven broad categories as shown in Table 1.

<b><u>Categories of Research</u></b>	<b><u>Projects</u></b>	<b><u>Total Funding</u></b>	<b><u>% Funding</u></b>
Lower Trophic Level Productivity	48	\$7,071,561	16
Fish and Invertebrates	110	\$19,705,062	44
Fish Habitat	16	\$3,781,642	8
Marine Mammals	44	\$7,161,499	16
Seabirds	23	\$4,032,194	9
Humans	20	\$1,490,852	4
Other Prominent Issues	15	\$1,521,699	3

In addition to projects funded as part of the annual RFP process, the Board supports Integrated Ecosystem Research Programs (IERPs). IERPs are not part of this RFP, however the NPRB website contains more information on the current Bering Sea (<http://bsierp.nprb.org/>) and the Gulf of Alaska ([gulfofalaska.nprb.org](http://gulfofalaska.nprb.org/)) integrated ecosystem programs.

**This notice constitutes the annual Request for Proposals (RFP) for projects commencing in 2012.**

Full proposals responding to this RFP are due at **4:00 pm (Alaska Time) on Monday, December 12, 2011.**

Although the main section of the RFP is similar in form and content to past NPRB requests for proposals, with research priorities structured around the 2005 *Science Plan*, there are three features introduced in the 2011 RFP that are continued in this RFP – 1) a focus section, 2) collaborative funding change, and 3) cyclical research theme approach. In general, the Focus Section will highlight pressing research needs for fisheries management or ecosystem understanding, is expected to vary between RFPs, and may not be in the RFP every year (see Table 2 and page 16). Funding for collaborations with other organizations has been folded into the regular RFP categories (see page 12). Finally, we are completing the two-year cyclical approach introduced in 2011 for certain research categories (see Table 2, page 2).

### Cyclical Request for Proposals

For the 2011 and 2012 RFPs, the Board implemented a cyclical approach to increase available funds within specific categories. As a result, some research priorities are not present in the RFP every year and others are not funded at the same level every year. Specifically, this cyclical nature applies to items under the general ecosystem components (with the exception of Humans), to data rescue, and to the focus sections (see Table 2). For example, the Fish Habitat section was not present in 2011 but is back in 2012 under Fish and Invertebrates. As announced in the 2011 RFP, topics not present in 2011 are returning for the 2012 RFP at levels higher than those possible if present annually. The Board will re-evaluate this approach in preparation for the 2013 RFP during the 2012 spring and fall meetings.

**Table 2. Distribution of funds over the two-year 2011 and 2012 RFP cycle.**

	2011 Cycle	2012 Cycle
<b>1. General Research Priorities on Ecosystem Components</b>	<b>\$2,300,000</b>	<b>\$2,700,000</b>
a. Oceanography and Lower Trophic Level Productivity	\$500,000	\$200,000
b. Fish and Invertebrates ( <i>\$500K proposal cap</i> )	\$800,000	\$1,300,000
c. Marine Mammals	\$800,000	\$200,000
d. Seabirds	\$0	\$500,000
e. Humans	\$200,000	\$200,000
f. Other Prominent Issues	\$0	\$300,000
<b>2. Local &amp; Traditional Knowledge and Community Involvement</b>	<b>\$200,000</b>	<b>\$200,000</b>
<b>3. Collaboration with Other Organizations</b>	included	included
<b>4. Cooperative Research with Industry</b>	<b>\$400,000</b>	<b>\$400,000</b>
<b>5. Technology Development</b>	<b>\$200,000</b>	<b>\$200,000</b>
<b>6. Data Rescue</b>	<b>\$50,000</b>	<b>\$100,000</b>
<b>FOCUS SECTION</b>		
Arctic Focus (2011)	\$400,000	
Arctic Focus (2012)		\$400,000
<b>TOTAL</b>	<b>\$3,550,000</b>	<b>\$4,000,000</b>

**2012 Request for Proposals: Research Priorities (Total: \$4.0 million)**

Table 3 summarizes research priorities and funding targets for the 2012 RFP. Detailed explanation of research priorities begins on page 5.

***BE AWARE THAT ALL SECTIONS HAVE FIRM LIMITS FOR INDIVIDUAL PROPOSAL FUNDING AMOUNTS. LIMITS FOR INDIVIDUAL PROPOSAL ARE EQUAL TO THE OVERALL CATEGORY AMOUNTS UNLESS OTHERWISE NOTED. PROPOSALS EXCEEDING THOSE LIMITS WILL NOT BE PROCESSED AND RETURNED WITHOUT REVIEW. AMOUNTS LISTED ARE FOR THE ENTIRE STUDY, NOT PER YEAR.***

**Table 3. 2012 RFP for Regular Research Priorities with target amounts totaling \$4.0 million.**

<b>1. General Research Priorities on Ecosystem Components</b>	<b>\$2,700,000</b>
<b>a. Oceanography and Lower Trophic Level Productivity</b>	<b>\$200,000</b>
i. Retrospective studies	
ii. Other oceanography and lower trophic level research	
<b>b. Fish and Invertebrates (\$500K proposal cap)</b>	<b>\$1,300,000</b>
i. Stock assessment research and model development	
ii. Fish and invertebrate movement	
iii. Discard and handling mortality	
iv. Biodiversity and implications for fisheries management	
v. Impacts of climate change on crab stocks	
vi. Fish habitat	
vii. Other fish and invertebrate research	
<b>c. Marine Mammals</b>	<b>\$200,000</b>
i. Retrospective studies	
ii. Adaptive management experiment design	
iii. Population status, dynamics, distribution, and foraging ecology of Steller sea lions in the Commander Islands	
iv. Other marine mammal research	
<b>d. Seabirds</b>	<b>\$500,000</b>
i. Influence of non-breeding season conditions on population dynamics	
ii. Seabird – prey ecosystem relationships	
iii. Effects of human derived food sources on seabirds	
iv. Seabirds and the marginal sea ice zone	
v. Other seabird research	
<b>e. Socio-economic and policy issues</b>	<b>\$200,000</b>
i. Social and economic studies of bycatch and bycatch mitigation	
ii. Pre- and post-implementation studies of management actions	
iii. Culture, values, and voice in the fisheries management process	
iv. Community adaptability to ecosystem change, market impacts, and management regime changes	
v. Other socioeconomic and policy issues research	
<b>f. Other Prominent Issues</b>	<b>\$300,000</b>
i. Food Safety	

ii. Coastal contaminants	
iii. Invasive species	
<b>2. LTK and Community Involvement</b>	<b>\$200,000</b>
<b>3. Collaboration with Other Organizations</b>	<b>included</b>
<b>Oil Spill Recovery Institute topics</b>	
<i><b>Under Fish and Invertebrates:</b> Fish and shellfish movement Fish Habitat - Essential habitats for forage fish and other managed fish and invertebrate species</i>	
<i><b>Under Seabirds:</b> Seabird – prey ecosystem relationships</i>	
<i><b>Under Other Prominent Issues:</b> Coastal contaminants</i>	
<i><b>Data Rescue</b></i>	
<i><b>Under Focus Section – Arctic Focus:</b> Determining scales of near shore sea ice primary production</i>	
<b>4. Cooperative Research with Industry</b>	<b>\$400,000</b>
<i>i. Fishing Industry</i>	
1. Gear modification	
2. Fishers' knowledge	
3. Fishery monitoring	
4. Ecosystem observations and research	
<i>ii. Oil &amp; Gas Industry</i>	
1. Species of special concern	
2. Monitoring from platforms	
<b>5. Technology Development</b>	<b>\$200,000</b>
i. Molecular and laboratory-based technology development	
ii. Marine measurement technology development	
iii. Resource assessment technology development	
iv. Energy efficiency technology development	
v. Other technology development	
<b>6. Data Rescue</b>	<b>\$100,000</b>
<b>FOCUS SECTION</b>	
<b>Arctic Focus</b>	<b>\$400,000</b>
i. Lower trophic level food webs	
ii. Determining scales of near shore sea ice primary production	
iii. Arctic Cod	
iv. Arctic fish habitat	
v. Movement, habitat use and body condition of walrus, belugas and ice seals in the Bering, Chukchi and Beaufort Seas	
<b>TOTAL</b>	<b>\$4,000,000</b>

**Request for Proposals for 2012****1. General Research Priorities on Ecosystems Components \$2,700,000**

Please consult the NPRB 2005 *Science Plan* for clarification of appropriate research to be conducted under each heading. **Care should be taken to consult current and past NPRB-funded projects (<http://project.nprb.org/>) including components of integrated ecosystem research projects - Bering Sea Project (BEST-BSIERP) and Gulf of Alaska Project (GOAIERP), and to show awareness of other related ongoing projects - to avoid duplication and coordinate with existing projects wherever possible.**

**a. Oceanography and Lower Trophic Level Productivity \$200,000**

The NPRB expects to fund projects focused on the topical areas listed below.

**i. Retrospective studies**

Given the cyclical nature of the RFP, 2012 is a low funding year for this category. As a result, we focus this section on maximizing the use of existing data time-series and their application and incorporation to ongoing research projects or current marine issues. Studies could span from all types of field data to modeling, but proposals should clearly identify the scope, quality and availability of datasets to be analyzed as well as state clear research objectives for which the retrospective analysis will be instrumental.

**ii. Other oceanography and lower trophic level productivity research**

While the other topics in this category are given priority status in this RFP, NPRB is also willing to consider proposals that focus on other topics identified in Table 3-2 of the *Science Plan*, p. 48.

**b. Fish and Invertebrates \$1,300,000**

NPRB is seeking proposals that focus on one of the topics listed below. **The individual proposal funding cap under Fish and Invertebrates is \$500,000. Also see fish and fisheries-related research topics under Cooperative Research and in the Arctic Focus section.**

**i. Stock assessment research and model development**

The NPRB is seeking proposals that will support stock assessment by conducting stock assessment research and development of managed species, with emphasis on data-poor managed groundfish and crab species, particularly those with catch- only data (i.e., Tier 6 for groundfish and Tier 5 for crab) and species with catch limits that may prevent attaining full harvest levels of target species that are caught in the same fishery. Proposal topics must fall within the boundaries of the 2005 NPRB *Science Plan* and to be competitive must clearly demonstrate the link to current fisheries management issues.

**ii. Fish and invertebrate movement**

The NPRB is seeking proposals that will assess the movement of fish and invertebrate species. The goal of this research may include an improved understanding of the spatial importance of

predator-prey interactions and spawning ground identification as related to management boundaries, including seasonal changes and responses to environmental variability. Proposals could also focus on mechanisms driving movement, connectivity, range expansion and benthic habitat utilization (e.g. age or seasonal environmental changes) patterns. Proposals that include a tagging component must demonstrate that barotrauma and/or tagging mortality concerns have been addressed to support a full-scale movement pattern study or must include such analyses in their proposal. *Successful proposals under this category could be funded as an OSRI-NPRB collaboration.*

### **iii. Discard and handling mortality**

The NPRB is seeking proposals that will conduct field work to develop and assess techniques to reduce discard and handling mortality in Alaska shellfish fisheries, for prohibited species in Alaska groundfish fisheries, or for other species without current discard mortality rates such as skate, shark, and octopus. Proposals should identify the application of project outcomes to incidental mortality catch estimates and thus stock assessment and catch limits.

### **iv. Biodiversity and implications for fisheries management**

One of the aims of an ecosystem approach to fisheries management is to maintain a healthy ecosystem structure and function while facilitating a sustainable fishery. In general, it is hypothesized that higher species richness and/or species diversity confers marine ecosystems with more stability and resilience in the face of natural and anthropogenic stressors, thus affording a degree of ecological insurance against ecological uncertainty. NPRB is seeking proposals to test this hypothesis of biodiversity in relation to fisheries and fisheries management in Alaska.

### **v. Impacts of climate change on crab stocks**

Climate change has been linked to the inability of certain crab stocks to rebuild, even in the face of minimal human removals. Important further research on this topic would consider how climate change affects the long-term success of these stocks. Climate change interactions such as changes in bottom temperatures, larvae survivability, predator-prey relationship changes, food scarcity, benefits to competitive species, ocean acidification and others should be considered. The research should also be conducted in the context of the historical and current fishing removals. A key question to address is if the stock can rebuild under expected future environmental conditions and minimal commercial removals.

### **vi. Fish habitat**

#### **1) Effects of fishing closures on benthic habitat and production of managed species**

Research is needed to evaluate the effects of fishing closures on benthic habitats and production of managed species. The North Pacific Fishery Management Council (NPFMC) implemented a variety of closures, which now have been in effect for various periods. NPRB is seeking proposals to evaluate the effect of these closures, with a focus on benthic habitat and production of managed species. Proposals could also focus on the creation of time series of the impact of fishing on habitat in or around closures to assess: 1) the impact of changes in management on the rate of habitat disturbance and recovery, and 2) the impact of habitat disturbance (or the cessation thereof) on the growth, distribution, and reproductive success of managed species.

**2) Essential habitats for forage fish and other managed fish and invertebrate species**

New research is needed to improve our knowledge of the characteristics and importance of fish habitat, including strategies for protecting these habitats from human impacts and in light of environmental change. The NPRB is seeking proposals for research on habitat use by forage fish species and other managed fish and invertebrate species. More data are required to identify habitat and map the distribution of various substrates and habitat types, including habitat-forming biota, infauna, and epifauna. In addition, an improved understanding of habitat requirements for forage fish and other managed fish and invertebrate species is needed, including measures of habitat characteristics (e.g., sediment size, exposure, temperature, algal cover, etc). The overall goal of this category is to identify the areas and habitats that contribute most to the survival, growth, recruitment, and productivity of key fish species. *Successful proposals under this category could be funded as an OSRI-NPRB collaboration.*

**3) Cumulative impacts**

Within the context of fishing, NPRB is interested in supporting studies of the cumulative impact of industrial operations (e.g. mining and dredging, oil and gas operations) on nearshore and estuarine Essential Fish Habitats, larval crab, groundfish and forage fish species and associated ecosystem processes.

**vii. Other fish and invertebrate research**

While the other topics in this category are given priority status in this RFP, the NPRB will also consider proposals that focus on other topics identified in Table 3-4 of the *Science Plan*, p. 79.

**c. Marine Mammals****\$200,000**

Proposals directed toward the study of marine mammals should be focused on one of the topics listed below. *Also see marine mammal related research topics under Other Prominent Issues, Cooperative Research, and the Focus Section.*

**i. Retrospective Studies**

Given the cyclical nature of the RFP, 2012 is a low funding year for this category. As a result, NPRB is seeking proposals that will take advantage of existing time-series or archived samples to conduct retrospective analysis that will support current marine mammal management and marine mammal – fisheries interaction issues.

**ii. Adaptive Management Experiment Design**

NPRB is seeking proposals to design a conceptual adaptive management experiment to determine the nature and the significance of the possible relationship between indirect effects of groundfish fisheries and SSL population dynamics in the western distinct population segment (WDPS). The relationship may be positive, negative, or not found to exist.

The design should explore requirements for scope (size of experimental area(s)); control area(s); temporal duration; necessary baseline data in selected area(s); monitoring and evaluation program; enforcement; estimated cost; and other relevant considerations. The design should examine the level of contrast necessary in management treatments between an experimental closed area and a control area as well as the limitations due to the Endangered Species Act (i.e.

relieving status quo management restrictions). The design should also take into consideration the movement of SSLs and groundfish biomass in and out of the experimental areas.

**iii. Population Status, dynamics, distribution and foraging ecology of Steller sea lions in the Commander Islands**

The proximity of the Commander Islands to the western Aleutians and the likely similarity of these two areas in terms of bathymetry/narrow shelf characteristics and predominant fish species makes this area of particular importance for studying the western distinct population segment (WDPS) sea lion sub-population trends, feeding ecology studies, and adaptive management questions based on responses of sea lions to differences in fishery catches and management.

Proposals should be aimed at increasing the collective scientific understanding of the continued decline of WDPS sea lions in the Commanders and the western Aleutians and evaluating the potential role of fisheries in that decline. Studies in the Commanders are also of particular importance where there may be potential for employing a wider set of data collection and study methodologies in the Commander Islands than in the western Aleutians.

**iv. Other marine mammal research**

While the other topics in this category will be given priority status in this RFP, NPRB is also willing to consider proposals that focus on other topics identified in Table 3-9 of the *Science Plan*, p. 94.

**d. Seabirds**

**\$500,000**

Proposals directed toward the study of seabirds should be focused on one of the topics listed below. *Also see seabird research related topics under Cooperative Research.*

**i. Influence of non-breeding season conditions on population dynamics**

Seabirds are exposed to many environmental and anthropogenic stressors, including subsistence harvest, bycatch in fishing gear, marine pollution, introduced predators, degradation of breeding and/or marine habitats, and climate change. Because seabirds are most easily observed during the breeding season, most of what is known about these impacts on seabirds comes from their time spent at colonies. In many instances, however, population regulation occurs outside the breeding season, when little is known about the ecology of most species or their vulnerability to stressors. The NPRB is seeking proposals to determine migration patterns and/or the location of wintering grounds for Alaskan breeding populations of seabirds in combination with efforts to assess the influence of natural and anthropogenic stressors on seabird populations during this time.

**ii. Seabird–prey ecosystem relationships**

Seabirds are integral members of marine ecosystems in the North Pacific and may serve as sensitive and cost-effective indicators of ecosystem health and status. The NPRB funded a study (project [516](#)) wherein an international panel of marine bird ecologists synthesized current knowledge of “seabirds as indicators” of marine ecosystems. NPRB also supported a pilot study relating seabird phenology and salmon returns in Bristol Bay (project [531](#)), and supported the compilation of seabird diet data (project [722](#)). NPRB is seeking proposals exploring trophic interactions and mechanisms between seabird and prey species, that may lead to seabird population effects and seabird-fisheries interactions. NPRB continues to seek proposals that will

exploit the utility of seabirds as indicators of forage fish stocks (e.g., of fish community composition, distribution, abundance, recruitment, and/or population dynamics), NPRB also seeks proposals investigating linkages among prey characteristics, forage effort, and seabird vital rates. *Successful proposals under this category could be funded as an OSRI-NPRB collaboration.*

### **iii. Effects of human derived food sources on seabirds**

Human derived food sources such as commercial fishing, fish processing or large hatcheries create easy feeding opportunities for many seabirds. Such food sources may act as a buffer in times of poor food availability or even act as a primary food source, influencing local population trends and migration patterns. Such a provision of food could also result in the establishment of new, potentially rapidly growing colonies, facilitate range expansions for certain species, and in some instances even create a human health hazard. NPRB is seeking proposals to investigate the impacts of these types of human-provided food sources on seabirds.

### **iv. Seabirds and the marginal sea-ice zone**

Several seabird species in the Bering, Chukchi and Beaufort Seas are found in association with marginal sea-ice zones, yet this connection is poorly understood or quantified. With changing ice conditions, the location, timing and predictability of these habitats will change, and with them the prey resource associated with the seabirds. NPRB is seeking proposals that will describe and quantify how changing sea ice conditions will affect seabird populations.

### **v. Other seabird research**

While the other topics in this category are given priority status in this RFP, NPRB is also willing to consider proposals that focus on other topics identified in Table 3-12 of the *Science Plan*, p. 110.

## **e. Socio-economic and Policy Issues**

**\$200,000**

The NPRB expects to fund projects focused on the topical areas listed below.

### **i. Social and economic studies of bycatch and bycatch mitigation**

Research is needed to develop or compare methods for assessing the economic and social costs of bycatch and bycatch reduction efforts. This includes studies that evaluate the performance of bycatch control methods, the costs borne by fishery participants (or interpreted in terms of the overall value of the fisheries) who must implement bycatch control mechanisms, and the social, economic, or other costs borne by a broad spectrum of stakeholders who depend on species that are affected by bycatch removals.

### **ii. Pre- and post-implementation studies of management actions**

Pre- and post-implementation studies of the benefits and costs, and distribution of benefits and costs, associated with changes in management regimes are needed. "Benefits and costs" include both economic and social dimensions. Assessments of analytical methods are of interest in addition to directed studies. Specific topics could include: the effectiveness (e.g., potential for overharvest or unintentionally limiting other fisheries) of setting allowable biological catch (ABC) and overfishing levels (OFL) for data-poor stocks (NPFMC Tiers 5 and 6 for groundfish

and Tiers 4 and 5 for crab; e.g., squid, octopus, shark, sculpins, other flatfish, other rockfish, skates, grenadier, and crab); the impact of data-poor species catch quotas on limiting harvest of other species (i.e. the impact of choke species); changes in product markets; characteristics of quota share markets; changes in distribution of ownership and/or crew compensation, as a consequence of the introduction of catch share programs; increased enforcement and other safety (e.g. search and rescue) requirements with the adoption of the Arctic Fisheries Management Plan and a more accessible Arctic; and prospective and retrospective analyses of changes in the spatial and temporal distribution of fishing effort in response to management actions. Studies of this kind could also consider the cumulative impacts of regulatory decisions on fishing communities, including subsistence policy changes and the use of regional economic models in analyzing these types of impacts.

**iii. Culture, values, and voice in the fisheries management process**

NPRB is inviting proposals that examine conceptual frameworks for integrating under-represented voices into the formal management processes in the North Pacific. Research projects identifying and measuring current impediments to participation (voice) are welcome. Similarly, the NPRB is interested in funding research aimed at identifying impediments to, and conceptual frameworks for, integrating competing or contrasting values in formal management processes.

**iv. Community adaptability to ecosystem change, market impacts and management regime changes**

The NPRB is seeking proposals that investigate the adaptability of Alaskan communities and/or the sustainability of the subsistence way of life relative to ecosystem change (e.g. location, abundance and productivity of marine species of importance to commercial and subsistence activities), market impacts and management regime changes (e.g. toward limited access programs). Preference will be given to those proposals that focus on communities in the Gulf of Alaska and Arctic and to those in the Bering Sea and Aleutian Islands that do not duplicate current efforts undertaken as part of the Bering Sea Project (BSIERP).

**v. Other socioeconomic and policy issue research**

While the other topics in this category are given priority status in this RFP, NPRB is also willing to consider proposals that focus on other topics identified in Table 3-13 of the *Science Plan*, p.120, and in particular those that overlap with human-related topics identified in the North Pacific Fishery Management Council [five-year priority plan](#).

**f. Other Prominent Issues**

**\$300,000**

**i. Food Safety**

Alaska Natives depend on on marine resources for significant amounts of subsistence food. Zoonotic infections in marine mammals and birds, as well as biotoxins of marine origin, are emerging as threats to subsistence food safety. Proposals investigating the presence of pathogens and/ or antibodies in archived tissue, or seroprevalence in available blood specimens, as well as the presence of algal biotoxins in invertebrate or vertebrate marine subsistence species, or prey species of marine mammals or birds important in subsistence diets, are encouraged. Proposals need not be limited to prevalence studies in subsistence species, but may also include intermediate hosts, transport hosts, and the ecology of the pathogen. Proposals that examine the

role of co-infection with more than one pathogen, such as *Coxiella burnetti* and *Toxoplasma gondi* are of particular interest. Studies that link human consumers and subsistence hunters with marine reservoirs of zoonotic disease are encouraged. Biotxin studies should focus on recognized seafood safety issues and be directly applicable to subsistence food gatherers, commercial harvesters, aquaculturists and recreational fishers.

## ii. Coastal contaminants

The coastal waters of Alaska are generally perceived as pristine, especially relative to more populated, industrialized areas elsewhere. However, contaminant levels vary across Alaska, and is of special concern in coastal areas because of the potential toxic effects on biological resources and often, indirectly, on human health. This is particularly important where subsistence food contamination is an emerging health concern and especially relevant in rural areas where subsistence harvest is a significant protein source. NPRB is seeking studies of bioeffects of contaminants in subsistence or commercially harvested species. Research on transport of contaminants with demonstrated bioeffects to other ecosystem components are encouraged and should address important and timely issues. *Successful proposals under this category could be funded as an OSRI-NPRB collaboration.*

## iii. Invasive species

NPRB is seeking proposals that focus on ecological and / or economic impacts of marine invasive species in Alaska. A recently published status report ([http://www.adfg.alaska.gov/static/species/nonnative/invasive/pdfs/invasivespp\\_report.pdf](http://www.adfg.alaska.gov/static/species/nonnative/invasive/pdfs/invasivespp_report.pdf)) lists the occurrence of marine invasive species in Alaska including several with high potential for economic impact and/or further threat of expansion, especially in light of changing ocean conditions and increasing ship traffic (in the Arctic especially, but also through the Great Circle Route and other maritime activities). Proposals could include risk assessment for new species invasions given future climate and associated changes in human activities, including marine shipping and ballast water discharges. Proposals could also include the design of eradication/control plans and a pilot program to test efficacy of removal. Investigations focused on risks of invasive species in regard to marine shipping should focus on fishing or cargo vessels. Investigations on passenger vessels will not be supported.

## **2. Local and Traditional Knowledge and Community Involvement \$200,000**

The Board continues to encourage proposals that relate to Local and Traditional Knowledge (LTK) as well as those that involve community-based organizations and individuals. Although LTK and Community Involvement have been combined in one section this year, proposals do not have to address both of these but should clearly address either LTK or Community Involvement as follows:

### **a. Local and traditional knowledge**

The Board is requesting proposals that address one or more of the research priorities identified elsewhere in this 2012 RFP that relate to LTK and its holders but do not duplicate current LTK efforts in the Bering Sea Project. Potential projects must be responsive to the LTK section of Chapter 4 of the NPRB *Science Plan* and contribute to the mission of the NPRB. In addition to the usual proposal evaluation criteria, LTK proposals will be assessed with regard to: (1) the degree to which they engage holders of LTK throughout the project, including project design and data interpretation as well as the collection of data and information, and (2) the demonstrated commitment of community partners (where “community” may

refer to a geographic, ethnic, occupational, or other group), for example, as research team members or in letters of support.

Proposals should include specific plans for communicating research results back to the appropriate communities.

### **b. Community involvement**

The NPRB seeks proposals for small-scale research activities based in communities along the coast of Alaska. The intent is to provide community-based organizations and individuals with the chance to gain experience in conducting research and to address their research interests and priorities, consistent with the overall mission of the NPRB. This section of the RFP is not intended to discourage community-based organizations from applying for other and larger projects under any other section of the RFP. Instead, it provides an opportunity for those organizations to define priority research, to explain how that research is connected to the NPRB mission, and to describe how the project would be conducted to meet scientific standards as well as community expectations.

## **3. Collaboration with other Organizations**

### **Oil Spill Recovery Institute**

This is the sixth year of collaboration between the NPRB and the Oil Spill Recovery Institute (OSRI). Again this year, OSRI will contribute up to \$100,000 total for projects submitted to NPRB that align with OSRI's mission and goals. The impact or potential impact of oil on the ecosystem is OSRI's primary interest. More information on OSRI's research plan can be found at [http://www.pws-osri.org/business/science\\_plan.pdf](http://www.pws-osri.org/business/science_plan.pdf). Proposals submitted in response to NPRB priorities that have overlapping interest with OSRI will go through a special joint review process and will be distributed to the OSRI Board and its advisory bodies in accordance with their standard operating procedures (<http://www.pws-osri.org>). All proposals, regardless of potential collaborative funding through OSRI, are subject to the funding cap of the category they are located in.

The topics of common interest are:

#### ***Under Fish and Invertebrates:***

- i. *Fish and invertebrate movement* – especially those proposals that address movement of rockfish and lingcod
- v. *Fish Habitat, 2) Essential habitats for forage fish and other managed fish and invertebrate species*

#### ***Under Seabirds:***

- ii. *Seabird-prey ecosystem relationships*

#### ***Under Other Prominent Issues:***

- ii. *Coastal contaminants*

#### ***Data Rescue***

#### ***Under Focus Section: Arctic Focus:***

- ii. *Determining scales of nearshore sea ice primary production*

**4. Cooperative Research with Industry \$400,000**

The Board is requesting proposals that address one or more of the research priorities identified below *and engage the fishing or oil and gas industries, or others industries, as appropriate*. Letters of cooperative support from the industry are required for proposals submitted under this category. Additionally, proposals must be responsive to the Cooperative Research section of Chapter 4 of the NPRB *Science Plan* and contribute to the mission of the NPRB. In addition to the other proposal evaluation criteria, cooperative research proposals will be assessed with regard to:

- a) The degree to which they directly engage the industry partner throughout the project, including project identification, design, and interpretation, as well as collection of data and information;
- b) How well the proposal addresses pressing conservation and management needs identified for the applicable industry;
- c) The extent to which the project will improve understanding between science and industry, and strengthen confidence in the products of research and in the regulatory process; and
- d) Scientific integrity, practicality, and cost effectiveness of the experimental design.

Cooperative Research priorities are listed below. Proposals are encouraged to include financial support from industry.

**i. Fishing Industry****1. Gear modification**

Areas of interest include gear modifications to reduce habitat impacts, gear loss, interactions with non-target species of fish and invertebrates, avoidance or minimization of interactions with marine mammal or seabirds, and improvements for catchability and selectivity. Studies in this category could also address the impact of increasing Short-tailed Albatross populations in particular and in that regard an evaluation of further development of bycatch avoidance techniques and gear. Studies in this area could also include modification of pot gear to minimize non-target bycatch mortality of halibut and octopus as well as improved techniques (handling and gear) to minimize non-target crab mortality in pot fisheries.

**2. Fishers' knowledge**

NPRB is seeking proposals to evaluate how fishers' knowledge might be useful to identify and delineate areas with aggregations of deep water corals that are vulnerable to damage from fishing. Proposals should include a spatial scale that is relevant to fishery management. Proposals should develop a strategy/plan to verify the information provided by fishermen (e.g. mapping, camera drops, submersible or ROV dives) where such information is not already available.

**3. Fishery monitoring**

The necessity for accurate and cost-effective fishery monitoring is growing as management depends more on real- or near-time data. Observer program logistics and costs are impediments to improving monitoring or meeting management needs in many fisheries. Various forms of remote monitoring, including electronic monitoring (EM), may offer practical solutions. The NPRB is seeking collaborative proposals to develop or further refine EM or other fishery monitoring techniques.

Monitoring techniques could include a combination of direct and alternative monitoring programs (e.g. electronic logbooks, VMS, video monitoring, and special projects for placement of observers). One of the intents of restructuring the observer program is to deploy observers across all fisheries, vessel classes, and processors to ensure ongoing data collection and improve the quality of observer

data. NPRB is seeking collaborative proposals to develop and further refine effective strategies for observer deployment, in a pilot program, in fisheries with less than 100% coverage.

#### **4. Ecosystem observations and research**

Investigators could use platforms of opportunity in the fishing fleet to carry out marine observations. These platforms could be used to deploy oceanographic sensors, to collect samples, to make cooperative biomass assessments and surveys, to study marine mammal/fishery interactions and methodologies to reduce such interactions. Fishermen, working together with scientists, could deploy acoustic monitors, evaluate non-fisheries activities on fish behavior (e.g. seismic testing), and carry out cooperative marine mammal or seabird monitoring. Fishermen could also coordinate with scientists and other marine resource users to document fish and invertebrate distributions, building a citizen-science program to help understand how dynamic climate conditions influence the distribution of commercial and non-commercial fish and invertebrate species.

### **ii. Oil and Gas industry**

Cooperative research proposals with the oil and gas industry should center on the topics listed below. For all topics, priority will be given to studies that take place where oil and gas activities occur now or where they may occur in the future (e.g., southern Beaufort and Chukchi seas, Herald and Hanna shoals, Cook Inlet). Use of data previously collected by the Oil and Gas Industry is encouraged.

#### **1. Species of special concern**

Of interest are proposals that investigate species of special concern in marine areas where oil and gas activities take place in Alaskan waters (e.g., Cook Inlet, Beaufort and Chukchi Seas). Of particular interest are species of marine mammals and seabirds that are directly impacted by sea ice declines, as well as salmon and other subsistence fish species, sea ducks, and all federal or state listed threatened or endangered marine species and other declining or at risk marine species for which evidence of significant threat and vulnerability can be demonstrated.

#### **2. Monitoring from platforms**

Platforms and vessels used for oil and gas activities could be used as sites to measure changes in the environment. Potential measurements include atmospheric parameters (air temperature, humidity, wind speed and direction, precipitation, solar radiation, and long wave radiation) and oceanographic parameters (sea surface height, temperature, salinity, currents, nutrients, acoustics, fluorescence, wave height, and ice cover). The use of platforms should provide observations to be carried out at appropriate intervals at fixed locations over relatively long periods of time.

### **5. Technology Development **\$200,000****

NPRB is interested in supporting new technological development in the following areas:

#### **i. Molecular and laboratory based technology development**

The Board is seeking proposals addressing the development and/or application of existing molecular techniques to particular management problems. One problem is the identification of larval stages of morphologically similar species. Species-specific DNA markers, such as mitochondrial DNA barcode genes or single nucleotide polymorphism (SNPs), might be used with polymerase chain reaction (PCR) techniques to efficiently identify undifferentiated

individuals to species. Such techniques could also be used to identify specific disease pathogens, hard to identify alien species, or chemical agents.

**ii. Marine measurement technology development**

The development of technologies to measure a wide variety of variables in the marine environment is needed. Both sensor technologies and their platforms (such as ROVs, AUVs, and gliders) need continual evaluation in the face of rapidly advancing engineering. In the interest of promoting marine environmental information needs, which should consider resource management needs, the NPRB is interested in supporting proposals that focus on marine sensor technology development. Examples include, but are not exclusive to, turbidity or pCO<sub>2</sub> sensors, fluorometers, and acoustic technologies for Arctic and subarctic marine environments. The focus of proposals should be on the design and field testing of such technologies. NPRB funding should not be a substitute for small business development grants.

**iii. Resource assessment technology development**

Technology development is needed to improve resource assessment. Examples include: innovations (including camera-based methods) to provide broader systematic sampling of biota and the physical environment, identification of advanced sampling technologies to conduct stock assessment surveys, high spatial and temporal resolution measurements of chemical, physical and biological parameters in the marine environment, and improvements in acoustic assessments using fixed and mobile gear.

**iv. Energy efficiency technology development**

Research is needed into technology and programs which improve the energy efficiency of fishing gear and vessels used to harvest marine resources. Recent studies have documented that increasing fuel prices can lead to decreased harvest of fishery resources and concentrate effort on fishing grounds near communities. This in turn may contribute to localized depletion, increase near-shore habitat impacts, and increase allocation conflicts. Energetically inefficient vessels and fishing gear also unnecessarily contribute to green house gas emissions. Potential measures to address this research need will likely entail the collection of quantitative data on the energy efficiency of fishing vessel and gear modifications, the development and testing of new technologies and vessel/gear modifications, and the development of innovative methods to assist stakeholders in evaluating the implications of these potential changes to their operations.

**v. Other technology development**

While the other topics in this category are given priority status in this RFP, NPRB is also willing to consider proposals that focus on other technological developments relevant to marine science and pressing fisheries management needs in the North Pacific.

**6. Data Rescue \$100,000**

**i. Data rescue**

Marine research in Alaska has produced a lot of new information and insights and large amounts of data have been collected. Many of these datasets have been digitized and submitted to national data centers, such as the National Oceanographic Data Center (NODC), for storage and retrieval

by the broader scientific community. Yet a variety of datasets spanning research from oceanography to fisheries, seabirds, marine mammals, and humans are currently in a format not accessible to other researchers (e.g. gray literature reports, paper files, field notes, and undocumented local and traditional knowledge) and as a result cannot be used to help answer current research and management questions. In light of limited resources for marine fieldwork and in order to maximize investment into new research, the NPRB is interested in supporting proposals that will rescue datasets that are inaccessible and/or at risk of being lost, with the goal of transforming them into shared digital formats. Applicants must describe the nature and state of the data to be rescued (location, format, content); ensure that they are not already part of an accessible database; and describe the utility of the dataset to current and relevant science and management questions. Proposals should include integration of the rescued data into appropriate national data centers or databases and could also include subsequent analyses of these data. *Successful proposals under this category could be funded as an OSRI-NPRB collaboration.*

**FOCUS SECTION****\$400,000**

The NPRB introduced a Focus Section in 2011 and is including it again this year. The purpose of this section is to highlight pressing research needs for fisheries management or ecosystem understanding. The Focus Section topic is expected to vary among years and may not be present in the RFP every year. This year, the focus section is dedicated to the Arctic.

**i. Lower trophic level food webs in the Arctic Ocean**

Diminishing perennial and seasonal Arctic ice cover is leading to changes in lower trophic level productivity. The implications of a shift from a system dominated by ice-algae to one with a longer open water season are unclear. Apart from changes in the timing, location and extent of primary productivity, increasing temperatures and/or increased variability in temperatures may critically affect food sources and thus set the stage for expansion of North Pacific Ocean organisms into the Arctic Ocean. The NPRB is requesting proposals to describe the changes in lower trophic levels that are occurring in the Arctic Ocean, and to examine the consequences of a changing Arctic environment for lower trophic level structure and energy flow.

**ii. Determining scales of nearshore sea ice primary production**

To assess the location for long-term monitoring sites, it is important to determine the spatial and temporal scales associated with key biological processes. In the Arctic region in particular, there is interest in the scale of primary production associated with the landfast ice. NPRB is seeking proposals that have the aim of determining the spatial and temporal scales of primary production in landfast ice as well as investigating the physical factors that control these spatial and temporal scales. *Successful proposals under this category could be funded as an OSRI-NPRB collaboration.*

**iii. Arctic cod**

With change in the timing, thickness, and extent of polar sea ice there will likely be a shift in the stability of the Arctic biological community. Ecological coupling of marine biota with the ice and ice edge will likely be altered and thus affect the ecology and population dynamics of mid- and upper trophic level species that directly or indirectly depend on the production associated with, and the physical presence of ice. Arctic cod production is likely related to the stability of

lower trophic level production. Studies could include, but are not limited to, how Arctic cod depend on ice-related productivity and how changes could alter their prey abundances.

**iv. Arctic fish habitat**

NPRB is seeking proposals that will identify and characterize important fish habitat areas in the Bering Strait and Arctic Ocean. Proposals could also include, or occur in conjunction with, baseline assessments of Arctic fish stocks.

**v. Movements, habitat use and body condition of walrus, beluga whales and ice seals in the Bering, Chukchi, and Beaufort Seas**

Studies are needed to determine movement and habitat use of marine mammals in the Bering, Chukchi, and Beaufort Seas, as well as to evaluate the health and body condition of individuals. Such studies are important to understand how changes in the marine environment (e.g., decrease in thickness and extent of sea ice and increase in potential disturbances due to oil and gas activities and shipping traffic) will affect the body condition and population dynamics of walruses, beluga whales, and ice seals. Aerial surveys, satellite telemetry, and/or passive acoustics are tools that could be used to collect data on movement and habitat use.

## PROPOSAL APPLICATION MATERIALS AND PROCEDURES

All applicants should refer to [http://www.nprb.org/proposals/current\\_rfp.html](http://www.nprb.org/proposals/current_rfp.html) for a copy of proposal application materials. If you need further information please contact the NPRB office by phone at (907) 644-6700. Scientific questions related to the RFP should be directed to Science Director Francis Wiese ([francis.wiese@nprb.org](mailto:francis.wiese@nprb.org)). For IT assistance with the proposal submission system please contact Igor Katrayev ([igor.katrayev@nprb.org](mailto:igor.katrayev@nprb.org)). If you require more general assistance with the proposal submission process, please contact NPRB staff members Carrie Eischens ([Carrie.Eischens@nprb.org](mailto:Carrie.Eischens@nprb.org)), Tom Van Pelt ([tvanpelt@nprb.org](mailto:tvanpelt@nprb.org)), Danielle Dickson ([danielle.dickson@nprb.org](mailto:danielle.dickson@nprb.org)) or Crystal Benson ([crystal.benson@nprb.org](mailto:crystal.benson@nprb.org)).

*Please note that if the links to the template documents provided below do not work on your computer due to your internal security settings, you can find all templates at the above-mentioned website.*

## PROPOSAL SUBMISSION AND DEADLINE

Proposals must be submitted online at [http://www.nprb.org/proposals/current\\_rfp.html](http://www.nprb.org/proposals/current_rfp.html) by **Monday, December 12, 2011 at 4pm Alaska Time**. Applicants will need to prepare the following information and documents (described in more detail below).

1. Proposal Summary Signature Page including an Abstract (250 words maximum) and Community Involvement summary (150 words maximum)
2. List of Proposal Objectives
3. Proposal Classification
4. Contact Information for the Applicant, lead Principal Investigator, Principal Investigators, Co-Investigators, Collaborators, Grant Managers, and Potential Reviewers
5. Research Plan (maximum 12 pages + Results of Completed NPRB projects, *use provided template*)
6. Budget Information and Budget Narrative (*use provided templates*)
7. Résumés (maximum 2 pages per investigator)
8. Current and Pending Support (*use provided template*)
9. Letters of Support (*if applicable*)

Online submission for proposals will be available starting on **Monday, October 3<sup>rd</sup>, 2011 until 4pm AK time on Monday, December 12, 2011**. During the submission process you will create an account to which you can return at a later date if needed. Returning applicants can use their existing accounts. You will be asked to fill in a series of forms with information from the list above, and to upload required files (research plan, budget summary and narrative, resumes/CV, Current & Pending Support forms).

**Templates** for the research plan, budget summary, budget narrative, the current and pending support form will be provided (refer to hyperlinks in the appropriate sections below) and **must be used**. Download these templates, complete them, and upload them again in the appropriate places during the submission process. Your information will be saved as you move through this process and you will have the ability to update any information you have provided at any time prior to the deadline and before your final submission.

A link to automatically-generated, complete summary signature pages will appear as soon as you have provided the following information: full address and contact information for each agency or entity that will be legally bound to perform the research if funded, name of the principal investigators and co-investigators that will be associated with the project and their agency/organization affiliation and email address, the abstract, the community involvement summary, and funding amount request.

There will be one signature page generated for each institution involved in the project, as well as one overall signature page listing all institutions. Please print these pages and have them signed by the authorized legal representatives of each institution participating in this research. Signature from authorized organizational representative certifies that the proposal in its entirety, including the budget, has been submitted according to your organization's standard proposal approval process.

**The proposal Applicant should sign the overall signature page.** Once you have finalized your submission you will be assigned a reference number. Insert this number in the appropriate place on the signed signature page and mail it to:

**North Pacific Research Board  
1007 West 3rd Avenue, Suite 100  
Anchorage, AK 99501**

It is acceptable for each authorized representative from the institutions involved in the project to sign their institution's summary signature page and send it to NPRB separately.

**Proposals** must follow the guidelines and criteria specified herein and **must be submitted online by 4 p.m. Alaska time (5 p.m. Pacific time), 12 December 2011.**

**In the interest of fairness, no proposals received after this deadline will be considered for funding. Please note that it is in your best interest to have fully submitted your proposal well ahead of the deadline, and not wait until the last day. The system will be closed promptly at the time noted above, and even if you are partially done, your proposal submission will be interrupted and no further work allowed. This will lead to immediate rejection of your proposal. If you have trouble submitting your proposal any time *prior to 4 p.m. Alaska time on 12 December 2011*, you may contact NPRB staff for assistance but you are still entirely responsible for getting it in on time. Note also that NPRB staff may be constrained in the help they are able to provide if you wait until the last minute.**

**The signed summary signature page(s) generated by the system at the end of the application process must be received at the NPRB office no more than one week after the proposal submission deadline, i.e. 4 p.m. Alaska time, 19 December 2011. Please note that courier and express deliveries to Anchorage, Alaska, normally require a minimum of two business days for delivery. Scanned copies of the signature pages are acceptable by the deadline but original copies must be forwarded to NPRB as well.**

### ***Confidentiality of Proposals***

If a proposal is submitted, but not funded, only the following information may be released to the public: proposal title, names of principal and co-investigators, funding amount requested, duration, abstract and community involvement summary. If a proposal is recommended for funding by NPRB and approved by the Secretary of Commerce, then the full proposal (without salary information) will be released to the public on the NPRB website. Proposals submitted in response to the joint NPRB-OSRI research priorities and considered of joint interest, will go through a special joint review process and will be distributed to the OSRI Board and its advisory bodies in accordance with their standard operating procedures (<http://www.pws-osri.org>).

## I. Proposal Package

*The full proposal package consists of ten elements:*

### 1. Proposal Summary Signature Pages

The proposal summary signature pages will be created automatically based on the information you provide during the online submission process. It will include a **title, project period, names of applicant organization and principal/co-investigators, an abstract** (250 words or less, see below), a **community involvement summary** (150 words or less; see below), **requested funds and other support**, and a place for the **signature** of an official authorized to legally bind the submitting organization. This page is not confidential and may be made available to the public. Ensure that you have not included any social security numbers in any of the fields. The proposal signature page is not a numbered page and thus does not count towards the 12-page limit of the Research Plan.

**Abstract:** In 250 words, briefly explain the project goal and value, and why your research is relevant to the mission of the NPRB. Use language understandable by individuals not familiar with the specific subject area, such as members of Congress and the public.

**Community Involvement:** While not necessarily required for some research priorities, researchers should recognize that local community knowledge of, and interest in, natural resources extend beyond physical boundaries of the communities themselves, to harvest locations and other important areas. Furthermore, researchers should advise communities and people involved with or affected by the study of the purpose, goals, and time-frame of the research and its potential positive and negative implications. Inclusion of local and traditional knowledge and wisdom is encouraged. Applicants should specify in this section which, if any, communities they plan to interact with during their research and how results will be brought back to the community when the project is completed. In addition, proposals for research on specific Alaska Native communities or health issues must have a letter of support from appropriate community and tribal governing bodies (see section 9 below). If you determine that this community involvement section does not apply to your proposal, please state that, and very briefly explain why it does not apply.

### 2. Proposal Objectives

During proposal submission you will be asked to list your project objectives. Objectives are the fundamental and measureable goals of your proposed work; the project objectives are what NPRB uses to evaluate progress and completion of the project. Project objectives must be achievable and specific. Note that project objectives entered into the online submission system should be the same as those listed in your research plan (see section 6D below).

### 3. Proposal Classification

During your submission, you will be asked to provide the following:

- a. *Research Priority:* Identify ONE primary research priority from the 2012 RFP under which your proposal will compete. In Section C of the research plan you may identify up to three secondary research priorities to show the broader responsiveness of your proposals to the RFP, but your proposal will **only** be considered and competed for funding under the primary research priority you indicate in the online system.

- b. *Graduate Students*: Indicate the number of graduate students you intend to make part of your project. Include the degree level (M.Sc., Ph.D.) and duration of their degree in years or list whether you intend to have no graduate students as part of your project. Graduate student participation in NPRB projects is strongly encouraged, but this graduate student listing will not affect the evaluation of your proposal and is intended for informational purposes only.
- c. *Species*: Provide the species name(s) of the focal subjects of your study.
- d. *Large Marine Ecosystem(s) (LME)*: Indicate the LME(s) in which your study takes place: Arctic Ocean, Bering Sea and Aleutian Islands, and/or Gulf of Alaska (consult the NPRB Science Plan for LME boundary definitions (p. 11, Figure 2-1)).
- e. *Places*: List one or more regional geographic locations in which your study will take place; this should be a finer-scale location than the one identified in the LME section.
- f. *GIS Location*: Enter the proper lat/long coordinates for your location or area of study. If necessary, there is a map feature incorporated into the online submission process to assist with this requirement.
- g. *Topical Area*: Identify the topical area of your proposed research based on Tables 3.2 through 3.13 in the Science Plan.
- h. *Ecosystem Components*: Indicate one or more of following ecosystem components addressed in your study: Oceanography & Lower Trophic Level Productivity, Fish and Invertebrates, Fish Habitat, Seabirds, Marine Mammals, Humans, and/or Other Prominent Issues (e.g., contaminants, disease, invasive species, climate change, etc.) – see the 2005 NPRB Science Plan for details.
- i. *Keywords*: Describe your project with 5-10 keywords (do not include any words that would apply to items c-h above).
- j. *Research Approach*: Identify which research approach(es) will be used in your study: Monitoring, Process Study, Retrospective Analysis, and/or Modeling.
- k. *Reviewer Expertise Criteria*: Towards the end of your submission you will need to fill in criteria that best describe the expertise needed to properly review your proposal. Filling in this form as accurately as possible will help ensure proper peer review of your proposal.

#### 4. Contact Information

As part of the submission process, you will be asked to provide contact information (name, organization, mailing address, email, phone and fax number) for the Applicant, the lead Principal Investigator, at least one Principal Investigator from each organization involved in the proposal, Co-investigators, Collaborators, one Administrative Grant Manager from each organization requesting funds, and potential Reviewers. Note that a Principal Investigator and Administrative Grant Manager are required for each organization requesting funding. Definitions of proposal roles are listed below. It is not required to suggest potential reviewers. If you choose to submit names for reviewers, these will not be disclosed, but please read the [conflict of interest policy](#) before doing so.

##### *Roles:*

**Proposal Applicant** (required): Person who is submitting the proposal, either for themselves or on behalf of the principal investigators. Full contact information is required, but no resume or Current & Pending form is required as part of this role.

**Lead Principal Investigator** (required): Person with the overall responsibility for the project, both in terms of scientific content, project management and project completion. There can be only one Lead Principal Investigator for the entire proposal. This person must also be listed as a "Principal Investigator".

**Principal Investigator(s)** (required): Person(s) responsible for the scientific content of the proposal and for completion of the project should it be funded. At least one PI for each organization requesting funds must be provided. Full contact information for all PIs is required. In addition, note that a resume/CV, and a Current & Pending form must be submitted for each Principal Investigator.

**Co-Investigator(s)** (if applicable): Researcher(s) responsible for carrying out part of the scientific content of the proposal. Full contact information is required. In addition, a resume/CV, and a Current & Pending form must be submitted for each Co-Investigator.

**Collaborator(s)** (if applicable): Person(s) who have committed to work with a project and complete specific tasks, but are not responsible for successful completion of the project. Full contact information is required; no resume or Current & Pending form is required.

**Administrative Grant Manager(s)** (required): Person(s) responsible for the financial administration of the grant and can provide legally binding authorization (e.g., Office of Sponsored Programs). One Administrative Grants Manager is required for each organization requesting funds. Full contact information is required, but no resume or Current & Pending form is needed.

**Potential Reviewer(s)** (optional; maximum of three): Person(s) not associated with this project in any of the groups above, but with sufficient expertise and credentials to review your proposal in an objective manner. No resume is required, but please provide full contact information. Please refer to "[Conflict Of Interest Policy](#)" before suggesting a reviewer.

**Unacceptable Reviewer(s)** (optional): If there is someone who you prefer not review your proposal (for other than conflict of interest reasons), please provide their name only. No reason needs to be provided. We will try to ensure that they are not used for an anonymous technical review of your proposal.

5. Research Plan ([use template](#)), 12-page maximum including references, tables and figures; continuous line numbers; Item K below is NOT considered part of the 12-page limit but must be included as part of your Research Plan document; upload your plan as a **WORD document (.doc or .docx) only**.

The main body of the proposal will be your research plan, **limited to 12 consecutively numbered pages** and formatted as follows:

- a) All pages (*including the reference section and Results from Previous NPRB projects*) must have **1-inch margins** at the top, bottom and sides.
- b) All text (*including tables, figure legends, citations and references*) must be single-spaced, and the font and size must be **Times New Roman 11 point**.
- c) No page in the proposal and supporting material may be formatted to any size other than 8.5x11 inches.
- d) Tables must be created within your WORD document and in Times New Roman 11 point font.
- e) Figure legends must be part of the WORD document in Times New Roman 11 point font and not part of the figure "picture" embedded into your research plan.
- f) Color graphics are allowed, but may be reproduced in black and white and should thus be sufficiently descriptive in black and white form. Note that submitted proposals will be converted to PDFs, and this conversion may impact the quality of your graphics. Please ensure an appropriate resolution is used.

- g) The research plan **must have continuous line numbers** from beginning to end to facilitate review.<sup>1</sup>

**Failure to comply with any of the formatting specifications above will result in automatic dismissal of your proposal without further review. Please note that the research plan (specifically sections A through J) will be reformatted to ensure that the font style, size and margin width specified above are used. If this exceeds the 12 page limit after this reformatting, your proposal will be automatically dismissed without further review. Disqualified applicants will be notified in writing of this outcome.**

Following the provided template, your research plan will have the following elements:

- A. Project Title. Include the **long title**, and a suggested **short title** of up to 60 characters.
- B. Proposal Summary. Briefly explain the project goal and value, and why your research is relevant to the mission of the NPRB. Use language understandable by individuals not familiar with the specific subject area, such as members of Congress and the public. The 250-word Abstract from the Proposal Summary Signature Page would suffice.
- C. Project Responsiveness to NPRB Research Priorities or Identified Project Need. Identify the specific research priority identified in the RFP to which you are responding **and describe how your proposal addresses this priority**. If you are responding to an “Other” research priority category, be sure to identify and justify the need for your proposed research within the context of NPRB’s mission. Note that the priority discussed here **must match** the one selected during the online submission process. In case of discrepancies the priority selected during the online submission process will be used. In this section you may describe and identify up to three secondary research priorities also addressed by your proposed research to show its broader applicability, but note that your proposal will **only** be considered and compete for funding under the primary research priority.
- D. Project Objectives. This should be an annotated listing of your project objectives. Use a numbered, annotated list format, rather than weaving your objectives and hypotheses into paragraphs. Objectives are the fundamental and measureable goals of your proposed work; the project objectives are what NPRB uses to evaluate progress and completion of the project. Project objectives must be achievable and specific. Project objectives listed in the research plan should be the same as those entered into the online submission system.
- E. Project Design and Conceptual Approach. State what the project will accomplish and why it is important. This should be an expanded version of the objectives listed above in Section D. Demonstrate an understanding of the problem being addressed, the present state of knowledge in the field, the project’s relation to previous work and work in progress by the principal/co-investigator(s), and the measurable benefits which will result from the proposed research. If this project builds on a project previously funded by NPRB, describe your progress to date and the objective(s) of the next funding period. Describe the conceptual or statistical model underlying your experimental work. Present a list of clear hypotheses. Describe the experimental design (and associated power analysis) and the analytical approach, including assumptions required, sample size, other relevant information needed to determine the utility and technical feasibility of

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<sup>1</sup> In Microsoft Word, on the **File** menu, click **Page Setup**, and then click **Layout** tab. In **Preview**, apply to **Whole Document**. Click **Line Numbers**, and then select the **Add Line Numbering** check box. In the **From text** box, must be **Auto**. In **Numbering**, click **Continuous**.

accomplishing your research, and the expected outcome.

- F. Education and Outreach. Describe in detail the education and outreach component of this project. Principal/co-investigators are required to develop a plan and materials for communicating their research results to non-scientific audiences. **Proposals must include a minimum of \$2,000 for such activities in the proposal budget and give a detailed breakdown of how the money will be spent in the Budget Narrative.** Education and outreach activities should target as many of the audiences identified in the *North Pacific Research Board Science Plan (2005)* as possible, or at least one other audience besides marine researchers. NPRB reserves the option of pooling education and outreach funds from funded projects, where appropriate, to achieve the broadest impact in communicating about research, working closely with the principal investigators. Please note that NPRB **does not** consider graduate student research, or posters or oral presentations at scientific conferences as education and outreach activities. For more ideas, please refer to the [Outreach Tools section](#) of our website, where you'll find resources and a sampling of outreach activities from other scientists. Also consider mentoring an Alaska student, teacher or school district in their ocean science fair projects. You can find more ideas and links to marine educators at Alaska's Center for Ocean Sciences Education Excellence ([www.coseealaska.net](http://www.coseealaska.net)).
- G. Timeline and Milestones. Applicants must demonstrate they can achieve an outcome and product within the requested award period, **including data analysis and submission, metadata and data submission, and timely completion of final reports**. Also include attendance for at least one representative of the project at the Alaska Marine Science Symposium during each year of the project AND in the year following the substantial completion of the project (see below). In planning the duration and timeline of your project, do not assume that a no-cost extension will be granted. Provide a clear table, organized by semi-annual reporting period (January-June, July-December), detailing your timelines and associated measurable milestones (objectives achieved, accomplishments and deliverables) that will be used to track and evaluate your project performance through the entire award period. You may additionally describe the product or result that may be used to measure your success (e.g., report, published paper, management implementation) and how you plan to disseminate the research results.
- H. Project Management. Describe the organization and management of the project and the experience and qualifications of the principal and co-investigator(s). Individuals with FTE positions must indicate standing time availability as authorized by their supervisor. Demonstrate how PIs/Co-PIs will coordinate and collaborate with other projects, and leverage their proposals with support from other sources. Applicants must seek to avoid duplication of other research efforts. If there is more than one investigator involved, the applicant must clearly identify which one will be responsible for the overall work (the designated lead principal investigator) as well as the specific responsibilities of each PI/co-PI involved in the project.
- If applicable, **permits** that may be required as part of the project should be documented in this program management section. If available, permit applications or granted permit numbers should be provided. Permitting requirements are the responsibility of the applicants and the NPRB will not financially support the permit application process.
- I. Figures and Tables. Figures and Tables are part of the 12-page limit and should be embedded in the text of the research plan. Note that all text in Figures and Tables must be 11 point, Times New Roman.
- J. References. References are part of the 12-page limit. Avoid using long strings of references for the same statements. List all references used in the Research Plan in a format appropriate for a

major journal such as *Fisheries Oceanography*, *Transactions of the American Fisheries Society*, *ICES Journal of Marine Science*, etc.

**(Note: This is the end of the 12-page limit. Line numbers are not required and should not be included beyond this part of the proposal package.)**

K. Results of Previous NPRB Projects. This section is NOT part of the 12-page limit for your research plan but should be included within the same WORD document. Each Principle Investigator and Co-Investigator identified in your current proposal that has been a Principal Investigator or Co-Investigator on previously completed NPRB projects must provide the information about that project as indicated in the Research Plan template. You only need to fill this out for completed NPRB projects. Information provided must be limited to a maximum of one page per completed project. Related projects which are continuation of the same effort/objectives may be combined for this reporting. Information on ongoing NPRB funded projects that are related to the current proposal should be included in section E of the Research Plan. If the PI or Co-PI has not been involved as a PI or Co-PI on any completed NPRB project, please state this at the top of the page.

6. Budget Summary and Budget Narrative (use templates)

**Amounts specified in the research topics above are for the full duration of the project, and are not to be interpreted as “per year” funding.** Please check your final budget before submission to ensure that the addition of indirect costs as a percentage or some other revision to your budget does not cause your total budget to exceed the individual proposal funding cap for the research priority addressed. **If your proposal exceeds the cap by even \$1, it will be returned without further processing.**

Your budget must include costs of preparing all required reports, publication of results in appropriate scientific journals, providing metadata and data records to NPRB and a minimum of \$2,000 for education and outreach (see above). The plan for your education and outreach funds should be described in your research plan as indicated above.

In the Budget Narrative, describe the cost breakdown of the education and outreach funds, including them under the appropriate budget category, and additionally summarizing them at the end of the budget narrative. It is **not** sufficient to list \$2,000 without itemizing costs for the proposed activities.

Your budget must include travel costs for at least one representative of the project to attend the annual January Alaska Marine Science Symposium in Anchorage for each year during the period of the project, **plus the annual symposium in the January following the substantial completion of the project**, to present your results. Participation at the Symposium does not guarantee an oral presentation. Please ensure that your project end date incorporates attendance at this final symposium. Please note that travel to and presentations at the annual symposium do not fulfill the education and outreach requirement.

Budget Summary. The **Budget Summary** Excel file is a series of spreadsheets (one for each institution/organization requesting funds) that detail by year (where year 1 is the first 12 months starting from your proposed start date) the following mandatory budget categories: salaries, fringe benefits, travel, equipment, supplies, contracts/consultants, other expenditures, indirect costs (F&A), and other support/cost sharing with other programs. The template Budget Summary includes a summary page that automatically combines all information for up to four different organizations. You may revise this template to include more institutions if necessary. Please note that each organization requesting funds must designate one **Principal Investigator** to be responsible for that component of the project, and this person's name must be entered on the Budget Summary worksheet for that organization. **You must**

**ensure that your total budget requested in the Budget Summary matches the one entered online. If discrepancies are found between the two we will assume the lower amount is the correct one.**

Budget Narrative. Guided by the example in the template for the **Budget Narrative**, **each institution requesting funds must provide** a detailed description of costs listed under each budget category in the Budget Summary Excel file. You are encouraged to include supporting spreadsheets and other materials if applicable, and the narrative text need not duplicate information that is clearly presented in spreadsheet form. *The details of the Budget Narrative must match **exactly** to the numbers entered in the Budget Summary.*

In the Budget Narrative, clearly state whether or not your project will require any **international travel**, including any travel to or from any location outside of the United States. Inclusion of international travel will not impact the review process, but approval of international travel after the approval of the proposal will require a special application that may take up to 3 months to process. Please note that it will be the funded investigator's responsibility to initiate the foreign travel request process once the proposal has received funding. Also note that the Fly America Act regulations will apply to all travel included in the funded proposal.

Please be explicit whether your budget includes ship time, or, if it does not, how required ship time (if any) and costs will be covered by other guaranteed funds.

Please attach a cost quote from a vendor any individual item of equipment costing \$20,000 or more.

Other support. Applications must reflect the total budget necessary to accomplish the project, including contributions from federal or non-federal grants, base organizational budgets, and/or donations. Cost-sharing is not required, but encouraged. If an applicant chooses to cost-share and if that application is selected for funding, the applicant will be bound by the percentage of the cost share reflected in the grant award. Please be advised that although EIRF (Environmental Improvement and Restoration Fund) funds which support NPRB awards are not appropriated, the U.S. Department of Commerce has made a finding that EIRF funds should be considered to be federal funding since an authorization act created the "fund" in the U.S. Treasury.

Indirect Costs (sometimes referred to as overhead or F&A). The budget summary may include an amount for indirect costs if the applicant has an established indirect cost rate with the Federal government. The total dollar amount of the indirect costs proposed in an application under this program **must not exceed the indirect cost rate negotiated and approved by a cognizant Federal agency prior to the proposed effective date of the award, or 100 percent of the total proposed direct cost dollar amount in the application, whichever is less.** If applicable, a copy of the current, approved, negotiated indirect cost agreement with the Federal government must be included. It will be retained in the office and not distributed to reviewers.

7. Resumes/CV (limited to 2 pages per principal/co-investigator - *Note: if uploading Resumes as PDF documents please insure that these are unprotected documents so that they may be merged with other documents for peer review*)

The resumes of all principal/co-investigators and other senior personnel involved in the proposal must be provided (collaborators do not need to submit their resumes). Upload each individual resume separately, not as a single document with all resumes combined. Each resume is limited to two consecutively numbered pages and must include the following information:

- a. A list of professional and academic credentials, mailing address, and other contact information including work phone number and email address.
- b. A description of current activities relevant to the proposed project.
- c. A list of up to five of your most recent/relevant publications most closely related to the proposed project and up to five other significant publications as appropriate. Please highlight publications that are based on research supported by NPRB funds.
- d. A list of all persons (including organizational affiliations) in alphabetical order with whom you have collaborated on a project or publication within the last four years. Also include all thesis advisors and graduate students supervised. If none, this should be indicated.

8. Current and Pending Support Form (use the [provided template](#))

Upload Excel documents using the online submission system. For each principal/co-investigator and other senior personnel involved in the proposal, use the provided template to disclose any current and pending financial resources that are intended to support research related or similar to that included in the proposal, or that would consume the time of the proposer(s). Upload each individual's current and pending form separately, not as a single document with all current and pending forms combined. The proposer must also disclose if they have submitted the proposal to other funding sources.

9. Letters of Support (*Note: if uploading Letters of Support as PDF documents please insure that these are unprotected documents so that they may be merged with other documents for peer review*)

Provide letters of support from: relevant management agencies, industry partners for cooperative research activities, those providing facilities or infrastructure support, communities (including Alaska Native communities and tribal governing bodies if applicable), or others potentially impacted by project activities or benefiting from the projects results. Letters should be specific about the role of collaborators and indicate how the results will be of use or benefit. Upload these letters, if any, in the appropriate place during the online proposal submission.

## PROPOSAL REVIEW PROCESS

### *Initial Screening of Proposals*

Upon receipt, the NPRB staff will screen proposals for conformance with requirements set forth in this notice. This review will consider whether the proposal meets the format and structure requirements in this RFP, and assess whether it falls within the research priority selected from this RFP. Proposal identified by staff as having questionable responsiveness will be reviewed by an ad hoc committee of Science Panel members who will determine which of these proposals, if any, to carry forward. If the Ad hoc committee cannot agree on whether a proposal is responsive to the RFP priority selected, it will be fully reviewed. **Proposals that are found to not comply with the requirements of the RFP or that are determined to be unresponsive to the priority selected from the RFP will be returned without further processing. Notification of non-compliance will be sent to the proposal applicant.**

### *Independent Technical Evaluations*

Proposals that pass the initial screening will undergo independent, anonymous, technical peer review, conducted by regional, national and international experts. Staff will assign peer reviewers to proposals following the [NPRB Technical Peer Review Conflict of Interest Policy](#). The goal of this step is to receive three independent technical reviews for each proposal. Reviewers will be asked to provide comments and qualitative assessments of the technical aspects for each proposal in each of the categories indicated

below (percentages indicate the weight that the subsequent review by the NPRB Science Panel will give to the criteria), and an overall summation. Reviewers will be asked to score each section, as well as the overall summation into one of five categories: poor, fair, good, very good and excellent.

The technical review criteria are as follows:

- a. Soundness of Project Design/Conceptual Approach (60%): Is there a clear statement of project objectives, and explanation of what the project will accomplish and why it is important? Have the applicants demonstrated a clear understanding of the problem being addressed, the present state of knowledge in the field, the project's relation to other work, including their own, and the measurable benefits which will result from the proposed work? Is there sufficient information to evaluate the project technically? What are the strengths and/or weaknesses of the technical design relative to securing productive results? Is there a clear hypothesis to be tested and well-defined expected outcomes? Is there a clear description of a detailed experimental design with associated power analysis as appropriate, including assumptions required, sample size, and other relevant information needed to determine the utility and technical feasibility of accomplishing the research? Is there a list of data sources or requirements? Reviewers will give the following approximate weights to components within this criterion: 10% for background and need; 10% for statement of problem or question; 20% for study design; and 20% for analysis.
- b. Education and Outreach (5%): Is the education and outreach plan clearly defined? Are the planned education and outreach activities/materials aimed at audiences other than the scientific community? Are the costs itemized in the budget narrative and realistic for the proposed activities?
- c. Timeline and Milestones (10%): Is there a clear table detailing appropriate timelines and associated measurable milestones, objectives, accomplishments and deliverables that can be used to track and evaluate project performance through the entire award period? Is there a description of the product or result that may be used to measure project success (e.g., report, published paper, management implementation) and how the research results will be disseminated?
- d. Project Management (15%): Evaluate the organization and management of the project, and the project's principal/co-investigator(s) and other personnel in terms of related experience, qualifications and prior performance. Applicants must demonstrate how they will coordinate and collaborate with other projects and leverage their proposal with support from other sources. Have investigators demonstrated adequate resources and partnerships to complete the proposed work? Applicants must seek to avoid duplication of other research efforts. If there is more than one investigator involved, has the applicant clearly identified the distribution of responsibility for the overall workload (i.e., the responsibilities of each PI or Co-PI involved in the project).
- e. Project Costs (10%): The justification and allocation of the budget in terms of the work to be performed will be evaluated. Is the project cost unreasonably high or low?

#### *Science Panel Review*

Following the [NPRB Science Panel Conflict of Interest](#) procedures, staff will assign two Science Panel members with the relevant expertise to each proposal (a Primary and a Secondary). Science Panel members generally conduct their own independent review following the same technical review guidelines above. These are completed and made available to all panel members in advance of the Science Panel meeting. Science Panel members will adhere to their [COI procedures](#) throughout the meeting. The Primary and Secondary summarize the proposal for the entire Panel, go over the evaluations by the outside technical reviewers, and, based upon that input and their own evaluation, give their overall

assessment to the group. The entire Panel then discusses the proposal and its evaluations further and determines, by consensus, a tier ranking as follows:

**Tier 1:**

Proposals that are considered highly meritorious based on the combined peer and science panel reviews (based on the criteria outlined above) will be designated Tier 1 proposals. Highly meritorious will be defined as proposals that generally score an average of Very Good to Excellent and do not require any scientific alterations to the proposed work to go forward (although suggestions for improvements may be made). The Science Panel may decide to go back over the Tier 1 list to determine if there are any scientific nuances amongst them that may be relevant to the Board when making their final funding decisions. Such criteria will be only science-based (i.e., not as it relates to the RFP category caps) and may include relative comparisons between highly ranked proposals such as: more technically robust, more specifically on target with what the RFP was looking for, or more time sensitive in terms of increasing scientific knowledge base. Accordingly, proposals placed in this category may be separated into **Tier 1a** or **Tier 1b**.

Proposals that are highly meritorious as defined above but have minor non-science related issues (e.g. budget or permitting) that once fixed would place the proposal in the Tier 1a or Tier 1b category, will be categorized as **Tier 1a conditional** or **Tier 1b conditional** proposals respectively. In such instances, the Science Panel will clearly identify the conditions they believe need to be met before the proposal goes forward.

**Tier 2:**

A **Tier 2** ranking will be given to proposals that are good scientifically but not exceptional. Additionally, proposal that have minor science issues of a simple or straightforward nature, for example simple changes to sample size or study design, will be categorized as **Tier 2 conditional**. A Tier 2 proposal that has non-science issues will also be placed in the **Tier 2 conditional** category. For conditionally ranked proposals, the Science Panel will clearly identify the conditions they believe need to be met before the proposal goes forward.

**Tier 3:**

Proposals that are found to have fatal flaws or those that are simply not competitive scientifically even with minor changes and should not be funded, are designated **Tier 3** proposals. These will generally be proposals with some Poor and Fair ratings or those that are mixed, depending on the issues. Tier 3 proposals are those that require substantial revision to be competitive and thus they should not be funded.

The NPRB receives over 100 proposals in response to its annual RFPs. To allow the Science Panel sufficient time to discuss those they feel are most competitive, a triage system is often required. As a result, the Science Panel may opt to forgo detailed discussion of proposals, based on reviews and Science Panel assessment, which will not be competitive. Science Panel members retain the option of bringing any of these up for discussion at any time during the meeting before final recommendations are crafted for the Board.

*Reconciling differences between Independent Technical and Science Panel reviews:*

Ideally, each proposal will have been read by five technical reviewers (3 peer and 2 Science Panel reviews). With that number of reviews it is common that evaluations vary, sometimes greatly. Where there is disagreement between the Science Panel and the outside reviewers (in either direction), proposals and all reviews are discussed at length. The final scientific authority lies with the Science Panel who will document these discrepancies and their discussion in support of their final recommendation to the Board.

It should be noted that the Board will also have access to all the technical reviews as well as the Science Panel Summary ahead of their meeting and thus will have all the information needed to also discuss any discrepancies in the rankings if they wish to do so.

#### *Science Panel recommendations*

Staff, Primary and Secondary panel members will take notes on the discussion of their assigned proposals. Following the meeting, the Primary, in consultation with the Secondary and any other panel member identified during the discussions, is responsible for drafting a summary paragraph for the specific proposals for the Board. This paragraph will follow a pre-determined template and be submitted to the NPRB staff within a few days of the meeting. Staff will compile all paragraphs and submit Tier 1 and Tier 2 summary paragraphs to the Advisory Panel (see below) and all summary paragraphs to the Board as soon as possible.

#### *Advisory Panel input*

The Advisory Panel Review of proposals is intended to highlight those proposals that have special stakeholder, community and other societal relevance and public interest value. The Advisory Panel will be provided with full proposal materials and the Science Panel summary paragraphs for all proposals that the Science Panel has determined to be responsive to the RFP and to have scientific merit. The Advisory Panel will review Tier 1 and Tier 2 proposals and provide a short summary of the attributes of a subset of these proposals that they wish to highlight as having significant stakeholder, community or other societal relevance. These summaries will be brought to the attention of the Board for consideration. It is not the intent of the Advisory Panel to comment on all Tier 1 and Tier 2 proposals, but rather to highlight those they identify as having special value to stakeholders. The Advisory Panel contribution is also not intended to rank proposals, to provide comment on the scientific merit of proposals, nor the alignment of such proposals with category budgets. Standard [Advisory Panel Conflict of Interest procedures](#) will apply with respect to the AP review of proposals.

#### *Board Review*

The chair and/or vice-chair of the Science Panel will present the Science Panel summary paragraphs to the North Pacific Research Board (NPRB) and be present at the meeting to answer technical questions. The NPRB will consider technical evaluations, Science Panel recommendations and Advisory Panel input. The Board will use scientific merit as defined by the Science Panel rankings as their primary criterion, but there are likely to be many more highly ranked proposals than funds available. To allow for a balanced portfolio and the flexibility to respond to current issues, other factors may be considered at the time of final funding decisions. Such factors include, but are not limited to:

1. Pressing fisheries management needs;
2. Ecosystem information needs;
3. Other projects currently funded on a similar topic;
4. Overlap with other ongoing programs;
5. Competitiveness relative to other proposals of equal merit within a topical area;
6. Category target funding amounts published in the RFP; and
7. Previous performance of applicants (evaluation of previous NPRB funded projects will involve project management, adherence to project budgets, timelines, and reporting requirements, as well as achievement of previously funded project objectives).

While these factors will be considered, scientific merit remains the primary consideration for proposal funding. Thus, the Board will accept Science Panel recommendations for Tier 3 proposals and will not

consider them for funding. Further, if the Board decides to fund a Tier 1 conditional or Tier 2 conditional proposal, the Board will carry forward all the Science Panel conditions. The Board reserves the right to put any additional conditions on any proposal recommended for funding. Proposals that receive conditional funding by the Board will be asked to resubmit a revised proposal which specifically addresses all concerns raised and specified during the review and decision-making process. Unless otherwise noted by the Board, staff will review the revised statements of work vis-à-vis the conditional requests and determine whether to go ahead with funding or not. Where staff does not feel comfortable making this final determination they may consult a subset of the Science Panel or the Executive Committee of the Board.

The Board will document their decision making process, in particular where it deviates from the Science Panel recommendations. This information, as well as all technical reviews and Science Panel Summary paragraphs will be provided as written feedback to the applicants.

Public comment will not be taken during the proposal review and decision making process. The exact award period will depend upon the requested duration of funding, the decision of the NPRB on funding amount, the results of post-selection negotiations between the applicant and NPRB staff, and review by NPRB and Department of Commerce officials.

#### *Consultation with Interested Parties*

Throughout the proposal review process, the NPRB and its staff may consult with NOAA and other Federal and State agencies, the North Pacific Fishery Management Council, and other entities, as appropriate, who may be affected by or have knowledge of a specific proposal or its subject matter.

#### *Secretary of Commerce Review*

By law, all recommendations of the Board are subject to final approval by the Secretary of Commerce, who must ensure that the project recommendations are consistent with the terms of the NPRB grant award, federal law and the enabling legislation. Projects recommended for funding by the Board may be denied approval upon the review of the Secretary of Commerce. As noted in general condition 4 (below) the applicants are responsible for obtaining all federal, state and local permits. Approval of the project by the Secretary of Commerce does not preclude the requirement to obtain such permits.

#### **D. Tentative Schedule**

The tentative schedule is as follows (except for the proposal deadline, the schedule is subject to change):

<u>Schedule Item</u>	<u>Tentative Timeline</u>
Release of RFP	September 30, 2011
Online Submission Opens	October 3, 2011
Deadline for Proposals	<b>December 12, 2011 at 4 p.m. Alaska time</b>
Deadline for Signature Pages	<b>December 19, 2011 at 4 p.m. Alaska time</b>
Technical Evaluations	January – March 2012
Science Panel Review	March – April 2012
NPRB Selection	early May 2012
Initial Notification to PIs	late May 2012
Submission to Secretary of Commerce	late May 2012
Grant Agreements to PIs	June - July 2012
Commence Research	July 1, 2012 (earliest)

The exact amounts of funds awarded to a project will be determined in pre-award negotiations between the applicant and NPRB. Projects should not be initiated in expectation of Federal funding until a fully executed Subaward Agreement or Memorandum of Understanding is received and NPRB has issued a Release of Funds email for the funded project. **Applicants may not request a project start date before July 1, 2012.** Please note that if your project includes funds for a NOAA organization, a formal MOU must be in place and fully executed between NPRB and NOAA before the NOAA agency will allow work to begin on the project. This will generally result in a later start date of approximately **September 1, 2012.**

### GENERAL CONDITIONS

This RFP is only a solicitation of offers and should not be construed as an expectation of award, or as any reasonable basis for detrimental reliance. NPRB is not obligated to award any specific project or any available funds. There is no guarantee sufficient funds will be available to make awards for all acceptable projects, and NPRB may choose to reject all proposals. No oral statement by any person can supersede or modify the terms of this RFP.

1. All Federal, State, private, and foreign organizations are eligible. Recipient organizations must have a DUNS number (<http://fedgov.dnb.com/webform>) and be registered in the Central Contractor Registration (CCR) system ([www.ccr.gov](http://www.ccr.gov)) before any award can be made. Recipient organizations required by OMB Circular A-133 to have a single or program-specific audit will be required to submit a copy of their most recent single or program-specific audit for review before any award is made.
2. Responding proposals are firm offers and shall remain open for the NPRB to accept any time before July 1, 2012 in accordance with a standard NPRB agreement for the performance of the work proposed. A proposal is accepted only when NPRB sends the applicant written approval and has a fully executed agreement. A proposal accepted for funding does not obligate NPRB to provide additional future funding.
3. NPRB's [Subaward Compliance Policy](#), finalized in March 2009, is based on Federal law that governs award agreements and on comments received on an interim compliance policy from NOAA's Federal Law Assistance Division, the National Science Foundation, and grants managers from five major research institutions. This policy will be part of all awards made as a result of this RFP.
4. The applicant is responsible for obtaining all Federal, State, and local governmental permits and approvals for projects or activities to be funded under this announcement. This includes, as applicable, section 404 or section 10 permits issued by the Army Corps of Engineers; experimental fishing or other permits under federal fishery management plans; scientific permits under the Endangered Species Act and/or the Marine Mammal Protection Act; and assistance to the Federal government in developing analysis to meet the requirements of the National Environmental Policy Act. All experiments must be conducted in compliance with law, and only pursuant to mandatory permitting duly granted by the appropriate federal and state agencies. Requirements for special permits, for example, those required for taking marine mammals, should be clearly described and indicate whether the permit is in possession or not. Failure to comply with the above may result in the cessation or termination of the project and may lead to other action that could preclude the issuance of future awards to the applicant. As a condition of funding, all award recipients must make available upon request access to any books, documents, papers and records which are directly

pertinent to a specific program for the purpose of making audits, examinations, excerpts and transcriptions. ( Circ. A-110. 47(d) )

5. Projects that require at-sea research using research vessels must comply with all research vessel safety standards in accordance with the guidelines for the operation of oceanographic research vessels owned, operated or chartered by members of the University-National Oceanographic Laboratory System (UNOLS), to ensure that research at sea is conducted to the highest practicable standards of safety and prudence. Those standards also apply to chartered non-institution vessels. (See: [http://www.gso.uri.edu/unols/saf\\_stand/contents.htm](http://www.gso.uri.edu/unols/saf_stand/contents.htm).)
6. Funded participants are wholly responsible for the conduct of research, submission of required reports, and preparation of the results for publication. Participants will be required to submit semiannual progress reports and a final report to be posted on the NPRB website and in other databases. Final reports may be submitted for peer review at the discretion of the NPRB. Failure to submit timely reports or to respond to peer review comments on final reports, or to meet project objectives due to problems in program management, may result in withheld payments. Every effort should be made to submit research results for publication in an appropriate scientific journal within one year of the completion of study. The NPRB Executive Director may in his/her sole discretion grant written exceptions if requested timely. All manuscripts shall acknowledge that funds were provided by the NPRB.
7. Successful applicants will be required to provide metadata and data records to NPRB at the completion of their project in accordance with the [NPRB Metadata and Data policy](#). Submission of metadata and data records constitutes part of the final project reporting requirements. Failure to submit such records may result in withheld payments of final project costs. Among other requirements, this policy specifies the storage media and format(s), month and location for reporting, and other relevant information that may be required by the circumstances of the project.
8. Full execution for newly approved projects may be delayed if investigators involved in previous completed NPRB projects have not fulfilled all their reporting requirements, including metadata and data delivery.
9. Researchers applying to do research involving human subjects are expected to demonstrate compliance with regional protocols for researcher/community interactions or the specific human subjects screening done by most academic institutions and agencies. The purpose is to ensure that privacy is protected, data are collected in a suitable manner, data are maintained in a secure environment, and results of any study are made available to participants if they indicate their interest.
10. In accordance with federal statutes and regulations, no person on grounds of race, color, age, sex, national origin, religion, marital status, pregnancy, parenthood, or disability shall be excluded from participation in, denied the benefits of, or be subjected to discrimination under this program.