Northern Bering Sea Integrated Ecosystem Research Program
Request for Pre-Proposals

This notice constitutes a call for pre-proposals for an Integrated Ecosystem Research Program focused in the Northern Bering Sea. The North Pacific Research Board (NPRB) has conducted interdisciplinary marine ecosystem research programs in the Bering Sea (https://nprb.org/bering-sea-project/), the Gulf of Alaska (https://nprb.org/gulf-of-alaska-project/) and Arctic (https://nprb.org/arctic-program/). NPRB aims to implement a similar program that will continue integrated research in the Bering and Chukchi Seas, centered in the Northern Bering Sea. Items of interest include how shifts in environmental conditions and processes may influence species of commercial, ecological and subsistence importance, and implications for state and federal fisheries management and communities that depend on these resources.

NPRB is communicating with other funding agencies/organizations and may seek to fund research in partnership with other entities. NPRB may share pre-proposals with potential funding partners.

Projects funded under the NPRB Core Program may be asked to collaborate with the IERP if the scope of the research fits the scope of the funded program. Funds for participation in annual Principal Investigator meetings will be provided by NPRB.

**DEADLINE for submission May 15, 2024 at 4:00 PM Alaska time**

Electronic proposal submission system https://grants.nprb.org/ierp/2024/

Questions about this solicitation should be directed to:

Danielle Dickson, Senior Program Manager/Chief Officer for Collaboration and Synthesis, Danielle.Dickson@nprb.org or

Dr. Matthew Baker, Science Director, Matthew.Baker@nprb.org.
PROGRAM OVERVIEW

The success of the program will rely on careful coordination led by NPRB and effective collaboration across disciplines. All participants will be expected to collaborate with colleagues outside of their specific discipline and institution and innovate means of integrating diverse data streams to achieve ecosystem-level understanding.

Pre-proposals are solicited in two research categories: (1) Oceanography and lower trophic level productivity and (2) Species distributions and interactions. More detail about these research categories is provided in Table 1. Under each category, we encourage both multidisciplinary proposals that address multiple elements of the marine environment as well as discrete projects that focus on a particular element of the ecosystem and intend to integrate into larger initiatives. Each pre-proposal is expected to demonstrate how that proposal might integrate in a multidisciplinary program that considers physical drivers and trophic linkages.

A selection of pre-proposals in each category will be invited to submit full proposals that will compete for funding. Those invited to submit full proposals will be encouraged to illustrate linkages to the proposals competing in the other category to demonstrate how projects funded in each category would integrate to form a cohesive program. Toward that end, the titles of successful pre-proposals as well as the identities and e-mail addresses of the lead Principal Investigators may be made public. Greater emphasis will be placed on plans for project integration in the evaluation of full proposals.

Following review of pre-proposals, invitations to submit full proposals will be issued in October 2024. The deadline for full proposals will be in March 2025. Final funding decisions will be made in September 2025. Plans for field operations should allow adequate time for communicating with coastal communities about the plans for operations and adjusting survey dates as necessary to avoid potential conflicts with subsistence activities. NPRB requires that funded researchers participate in in-person logistics planning meetings hosted by NPRB that will occur several months prior to any IERP field operations. NPRB also requires that funded researchers participate in an initial in-person kickoff meeting, annual in-person Principal Investigator meetings, and monthly virtual Principal Investigator meetings. At least two years of integrated analysis and product development will follow the completion of field operations. Proposals should plan for research projects to begin in October-December 2025 and conclude in September 2031.

Sharing of information across disciplines is important to the success of these multidisciplinary research programs. All investigators funded under this solicitation will be required to share data with all other funded researchers in near-real time (i.e., as soon as possible following initial quality control) and a private data portal will be established to facilitate data exchange. All data collected by the program will be made public at the conclusion of the IERP. Researchers may publish their respective data publicly earlier at their own discretion.

NPRB is committed to regularly communicating the research plans, intermediate progress, final results, and potential management applications of the program to the broader scientific community, stakeholders, and the public. NPRB will dedicate resources to facilitating this communication. Program participants will be called upon to engage in outreach activities.
RESEARCH DIRECTION AND FUNDING CATEGORIES

The program aims to address the following research questions:

| How do environmental conditions and processes in the Northern Bering Sea influence species of commercial, ecological and subsistence importance, and what are the implications for state and federal fisheries management and communities that depend on these resources? |

Research will focus on the northern Bering Sea and will include consideration of upstream and downstream ecosystems in the southeastern Bering Sea, western Bering Sea, and Chukchi Sea, respectively.

Research questions should be posed in the context of developing a mechanistic understanding of how physical processes (e.g., sea ice dynamics, advection patterns, water properties, seasonal patterns, winter conditions and seasonal reset) influence ecosystem structure and function and the persistence, abundance, distribution, phenology, life history, and condition of species of commercial, ecological and subsistence importance. Applicants are asked to explain how their research will address phenomena and processes in a marine ecosystem assumed to be in a state of transition and how their research will not only advance understanding of existing processes but also inform anticipated future change.

The core hypotheses to be tested by the overall research program will be determined in a kickoff meeting involving all researchers after funding decisions have been announced. Applicants should articulate testable hypotheses that could be addressed by the work proposed.

Approximately $6.5 million dollars will be made available for this research program by the NPRB. Funding partners may provide additional resources. Research will initiate in fall 2025 and Principal and Co-Investigators must remain engaged through September 2031.

Individual funding categories are described below. Proposers must identify one category under which to compete. NPRB intends to fund 1-5 proposals under each category. Target funding for each category is meant to serve as guidance. Based on proposals received or other considerations, the Board may adjust the funding allocated to each category. Proposal caps indicate the maximum amount any individual proposal may request.

NPRB anticipates allowing the budget of the full proposal to increase by up to 20% from the pre-proposal budget or $250 K, whichever is less. More detailed guidance may be communicated when the full proposal is invited.
Table 1. Research Categories and Target Funding

<table>
<thead>
<tr>
<th>Research Categories</th>
<th>Target Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Oceanography and lower trophic level productivity:</td>
<td>$3,250,000</td>
</tr>
<tr>
<td>Influence of sea ice dynamics, ocean properties, and advection on the phenology,</td>
<td></td>
</tr>
<tr>
<td>magnitude, and location of primary and secondary production that influence species</td>
<td></td>
</tr>
<tr>
<td>of commercial, ecological and subsistence importance.</td>
<td></td>
</tr>
<tr>
<td>Pre-proposal cap: $2,500,000</td>
<td></td>
</tr>
<tr>
<td>2. Species distribution and interactions:</td>
<td>$3,250,000</td>
</tr>
<tr>
<td>Physical, biological, and ecological drivers and important thresholds relevant to</td>
<td></td>
</tr>
<tr>
<td>the distribution, phenology, life history, and condition of species of commercial,</td>
<td></td>
</tr>
<tr>
<td>ecological and subsistence importance, and implications for state and federal</td>
<td></td>
</tr>
<tr>
<td>fisheries management and communities that depend on these resources.</td>
<td></td>
</tr>
<tr>
<td>Pre-proposal cap: $2,500,000</td>
<td></td>
</tr>
</tbody>
</table>

Proposals submitted in either category may seek to apply a variety of methods including, but not limited to: field data collection and analysis, laboratory analyses, modeling, use of Indigenous knowledge, and/or social science. Proposers are encouraged to co-develop proposals and propose research with the involvement of Indigenous partners, local communities, and/or relevant industries.

Proposals under either research category could incorporate one or more of the four approaches defined on pages 44-51 in the NPRB Science Plan and described below for additional recognition. A description of how each selected approach improves the methods, study design, data collected, products of the research, and utility of the deliverables will be required during proposal submission. Please read in detail the requirements below for each approach to apply.

Approaches include:
- Community Involvement
- Cooperative Research with Industry
- Technology Development
- Data Rescue

Community Involvement: The project must be designed, co-designed or initiated by the relevant local community(s). Evaluation of this approach will include: the degree to which the community or communities are directly engaged in the project (from conception and design to data collection, analysis and dissemination), applicability to pressing community needs, and the extent to which the project will improve shared understanding between scientists and community members. Support letters from the relevant community institutions will not be accepted in the pre-proposal submission. However, please note that support letters from the relevant community institution will be required when full proposals are submitted.

Cooperative Research with Industry: Evaluation of this approach will include: the degree to which the industry partner is directly engaged in the project (from conception and design to data collection, analysis and dissemination), applicability to pressing management needs of the industry, the extent to which the project will improve shared understanding between science and industry, the use of industry
infrastructure for marine observations and industry-collected data, and the extent to which the project may promote future collaboration. If invited to submit a full proposal, applicants must include a cooperative plan and support letters describing how the research and participants will benefit from the perspectives and skill sets of each partner. These will not be accepted at the pre-proposal stage, but will be required when full proposals are submitted.

Technology Development: Proposals must develop new technology or validate new applications for existing technology. Proposals that develop new technology should indicate where it may be applied. Proposals incorporating existing technology must justify the novelty of its application.

Data Rescue: Proposals must include: a description of the current nature and state of the data (location, format, content, completeness, risk of loss), assurances that the data are not already a component of an accessible portal, an explanation of the utility of the dataset to relevant science and management issues, and a robust metadata and data management plan. Examples of eligible projects include: the preservation of specimens in permanent archives, transfer of outdated electronic records to current archiving methods, and transcription of hard copy records to accessible electronic formats. New data collection or analysis of existing samples does not qualify as data rescue.

Awards to support full proposal development with Indigenous Co-Investigators
Those who are invited to submit a full proposal will be offered up to $10,000 per proposal to support the further development of the proposal with Indigenous Co-Investigators. Indigenous-led pre-proposals may use the funds to seek western science Co-Investigators. Pre-proposals should describe how the investigators envision applying these funds, which must be spent by the full proposal deadline in March 2025. NPRB intends these funds to support the travel and/or time of individuals to do one or more of the following:

- explore how the proposed project might address different/additional questions relevant to the interests of Indigenous individuals and/or Alaska Native Organizations;
- design the project to use western science alongside traditional, local, and/or Indigenous knowledge; and/or
- articulate how the project will involve Indigenous partners directly in the research.
PRE-PROPOSAL SUBMISSION INSTRUCTIONS

Pre-proposals must be submitted via the NPRB electronic proposal submission system prior to 4:00 PM Alaska time on May 15, 2024.

Electronic proposal submission system https://grants.nprb.org/ierp/2024/

All proposals are uploaded through the online submission system, which is optimized for Google Chrome. Other browsers such as Internet Explorer, Edge, and Safari may not provide full functionality. The site is not designed to function on mobile devices such as iPads, Android tablets, smartphones, etc. It is recommended that proposals be prepared in a text editor and entered into the electronic submission system using copy>paste.

Pre-proposals may be accessed and edited up until the time of submission. Templates are required for the Timeline, Budget, Logistics Budget, and Signatures sections. Applicants may download a PDF version of their pre-proposal using the “Download proposal as PDF” option that appears under ‘Menu’ in the upper right corner of any page in the electronic proposal submission system.

The pre-proposal package includes the following sections:

1. Title & Period
2. Abstract (maximum 300 words)
3. Contacts
4. Descriptors
5. Background (maximum 1000 words)
6. Objectives (maximum 60 words each)
7. Project Design (maximum 4000 words)
8. Figures, Tables & Equations
9. Management or Ecosystem Implication (maximum 300 words)
10. Engagement Strategy (maximum 500 words)
11. Full Proposal Awards — Awards to facilitate full proposal development with Indigenous Co-Investigators (maximum 1000 words)
12. Links to Other Projects (maximum 300 words)
13. Project Management
14. Timeline & Milestones (template)
15. Budget (templates)
16. Supplemental Documents
17. Review Criteria
18. References
19. Upload Summary
20. Signatures (template)
21. Review & Submit

Proposals with multiple institutions should be uploaded by the lead institution. Contacts, budget, and signature pages are required for each institution requesting funds.
Detailed instructions by section:

1. **Title & Period.** Include a long title of up to 120 characters, and a short caption of up to 60 characters. Projects should plan to start between October and December 2025 and will begin as soon as award documents are signed. Projects should plan to end on September 30, 2031. Projects may not extend beyond September 30, 2031 and it is recommended that projects plan to extend through September 2031 to keep all collaborating projects on the same timeline. Applicants should indicate if they wish to be considered for joint funding. This will authorize NPRB to share the pre-proposal with other organizations that wish to consider contributing support for projects that align with their missions.

2. **Abstract** (300 words). Explain the goal and value of the proposed project and how your research is relevant to the mission of NPRB using language understandable by the general public.

3. **Contacts.** Provide contact information for those affiliated with the pre-proposal as detailed below.

   - **Investigators.**
     - **Authorized Organizational Representative.** This person provides legally binding authorization for the organization. Full contact information is required.
     - **Lead Principal Investigator (Lead PI).** The Lead PI will have oversight of scientific content, project management and completion, and also serve as the PI for their home organization. The Lead PI is responsible for semi-annual and final reporting to NPRB and coordinates with PIs from any other institutions funded under the project to produce reports. There is only one Lead PI for a project regardless of the number of cooperating institutions. In the context of an Integrated Ecosystem Research Program, a Science Steering Committee (SSC) is established, and often the Lead PI of a project is responsible for serving on the SSC. The SSC works closely with NPRB staff to facilitate effective collaboration. Contact information and 2-page CV are required.
     - **Principal Investigator (PI).** A PI must be named for each institution requesting funds and this individual is responsible for ensuring that the research, reporting, and invoicing for the institution proceed on schedule. There must be only one PI for each organization requesting funds. Full contact information and CVs (maximum 2 pages) are required.
     - **Co-Investigator** (if applicable). Co-Investigators receive funds as part of their involvement with the project. Full contact information is required.
     - **Unfunded Collaborator** (if applicable). Any participant that does not receive funds falls under this category. Full contact information is required.
     - **Contractor** (if applicable). Person(s) committed to work on a specific task but not responsible for the completion of the project as a whole. Full contact information is required.

   - **Grants Manager.** Person responsible for the financial administration of the grant (e.g., Office of Sponsored Programs). Contact information is required.
   - **Invoicing Contact.** Person responsible for invoicing. Contact information is required, including the remittance address.

4. **Descriptors.** Enter keywords that will be used by NPRB to populate a database that will allow a search to identify projects based on relevant keywords.

5. **Background** (max. 1000 words). Provide background information that will be used to evaluate the applicant’s understanding of the problem being addressed, the present state of knowledge in the field, and the measurable benefits that will result from the proposed research. Objectives,
hypotheses, and experimental design should be included in later sections. Large amounts of text should be prepared in Word or a similar application to be cut and pasted into this section.

6. **Objectives** (max. 60 words each). Articulate objectives that are concise and provide a discrete intended outcome. Multiple objectives may be included using the “Add Objective” button at the bottom of the page. The order of the objectives may be changed using the drag and drop feature.

7. **Project Design** (max. 4000 words). Experimental design and methods should be presented with clear hypotheses. Detail any field logistics and animal handling. Include the statistical and analytical approach, including assumptions, sample size required, and model validation. A power analysis is recommended where applicable. Figures, Tables, and Equations should be uploaded in the following section.

8. **Figures** (max. 4), **Tables** (max. 2) & **Equations** (unlimited). All files in this section are optional and should be uploaded in PDF format. Figure legends and table headers should be included in each file as part of the image. Multiple equations may be included in a single PDF upload. Figures, tables and equations included in the proposal must be directly referenced in the narrative. The applicant is responsible for ensuring that the resolution and size of each file conforms to one standard page. Posters are not acceptable as figures.

9. **Management or Ecosystem Implication** (max. 300 words). Describe how the research addresses pressing fishery management or ecosystem information needs (i.e., the two aspects of the NPRB mission).

10. **Engagement Strategy** (max. 500 words). Applicants should share their ideas about how the project could contribute to creatively engage audiences and incorporate a variety of knowledge sources. Applicants should describe how the anticipated results of the project will be useful to stakeholders and/or Alaska Native tribes or tribal organizations. Emphasis should be placed on the incorporation of clearly-described, project-appropriate methods of communication and participation and/or engagement. NPRB takes an active role in developing outreach products and coordinated engagement strategies for Integrated Ecosystem Research Programs to ensure that communication about any aspect of an IERP acknowledges the breadth and scope of the entire program and all funding partners. Interaction and engagement with communities, stakeholders and/or target audiences is expected, regardless of the type of study, and IERP participants will cooperate with NPRB to contribute to such activities. Proposals are not required to include outreach activities in their budgets. Applicants are encouraged to visit the NPRB [Communications and Outreach Resources](#) webpage for ideas on how to creatively engage audiences and incorporate a variety of knowledge sources.

11. **Full Proposal Awards — Awards to facilitate full proposal development with Indigenous Co-Investigators** (max. 1000 words). Those who are invited to submit a full proposal will be offered up to $10,000 per proposal to support the further development of the proposal with Indigenous Co-Investigators. Indigenous-led pre-proposals may use the funds to seek western science Co-Investigators. The electronic pre-proposal submission system will ask applicants to confirm their interest in accepting such an award. Space will be provided for applicants to indicate how they envision applying the funds, which must be spent by the full proposal deadline in March 2025.
NPRB intends the funds to support the travel and/or time of individuals to do one or more of the following:

- explore how the proposed project might address different/additional questions relevant to the interests of Indigenous individuals and/or Alaska Native Organizations;
- design the project to use western science alongside traditional, local, and/or Indigenous knowledge; and/or
- articulate how the project will involve Indigenous partners directly in the research.

12. **Links to Other Projects** (max. 300 words). Describe any links to other projects, including work by the current project team as well as other groups on the same topic, as relevant. Specifically identify if a project is linked to a member of the currently proposed team. Projects that are currently underway but not yet completed may also be referenced. State if there are no linkages. A project search for NPRB-funded research may be conducted at [https://nprb.org/project-search/](https://nprb.org/project-search/).

13. **Project Management**. Describe how the expertise of the PI and other team members relates to the successful completion of the project. Explain the coordination and collaboration plan for multiple institutions, and to other ongoing or submitted projects. Define the anticipated dissemination of results. All permits are the responsibility of the Applicant.

14. **Timeline & Milestones** (template). An Excel template will autofill the project dates and objectives. Enter the responsible person(s) for each task. Finalize the Title and Period and Objectives before downloading the template. Any changes to these components after the timeline upload will not auto-update until the existing file is deleted.

15. **Budget**. All budgets should be prepared in US currency to the nearest dollar. Cost sharing is not required but leveraging of other support is encouraged.

Indicate the amount requested by each institution affiliated with the project. The Science Budget and Logistics Budget will be detailed separately using Excel templates provided in the electronic proposal submission system. The Unique Entity ID (UEI) will be required for each institution. Institutions requesting funds from NPRB must be registered in the System of Award Management (sam.gov).

Budgets must be organized according to federal fiscal years (Oct. 1-Sep. 30) and the budget for each institution should be described separately. Subawards will be issued to each participating institution directly. Each institution may receive incremental subawards, (i.e., the total amount of funding may not be awarded at the beginning of the project, but rather in two or three increments throughout the project). NPRB expects that funds issued through each subaward will be spent on schedule. Please note that all funds are disbursed on a reimbursable basis.

Identify each institution requesting funds and the total amount requested by each institution. The total amount should represent the sum of the science budget and the logistics budget that will be detailed separately using templates that will be provided after the institutions are entered. Any in-kind or other support amounts should also be entered here.

**Science Budget Detail** (required template). Complete and upload the provided Excel template for each institution requesting funds.

Budgets must include:

- Funds for all PIs to travel to a kickoff meeting in Anchorage, AK for two days during which the core hypotheses of the program will be decided.
• Funds for lead PIs to travel to logistics planning meetings in Anchorage, AK for two days prior to each field season.
• Funds for all PIs, Co-PIs, and graduate students to travel to annual PI meetings in Alaska for five days in March 2026-2031. Meetings may be held in Anchorage or in another regional hub relevant to the research (e.g., Nome).
• Funds for the lead PIs to travel to the Alaska Marine Science Symposium in Anchorage annually in January 2026-2031.
• Anticipated other support and cost leveraging per year and organization.
• Support for analyses, manuscript preparation, and synthesis activities through September 30, 2031.

Note that the Lead PIs of projects funded under an IERP are typically expected to serve on a Science Steering Committee (SSC). The SSC meets via Zoom with NPRB staff for one hour per month and shares responsibility for coordinating multi-disciplinary and multi-institutional collaboration to ensure that the objectives of the IERP are achieved. Responsibilities include, for example, developing the agendas for annual in-person PI meetings and logistics planning meetings, organizing the content for monthly PI Zoom meetings, ensuring effective communication within and across research projects, and working with NPRB staff to address any challenges that arise. SSC representatives also serve as guest editors for IERP special issue publications.

Logistics Budget Detail (required template). Complete and upload the provided Excel template detailing the funds required for logistics support (e.g., vessel charter) for each institution. If no logistics support is required, enter zeros.

NICRA. A PDF copy of the current federally negotiated indirect cost-rate agreement (NICRA) is required for all organizations requesting funds. Organizations without a current federally negotiated NICRA may request up to a 10% indirect cost recovery, and a memo to this effect should be uploaded in lieu of a NICRA document. The total dollar amount of the indirect costs proposed 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% of the total proposed direct cost amount in the application, whichever is less. Profit is not an allowable cost.

Single Audit (formerly A-133): If your organization is required to complete a Single Audit (formerly A-133), please provide the most recent copy. If your organization is exempt from the requirements of a Single Audit, please upload a file indicating the reason from among the options listed below:
• US domestic entity that did not expend $750,000 or more in US Federal funds during the latest completed fiscal year;
• US domestic for-profit organization; or
• Non-US based entity that did not expend $750,000 or more in US Federal funds during the latest completed fiscal year.

16. Supplemental Documents. Upload supplemental documents including, for example, MOUs, quotes, and SAM.gov documentation.

Successful applicants will need to be registered with the System of Award Management (sam.gov) to accept funds from the NPRB. All required sam.gov documentation should be provided with the pre-proposal, including fringe memo and W-9, in addition to the Unique Entity ID, NICRA, and single audit
that are entered under the Budget section above (for more information, see Subrecipient Compliance Documentation Requirements).

Letters of support will not be accepted at the pre-proposal stage, but rather, at the full proposal stage only. NPRB recognizes that it takes time to develop relationships with communities and the capacity of communities to respond to requests for collaboration is often limited. NPRB intends to provide funds to support this at the full proposal stage.

17. **Review Criteria.** This section is designed to identify the relevant fields of expertise applicable to review the proposal, not the expertise of the applicant. If no fields on the page apply, leave it blank and move to the next page. A minimum of 5 identifiers is required.

18. **References.** List all sources of information cited in a consistent format appropriate for a major journal (e.g., ICES Journal of Marine Science).

19. **Upload Summary.** This page will list all uploaded documents.

20. **Signatures.** The system will generate a signature page for each organization requesting funds. The Authorized Organizational Representative should sign this page. The signature on this page certifies that the proposal, in its entirety, has been submitted according to the submitting organization’s standard proposal approval process.

The lead organization is responsible for the entry and upload of all information in any collaborative proposal.

21. **Review & Submit.** The system will not complete the submission process until all error messages have been resolved. Use of the PDF download tool for review prior to submission is recommended. Proposals may not be modified after submission.

**PRE-PROPOSAL REVIEW PROCESS**

Pre-proposals will be evaluated by the NPRB Science and Advisory Panels, which will make recommendations to the Board. The Board will decide which pre-proposals to invite to submit full proposals. Staff will notify proposers of the Board’s decisions on pre-proposals in October 2024. Those PIs invited to submit full proposals will then have until March 2025 to do so. Representatives of the other institutions contributing money to the program may be represented at Panel and Board meetings and may participate in discussions but will not vote during pre-proposal selection.

**Initial Screening of Pre-Proposals**

Upon receipt, the NPRB staff will screen pre-proposals for conformance with requirements set forth in this RFP. This review will consider whether the pre-proposal meets the format and structure requirements and will assess whether it is responsive to the RFP. Pre-proposals 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 pre-proposals, if any, to carry forward. If the ad hoc committee cannot agree on whether a pre-proposal is responsive to the RFP, it will be fully reviewed. Pre-proposals that are found to not comply with the requirements of the RFP or that are determined to be unresponsive will be returned without further processing. Notification of non-compliance will be sent to the applicant.
NPRB Science Panel Review

NPRB staff will assign at least two Science Panel members with the relevant expertise to each pre-proposal (a Primary and a Secondary). Science Panel members will conduct their own independent review using the following technical review criteria:

a. **Project Design (60%)**: Is there a clear statement of project objectives, explanation of what the project will accomplish, and why it is important? Have the applicants articulated hypotheses that explore mechanistic processes in detail? 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 that 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?

b. **Synergy with Other Projects (10%)**: Have the applicants demonstrated awareness of how the proposed research would leverage existing projects? Have the applicants proposed to leverage data or logistics provided by other such projects? Have the applicants proposed means to integrate data or analyses from multiple subject areas or disciplines and consider results in the context of understanding broad-scale processes or the system as a whole? NPRB anticipates that this aspect of the score will receive more weight at the full proposal stage.

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., management application, report, published paper) and how the research results will be disseminated?

d. **Project Management and Cost (20%)**: Are the experience and qualifications of the principal/co-investigator(s) matched to the project? Is the organization and management of the project appropriate to ensure the overall success of the research? Have the applicants identified a Lead PI who would serve on the program’s steering committee and have they budgeted time for this individual to participate in steering committee activities (e.g., monthly teleconferences, serving as guest editor for special issue publications)? Is the budget allocation and justification sufficient to support the work to be performed? Is the project cost unreasonably high or low?

**NPRB Science Panel Proposal Ranking**

Science Panel reviews are completed and made available to all Panel members in advance of the Science Panel meeting. The Primary and Secondary Science Panel reviewers summarize the pre-proposal for the entire panel. The entire panel then discusses the pre-proposal and its evaluations further and determines, by consensus, a tier ranking as follows:

**Tier 1:**

Pre-proposals that are considered highly meritorious based on the Science Panel reviews (based on the criteria outlined above) will be designated Tier 1 pre-proposals. Highly meritorious will be defined as pre-proposals that generally score an average of Very Good to Excellent and do not require 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 and may include relative comparisons between highly ranked pre-proposals such as: more technically robust, more specifically on target with what the RFP solicited, or more time sensitive in terms of increasing scientific knowledge base.

**Tier 2:**

A Tier 2 ranking will be given to pre-proposals that are good scientifically but not excellent. Proposals ranked Tier 2 are eligible for funding.

**Tier 3:**

Pre-proposals that are found to have fatal flaws in the science will be designated Tier 3 pre-proposals. Proposals ranked Tier 3 are not eligible for funding.

**NPRB Science Panel Recommendations**

Following the meeting, the Primary Science Panel reviewer, in consultation with the Secondary and any other Panel member identified during the discussions, is responsible for drafting a Science Panel Summary. The Science Panel Summary is shared with the NPRB Advisory Panel and Board and is shared with the applicant(s) following the Board’s funding decision.

**NPRB Advisory Panel Input**

The NPRB Advisory Panel provides input about community and stakeholder relevance for all NPRB activities, including proposal funding decisions (http://www.nprb.org/about/advisory.html). The NPRB Advisory Panel will review the pre-proposals and write a brief summary for each to highlight those pre-proposals that have special stakeholder, community, or other societal relevance for the Board and/or to share feedback with proposers that could strengthen the stakeholder, community, or other societal relevance of the research. The Advisory Panel review is not intended to rank pre-proposals, to provide comment on the scientific merit of pre-proposals, nor the alignment of such pre-proposals with category budgets.

**Board Review**

The Chair and/or Vice-Chair of the NPRB Science Panel will present the Science Panel Summary to the Board and will be present at the meeting to answer technical questions. The Chair and/or Vice-Chair of the NPRB Advisory Panel will also present the Advisory Panel recommendations to the Board and will be present at the meeting. The Board will consider the 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 may consider other factors at the time of final decisions. Such factors include, but are not limited to:

1. Addressing how environmental conditions and processes in the Northern Bering Sea influence species of commercial, ecological and subsistence importance, and implications for state and federal fisheries management and communities that depend on these resources;
2. Other projects currently funded on a similar topic;
3. Overlap with other ongoing programs;
4. 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).

**Invitations for full proposals**

Based on the Board’s decision, invitations for full proposals will be issued in October 2024. The titles of successful pre-proposals may be made public, as well as the identities and e-mail addresses of the Lead Principal Investigators. Full proposals will be encouraged to discuss how they envision integrating with other potential aspects of the program.

Full proposals will likely be due in March 2025. Full proposals will be sent out for peer review and then reviewed by the NPRB Science and Advisory Panels during April-September 2025, and the Board will make funding decisions in late September 2025.

Proposers should expect that the total budget of the full proposal will be allowed to increase by up to 20% from the pre-proposal budget or $250 K, whichever is less, to allow for changes as the proposal is further developed. The Board reserves the right to change this information when full proposals are invited.

**Program Integration**

Full integration of the funded elements of the program will occur after funding decisions have been announced. NPRB will organize a kick-off meeting for all funded PIs and collaborators, during which the core hypotheses for the program will be decided and the expected contributions of participants identified. A leadership group (IERP Steering Committee) will be established that includes a representative from each of the main components of the funded program. This leadership group will work closely with the NPRB Science Director and Senior Program Manager and will be responsible for overall program management and integration. Lead PIs should expect to serve as Guest Editors for special issue publications.

**TIMELINE**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call for pre-proposals released</td>
<td>October 2023</td>
</tr>
<tr>
<td>Pre-proposal submission deadline</td>
<td>May 15, 2024</td>
</tr>
<tr>
<td>Invitations for full proposals issued</td>
<td>October 2024</td>
</tr>
<tr>
<td>Full proposal submission deadline</td>
<td>March 2025</td>
</tr>
<tr>
<td>Proposers notified of funding decisions</td>
<td>September 2025</td>
</tr>
</tbody>
</table>