Maine Sea Grant

2018-2019 Biennial Request for Proposals

http://www.seagrant.umaine.edu/funding

Deadline for Preliminary Proposals:
Friday, February 24, 2017, 4:30 p.m. EST

Late applications will not be considered.

Contents

A. Introduction

The Maine Sea Grant College Program invites preliminary proposals for research and synthesis projects to be funded in the period February 2018 through January 2020. Maine Sea Grant is a state-federal partnership based at the University of Maine and sponsored by the National Oceanic and Atmospheric Administration (NOAA) and the State of Maine. Operating in partnership with NOAA's National Sea Grant Office, the mission of Maine Sea Grant is to play a leadership role in marine science and education in Maine and to promote their use for the sustainable development, management, and stewardship of marine and coastal resources. Through this new request for proposals, we seek proposals of two separate categories. First, we seek to fund research proposals that link the scientific capacity of Maine with the needs of coastal stakeholders. Secondly, we aim to support synthesis efforts that will integrate knowledge from diverse sources to summarize our current understanding of coastal Maine issues, identify gaps in knowledge, and outline future research directions. *Synthesis efforts should not include the collection of new data.* The format of the synthesis product is flexible, but it is important that the product is easily accessible to the public. Appropriate products may include a review paper, a report, an online tool, a webinar, a map, etc.

Maine Sea Grant seeks to foster research and synthesis products with the strongest likelihood of societal impact, so only the most creative and rigorously conceived proposals will receive consideration. Maine Sea Grant's funding programs are highly competitive, with each proposal receiving preliminary in-state stakeholder review, extensive peer review, and final review conducted by an external technical review panel. Maine Sea Grant routinely receives numerous excellent proposals and available funds are never sufficient to support all of them. Maine Sea Grant is administered by the University of Maine, but this competition is open to faculty and staff at any public or private research or higher education institution in the state.

Maine Sea Grant does not discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status and gender expression, national origin, citizenship status, age, disability, genetic information or veteran status in employment, education, and all other programs and activities.

B. Funding Levels and Duration

Proposed research activities may be one or two years in duration, for the period between February 2018 and January 2020. Assuming no changes in the federal Sea Grant appropriation and the requirements of the non-research components of the Maine Sea Grant program, an anticipated $750,000 will be available to support research projects over the two-year funding period. Maine Sea Grant will consider funding 2-year proposals up to $150,000. Maine Sea Grant intends to fund as many excellent proposals as is possible within budgetary constraints. Due to Maine Sea Grant's limited resources, total two-year requests over $150,000 in Sea Grant

funds (including all direct and indirect costs) will not be considered. Sea Grant funding requires a 50% non-federal match; all preliminary proposals must indicate source and level of available non-federal match. Proposals without sufficient match will not be considered.

C. Maine Sea Grant Strategic Objectives for 2018-2021

Maine Sea Grant requests competitive research and synthesis proposals that align with, and are relevant to, the Maine Sea Grant strategic objectives outlined below and available in more detail here; integrate across Sea Grant's functional areas of research, education, and outreach (extension and communications); and display a strong promise for meaningful societal impact and application. Collaborations with communities, industry, state and regional agencies, and other research institutions are encouraged. All proposals must therefore clearly identify how the proposed research or synthesis effort applies to one (or more) of the strategic objectives described below. Each research proposal **must** include an outreach component designed to extend the research findings to potential stakeholders and information users. Investigators are encouraged not only to list the strategic objectives that their project addresses, but to explicitly describe how understanding, tools, and data products generated in their projects will lead to measurable progress toward these priorities.

	Strategic Objectives 2018-2021 Coastal community constituents have the information, tools, resources, and support they need to:
Healthy Coastal Ecosystems	● Protect and restore coastal ecosystem health and function. ● Protect and improve coastal water quality. ● Protect and improve habitat for native sea-run fish.
Resilient Communities	● Enhance public decision-making processes related to ocean and coastal resource use and community planning initiatives. ● Preserve their cultural heritage, including fisheries, working waterfronts, and other unique aspects related to the sea. ● Support marine businesses and infrastructure by identifying opportunities and vulnerabilities and prioritizing how to address them. ● Facilitate collaboration across sectors, especially between the seafood, tourism, and fisheries heritage sectors that enable mutually beneficial action.
Safe & Sustainable Seafood	● Develop and support opportunities for wild harvesters and aquaculture producers to strengthen or diversify their seafood-related businesses. ● Support applied research initiatives to diversify commercial seafood species through aquaculture and harvesting innovation.

	● Support applied research and extension services to improve coastal and marine resource monitoring and management, and inform community, regional, and statewide management planning processes. ● Consumers have access to science-based information about Maine seafood. ● Support marine business and infrastructure development by identifying opportunities and vulnerabilities and prioritizing how to address them.
Preparing for a Changing Climate	● Support community, state, and regional efforts to understand, communicate about, and respond to climate-related changes in the marine and coastal environment, including ocean acidification, increased water temperature, and changes in native and non-native species populations, distributions, and disease. ● Conduct applied research, and support community and state risk assessment and planning initiatives related to the impacts of sea-level rise, extreme storm events, and related erosion on coastal infrastructure. ● Enhance and expand climate literacy and citizen science initiatives to increase understanding of the expected impacts of climate change, and address geographic and temporal gaps in climate data. ● Support community and state outreach and community engagement efforts related to offshore wind and tidal renewable energy development initiatives.

D. Proposal Development and Evaluation Process

The development and review of Sea Grant proposals is a multi-step process:

1) Short preliminary proposals are to be submitted electronically to Maine Sea Grant by 4:30 p.m. EST on Friday, February 24, 2017.

2) Preliminary proposals are evaluated by an in-state ad-hoc panel of stakeholders. The objective at this stage of review is to identify preliminary proposals that provide the most promise in advancing knowledge in one (or more) of the four identified Sea Grant strategic priorities and the potential for societal impact. The pre-proposal review is primarily focused on the relevance and potential of the project, rather than scientific merit, although obvious flaws in project design will be identified. The pre-proposal stage also offers the opportunity to give applicants advice on how their proposals might be improved. We are accepting two types of proposals during this call: research proposals and synthesis proposals. Note that synthesis proposals should not include the collection of new data. Below we outline the pre-proposal review criteria for each proposal type.

Pre-proposal review criteria for <u>research proposals</u>:
- Does the proposed work apply in a meaningful way to one (or more) of Maine Sea Grant's strategic objectives?

- Which stakeholders will benefit from the research, and how will they benefit?

- Is the outreach strategy well-conceived and appropriate?

- Are the anticipated societal impacts credible and do they justify the investment?

- Does the proposed work relate to, or complement, Maine Sea Grant's ongoing research efforts? (See seagrant.umaine.edu/research for information on Maine Sea Grant-funded research projects.)

Pre-proposal review criteria for <u>synthesis proposals</u>:
- Would the proposed effort synthesize existing data and knowledge that is relevant to one (or more) of Maine Sea Grant's strategic objectives?

- Which stakeholders will be involved in the synthesis effort, and how will their knowledge be obtained and used?

- Is the stakeholder engagement strategy well-conceived and appropriate?

- Will the knowledge gained through this synthesis effort lead to societal impacts that justify the investment? Will this project identify knowledge gaps and future research directions?

- Does the proposed work relate to, or complement, Maine Sea Grant's ongoing research efforts? (See seagrant.umaine.edu/research for information on Maine Sea Grant-funded research projects.)

The pre-proposal panel's evaluations are advisory; final decisions on inviting full proposals will be made by the Maine Sea Grant Management Team.

3) Applicants who submit the most promising preliminary proposals will be invited to submit full project proposals. Full proposals are to be submitted electronically to Maine Sea Grant by 4:30 p.m. EDT on Monday, June 5, 2017. Full proposal guidelines will be available online after preliminary proposal applicants have been invited to submit full proposals.

Preliminary proposal applicants not invited to submit a full proposal by Maine Sea Grant may still choose to submit a full proposal; however, applicants must have submitted a preliminary proposal to be eligible to submit a full proposal.

4) Peer mail reviews of full proposals are obtained from out-of-state U.S. and international experts in the proposed area of research. Each proposal is expected to receive at least three reviews. Applicants suggest potential reviewers, and identify potential conflicts of interest. In general, about half of the reviewers are those suggested by the applicant, although this is not guaranteed. Applicants are provided anonymous copies of the peer reviews.

5) An opportunity is provided for the applicant to write rebuttals to the reviewers' comments.

6) A technical review panel of out-of-state experts evaluates the proposals, peer reviews, and applicant's rebuttals to provide a summary of the scientific merit and prospects for success.

7) Recommendations for funding to the National Sea Grant Office are made by the Maine Sea Grant Management Team based on the evaluations of both the pre- and full-proposal review panels. Final project selection also takes into account programmatic considerations, such as the overall balance of projects and disciplines in our research portfolio, and the diversity of institutions and investigators supported by Maine Sea Grant.

Final decisions for Maine Sea Grant-funded proposals are subject to approval by the program monitor from the National Sea Grant Office who attends the full proposal review panel. Applicants will be informed of final decisions in October 2017.

E. Preliminary Proposal Guidelines

Remember that project review and selection is a two-step process. Preliminary proposals are evaluated primarily on the basis of their relevance to the Sea Grant strategic priorities and potential benefits to Maine and regional stakeholders. Invited full proposals are evaluated on the basis of scientific merit and qualifications of the applicant.

All components of the preliminary proposal (as described below) must be submitted as a single PDF file, with the exception of the NOAA 90-4 budget form, which must be submitted as a separate MS Excel file. Proposals must be received by 4:30 p.m. EST on Friday, February 24, 2017. Applicants may submit the proposal as an e-mail attachment or on a CD if preferred, to Rachel Lasley-Rasher, Maine Sea Grant Research Coordinator, sgresearch@maine.edu.

Preliminary proposals must use Times New Roman 12-point font with 1-inch margins on the top, bottom, and both sides, and must contain the following elements:

1) **Proposal Cover Sheet and Summary (NOAA form 90-2)** one-page maximum, available in MS Word format at the Maine Sea Grant website, or by contacting Kathy Villarreal, Maine Sea Grant Administrative Assistant, by phone (207.581.1435) or email, kvillarreal@maine.edu.

2) **Proposal Narrative** (three-page limit with 12-point font). *Note that we have outlined separate guidelines for Research versus Synthesis Proposals.*

Research Proposal:

a. **Justification and Expected Impacts:** Describe the question or problem that you propose to address and clearly identify how it applies to one (or more) of Maine Sea Grant's strategic objectives as described above. It is particularly important to explicitly address the anticipated societal impacts of the research by explaining how the information obtained will be used by a clearly identified group of stakeholders.

b. **Scientific Approach:** Describe the major goals and objectives of the research, including the questions or hypotheses that will be addressed or tested. How does the proposed project provide opportunities for diverse stakeholders to contribute their knowledge and experience? Outline the conceptual approaches and methodologies that will be used, and provide a general timeline for the project.

c. **Available Resources:** Briefly summarize the qualifications of the investigator(s) and the institutional capabilities that will be brought to bear on the proposed project.

d. **Outreach:** Outreach is activity that extends Sea Grant-sponsored and other relevant coastal and marine information to user groups. Presenting results at a scientific meeting, academic seminar, or publishing in peer-reviewed journals are encouraged but are <u>not</u> considered outreach within this context. Describe the strategies that will be used to share the research results to stakeholders and track their application and impact beyond the project end date. Applicants are encouraged to review the document *Public Outreach and Engagement: A Primer for Sea Grant Researchers* and discuss outreach goals and strategies with Catherine Schmitt, Maine Sea Grant's Communications Director, or a member of the Marine Extension Team. If Marine Extension Team members or other Sea Grant staff will participate in the project, you must have their explicit permission to be included in the proposal, and their roles must be specified. **Do not assume their participation.**

Synthesis Proposal:

a. **Justification for Synthesis and Impacts:** Describe the question or problem that you propose to address and clearly identify how it applies to one (or more) of Maine Sea Grant's strategic objectives as described above. It is particularly important to explicitly address the anticipated societal impacts of the synthesis by explaining how the information obtained will be used by a clearly identified group of stakeholders.

b. Stakeholder Engagement: Describe how you will ensure that targeted stakeholder groups have a sustained involvement throughout the tenure of the project. Stakeholders should help identify the most useful content and format for the synthesis product. Also, when appropriate, stakeholder knowledge and experience should be incorporated into the synthesis.

c. Approach for Synthesis and Dissemination: Describe the related datasets, research projects, stakeholder knowledge and/or publications that have not been integrated in a single synthetic product. What knowledge will be potentially gained by synthesizing this information? Describe a plan to achieve project milestones. This plan should outline a process by which results and insights from diverse sources will be integrated into a synthesis product.

d. Description of synthesis product: Describe the type of synthesis product that will be generated through this effort. The actual format of the synthesis product is flexible; an appropriate product could be a review paper, a report, an online tool, a map, etc. The important piece here, is that the synthesis product is the result of sustained stakeholder engagement and is highly accessible to the general public. *Synthesis efforts should not include the collection of new data.* How will this product address a critical issue(s) faced by Maine's coastal communities? Applicants are encouraged to clearly demonstrate how their synthesis product can be used to accomplish one or more of the desired outcomes: 1) support the decisions of resource managers with science-based information; 2) educate individuals, groups, or institutions on complex issues faced by Maine's coastal communities; 3) identify gaps in our current knowledge and highlight future research directions. If Marine Extension Team members or other Sea Grant staff will participate in the project, you must have their explicit permission to be included in the proposal, and their roles must be specified. **Do not assume their participation.**

e. Available Resources: Briefly summarize the qualifications of the investigator(s) and the institutional capabilities that will be brought to bear on the proposed project.

3) **Literature Cited** Provide complete citations for all literature referenced in the proposal narrative.

4) **Budget Form** (NOAA form 90-4), available in MS Excel format at the Maine Sea Grant website, or by contacting Kathy Villarreal, Maine Sea Grant Administrative Assistant, (207.581.1435) or email (kvillarreal@maine.edu). Prepare a budget for each year of the proposal and an overall summary (if the project is for two years). **All proposals must include a minimum 50% non-federal match (i.e., one dollar of match for every two dollars requested)**. The budget should include all direct (including fringe benefits) and indirect costs of the research. Applicants should contact the sponsored research department of their home institution to obtain the current rates for fringe benefits and indirect costs.

Because graduate education is a priority for Maine Sea Grant, applicants are encouraged to include support for graduate students in their projects. Minimum graduate student research assistant stipends are $19,467 for 12 months. Please refer to:
http://www.umaine.edu/orsp/quick-links/rates/ for the most up-to-date information on minimum stipends, health insurance, and tuition rates for graduate students. If graduate student support is included, our expectation is that the research project would form all or part of the graduate student's thesis, and that the student will be supported full-time. Requests for partial graduate student support (e.g., for a six-month stipend) must explain the nature of the student's involvement in the project and indicate how the student will be supported for the remainder of the year.

Applicants must budget for the cost of outreach aspects of their project, such as printing costs, as well as any costs associated with data management.

Applicants outside the University of Maine must include University of Maine indirect costs (44%, but refer to http://www.umaine.edu/orsp/quick-links/rates/ for the most up-to-date rates) on the first $25,000 of their total budget.

5) **Budget Justification** (one-page limit). Justify the major elements of the budget.

6) **Results of Prior Sea Grant Support** All principal investigators who have received Sea Grant support are required to provide a summary (two-page limit) for each project funded in the past five years. The report should contain the following elements:

- Project title.

- Principal investigator(s).

- Period and amount of award.

- Summary of major results and conclusions (250-word limit).

- List of all publications that resulted from the grant, distinguishing between peer-reviewed and other literature.

- List of students, post-docs, and other professionals supported with degree titles and dates (if appropriate).

- List of significant outreach accomplishments or impacts on industry or other stakeholders.

7) **Resumé of Principal Investigator(s)** (two-page limit for each investigator). Indicate institutional affiliation and key professional details. List up to five publications most relevant to the proposal, along with five additional recent publications.

8) **Current and Pending Support** (one-page limit for each investigator). For each PI, list (on a separate page) all pending, current, and recent (within three years) outside support. Include project title, amount, source, and period of funding, and the extent of the PI's involvement in each project.

F. Contacts for Further Information

All documents referred to in these guidelines are available at the Maine Sea Grant website (www.seagrant.umaine.edu/funding).

Prospective applicants are encouraged to contact the following Sea Grant staff to discuss project ideas, proposal development, and budget.

Research Coordinator: Rachel Lasley-Rasher
sgresearch@maine.edu
Tel: 207.563.8115

Assistant Director for Research: Damian Brady
damian.brady@maine.edu
Tel: 207.563.8102

Communications Director: Catherine Schmitt
catherine.schmitt@maine.edu
Tel: 207.581.1434

Administrative Assistant: Kathy Villarreal
kvillarreal@maine.edu
Tel: 207.581.1435

Director: Paul Anderson
panderson@maine.edu
Tel: 207-581-1435
5784 York Complex, Suite 66
University of Maine
Orono, Maine 04469-5784

G. Request for Proposals Timeline

Thursday, January 5, 2017: Release 2018-2019 request for preliminary proposals.

Friday, February 24: Preliminary proposals due in Sea Grant office by 4:30 p.m.

Wednesday, March 8: Pre-proposal packages distributed to Stakeholder Advisory Panel.

Monday, April 10: Stakeholder Advisory Panel Meeting (UMaine) – Panel reviews preliminary proposals and makes recommendations to Maine Sea Grant Management Team regarding full proposal development.

Friday, April 14: Principal investigators receive recommendations regarding full proposals.

Monday, May 22: List of suggested reviewers due in Sea Grant office by 4:30 p.m.

Monday, June 5: Full proposals due in Sea Grant office by 4:30 p.m.

Monday, June 19: Full proposals distributed to peer reviewers.

Monday, July 24: Full proposal peer reviews due in Sea Grant office by 4:30 p.m.

Friday, August 4: Blinded peer reviews provided to PIs.

Wednesday, August 16: PI rebuttal letters due in Sea Grant office by 4:30 p.m.

Friday, August 18: Proposals, reviews, and rebuttals sent to Technical Advisory Panel and to National Sea Grant Office.

Tuesday, September 19: Technical Advisory Panel Meeting (MIT Sea Grant) – Panel reviews proposals and makes recommendations to Management Team. Maine Sea Grant Management Team meets to make final decisions on which projects to include in the proposal to the National Sea Grant office for 2018-2019 funding.

Friday, September 22: Selected projects and rationale submitted to the National Sea Grant office for approval.

By October 16: Applicants informed of decisions.

Tuesday, October 31: 2018-2019 Omnibus proposal mailed to the National Sea Grant office.

February 1, 2018: Anticipated 2018-2019 awards begin.

H.   Preliminary Proposal Checklist

Note for University of Maine investigators: The Proposal Approval Routing System (PARS) process is not required for preliminary proposals.

❑   All proposal elements must be submitted electronically as a <u>single PDF file</u> with the exception of the budget forms ([NOAA 90-4 form](#)) which should be included electronically as MS Excel files.

❑   Proposal text must be Times New Roman in 12-point font with 1-inch margins on the top, bottom, and both sides.

❑   The preliminary proposal should include:

   ❑   Project Summary Form (90-2)

   ❑   Proposal Narrative (3-page limit)

   ❑   Literature Cited

   ❑   90-4 Budget Form for each year of project (submitted as separate MS Excel file)

   ❑   90-4 Budget Form with summary budget (submitted as separate MS Excel file)

   ❑   Budget Justification (1-page limit)

   ❑   Results of Prior Sea Grant Support (2-page limit per project)

   ❑   Resumé(s) (2-page limit per investigator)

   ❑   Current and Pending Support (1-page limit per investigator)