Maine Sea Grant 2018-2019 Biennial Request for Proposals

Full Proposal Guidelines

Deadline for Full Proposals: Monday, June 5, 2017 by 4:30 p.m. EDT Late applications will not be considered.

Contents

A.	Important Notes	1
B.	Full Proposal Development and Review	2
C.	Maine Sea Grant Strategic Objectives	2
D.	Full Proposal Guidelines	4
E.	Contacts for Further Information	8
F.	Submission Deadlines and Decision Timetable	9
G.	Checklist for Full Proposals	10

A. Important Notes

- Full project proposals will only be accepted from applicants who submitted a preliminary project proposal in response to the Maine Sea Grant College Program 2018-2019 request for proposals.
- Total funds requested from Sea Grant should not exceed \$150,000; 50% non-federal match required.
- The next request for proposals will not be until January 2019.
- The following guidelines should be followed explicitly.
- All submissions are to be made electronically.
- Applicants must complete and return a <u>Proposal Submission Form</u> no later than 4:30 p.m. EDT on Monday, May 22, 2017. This form is available in MS Word format at the Maine Sea Grant website, or by contacting Rachel Lasley-Rasher, Maine Sea Grant Research Coordinator (<u>rachel.lasleyrasher@maine.edu</u> or <u>sgresearch@maine.edu</u>).

• Applicants are required to fill out the <u>Sea Grant Data Management Form</u> in compliance with NOAA Data Management Requirements.

B. Full Proposal Development and Review

Full proposals are evaluated on scientific merit based on the highest national and international standards in the field. The full proposal evaluation process has several steps.

- Full proposals are reviewed by out-of-state U.S. and international experts in the area of the proposed research. Each proposal receives 3 reviews. Applicants are requested to suggest potential reviewers, and may also identify potential reviewers with conflicts of interest (on the Proposal Submission Form).
- 2) Applicants are provided with anonymous copies of the reviews and given the opportunity to write rebuttals to the reviewers' comments.
- 3) A technical review panel of out-of-state experts evaluates the proposals, the expert reviews, and the applicants' rebuttals, and provides a summary of the scientific merit and prospects for success of the proposal.
- 4) Recommendations for funding of Sea Grant proposals are made by the Maine Sea Grant Management Team, based on the evaluations of both the pre- and full-proposal review panels. Final Sea Grant project selection also takes into account programmatic considerations, such as the overall balance of projects and disciplines across the Maine Sea Grant College Program, and the goal of encouraging new investigators and institutions to become involved in Sea Grant research.
- 5) 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.

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 2018-2021 Maine Sea Grant strategic objectives outlined below and available in more detail here (http://www.seagrant.umaine.edu/strategic-plan); 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 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 proposal **must** also include an outreach component designed to extend the research findings or synthesis product beyond the scientific community 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 measureable 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. Access 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. Full Proposal Guidelines

Full proposals must contain the following elements:

- 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 Lynn Wardwell, Maine Sea Grant Fiscal Officer, by phone (207.581.1448) or email (wardwell@maine.edu).
- 2) Proposal Narrative: Proposals must be single-spaced using Times New Roman 12-point font with 1-inch margins on the top, bottom, and both sides of the page. There is a 12-page limit to the proposal narrative, including figures and tables. The page limit establishes the maximum length of a proposal and is not intended to be a target. Applicants should strive to be as succinct and concise as possible in explaining their research or synthesis effort.

The 12-page limit covers the following required components (a-e) and includes any tables or figures used to explain the research. *Note that we have outlined separate guidelines for Research versus Synthesis Proposals.*

Research Proposal

- a. **Background and rationale:** Explain why the proposed research effort is important in the context of the Maine Sea Grant Strategic Objectives. Describe the potential users of the information and how they will benefit from the results. Discuss the research relative to the current state of knowledge in the field and to previous or ongoing research by the applicant or other investigators.
- b. **Scientific objectives:** Provide a clear statement of the project's goals and objectives. Explain the questions that will be addressed and hypotheses that will be tested in the research.
- c. **Proposed research:** Describe the research that will be conducted to answer the questions and test the hypotheses outlined in section (b). This section of the proposal should be written for people who are familiar with the field, using the appropriate terminology. The research plan should be consistent with the highest standards in the discipline. Particular attention should be paid to experimental design, appropriate methodology, and data analysis.
- d. **Outreach (required):** Describe the strategies that will be used to communicate the research results to stakeholders. The overall goal of outreach is to effect change by having

individuals, groups, or institutions use scientifically based information when making decisions. 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 <u>not</u> considered outreach within this context.

Applicants are encouraged to review the document <u>Public Outreach and Engagement: A</u> <u>Primer for Sea Grant Researchers</u>. Applicants are also encouraged to contact Maine Sea Grant staff with outreach expertise – including the <u>Program Director</u>, <u>Associate Director</u>, <u>Communications Director</u>, or a member of the <u>Marine Extension Team</u> – to discuss and receive advice on conceptual development of an outreach component. 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. Educational impact (optional): Briefly describe the involvement of high school, undergraduate, and graduate students, and post-doctoral researchers in the proposed research.

Synthesis Proposal

- a. **Background and rationale:** Explain why the proposed synthesis effort is important in the context of the Maine Sea Grant Strategic Objectives. Why is this synthesis needed? Describe the potential users of the information and how they will benefit. Discuss this synthesis effort relative to previous or ongoing efforts by the applicant or other investigators.
- b. **Stakeholder Engagement:** What stakeholder groups will you engage in this project? What is their role? 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.

Applicants are encouraged to review the document <u>Public Outreach and Engagement: A</u> <u>Primer for Sea Grant Researchers</u>. Applicants are also encouraged to contact Maine Sea Grant staff with outreach expertise – including the <u>Program Director</u>, <u>Associate Director</u>, <u>Communications Director</u>, or a member of the <u>Marine Extension Team</u> – to discuss and receive advice on conceptual development of an outreach component. 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.

- c. **Approach for Synthesis:** Describe the related datasets, research projects, stakeholder knowledge and/or publications that have not been integrated into 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 and dissemination methods: 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? Describe potential scenarios under which this synthesis product could be used. How will user groups find and access this synthesis product? 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.
- e. Educational impact (optional): Briefly describe the involvement of high school, undergraduate, and graduate students, and post-doctoral researchers in the proposed research.
- 3. <u>Literature Cited</u>: 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 Lynn Wardwell, Maine Sea Grant Fiscal Officer, by phone (207.581.1448) or email (wardwell@maine.edu).

Budgets for all full proposals must be reviewed and approved by the appropriate institutional sponsored programs office prior to submission to our office. Note that PIs from the University of Maine must submit a draft of their budget to the <u>Office of Research and</u> <u>Sponsored Programs (ORSP) by May 15</u>. Therefore, UMaine applicants should review draft budgets and budget justifications with Lynn Wardwell <u>prior to May 15</u>.

a. Matching funds: All proposals must include 50% matching funds, i.e., one dollar of match for every two dollars requested from Sea Grant. Matching funds on Sea Grant proposals must be from non-federal sources.

- b. Note for all applicants: Prepare a budget for each year of the project and a total summary budget (if the project is for two years). The budget should include all direct costs (including fringe benefits) and indirect costs of the project. Applicants should contact the sponsored research office of their home institution to obtain the current rates for fringe benefits and indirect costs.
- c. Note for applicants outside the University of Maine: University of Maine indirect costs of 44% must be added to the first \$25,000 of the total budget for grant administration. See the University of Maine website for the most up-to-date rates <u>http://www.umaine.edu/orsp/quick-links/rates/</u>
- d. Notes for applicants from more than one institution: A yearly and total budget for each institution and a yearly and total budget for the overall project must be prepared and submitted. Applicants outside the University of Maine see note (c).
- e. Graduate education: 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 twelve months. 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 6-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.
- 5. **Budget Justification**: Justify the major elements of the budget. The budget justification should be organized by year and should clearly describe the match and its source. Detail is required for supplies and for travel (flight costs, miles/mileage per trip, etc.).
- 6. <u>Results of Prior Sea Grant Support</u>: (2-page limit for each project) All applicants who have received Sea Grant support in the past five years are required to provide a summary for each project. 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-doctoral associates, and other professionals supported, including degree titles and dates (if appropriate)

- List of significant outreach accomplishments or impacts on industry or other stakeholders
- 7. <u>Resumé(s) of Principal Investigator(s)</u> (2-page limit for each investigator): Indicate institutional affiliation and key professional details. List up to five publications most relevant to the proposal, plus up to five additional recent publications.
- 8. <u>**Current and Pending Support**</u> (1-page limit for each investigator): List (on a separate page for each investigator) all pending, current, and recent (3 years) extramural support. Include project title, amount, source, and period of funding, and the extent of the investigator's involvement in each project.
- 9. Data Management Plan: Data and information collected and/or created under NOAA grants and cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two years after the data are collected or created). Proposals submitted in response to this Announcement must include a Data Management Plan describing how these requirements will be satisfied. To comply with this requirement, the Principal Investigator must fill out the Sea Grant Data Management Form to explain how the data and metadata will be provided.

E. Contacts for Further Information

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

Prospective applicants are encouraged to contact the following Sea Grant staff to discuss proposal development.

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

Assistant Director for Research: Damian Brady damian.brady@maine.edu Tel: 207.312.8752

Director: Paul Anderson panderson@maine.edu Tel: 207.581.1435

Fiscal Officer: Lynn Wardwell wardwell@maine.edu Tel: 207.581.1448

Communications Director: Catherine Schmitt <u>catherine.schmitt@maine.edu</u> Tel: 207.581.1434

Associate Director: Beth Bisson beth.bisson@maine.edu Tel: 207.581.1440

5784 York Complex, Suite 66 University of Maine Orono, Maine 04469-5784

F. Submission Deadlines and Decision Timetable

All PIs should reach out to Fiscal Officer, Lynn Wardwell for budget advice, by email <u>wardwell@maine.edu</u> or phone (207.581.1448) <u>prior to May 15</u>. All PIs should also reach out to the Communications Director, Catherine Schmitt, regarding their

communications and engagement, by email <u>catherine.schmitt@maine.edu</u> or phone (207.582.1434) <u>prior to May 15</u>.

***Monday, May 15:** Draft of budget and justification is due to the University of Maine's Office of Research and Sponsored Programs (ORSP) by 4:30 p.m. EDT. University of Maine PIs should have already reviewed their budget and justification with Lynn Wardwell.

Monday, May 22: Proposal Submission Form with list of suggested reviewers due in Sea Grant office by 4:30 p.m. EDT. *Note, by this date, University of Maine PIs should have initiated the Proposal Automated Routing System (PARS).

***Friday, May 26:** A working draft of the proposal narrative is due to ORSP by 4:30 p.m. EDT.

***Wednesday, May 31:** Final proposals must be submitted to ORSP and PARS routing should be initiated.

Monday, June 5: Full proposals due electronically by 4:30 p.m. EDT, send to rachel.lasleyrasher@maine.edu or sgresearch@maine.edu

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

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

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

Wednesday, August 16: PI rebuttal letters due electronically by 4:30 p.m. EDT.

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

Tuesday, September 19 (tentative): Technical Advisory Panel reviews proposal packages and makes recommendations to Maine Sea Grant Management Team.

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

By mid-October: Applicants informed of decisions.

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

*Dates apply only to proposals submitted by University of Maine PIs. Lead PIs outside of the UMaine system should consult with their host institution regarding internal deadlines.

G. Checklist for Full Proposals

All components of the full proposal must be submitted electronically as a <u>single pdf file</u>, with the exception of the budget forms which must be submitted as a separate MS Excel file. **Proposals must be received by 4:30 p.m. EDT on Monday, June 5, 2017**. Applicants may submit the proposal as an e-mail attachment to Maine Sea Grant Research Coordinator, Rachel Lasley-Rasher (<u>rachel.lasleyrasher@maine.edu</u> or <u>sgresearch@maine.edu</u>).

Proposals received after the deadline will not be considered.

- □ All proposal elements must be submitted electronically as a single pdf file with the exception of the budget forms (NOAA 90-4 form).
- University of Maine investigators must obtain permission for submission through the Proposal Approval Routing System (PARS). Investigators from other institutions may need formal approval from their own institutions.
- Proposal text must be Times New Roman in 12-point font with 1-inch margins on the top, bottom, and both sides.
- The proposal should include:
 - □ <u>90-2 Project Summary</u> Form
 - □ Proposal Narrative (12-page limit)
 - Literature Cited
 - NOAA 90-4 Budget Forms for total project: for each year of project and a total summary budget (submitted as separate MS Excel file)
 - NOAA 90-4 Budget Forms for each institution: for each year of the project and a total summary budget (submitted as separate MS Excel file)
 - Budget Justification
 - □ 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)**
- <u>Sea Grant Data Management Form</u>