



**New York Sea Grant's
Biennial Research Call for 2018-2019**

**INVITING PRE-PROPOSALS FOR RESEARCH
Specifically Addressing Portions of NYSG's Strategic Plan for 2018-2021**

Pre-Proposal Deadline 4:30 PM Monday February 27, 2017

Anticipated Funds: approximately \$120,000 per year for 2 years,
to support about 5-7 projects

The main goal of New York Sea Grant's (NYSG) research program is to generate and provide valid scientific information that will further the sustainable development, use, protection, conservation, and management of our coastal resources. The research must clearly be driven by stakeholder identified research needs and must provide enhanced opportunities for NYSG to 'make a difference' and have an impact on addressing important coastal issues.

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I. BACKGROUND

[New York Sea Grant](#) is part of a national Sea Grant network that constitutes NOAA's [National Sea Grant College Program](#). NYSG is a cooperative program of the State University of New York (SUNY) and Cornell University, with its main administrative offices located at Stony Brook University and extension offices [located throughout the state](#). In a time of accelerating economic, environmental, and scientific developments, NYSG's mission is to serve as an important partner in helping New York's diverse coastal communities respond to rapid economic and environmental changes.

II. NYSG RESEARCH AND TOPICS FOR THIS CALL

Sea Grant projects address well-defined coastal, Great Lakes, or marine issues confronting modern society. While research projects supported by NYSG must address problems or opportunities important to New York State, the results of these projects should also be relevant to regional or national needs and be consistent with the program priorities for the National Sea Grant College Program as contained in the National Network 2018-2021 Strategic Plan.

NYSG supports research on marine, Hudson estuary, and Great Lakes topics and issues. Projects can consist of developmental work on new methods, models, tools, techniques, state-of-knowledge synthesis efforts, and hypothesis driven experimental work. The proposed research must show an understanding of what constitutes necessary and sufficient information for responsible decision-making or for applied use and will be expected to generate such. A successful Sea Grant project would provide information or tools that will assist resource managers, communities, and other stakeholders to make decisions or plans regarding coastal resources and environments. Additionally, a project must have sufficient intellectual content and scientific rigor to make it appropriate for university research.

The need, significance, products, usability, target audience (beyond other academics), and expected impact for and of the research must be clearly anticipated and described. ***These will be key factors in the review process.***

Because Sea Grant's mission includes extension of research and other results to stakeholders, discussions with NYSG extension staff (see list in Section VI) may help hone the focus of proposed research towards particularly useful information. ***Researchers are strongly encouraged to contact NYSG staff with their ideas to improve their understanding of what information and products may be most useful to coastal stakeholders.*** The organization or people whose task it will be to make related decisions, or who will be able to make specific use of the project's results, must be identified. Contact with them before, during, and after the project by the researchers and/or via NYSG staff is expected. **Within two months of the start of a research project funded under this Call, the PI and NYSG staff must develop a project extension and outreach plan to be implemented throughout the duration of the project.**

NYSG encourages multi-disciplinary and multi-investigator research. **Research in all**

disciplines is encouraged-such as in the physical, natural and/or social sciences. NYSG is also interested in helping to foster new research talent, and encourages submissions from young investigators and others who have not previously received NYSG funding. The development of future scientists and decision-makers through student education is also important to NYSG. Investigators are encouraged to involve graduate and/or undergraduate students in the conduct of their projects.

Efforts inappropriate for Sea Grant funding include those directed solely toward monitoring or surveys, or that are merely demonstration projects. Expansion of understanding solely for its own sake is also considered inappropriate for Sea Grant.

In this Call for Pre-proposals, NYSG invites projects that will address the specific topics described below. The selected topic must be addressed in the context of the Focus Area and Goal under which it appears. The Goals are from *New York Sea Grant's Strategic Plan for 2018-2021*.

Be sure that your proposal idea, for the topic you have chosen from the list below, matches these criteria:

- Will help NYSG make progress towards fulfilling the Goal under which the topic appears;
- Fulfills a specified aspect of the Goal under which the topic appears.

Focus Area A. Healthy New York Coastal Ecosystems and Habitats

NYSG Goal A1: Coastal habitats, ecosystems, and the services they provide are protected, enhanced, or restored, including, but not limited to those impacted by *Aquatic Invasive Species (AIS)*, *climate change*, *altered trophic interactions*, *plastic contaminants* and *habitat degradation*.

To help achieve this Goal, NYSG is looking to fund research under the following topics:

Topic A1.1 Develop techniques, tools and approaches to protect and restore ecosystems endangered by AIS, and/or altered trophic interactions.

Topic A1.2 Develop measures and tools to predict, prevent, prepare for, control or mitigate the introduction and effects of aquatic invasive species.

Topic A1.3 Develop tools, techniques and methods to predict the local and regional impacts of AIS, climate change, altered trophic interactions, plastic contaminants and habitat degradation.

NYSG Goal A2: Coastal ecosystems and habitats and their living resources are managed by applying sound science, tools, and planning to sustain ecosystem function and services

that support communities and economies.

To help achieve this Goal, NYSG is looking to fund research under the following topics:

Topic A2.1 Develop the information, tools, and methods to restore, and sustain the habitat, biodiversity and productivity of coastal ecosystems.

Topic A2.2 Synthesize data from field observations, monitoring, historical data, research and modeling to provide tools, methods and information to reduce, mitigate or adapt to changes to sustain ecosystem function and services that support communities and economies.

NYSG Goal A3: Coastal water quality of New York is enhanced and protected from excess nutrients, HABs, emerging contaminants, microplastics and other pollutants from anthropogenic sources.

To help achieve this Goal, NYSG is looking to fund research under the following topics:

Topic A3.1 Create tools, programs, models and products that increase understanding of sources of water pollution as well as the activities that can reduce sources of water quality degradation.

Topic A3.2 Develop tools, techniques and methods to manage and mitigate the impacts of, and prevent or reduce the occurrence of excess nutrients, HABs, emerging contaminants, microplastics and other pollutants in coastal environments.

Focus Area B. Sustainable New York Fisheries, Aquaculture and Seafood Businesses

NYSG GOAL B1: Fisheries and aquaculture industries provide food, jobs and economic/cultural values in coastal communities and economies.

To help achieve this Goal, NYSG is looking to fund research under the following topics:

Topic B1.1 Ensure safe seafood preparation and handling practices are used by marine resource industries.

Topic B1.2 Develop and provide market data, tools, and information for marine recreational fishery businesses (e.g., “for-hire” operators, bait & tackle dealers) and commercial fishers to market their businesses and/or their catch.

Topic B1.3 Increase domestic production of currently farmed and promising new

species through improvements in nutrition, reproduction, larval rearing and genomics to enhance growth, improve health and adapt to changing conditions, such as ocean acidification and climate change.

NYSG GOAL B2: Marine and freshwater fishery resources are conserved and sustained, supporting fishing communities and businesses, including commercial, aquaculture, recreational, and subsistence fisheries.

To help achieve this Goal, NYSG is looking to fund research under the following topics:

Topic B2.1 Identify threats to fishery resources, wild and those under cultivation, and ensure sound science, services and tools are available and accessible to help understand the threat(s), how they arise, what actions can be taken to eliminate them or ameliorate their effects.

Topic B2.2 Determine the causes and potential remedies for actual and predicted changes in populations, population dynamics and health of finfish and shellfish of economic importance to New York.

Focus Area C. Resilient New York Communities and Economies

NYSG GOAL C1: Vulnerable and at-risk coastal communities are aware of changing conditions and can improve their resilience, economy, and community well-being.

To help achieve this Goal, NYSG is looking to fund research under the following topics:

Topic C1.1 Develop tools and techniques to improve the prediction of and/or impacts from coastal processes, coastal hazards, or extreme weather on coastal communities.

Topic C1.2 Develop tools and techniques to assist coastal communities and property owners to adapt to fluctuating lake levels especially when combined with factors such as weather and upland land use.

Topic C1.3 Increase the resilience of businesses, communities and landowners to predicted threats from coastal hazards and extreme weather and to impending changes in the coastal environment and the coastal economy.

III. GENERAL INFORMATION ABOUT PRE-PROPOSAL SUBMISSION

A. Who is Eligible to Submit:

Faculty at academic institutions are the main targets and recipients of NYSG's research funds. Nevertheless, proposals from other groups may be accepted and approved for funding, too. Eligible groups are listed below in order of preference for funding under this Call:

1. Researchers at universities and colleges.
2. Researchers at other not-for-profit research institutions.
3. Researchers who are personnel of state or local agencies, or of not-for-profit organizations.
4. Researchers at for-profit institutions or companies (with limits).

Important Notes: All proposals submitted under this Research Call for 2018-2019 must be **led** by an eligible researcher with his or her primary professional base in New York State. Federal employees may participate in projects as collaborators, but they may not be included in the budget. Federal employees and institutions are *not* eligible for compensation or budget items of any sort, and their contributions to the proposed research cannot be used as a source of cost-share. Graduate students cannot be included as PIs.

B. Duration of Proposed Work:

Funding made available under this Call will cover two years (2/1/2018 - 1/31/2020). While NYSG is accepting proposals for up to two years of work, only one year of support is awarded at a time. Continued support for the second year of a project will be contingent on demonstrated progress. Proposals for one-year projects are also welcome.

C. Budget Size (total of indirect plus direct costs):

The total budget request (direct + indirect costs) for a project may not exceed \$120,000 per year. Note that the budget estimates in pre-proposal submissions are expected to be realistic. A substantial increase in the final budget request of invited full proposals will be viewed negatively and may result in either rejection of the project or budget cuts without changes in the scope of work.

D. Cost-Share Requirement:

Sea Grant requires non-federal cost-share (a.k.a. matching funds) support in the amount of at least 50 percent of the Sea Grant funds requested. For example, if \$100K is requested from Sea Grant, the proposal's budget page must demonstrate an additional \$50K of non-federal cost-share. Additional cost-share (i.e., more than 50%) is encouraged and will be viewed favorably.

E. Limit on Salary Requests:

Principal and associate investigators with appointments providing nine (9) or more months of support annually are generally not allowed to receive more than two (2) months' total salary from NYSG per year. Other eligible principal and associate investigators will generally be allowed to receive up to six (6) months' salary from NYSG per year. These limits may be relaxed under exceptional circumstances, with prior approval from NYSG. Under all circumstances, the amount of salary support requested or provided as cost-share must be warranted by the effort needed to conduct the project.

F. Regional or Multi-state Proposals:

All Sea Grant programs are on the same funding cycle, which facilitates collaborative projects between states. If you are interested in submitting a regional or multi-state proposal that is not part of a special Regional Call, you must contact NYSG's Director, William Wise, and your co-PIs must contact their state Sea Grant director(s) or research coordinators prior to submission. It is critical that submitters be familiar with, and comply with, the due dates and processes as specified by their state's Sea Grant program.

G. Duplicate Submissions:

NYSG should be immediately informed by the Principal Investigator if a proposal submitted under this Call will also be submitted elsewhere, e.g., in response to a call released by the National Sea Grant College Program, another state Sea Grant program, or any other funding agency or source. It is NYSG's policy to consider only proposals submitted specifically in response to, and within the due dates for, this Call. Full proposals will not be considered unless they were in this Call's pool from the start as a pre-proposal.

H. Data Management/Sharing Plan:

NOAA regulations require that data and information collected and/or created under NOAA (including Sea Grant) grants 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), except where limited by law, regulation, policy or by security requirements.

The requirement has two basic parts: (1) environmental and socio-economic data generated by a grant project must be made available after a reasonable period of exclusive use, and (2) the grant proposal must describe the plan to make the data available.

To comply with this requirement, in NYSG's full proposal stage, the principal investigator must include a data management plan that describes how the project's data and metadata will be made available to others. Deposition of data in standard data archives (e.g., by discipline) or in available university archives is encouraged. This requirement for data archiving is in addition to the expected publication of research results in peer-reviewed journals. The proposed plan will be reviewed for compliance with NOAA requirements. If funds are needed for this task, they may be included in the project pre-proposal and full proposal budgets.

I. What and When to Submit:

NYSG uses a pre-proposal process. A complete, PC-readable Pre-proposal Submission Form (see Section VII) ***must be received by the deadline of 4:30 pm EST on Monday, February 27, 2017*** through NYSG's electronic submission web site: www.NYSGProposal.org. Click on "New York Sea Grant's Biennial Research Call for 2018-2019" under "Current Funding Opportunities" and follow all directions for electronic submission. At the pre-proposal stage, signatures of principal investigators or campus officials are not required.

Do *not* include information or materials supplemental to the Pre-proposal Submission Form (e.g., full budget, appendices, letters of support, etc.). Such materials will be discarded without review.

Important notes about pre-proposal submission:

Submissions that do not include the required information will lose rating points (see Section VII for Instructions).

- Double-check your Pre-proposal Submission Form file before uploading it at the submission web site to make sure it is PC-readable and that it is the final version. *The submission must be in the form of a single pdf file.* You will receive an auto-receipt from the web site confirming your submission.
- We recommend submission via a PC at your university office, with a current version of Firefox or Google Chrome web browser installed.
- If you have trouble with submission through www.NYSGProposal.org, call NYSG (631-632-6906) to explain the problem. We will try to help, but cannot guarantee that we can solve your problem. In any case, unless the web site becomes inoperable, it is *your* responsibility to use equipment that will allow you to meet the deadline.
- A pre-proposal submitted after the deadline of 4:30 pm EST on Monday, February 27, 2017 will not be accepted and its lead investigator will be notified. Please be sure to watch the website's clock! Even if you are on the website before the deadline, if your file is not submitted by 4:30 PM, it will be too late to be accepted.

NYSG will not make exceptions to these conditions, so ***early submission is very strongly advised.*** The official time stamp on the submission is provided by the website's server.

IV. THE REVIEW PROCESS

Pre-proposals submitted to NYSG in response to this Call will be reviewed by NYSG's senior program managers, extension specialists, and Program Advisory Council, as well as several non-NY academic research panelists. The following criteria will be used in this evaluation:

- How well the project responds to one or more of the research priorities contained in Section II (0 to +5)
- Likelihood that the approach will be successful (0 to +2)
- Expected products and anticipated impact(s) from the results (0 to +5)
- Information missing from any of the sections, 1 through 9 (0 to -1, per section)
- Other programmatic considerations

Only authors of the most highly-rated pre-proposals will be invited to submit full proposals. In this cycle, NYSG will invite about twice as many full proposals as it expects to be able to fund. During full proposal development, investigators will be expected to facilitate coordination with, or input from, industry, agency, or private groups as appropriate. NYSG staff will attempt to assist in this process.

Full proposals will be subject to mail peer review and a special Technical Review Panel. NYSG's senior program managers will also utilize additional input from NYSG's staff and Program Advisory Council. The specific projects NYSG includes in its 2018-2021 omnibus proposal to the National Sea Grant College Program will be selected primarily on the basis of the following criteria: responsiveness to the NYSG conditions and priorities outlined in this Call; significance of the specific problem or opportunity; scientific or technical merit of the project, including also the professional qualifications of investigators and appropriateness of the budget request and match; expected products and anticipated impact(s) from the results; and other programmatic value. The PI's performance and accomplishments on previous NYSG-funded research will also be considered, if applicable.

V. 2018-2019 CALL TIMELINE

| | |
|----------------------|--|
| January 10, 2017 | Call for pre-proposals released |
| February 27, 4:30 pm | Deadline for pre-proposals (must use NYSG submission web site) |
| April 14 | NYSG invites selected PIs to write full proposals |
| June 12, 4:30 pm | Deadline for full proposals with all authorized signatures (must use NYSG submission web site) |
| July 31 | Full proposal PIs receive masked peer reviews for response |
| August 14 | Deadline for PI responses to reviews |
| August 30 | NYSG notifies all investigators of funding decisions |
| September 22 | Deadline for revisions, final budgets and Word/Excel versions of successful proposals |
| February 1, 2018 | Anticipated funding begins for new projects |
| By April 1, 2018 | Outreach plan for the funded project is developed by PI and NYSG staff |
| February 1, 2019 | Anticipated funding continues for 2-year projects with satisfactory progress |

VI. NEW YORK SEA GRANT STAFF

Research Administration (at Stony Brook University)

William Wise, Director (631-632-6905, william.wise@stonybrook.edu)

JeanAnn Johnston, Fiscal Officer (631-632-6908, jean.johnston@stonybrook.edu)

Lane Smith, Research Program Coordinator (631-632-9780, lane.smith@stonybrook.edu)

Extension Specialists (locations throughout New York State)

Katherine Bunting-Howarth, Associate Director (607-255-2832 at Cornell University, keb264@cornell.edu) – coastal policy and decision-making; public participation; human dimensions of coastal management.

Mary Austerman (315-331-8415 at Wayne County Cooperative Extension, mp357@cornell.edu) – Great Lakes coastal communities; climate adaptation and resilience planning; aquatic invasive species.

Antoinette Clemetson (631-727-3910 at Stony Brook University, aoc5@cornell.edu) – marine recreational fisheries; lobsters; marine animal diseases.

Helen Domske (716-645-3610 at SUNY Buffalo, hmd4@cornell.edu) – coastal education; avian botulism; Great Lakes ecosystems; emerging contaminants.

Michael Ciaramella (631-632-8730 at Stony Brook University, klg9@cornell.edu) – seafood safety; seafood processing; seafood utilization; seafood education.

Nordica Holochuck (845-340-3983 at Cornell Cooperative Extension of Ulster County in Kingston, nch8@cornell.edu) – stewardship; coastal recreation; habitat issues; aquatic invasive species; Hudson River issues.

Jesse Lepak (315-312-3042 at SUNY College Oswego, jml78@cornell.edu) – Great Lakes fisheries, ecosystem health.

Amy Mandelbaum (631-632-9216 at Stony Brook University, acb328@cornell.edu) – Long Island Sound Study Outreach Coordinator.

Jay Tanski (631-632-8730 at Stony Brook University, jjt3@cornell.edu) – marine facilities; coastal processes and erosion control; sea level rise and other coastal hazards.

David White (315-312-3042 at SUNY College Oswego, dgw9@cornell.edu) – coastal recreational facility design, management, and operation; coastal recreation participation, uses, and impacts.

Helen Cheng (718-951-5415 at Science and Resilience Institute at Jamaica Bay, Brooklyn College, helen.cheng@cornell.edu) – coastal resilience, climate, urban ecology and biology

Brittany Rogers (315-331-8415 at Wayne County Cooperative Extension, blr93@cornell.edu) – aquatic invasive species management.

Communications Staff (at Stony Brook University)

Barbara Branca (631-632-9124, barbara.branca@stonybrook.edu) – communications manager.

Paul Focazio (631-632-9124, paul.focazio@stonybrook.edu) – writer, web developer.

VII. PRE-PROPOSAL SUBMISSION FORM INSTRUCTIONS

Be sure to use the format and provide the information as described below. **Every Section (1-9) and all of the information specified within it is required.** Submissions that do not include all of this information will lose rating points. Use all-around margins of at least 1" and a font size no less than #12 Times New Roman. Convert your document to pdf before submission.

Pre-proposal Submission to the NYSG Biennial Research Call for 2018-2019

Date: _____

1. LAST NAMES OF PRINCIPAL INVESTIGATORS: (e.g., Smith / Doe / Jones)

2. BRIEF PROJECT TITLE:

3. INVESTIGATOR(S): List all principal (PI), co-principal (co-I), and associate (AI) investigators, including name, mailing address, telephone, and email for each. *Also* indicate eligibility category (#1, 2, 3, or 4) from the Call's Section III.A for each. The primary institutional affiliation of the lead investigator must be an institution located in New York State. Students and NYSG staff cannot have PI, co-I, or AI status.

4. TYPE OF PROJECT:

A. Addressing Which Research Topic: Indicate the Research Goal, and Topic, from Section II of this Call that will be addressed by this submission (e.g., *Goal A1, Topic A1.2 Research to develop measures and tools to predict, prevent, prepare for, control or mitigate the introduction and effects of aquatic invasive species*)

B. Regional or multi-program submission? Indicate yes or no, whether the pre-proposal is part of a regional or multi-program submission being considered by other state Sea Grant programs. If yes, indicate which Sea Grant programs. Proposals in response to Special Regional Sea Grant RFP's should not be submitted with this form.

5. BUDGET: Total of direct plus indirect costs.

A. Estimated Request for Federal Funds from New York Sea Grant

Year One \$ _____ Year Two \$ _____ Total Request \$ _____

B. Estimated Non-Federal Cost-Share to be Provided to New York Sea Grant

Year One \$ _____ Year Two \$ _____ Total Match \$ _____

**C. Expected Source(s) of Cost-Share: Year One:
Year Two:**

D. Data Management Plan: Indicate your recognition that an acceptable data management/sharing plan will be required as part of a full proposal, that compliance with the plan will be required if the project is funded, and that the preproposal's budget estimate provides for this. ___yes.

E. Extension and Outreach Plan: Indicate your recognition that an acceptable extension and outreach plan developed with NYSG extension staff will be required by two months after the start of a project if the project is funded, and that the preproposal's budget estimate provides for this. _____yes.

6. BRIEF DESCRIPTION OF PROJECT: Starting on a *new* page, **use no more than two pages** with the following a-e headings to describe your proposed project. Use all-around margins of at least 1" and a font size no less than #12. Anything beyond two pages will be discarded prior to review.

- a) **STATEMENT OF THE ISSUE AND OBJECTIVES:** Explain how the research you propose will address the topic you have chosen from Section II's list. Present the overall objectives of your proposed study. Alternatively, if the proposal involves model and/or decision-making tool development, clearly state the intent.
- b) **APPROACH:** Very briefly describe the general approach to be used in accomplishing the objectives.
- c) **EXPECTED PRODUCTS AND ANTICIPATED IMPACT(S):** Explain what products (techniques, tools, models, and scientific information) are expected to result from this project, who will use them, and what their anticipated impact(s) will be within New York and elsewhere. *This is one of the most important sections of your submission!*

7. LITERATURE CITED: Present the full citations for any work referenced in Section 6, where they may be labeled as (1), (2,3), etc. The space required for Section 7 is not counted under the 2-page maximum for Section 6. If no references are used in Section 6, state "none".

8. CVs: Provide a Curriculum Vita for each listed investigator (Principal Investigator, Co-Principal Investigator, Associate Investigator) with a 2-page maximum per person, using the format required by NSF. Contact NYSG if you need more information.

9. POSSIBLE PEER REVIEWERS: Starting on a new page, list the names and affiliations of four out-of-state individuals of national standing and pertinent expertise who we might ask to provide peer reviews of your submission. Do **not** include individuals with whom you have worked or collaborated within the last 4 years or who would be considered to have a professional or personal conflict of interest. We may or may not use these individuals, so do not contact them yourself. You may also request for certain individuals not be asked to review your proposal.

The information for Section 9 is for internal NYSG use only. Like Sections 1 through 8, omitting this section will cause your submission to lose rating points.