(121217-final)



New York Sea Grant's Biennial Research Call for 2014-2015

INVITING PRE-PROPOSALS FOR RESEARCH Specifically Addressing NYSG's Strategic Plan for 2014-2015

Pre-Proposal Deadline 4:30 PM Friday February 22, 2013

Anticipated Funds: approximately \$1 million per year for 2 years, to support about 7-10 projects

The main goal of New York Sea Grant's research program is to provide valid scientific information that will serve as the basis for furthering the sustainable development, use, protection, conservation, and management of our coastal resources. The research must clearly be driven by identified 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 (NYSG) is part of a national Sea Grant network that constitutes NOAA's National Sea Grant College Program. In New York State, Sea Grant 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. 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 to respond to rapid economic and environmental changes.

II. NYSG RESEARCH AND TOPICS FOR THIS CALL

Sea Grant projects tackle well-defined coastal, Great Lakes, or marine issues confronting modern society. While research projects supported through New York Sea Grant must address problems or opportunities important to New York State, the results of these projects should also be relevant to regional or national needs. Further, the ability of NYSG to present its results as relevant to National Sea Grant priorities within NOAA is very important.

NYSG supports hypothesis-based research related to marine, Hudson estuary, and Great Lakes topics and issues. Projects must be oriented toward answering "why" or "how," not just describing "what is." Developmental work on new methods, models, tools, and techniques also qualifies as Sea Grant research. State-of-knowledge synthesis efforts may also be proposed. The project 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 project must have sufficient intellectual content (theoretical basis, hypothesis testing) 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 the Sea Grant 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 research projects towards particularly useful information. Researchers are strongly encouraged to contact NYSG staff with their ideas to make sure they are addressing the most critical questions and to improve their understanding of what information and products may be most useful to coastal stakeholders. Preference will be given to high-quality proposals which are designed to lead to products and knowledge of significance to NYSG Extension staff and their 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.

NYSG encourages multi-disciplinary and multi-investigator research. 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, and 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 advance the Goals listed in *New York Sea Grant's Strategic Plan for 2014-2017*, via the Research Topics presented below. Note that research in many disciplines (e.g., biology, chemistry, geology, physical oceanography, and engineering) will be appropriate. This includes social science research to develop approaches or methods as applied to Goals 1, 2, 4, 5, 6, or 7 that will aid decision-makers and others in taking action based on scientifically sound research results.

<u>Goal 1:</u> Protected, Restored and/or Enhanced Habitat and Ecosystems through reduction or mitigation of, or adaptation to, the impacts of a) aquatic invasive species, b) changes in aquatic communities due to ecosystem and climate change, and c) anthropogenic activities. To help achieve this, NYSG is looking for:

- 1.1 Research (through the natural and social sciences) to develop measures and tools to predict, prepare for, assess, and mitigate the effects of ecosystem changes on coastal habitat, including species loss.
- 1.2 Research (through the natural and social sciences) to develop measures and tools to predict, prevent, prepare for, control or mitigate the introduction and effects of aquatic invasive species.
- 1.3 Research (through natural and social sciences) to develop techniques and methods for habitat management and restoration, and to identify ways to assess the effectiveness, sustainability, and costs of new and current methods.
- 1.4 Research to develop information, tools, and methods to forecast what new ecosystem and habitat states might be as affected by AIS, climate and other changes, and anthropogenic activities.

<u>Goal 2:</u> Sustainable Fisheries and Aquaculture for New York. To help achieve this, NYSG is looking for:

2.1 Research to determine the causes and potential remedies for actual and predicted changes in populations and population dynamics of finfish and shellfish of economic importance to New York.

Goal 3: Safe, High Quality Seafood Products from Profitable New York Seafood Businesses. To help achieve this, NYSG is looking for:

3.1 Research to fill knowledge gaps on current issues, policies, regulations, or environmental conditions that could affect the quality and safety of products, or the productivity and profitability of their individual seafood business or the seafood industry in New York.

Goal 4: Robust and Sustainable Development of Coastal Business. To help achieve this, NYSG is looking for:

4.1 Research to develop tools, techniques and methods to determine potential impacts on coastal resources from activities such as dredging, boating, construction and other economic activities.

- 4.2 Research to develop techniques so that coastally-located businesses can cost-effectively reduce their impact on nearby habitat and meet regulatory requirements.
- 4.3 Research (through the natural and social sciences) to develop tools, techniques and methods to assess economic impacts of coastal businesses on coastal economies.
- 4.4 Social science research to identify effective ways that coastal businesses can diversify income sources.

<u>Goal 5:</u> Effective Community Land Use Planning which Integrates Watershed Issues. To help achieve this, NYSG is looking for:

5.1 Research to develop tools, methods or practices to assist municipal governments in the prevention of point and nonpoint source pollution.

<u>Goal 6:</u> Improved Coastal Water Quality through Community Efforts. To help achieve this, NYSG is looking for:

- 6.1 Research to develop techniques and tools to better assess coastal water quality, water quality impairments (including emerging contaminants), and harmful algal blooms and to identify and develop potential remedial measures.
- 6.2 Research to interpret water quality data to understand how (or how much) the expenditures for practices designed to create water quality improvements are benefiting the ecosystem and water quality.

Goal 7: Improved Ability to Prepare for and Mitigate the Impacts of Existing and Future Coastal Hazards. To help achieve this, NYSG is looking for:

7.1 Research to develop and/or use tools and techniques to improve the prediction and consequences of current coastal processes and hazards and those that might be affected by land-use and/or climate change, this may include long-term strategies for addressing existing and potential coastal hazards.

III. GENERAL INFORMATION ABOUT PRE-PROPOSAL SUBMISSION

A. Who is Eligible to Submit:

Sea Grant is a national college program, so 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 Biennial Research Call for 2014-2015 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 <u>not</u> eligible for compensation or budget items of any sort, and their contributions cannot be considered a source of cost-sharing.

B. Duration of Proposed Work:

In this Call, the funding will cover two years, running from 2/1/2014 through 1/31/2016. 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 \$130,000 per year. Note that the budget estimates in pre-proposal submissions are expected to be realistic. A substantial increase in the final budget request will be viewed negatively and likely will 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 be provided under this Call. 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 only 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 now on the same funding cycle which facilitates collaborative projects between states. If you are interested in submitting a regional or multi-state proposal, you must contact NYSG's assistant director, Cornelia Schlenk, 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.

In addition separate, special regional Calls are being released by the Northeast Sea Grant College Consortium (ME through NY) and by the Mid-Atlantic Sea Grant Programs (NY through NC). These will be posted on NYSG's website when they are available. See http://www.seagrant.sunysb.edu/proposals/ for details and specific submission instructions. Those submissions are *not* considered to be part of NYSG's Biennial Call for 2014-2015 and will be supported through separate funding.

G. Duplicate Submissions:

New York Sea Grant should be immediately informed by the Principal Investigator if a proposal submitted under this NYSG Call will be also be considered under other Calls, e.g., as released by the National Sea Grant College Program, another state Sea Grant program, or any other funding agency or source. In addition, please note that it is New York Sea Grant's policy to consider only submissions specifically in response to, and within the due dates for, this Call. 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 (*NEW!*) New 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 new 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 new 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:

The completed PC-readable Pre-proposal Submission Form (see Section VII) *must be received by the <u>deadline</u> of 4:30 pm EST on Friday, February 22, 2013* at NYSG's electronic submission web site: www.NYSGProposal.org Navigate to "New York Sea Grant's Biennial Research Call for 2014-2015" and follow all directions for electronic submission. At the pre-proposal stage, signatures of principal investigators or campus officials are not required.

Do <u>not</u> 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 your final version. *It must be in the form of a single pdf file*. You will receive an auto-receipt from the web site confirming your submission, but this is not an indication that your file is readable.

- We recommend submission via a PC at your university office, with a current version of Internet Explorer, 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 (housed on the Stony Brook University server) becomes inoperable, it is your responsibility to use equipment that will allow you to meet the deadline.
- All submissions will be checked in the order they were posted and any that contain a virus or that are unreadable cannot be accepted. The lead investigator will be notified about this by email. However, for submissions that are posted on February 22, NYSG cannot guarantee that this check and notification will take place before the 4:30 PM deadline.
- Any submission after the deadline of 4:30 PM on February 22, 2013, cannot be accepted and its lead investigator will be notified. Please be sure to watch the time! 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 web site's server.

IV. THE REVIEW PROCESS

All pre-proposals submitted to NYSG in response to the *Biennial Research Call for 2014-2015* will be screened by NYSG's program management team, extension specialists, and Program Advisory Council, as well as several non-NY academic research Panelists. The following criteria will be evaluated:

- Explanation of fit to Section II Goals and Research Topics and the significance of the specific problem, need, or opportunity the proposal will address (0 to +5)
- Expected products and anticipated impact(s) from the results (0 to +5)
- Likelihood that the approach will be successful (0 to +2)
- 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 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 be of assistance in this process.

Full proposals will be subject to mail peer review and a special Technical Review Panel. NYSG's program management team will also utilize additional input from NYSG's staff and Program Advisory Council. The specific projects NYSG includes in its 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, priorities, and Goals outlined in this Call; significance of the specific problem or opportunity; scientific or technical merit of the workplan, 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. Performance and accomplishments with previous NYSG funding will be considered also, if applicable. The National Sea Grant Program Office oversees NYSG's review processes and does not conduct a separate evaluation of individual proposals.

V. 2014-2015 CALL TIMELINE

January 4, 2013 February 22, 4:30 pm April 11 June 7, 4:30 pm	Call for pre-proposals released Deadline for pre-proposals (must use NYSG submission web site) NYSG invites selected PIs to write full proposals Deadline for full proposals with all authorized signatures (must use
vane /, 1130 pm	NYSG submission web site)
July 31	PIs receive masked peer reviews for response
August 7	Deadline for PI responses to reviews
August 30	NYSG notifies successful investigators
September 20	Deadline for revisions, final budgets and Word/Excel versions of successful proposals
February 1, 2014	Anticipated funding begins for new projects
February 1, 2015	Anticipated funding continues for 2-year projects with satisfactory progress

VI. NEW YORK SEA GRANT STAFF

Research Administration (at Stony Brook University)

James Ammerman, Director (631-632-6905, james.ammerman@stonybrook.edu)
Cornelia Schlenk, Assistant Director (631-632-6906, cornelia.schlenk@stonybrook.edu)
Mary Kethman, Fiscal Officer (631-632-6908, mary.kethman@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.
- **Antoinette Clemetson** (631-727-3910 at the Cornell University Research & Extension Center in Riverhead, *aoc5@cornell.edu*) marine recreational fisheries; lobsters; marine fisheries diseases.
- **Helen Domske** (716-645-3610 at SUNY Buffalo, *hmd4@cornell.edu*) coastal education; avian botulism; Great Lakes ecosystems; emerging contaminants.
- **Ken Gall** (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; Hudson River issues.

- **Eileen Keenan** (631-632-8730 at Stony Brook University, *ek72@cornell.edu*) water quality; stormwater management; non-point source pollution.
- **David MacNeill** (315-312-3042 at SUNY College Oswego, *dbm4@cornell.edu*) sportfishery development; fisheries biology, management and conservation; aquaculture; ecosystem change; aquatic invasive species.
- **Mary Penney** (315-312-3042 at SUNY College Oswego, *mp357@cornell.edu*) Great Lakes coastal communities; aquatic invasive species.
- **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.

Communications Staff (at Stony Brook University)

Barbara Branca (631-632-9124, <u>barbara.branca@stonybrook.edu</u>) – 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.

Pre-proposal Submiss Date:	ion to the NYSG Bienn	ial Research Call for 2014-2015
1. LAST NAMES OF PR	INCIPAL INVESTIGATO	RS: (e.g., Smith / Doe / Jones)
2. BRIEF PROJECT TIT	<u>LE</u> :	
investigators, including nan eligibility category (#1, 2, 3	ne, mailing address, telephon, or 4) from the Call's Section in New Y	incipal (co-I), and associate (AI) e, and email for each. <i>Also</i> indicate in III.A for each. The primary ork State. Students and NYSG staff
numbers from Section II of Research to develop tools, t	this Call that will be address echniques, and methods to d	icate the Goal and Research Topic ed by this submission (e.g., Goal 4, 4.1 etermine potential impacts on coastal struction and other economic activities).
part of a regional or multi-p programs. If yes, indicate v	rogram submission being con which Sea Grant programs. National Calls mention	yes or no, whether the pre-proposal is nsidered by other state Sea Grant Note: pre-proposals in response to the oned in section III.F should <i>not</i> be
	Federal Funds from New Y	ork Sea Grant Total Request \$
	Cost-Share to be Provided	
Year One \$	Year Two \$	Total Match \$
C. Expected Source(s) of C Year One:	Cost-Share:	

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.

- **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 (or estimated to be beyond, if margins or font are incorrect) will be discarded prior to review.
- a) **STATEMENT OF THE ISSUE:** Explain the specific problem, need, or opportunity you wish to address and how it fits the Section II Goals and Research Topics.
- b) **OBJECTIVES:** List the overall objectives of your proposed study, with a statement of the hypothesis(es) to be tested. Or, if this is model or technique development or a synthesis effort, clearly state the intent.
- c) **APPROACH:** Very briefly describe the general approach to be used in accomplishing the objectives.
- d) **EXPECTED PRODUCTS AND ANTICIPATED IMPACT(S):** Explain what products (models, methods, 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 under 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".
- **<u>8. CVs:</u>** Provide a Curriculum Vita for each listed investigator (Principal Investigator, Co-Principal Investigator, Associate Investigator) with 2 page maximum per person, using the format required by NSF. Contact NYSG if you need instructions.
- **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 could provide informed 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.

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.