



**CALL FOR PRELIMINARY PROPOSALS
2017-2019 LONG ISLAND SOUND RESEARCH**

OPENING DATE: March 25, 2016

CLOSING DATE: June 6, 2016

Connecticut Sea Grant (CTSG) and New York Sea Grant (NYSG) announce the Long Island Sound Study (LISS) extra-mural research program. The intent of this program is to fund research that will support the management of Long Island Sound (LIS) and its resources. The LISS is a regional, community-based partnership to protect and restore LIS. Information on the LISS can be obtained at www.longislandsoundstudy.net. **NOTE** that the emphases, approach, and funding levels for this cycle of the LISS Research Grant Program differ from prior years. Respondents are urged to read the Call carefully.

Preliminary proposals are invited for the funding period of March 1, 2017 to February 28, 2019. Any investigator seeking support for this period (or portion thereof) must submit a preliminary proposal via NYSG's electronic submission web site www.NYSGproposal.org for receipt by **5:00 p.m. EDT on Monday June 6, 2016**. Hard copy, email, and fax submissions will NOT be accepted. Approximately \$700,000 in funding is expected to be available for one or two year projects. The first year of the funding period covered by this Call for Preliminary Proposals begins on March 1, 2017. Allocation of Year 2 funds, if applicable, will be contingent on approval of a Quality Assurance Project Plan (QAPP) and satisfactory progress in Year 1.

1. Topic Areas

With the publication of the Long Island Sound Study's synthesis book entitled *Long Island Sound: Prospects for the Urban Sea* (Latimer *et al.* 2014) and the 2015 Long Island Sound Comprehensive Conservation and Management Plan, several science gaps that hinder management were identified as priority research needs. On the basis of these, four topic areas were selected for this Call in consultation with the LISS Science and Technical Advisory Committee (STAC).

As a result, the purpose of this Call is to ***support research that will produce and integrate information to fill these identified gaps in our understanding and extend the ability of managers to make informed decisions and take appropriate management actions in order to prevent, reduce, or mitigate anthropogenic stressors and enhance the health and***

sustainability of the Sound. This call requests proposals that demonstrate linkages to specific strategies outlined in the CCMP. Referring to specific strategies identified in the CCMP will facilitate reviewers' assessment of proposals for responsiveness and relevance.

Preliminary proposals (i.e., pre-proposals) in any of the four **Topic Areas** listed below are invited in this funding cycle:

A. Examine the impact of nutrients on eutrophication impairments in LIS. Such research should also contribute to our ability to manage and reduce these impairments. Example topics include, but are not limited to:

- Address major knowledge gaps in the chemical sources (C, N, etc.), and physical and biological processes (stratification, bacterial respiration, etc.) that produce hypoxia in LIS and may be addressed by management actions.
- Develop LIS-specific N thresholds (either concentration or loading based) to improve water quality. These thresholds should address endpoints such as improved water clarity, increased eelgrass acreage, decreased harmful algal blooms and benthic macro algae, and reduced nearshore hypoxia¹.

B. Improve understanding of ecosystem services provided by LIS habitats such as eelgrass and saltmarsh, and how these systems respond to climate and anthropogenic change. Such research should also contribute to our ability to restore these critical habitats. Example topics include, but are not limited to:

- Determine coastal habitat locations that are likely to be impacted by sea level rise, including alteration or loss, and which of those sites have the potential to migrate upland.
- Develop a conceptual model, or a diagnostic matrix, that would include several factors influencing marsh growth and loss. Possible factors to contain in the model include accretion rates, sediment availability, SLR, nutrient levels (nitrogen), groundwater input, surface water hydrology, LiDAR, and tidal wetland size. The work should recommend approaches for dynamically modeling wetlands to allow practitioners to classify and analyze how different marshes (e.g., size, geography) respond in different ways to the various factors influencing marsh growth and loss.
- Develop or apply habitat suitability and connectivity models to provide metrics for all restoration and protection projects (including living shorelines).

¹ Proposers may also wish to consult the New York Conceptual Scope for the Long Island Nitrogen Action Plan, <http://www.dec.ny.gov/lands/103654.html> and the EPA proposed Long Island Sound Nitrogen Strategy, <http://longislandsoundstudy.net/issues-actions/water-quality/nitrogen-strategy/>

- Valuation of the effectiveness of various tidal marsh restoration techniques with regard to successfully building marsh elevation/coping with marsh migration, supporting flora and fauna and providing ecosystem services.

C. Synthesize information that contributes directly to our ability to understand and manage anthropogenic perturbations to LIS. Example topics include, but are not limited to:

- Synthesize LIS water quality, habitat, or other monitoring data to illuminate long-term trends and highlight changes. The Buzzards Bay² and Tampa Bay³ National Estuary Programs have recently published syntheses of water quality monitoring data to demonstrate trends and improvements.
- Synthetic work combining datasets to test novel hypotheses.

D. Improve understanding and management of the sources and relative loads of sediments, nutrients, and contaminants into LIS. Example topics include, but are not limited to:

- Characterize and evaluate the major sources of solid waste that are introduced to LIS in order to minimize future inputs. To support the objective of trash free waters, there is a need to identify the types of debris that pose a higher risk to aquatic ecosystems, understand their fate and transport, and identify the vectors for their introduction to LIS and recommendations for prevention.
- Collect and analyze social data related to understanding behaviors, and their underlying motivations, that contribute to water and habitat quality impairments. Areas of interest include but are not limited to residential turf fertilizer use and littering contributing to marine debris. The work should contribute to an understanding of how social marketing can be effectively used to effectively motivate change.

Applicants must specify which Topic Area or Areas (A, B, C, and/or D) and CCMP strategies their pre-proposal addresses. Applicants must clearly identify and provide specific examples of how their research projects can inform management decisions and help to address impairments to LIS. Submissions merely stating, in general, that “there will be value” of the information generated from the proposed research will not be sufficiently compelling.

² Rheuban et al. 2016. Spatial and temporal trends in summertime climate and water quality indicators in coastal embayments of Buzzards Bay, Massachusetts. *Biogeosciences*, 13, 253-265.

³ Greening et al. 2014. Ecosystem responses to long-term nutrient management in an urban estuary: Tampa Bay, Florida, USA. *Estuarine, Coastal and Shelf Science*, Volume 151, A1–A16.

For the purposes of this RFP, research is defined as scientific endeavors with **explicit and testable hypotheses** that strive to answer “why” and “how” questions. Research questions may be derived from either the natural or social sciences. Within the scope of this RFP, proposals that focus primarily on describing or monitoring conditions and do not identify or test a specific hypothesis will not be considered.

2. Duration and Funding

The program anticipates awarding approximately \$700,000 to cover the entire duration of all selected projects. The program will support one or two year projects. **The maximum amount of funding available per project is \$200,000/year for a maximum of \$400,000/project and this must include all direct plus indirect costs.** Proposals that exceed this amount will be discarded without review.

3. Eligibility

Pre-proposals from the following eligible categories will be considered for funding:

- A. Faculty at universities and colleges,
- B. Researchers at not-for-profit institutions,
- C. Researchers who are personnel of state or local agencies, and
- D. Researchers at for-profit institutions or companies.

Eligibility is not limited to individuals from New York and Connecticut. However, the primary professional base of the lead investigator must be in the United States. U.S. citizens located in other countries are not eligible. Federal employees and institutions are not eligible to receive compensation, equipment, or budgeted items of any sort, but they may be involved with the project. Students and NYSG and CTSG staff cannot serve as Principal Investigators, co-PIs, or Associate Investigators. Members of the STAC may serve as PIs or co-PIs, and may receive funding under this initiative.

4. Review

All pre-proposals that meet all of the specified requirements will be screened by a Panel established by CTSG and NYSG that will include scientific peers from unaffiliated institutions and one representative each from CTSG, NYSG, EPA, NYSDEC and CTDEEP. The Panel will use the following criteria, scoring, and weighting in rating pre-proposals:

- A. Likelihood that the project will be successful in fulfilling its objectives (0-5) 30%
- B. Rationale and responsiveness to the Topic Areas identified in the Call (0-5) 30%
- C. Usefulness of the anticipated results, as described in the submission, to inform and direct management of LIS and its resources (0-5) 40%

Pre-proposals will be ranked on their average total scores. Each lead investigator will receive a summary of the Panel scores for his/her pre-proposal. Full proposals will be encouraged only from those prospective principal investigators with the highest-ranked preliminary proposals. The estimated pool for funding is \$700,000 but note that there is no *a priori* projection or target for the number of proposals that will ultimately be supported. Instructions for full proposal submissions will be provided to the PIs for those full proposals which are encouraged.

5. Preliminary Proposal Requirements

A preliminary proposal, while not as detailed as a full proposal, should clearly and succinctly define the objectives, approach, and rationale for the project. The anticipated benefits (i.e., the usefulness) of the proposed work must also be described, that is, specifically how the proposed work will enhance understanding and management of Long Island Sound.

General statements simply expressing that there will be value in the information generated from the proposed research will not be sufficiently compelling.

Pre-proposals requesting funding that is complementary to that sought from other sponsors are welcome. In this case, other funding sources and amounts should be disclosed, and work being funded or proposed elsewhere should be distinguished from, and not duplicative of, work proposed under this Call.

All preliminary proposals must be submitted using the format and categories described at the end of this announcement. No appendices or other attachments are permitted. Investigators should ensure that all information is provided and that pre-proposal components follow the specified format.

The preliminary proposal project description must conform to stated page limitations, including minimum 1-inch margins and 12-point font of Times New Roman or equivalent. Illustrations and tables must be of legible size, and are *included* in the page limitation. References cited may be included as a separate section, *in addition* to stated page limits.

The completed Pre-proposal Submission Form (see end of this announcement) must be received via www.NYSGproposal.org as a single pdf by the closing **deadline of 5:00 p.m. EDT on June 6, 2016**. Hard copy, email, and fax submissions will NOT be accepted. Please note that, although the submissions are to NYSG's web site, this is a jointly administered funding opportunity and all the submissions will be processed by both programs, CTSG and NYSG, as a single pool. *Preliminary proposals that are not received by this deadline will be discarded without review, as will preliminary proposals that fail to comply with content, format, budget, and other requirements. Note that submissions with sections that exceed specified page limitations will be rejected, not truncated.* We want all submissions to have a fair and equal opportunity, so please be sure to carefully follow the instructions. Unless required by your institution, it is not necessary for your University (or institution) sponsored programs office to formally approve your preliminary proposal prior to submission.

Each lead applicant will be notified by August 12, 2016, about whether or not a full proposal is encouraged. A summary of Panel results will be provided by August 19, 2016. Note that submission of full proposals will only be encouraged for those prospective principal investigators with the highest-ranked preliminary proposals following the Panel review and evaluation. For those investigators invited to submit full proposals, the deadline for these full proposals is October 3, 2016 at 5:00 p.m. EDT.

The total budget request for a project may not exceed \$400,000 for the entire project, or

\$200,000 for each year, including all direct and indirect costs.

Please double-check your Pre-proposal Submission Form file before uploading at the submission web site www.NYSGproposal.org to make sure it is a PC-readable pdf and that it is your final version. **Warning!! Do not wait until just before the deadline** in case you encounter technical difficulties with your computer or unexpected network issues. Note that the deadline time is based on the server clock and not your computer clock. Be sure to pay attention to the server time and remaining time as displayed on the submission form page. For best results, it is recommended that you use your office computer at your institution to submit your pre-proposal. Allowing yourself plenty of time (at least several hours, if not days) to submit is highly recommended. Sending a test submission is allowable, if you identify it as such. You will receive an auto-receipt with a time and date stamp from the web site confirming your submission, but this is not an indication that your file is readable. If the file contains a virus or is unreadable, your submission cannot be accepted.

6. Schedule

- March 25, 2016 -- Sea Grant announces Call for Pre-proposals
- June 6 -- Pre-proposals are due by 5:00 p.m. EDT via www.NYSGproposal.org
- August 12 -- Sea Grant notifies authors about whether or not a full proposal is encouraged
- August 19 -- Sea Grant distributes to all lead investigators a summary of Pre-proposal Review Panel results for his/her submission
- October 3 -- Full proposals are due by 5:00 p.m. EDT via www.NYSGproposal.org
- December 15 -- Sea Grant notifies authors about decisions, providing peer reviews and a summary of Full Proposal Review Panel results
- March 1, 2017 -- Year 1 funding starts; the completion, submission and approval of a QAPP is required. No data collection can be conducted by PIs until a QAPP has been approved.
- March 1, 2018 -- Year 2 funding starts if a QAPP has been submitted and approved and Year 1 progress is satisfactory.

7. If you have questions, contact:

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PRE-PROPOSAL SUBMISSION FORM – INSTRUCTIONS

Please be sure to use the format and provide the information as described below. Submissions that do not include the required sections and information will be rejected as incomplete. Likewise, submissions that do not follow the specified instructions below or as indicated elsewhere in the Call will also be rejected as not meeting the submission requirements.

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- 1. LAST NAMES OF PRINCIPAL INVESTIGATORS:** (e.g., Smith / Doe / Jones)
- 2. BRIEF PROJECT TITLE:**
- 3. INVESTIGATOR(S) and ELIGIBILITY:** List **all** principal, co-principal, and associate investigators, including name, address, telephone, and email for each. *Also* indicate eligibility category for each (see Section 3 and specify A, B, C, or D).
- 4. PROJECT TOPIC AREA(s):** Specify by letter (A, B, C, or D) the Topic Area or Areas listed in Section 1 of the Call, as well as the specific CCMP strategies identified in the same section, that the pre-proposal addresses.
- 5. BUDGET:** Total of direct plus indirect costs (\$400,000 max).
 - A. Estimated Funding Request** \$ _____
 - B. Anticipated Non-Federal Cost-Share to be Provided (if any)** \$ _____
 - C. Expected Source(s) of Cost-Share (if any):**
- 6. BRIEF DESCRIPTION OF PROJECT:** Starting on a *new* page, use up to two pages of text with the following a-c headings to describe your proposed project. Use all-around margins of at least 1” and a font size no less than #12 Times New Roman or equivalent.
 - a) **OBJECTIVES and APPROACH:** List the overall objectives of your proposed study, with a statement of the hypothesis(es) to be tested. Or, if this is model development or a synthesis effort, clearly state the intent. Include brief information about the approach to be used and whether there are linkages to other past, current, or proposed efforts.
 - b) **RATIONALE, and RESPONSIVENESS TO THE TOPIC AREA:** Explain the rationale for, and significance of, the proposed project to Long Island Sound in addressing the Topic Area(s) you have identified above in #4.
 - c) **USEFULNESS OF THE ANTICIPATED RESULTS TO MANAGEMENT:** Explain how the research and anticipated results can be used to inform and direct management of

Long Island Sound and its resources. It is up to the pre-proposal to provide specific examples.

7. LITERATURE CITED: Starting on a new page, present the full citations for any work referenced under #6, where they may be labeled as (1), etc. The space required to list the literature cited is not counted under the 2-page maximum for #6 (Brief Description of Project).

8. REVIEWERS: You are invited to list three potential peer reviewers who would not have a conflict of interest with you, your team, or your institution, in case you are encouraged to submit a full proposal. We may or may not use these peers, so there is no need for you to contact them. If there is anyone who you feel should *not* be asked to provide a review, you may list up to two people and we will do our best to accommodate this request. Leaving Section 8 blank is acceptable.