

CALL FOR PRELIMINARY PROPOSALS 2013-2014 LONG ISLAND SOUND MULTI-DISCIPLINARY RESEARCH

OPENING DATE: March 30, 2012 CLOSING DATE: June 8, 2012

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 <u>www.longislandsoundstudy.net</u>. **NOTE** that the emphasis, approach, and funding levels for this cycle of the LISS Research Grant Program differ from prior years. Respondents are urged to read the RFP carefully.

Preliminary proposals are invited for the funding period of March 1, 2013 to February 28, 2015. Any investigator seeking support for this period (or portion thereof) must submit a preliminary proposal via NYSG's electronic submission web site <u>www.NYSGProposal.org</u> for receipt by **5:00 p.m. EDT on June 8, 2012.** Hard copy, email, and fax submissions will NOT be accepted. With approximately \$800,000 expected to be available, it is anticipated that two or three projects will be supported. The first year of the funding period covered by this Call for Proposals begins on March 1, 2013. Allocation of Year 2 funds will be contingent on satisfactory progress in Year 1.

<u>1. Emphasis and Topic Areas</u>

There is a strong need for integration and synthesis of our understanding of coastal and estuarine systems to better support ecosystem-based management. Locally, this need is driven by increased amounts of data and information about LIS, and the complexity of new and enduring challenges such as climate change, invasive species, coastal and watershed development, emerging contaminants, fisheries management, and nutrient pollution. There is also a demand that science be understood and applied more effectively to address these challenges efficiently in a world of limited public resources.

As a result, the purpose of this RFP is to *support multi-disciplinary research that can provide explanations, models, or tools to understand and forecast the response of LIS to anthropogenic stressors and to address management measures intended to prevent, reduce, or mitigate these anthropogenic stressors.* Various methods can be used, but four are listed here (Kemp and Boynton, 2012) as examples of how multi-disciplinary topics might be handled.

- 1. Comparative cross-system analysis that evaluates similar data from different areas to develop a model that quantifies how one or more key property or process varies in relation to external drivers or internal properties.
- 2. Analysis of time-series data to understand the drivers of key ecological properties.
- 3. Cross-boundary flux balances to understand the processes that control changes in chemicals, energy, or other matter within LIS and its watershed.
- 4. Simulation modeling to relate temporal and spatial patterns in LIS to the physical, biogeochemical, and biological controls on the ecosystem processes.

Other combinations of data collection and methods of synthesis are possible, too.

The **Topic Areas** to be supported in this funding cycle, and to which these methods of integration and synthesis should be directed to focus a multi-disciplinary approach, are listed below (in no particular order):

- I. <u>Water Quality Impairments</u>
 - A. Identify and assess the conditions and causes of one or more water quality impairments and with those results provide suggestions for remediation strategies. The project must develop or identify clear linkages among stressors and impairments, or dispel putative linkages. Examples of impairments include hypoxia, harmful algal blooms, pathogen contamination, and toxic contamination. Examples of stressors include watershed conditions and pollutant loading sources.
 - B. Determine the relative impacts of various processes and stressors in their influence on impairing the conditions of embayments and with those results identify priorities for remediation. Examples of potential stressors to compare include septic systems, stormwater, fertilizer, atmospheric deposition, groundwater, and inputs from Long Island Sound proper.

II. <u>Habitat Protection and Restoration to Support Living Marine Resources</u>

- A. Evaluate current conditions and trends in key habitats and identify the critical factors controlling those habitats' quantity, quality, and function in supporting living marine resources, so as to provide information useful for protection or restoration of those characteristics. The project must develop or identify clear linkages among stressors and impairments, or dispel putative linkages. Examples of key habitats include SAV and tidal wetlands.
- B. Evaluate and compare the effectiveness of habitat restoration techniques in terms of restoring or providing ecosystem service functions to support living marine resources. Examples of habitat restoration techniques include restoring tidal flow to marshes, restoring riparian vegetation along stream banks, and eliminating invasive species from coastal forests or grasslands. Examples of ecosystem service functions include supporting species diversity, abundance, and reproductive success; nutrient processing; and productivity.
- C. Identify the relationships among anthropogenic stressors to LIS and their subsequent combined effects to explain observed trends in abundance and distribution of habitats and important living marine resources and use this

information to suggest feasible management responses, including adaptations. Examples of anthropogenic stressors include climate change, fishing pressure, toxic substances, and watershed and coastal development pressures.

Applicants must specify by the alphanumeric identifier (e.g., II.B) which topic area their 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. General statements of the value of the information generated from the proposed research will not be compelling.

2. Duration and Funding

The program anticipates awarding approximately \$800,000 to cover the entire duration of all selected projects. Projects may extend for two years, but projects of shorter duration are also welcome. The maximum amount of funding available per project is \$200,000 per year and this must include all direct plus indirect costs. Proposals that exceed this amount will be discarded without review. Matching funds (from state, private, or any non-federal sources) are desirable, but are not required. Total requested funding must include direct and indirect costs and may not exceed \$400,000.

3. Eligibility

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 have Principal Investigator, co-PI, or Associate Investigator status.

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 and scoring in rating pre-proposals:

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

Pre-proposals with an average score of 2 or less in *any* of the three criteria (A, B, or C) will result in that submission being considered "out" of the competition. The remaining 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. It is anticipated that up to 6-8 pre-proposals will be encouraged for submission as full proposals. Two or three full proposals are expected to be selected for funding. Instructions for full proposal submissions will be provided when full proposals are encouraged.

5. Preliminary Proposal Requirements

A preliminary proposal (i.e., a pre-proposal), while not as detailed as a full proposal, should clearly define the objectives, rationale, and approach for the project. Potential benefits of the proposed work should also be described (e.g., how the proposed work enhances understanding and management of Long Island Sound). Proposals must be multi-disciplinary in nature. 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 as a single pdf by the closing deadline of 5:00 p.m. EDT on June 8, 2012. 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.* 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 about the status of his/her pre-proposal by July 20, 2012 indicating whether a full proposal is encouraged or not. A summary of Panel results will be provided by August 10, 2012. 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 1, 2012 at 5:00 p.m. EDT.

Again, the total budget request for a project may not exceed \$200,000 per year, including all direct and indirect costs. Matching funds (from state or private sources) may be included, but are *not* required.

Please double-check your Pre-proposal Submission Form file before uploading at the submission web site to make sure it is a PC-readable pdf and that it is your final version. **Do not wait until just before the deadline** in case you encounter technical difficulties with your computer. 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 30, 2012 -- Sea Grant announces Call for Pre-proposals
- June 8 -- Pre-proposals are due by 5:00 p.m. EDT
- July 20 -- Sea Grant notifies authors about whether or not a full proposal is encouraged
- Aug 10 -- Sea Grant distributes to all lead investigators a summary of Pre-proposal Review Panel results for his/her submission
- Oct 1 -- Full proposals are due by 5:00 p.m. EDT
- Dec 21 -- Sea Grant notifies authors about decisions, providing peer reviews and a summary of Full Proposal Review Panel results
- March 1, 2013 -- Year 1 funding starts
- March 1, 2014 -- Year 2 funding starts, if Year 1 progress is satisfactory

7. If you have questions, contact:

Dr. Syma A. Ebbin Research Coordinator Connecticut Sea Grant College Program University of Connecticut 1080 Shennecossett Road Groton, CT 06340-6048 Tel. (860) 405-9278 E-mail: <u>syma.ebbin@uconn.edu</u> Mr. Lane Smith Research Program Coordinator New York Sea Grant 123A Nassau Hall Stony Brook University Stony Brook, NY 11794-5001 Tel. (631) 632-9780 E-mail: Lane.Smith@Stonybrook.Edu

Reference:

Kemp, W.M. and W.R. Boynton (2012) Synthesis in Estuarine and Coastal Ecological Research: What is it, why is it important, and how do we teach it? *Estuaries and Coasts* 35:1-22.

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.

2013-2014 LONG ISLAND SOUND RESEARCH PRE-PROPOSAL

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

2. BRIEF PROJECT TITLE:

<u>3. INVESTIGATOR(S)</u>: List <u>all</u> principal, co-principal, and associate investigators, including name, address, telephone, and email for each. *Also* indicate eligibility category for each.

<u>4. PROJECT TOPIC AREA</u>: Specify by the alphanumeric identifier the Topic Area listed in the Call that the pre-proposal addresses (e.g., II.B).

<u>5. BUDGET</u>: Totals of direct plus indirect costs (\$200K max per year).

A. Estimated Funding Request

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

B. Anticipated Non-Federal Cost-Share to be Provided (if any) Year One \$_____ Year Two \$_____ Total Match \$_____

C. Expected Source(s) of Cost-Share (if any):

<u>6. BRIEF DESCRIPTION OF PROJECT</u>: Starting on a *new* page, use up to three pages of text with the following a-f 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:** 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.
- b) **MULTI-DISCIPLINARY APPROACH:** Very briefly describe the general methods and multi-disciplinary approach to be used in accomplishing the objectives.
- c) **RESPONSIVENESS TO THE TOPIC AREAS:** Explain or spell out how the proposed project addresses the specific Topic Area you have identified above in #4.

- d) **SIGNIFICANCE TO LIS OF THE SPECIFIC ISSUE AND APPROACH:** Explain or describe the rationale for, and significance of, the proposed project and the way your team will be approaching it.
- e) **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.
- f) **LINKAGES:** Highlight whether the work is being proposed in conjunction with other projects or proposals, or will be able to coordinate with other known efforts.

7. LITERATURE CITED: 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 3-page maximum for #6.

8. REVIEWERS: 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.