

## GEORGIA SEA GRANT - REQUEST FOR PROPOSALS

**For the 2010-2012 funding cycle, Georgia Sea Grant is soliciting research proposals that address coastal development issues.** There are 2 stages to applying for SG support: 1) a pre-proposal with external review; and 2) a full proposal with external review. **THE DEADLINE FOR PRE-PROPOSALS IS FEBRUARY 25, 2009**

For this competition, Georgia Sea Grant will support two-year research projects in **both natural science and social sciences** so as to bring together research, management and policy sectors to foster the development of economic opportunities that promote healthy communities that are economically and socially inclusive, supported by diverse, balanced, and vibrant economies and function within the carrying capacity of the coastal ecosystems and energy resources. Sea Grant will support research and accompanying education and outreach activities that lead communities to adopt policies for the design of buildings and communities that are safer, more energy efficient, resilient to coastal hazards and maximize ecosystem services. The anticipated funding range is \$40,000 to \$70,000 per year.

### **What Types of Research Will Georgia Sea Grant Consider Funding?**

- What are the recent spatial and temporal trends of suburbanization and other types of development in coastal Georgia? What are likely future scenarios and what are the the most effective means of visualizing these changes.
- Development of guidelines that identify criteria for siting new residential, commercial and industrial growth that maximize economic return and minimize environmental degradation, both on and off site. For example, land elevation; presence or absence of endangered species, presence of wetlands, streams, and riparian buffers; soil type; freshwater availability; and the quality of transportation corridors and schools may all influence decisions on where to locate future development.
- Determining the economics of various types of suburbanization, such as low-density, suburban-sprawl vs. high-density, cluster “smart growth. How can we best educate coastal developers to use more “environmentally friendly” approaches?
- Determining hydrologic flow paths of various types of development and how best to minimize rapid, surface water runoff. Likewise, how best to minimize nutrient and pollutant runoff to adjacent streams, tidal creeks and wetlands.
- Determining the environmental and social impacts of suburbanization.
- Determining how to encourage alternative development scenarios, scenarios that minimize the loss of ecosystem services.
- Quantification of ecosystem services throughout the 6 coastal counties of Georgia.
- What are the social impacts of various types of development in coastal Georgia? How is it affecting access to water and recreational opportunities, commuting times, the sense of “place”, the working waterfront?
- What are the tax implications for local towns and counties of unbalanced growth, such as residential growth but without commercial and industrial growth? What mix of growth types provide counties with the ability to provide services to best meet citizen and business needs?
- What are the demographics of the region? What forces are driving demographic and development changes?
- How can environmental “costs” of development be minimized?
- What are the available options for dealing with human sewage? What are the limitations of septic, versus centralized sewage treatment versus local sewage treatment options?

- Develop spatially and temporally explicit maps to identify lands where various types of development would have maximal and minimal effects on adjacent natural ecosystems, such as tidal creeks and wetlands.
- Develop maps to identify spatially coastal wetland and tidal creek areas that are more or less susceptible to the effects of urban runoff (of water, sediment, nutrients and pollutants).
- What are possibilities for mitigating the deleterious effects of urban runoff into coastal wetlands and tidal waters, such as through the use of filter feeders (e.g., clams)? What are the policy hurdles to such efforts and what are the solutions to present institutional restrictions?
- How can models and new visualization tools be used to translate research results so that they are understandable to the average citizen and useful for managers and policy-makers?
- Are there new approaches to better educate local citizens and government officials about alternative development practices that promote a sense of natural resource stewardship?

This is not intended to be an exclusive list of research topics, but it should provide a good idea of the types of projects we are interested in funding – those that will have application in the short to medium term to issues related to Georgia’s coastal development

### **Additional Considerations for Successful Funding**

Our goal is to fund a small group of proposals that together will make a significant contribution to wise development and resource management of the Georgia coastal zone. In order to maximize the “impact” of our research, we may encourage research scientists to either collaborate with other funded scientists, or to conduct their research in a particular location. Georgia Sea Grant and Marine Extension already have work underway in the Barbour Creek area west of Savannah, in Brunswick, near where the Ogeechee River enters the estuary, and on Harris Neck. We may get more “bang for our buck” by concentrating efforts of several projects in the same geographic region. Investigators need not concern themselves too much in addressing these collaboration or geographic location issues while preparing their pre-proposals. Those encouraged to go forth with a full proposal, will be instructed on how to proceed with these considerations.

Investigators invited to submit full proposals will be expected to collaborate extensively with SG / MAREX specialists to develop an *effective* outreach component to their research. We will provide proposal investigators with options and advice on outreach collaborators for this section of their full proposals. For example, we might suggest working with Karen Giovengo, at the Brunswick MAREX office, to find a means of educating coastal developers on the economics (building costs and selling prices) of alternative building/developing approaches. **Additionally**, we will expect all funded investigators to donate 2-3 days of their time (while funded or afterwards) to give talks at various outlets, such as at the Sapelo Island National Estuarine Research Reserve-sponsored Coastal Decision-Makers Conference, or the annual meeting of the Association of County Commissioners in Georgia (ACCG), or the Carl Vinson Biennial legislative training meeting. Many scientists are inexperienced in talking effectively with planners, policy-makers, and local citizenry, so Georgia Sea Grant may provide training for such communication through the Carl Vinson Institute at UGA.

We feel that this opportunity to make your research applicable to the taxpayers who are supporting your research useful, not only for this particular SG research, but also to meet the “broader impacts” requirement of possibly related NSF-funded research.

## **PRE-PROPOSAL GUIDELINES**

Prior to preparing a full, formal proposal, participants should develop a two to three-page pre-proposal with a brief description of the project, outlining 1) rationale, 2) goals, 3) objectives and 4) general approach. Outside of the three-page maximum, applicants also should include a short, preliminary budget. Pre-proposals should be submitted to the Sea Grant College Program. Email a Word file to Dianne England, [dengland@uga.edu](mailto:dengland@uga.edu).

An ad hoc pre-proposal evaluation committee will recommend that the principal investigator develop a full proposal if the concept of the proposed project is judged to have scientific or academic merit and its goals and objectives are consistent with the priorities set forth in this RFP. However, projects may be declined for reasons other than the merits of the proposal; for example, some may be judged more suitable for submission to the National Science Foundation, Environmental Protection Agency or National Institute of Health. If a project appears to be a likely candidate for Sea Grant support, the principal investigator will be contacted after March 13 and encouraged to submit a full proposal. If a principal investigator disagrees with the committee, a full proposal may still be submitted.

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Guidelines for full proposals are available at  
<http://www.marsci.uga.edu/gaseagrant/ProInfo-Forms.html>