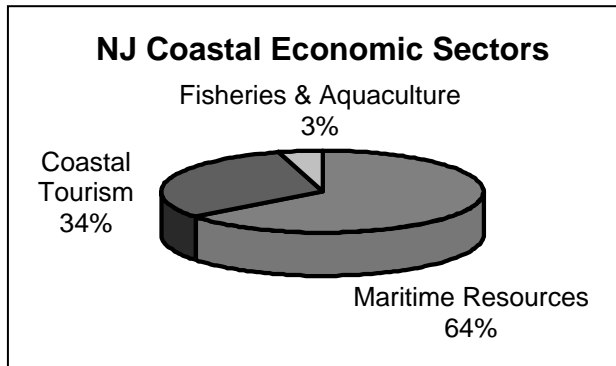


NEW JERSEY SEA GRANT COLLEGE PROGRAM **REQUEST FOR PRE-PROPOSALS** **2010-2012**

The *New Jersey Sea Grant College Program* is part of the National Sea Grant College Program housed within the National Oceanic and Atmospheric Administration, Department of Commerce. Sea Grant addresses marine issues and coastal sustainability in the context of wise resource use and management. In New Jersey, we are interested in balancing economic growth with resource stewardship to sustain the state's \$50+ billion coastal economy.



The *New Jersey Sea Grant College Program* fulfills its mission through relevant research and student training, educational excellence, and rapid dissemination of acquired knowledge. New Jersey Sea Grant is a statewide program housed at the New Jersey Marine Sciences Consortium. The program brings together the best talent within the region's member colleges and universities without regard to academic affiliation.

In the 2010-2012 Omnibus Cycle, New Jersey Sea Grant will continue an approach recommended by its Sea Grant Advisory Council (SGAC) that encourages fewer, but larger *multi-investigator, multi-institution* (a complete list of member institutions is appended to this RFPP), *transdisciplinary* awards focused on critical regional research needs. It is the intent of this Request for Pre-Proposals (RFPP) to ultimately award up to three 2-year grants of \$200,000 each *including indirect costs*. Funding for new projects will generally begin on February 1, 2010 pending the federal appropriations process. The *New Jersey Sea Grant College Program* makes resource allocation decisions annually, dependant on the availability of federal funds. Because New Jersey Sea Grant supports scientific excellence integrated into coastal issue relevancy, sociological and economic impacts, *applications of research results through the New Jersey Sea Grant Extension Program* are important considerations in funding. Collaboration with industry, state and regional agencies is strongly encouraged.

Pre-Proposals should be submitted to the New Jersey Sea Grant Office by 4:00 P.M. Monday, 26 January 2009. No submissions will be accepted after the deadline.

RESEARCH PRIORITIES

Based on input from its Sea Grant Advisory Council (SGAC), its Sea Grant Advisory Board (SGAB, or stakeholder community), and guidance from the National Sea Grant Strategic Plan 2009-13 (<http://www.seagrants.noaa.gov/focus/index.html>), New Jersey Sea Grant has identified five (5) *Focal Areas* for this funding cycle:

- **Sustainable Coastal Development**
- **Safe, Sustainable Seafood Supply (Fisheries, Aquaculture, Seafood Technology)**
- **Hazard Resiliency**
- **Healthy Coastal Ecosystems**
- **Urban-Industrial Estuaries/Ports and Harbors (Cross Cutting Theme)**

New Jersey Sea Grant will review *any* proposal dealing with issues of major concern to the region, but *relevance to the Focal Areas listed above is an important consideration in funding* (see **Proposal Evaluation**). New Jersey Sea Grant is also interested in the impacts of climate change on issues within these Focal Areas and the utilization of Integrated Ocean Observing Systems to address these issues. Some specific areas of interest are noted below:

Sustainable Coastal Development

Manage sustainable coastal community development in the context of:

- Developing appropriate methods to preserve working waterfronts
- Impact of offshore conventional and alternative energy development
- Understanding and predicting the consequences of storm events, sea level rise, and climate change
- Quantifying socioeconomic and cost-benefit implications of coastal zone management rules (including public access decisions)
- Cost-benefit impact of implementing green practices in communities (energy, water, etc)
- Protecting people and property
- Developing predictive models for the outcome of ocean zoning decisions, including socioeconomic impacts
- Developing appropriate social marketing tools to address maritime safety, coastal zone management, or public access

Safe, Sustainable Seafood Supply (Fisheries, Aquaculture, Seafood Technology)

Fisheries, aquaculture and seafood technology needs and priorities:

- Economic evaluation of shellfish aquaculture in New Jersey
- Assessment of the socioeconomic value of fishing communities (commercial and recreational) to New Jersey
- Quantifying the economic impacts of management decisions and the regulatory process on fisheries and aquaculture
- Developing New Jersey specific protocols and methods for reintroduction of anadromous fish to local rivers and streams

- Understanding stock recruitment relationship in commercially and recreationally important fish species including summer flounder, black sea bass, winter flounder, weakfish, hard clams, horseshoe crabs and oysters
- Evaluate data gaps or model parameters in fish stock assessment through archival analysis, and laboratory or field studies on population age structure, sex ratio and mortality especially for “data poor” species, such as scup, black sea bass and tautog
- Socioeconomic (multi-use conflicts) or ecological assessment of pot fishing on artificial reefs
- Developing new aquaculture technology (designs and techniques)
- Development and assessment of marine recreational fishing surveys especially in relation to the new national registry of salt water anglers
- Impact of regulation on leasing approaches on aquaculture
- Develop integrated ocean observing system tools to assess the response of commercially and recreationally important fish species to climate change and its socioeconomic impact

Hazard Resiliency

Address hazard resiliency in the context of:

- Consequences of storm events, sea level rise, and climate change (including predictive and response models)
- Green infrastructure to address sea level rise, storm events and climate change and stormwater management
- Offshore alternative energy development as energy security
- Developing predictive and response models for hazardous events (including spills, beach closures, and rip currents)
- Navigation safety
- Developing appropriate social marketing tools to respond to or mitigate hazards

Healthy Coastal Ecosystems

Address habitat and resource management issues of ongoing concern in New Jersey:

- Quantifying the economic, social, and ecological impacts, costs and benefits of coastal habitat preservation and restoration
- Quantifying the ecological goods and services derived from coastal habitat
- Managing impacts of antifouling paints
- Quantifying economic and ecological impacts, costs and benefits of offshore energy development (including landside impacts)
- Predicting and managing the onset of sea nettle blooms
- Develop plant technologies to integrate plants into structural shoreline treatments effectively and successfully (living shorelines)
- Restoration of shellfish reefs including quantifying success of restoration, affects of policy (closed vs. open waters), living shorelines, impact on species diversity (habitat), ecological services, and use of non-edible shellfish
- Quantifying impacts of endocrine disrupters (estrogen mimics) on marine life

- Onset, extent and duration of hypoxia
- Human health impacts of coastal ocean processes

Urban-Industrial Estuaries / Ports and Harbors (Cross Cutting Theme)

Manage New Jersey's urban-industrial estuaries and ports in the context of:

- Resiliency of ports and working waterfronts
- Methods for the beneficial use and management of dredged material at all spatial scales
- Diversity and habitat restoration (e.g., oyster gardens) in urban estuaries and waterfronts
- Models, technology and sensor development for port security, navigation safety, and coordination of maritime industry activity
- Understanding the fate and transport of sediments and contaminants
- Managing species adapted to human modified habitats (including invasive species) and/or restoration of "signature species" in urban estuaries
- Watershed → estuary → coastal zone connectivity (riverine and estuarine drainage areas, riverine plumes)
- Hypoxic events and their impacts
- Port expansion and intermodal transportation in relation to multi-use issues and climate change
- Understanding the urban recreational and subsistence fishery

WHAT TO SUBMIT

Each pre-proposal should include the items listed below. All text should be single spaced, with **1” margins**, using at least an 11-point font on 8 ½” x 11” pages. **Text may not exceed 2 pages**, *exclusive* of pre-proposal form, budget form, budget justification, literature cited, and vitae.

- ***New Jersey Sea Grant College Program Pre-proposal Form***, available on our website or by e-mail as a Word file (please see **Contacts**)
- **Statement of Problem**
- **Project Goals and Objectives**
- **Research Plan**
- **Statement of Extension Goals:** You are encouraged to meet with and jointly prepare this section with NJSG Extension personnel
- **Summarize the *Relevance* of the Project to New Jersey and/or the mid-Atlantic Region:** Include a rationale that stresses the importance of the project, who the actual or potential users are and how they are involved or benefit from the project
- **What other State, Federal, or Private Organizations will be involved in this Proposal:** Include at what level of participation and/or what funding will be available
- **Budget:** Submitted on a Sea Grant Budget Form which is available on our website or through e-mail as an Excel file (Please see **Matching Funds and Budget Aspects**)
- **Budget Justification**
- **Vitae:** Maximum two pages per investigator

HOW TO SUBMIT

Pre-proposals must be submitted no later than 4 pm, 26 January 2009 by e-mail or CD to Ms Tara Shah, Executive Assistant (Please see **Contacts).**

MATCHING FUNDS AND BUDGET ASPECTS

Matching funds are required for this program (Please see **Contacts**). Sea Grant investigators must include a *non-federal* contribution of at least \$1 for every \$2 of Federal support requested. Potential matching non-federal support includes:

- Salaries, wages, and benefits of those working on the project
- Expendable supplies equipment and ship time
- Indirect costs
- Contributions such as private, local, or state contracts and special project funds

PRE-PROPOSAL EVALUATION

All pre-proposals will be subjected to coordinated review and numerical ranking by the SGAB (optional for this group) and the Scientific Advisory Committee (SAC) with the latter composed of peer scientists from outside the New Jersey area. *New Jersey Sea Grant strives to fund the best science that is relevant to New Jersey and the region*. Ultimately, an Extension Plan will become an important consideration in the full-proposal review. As such, New Jersey Sea Grant highly encourages early dialogue with its Extension Program to implement this process in the pre-proposal stage. Relevance to program objectives will be reviewed by the SGAB while scientific merit and ranking will be reviewed by the SAC. Based on panel evaluations, investigators may be asked to modify objectives, work plans or budgets. The criteria for pre-proposal evaluation and their respective weights are:

- Scientific Merit and Innovativeness (40 pts)
- Responsiveness to New Jersey Sea Grant Priorities and Extension Activities (30 pts)
- Expected Benefits (20 pts)
- Professional Qualifications of the Investigators (5 pts)
- Budget (5 pts)

The *New Jersey Sea Grant College Program* encourages multidisciplinary research and interdepartmental, inter-institutional and public/private collaboration. Part of New Jersey Sea Grant's recent success has been the development of funding partnerships with institutions/organizations that are external to the Sea Grant community but share common interests in marine affairs. The *New Jersey Sea Grant College Program* will actively encourage other state, federal and private organizations to co-fund projects where appropriate, and where programmatic needs set the priorities.

SCHEDULE

26 January 2009 (4:00 P.M.)

Pre-Proposals Due at NJ Sea Grant

23 March 2009

Solicitation of Full Proposals

16 May 2009

Full Proposals Due at NJ Sea Grant

May - July 2009

Peer Review of Full Proposals

August - September 2009

SAC Meets to Review Full Proposals

Late October 2009

Revised Proposals Due at NJ Sea Grant (if necessary)

Early December 2009

Final Funding Decisions Made

On or about 1 February 2010

Start Date for New Awards

CONTACTS

New Jersey Sea Grant College Program

22 Magruder Rd.

Fort Hancock, NJ 07732

Phone: 732-872-1300

Fax: 732-872-9573

Website: www.njmssc.org

Questions on Possible Collaborations, Research Priorities and Evaluation Criteria:

Dr. Peter Rowe, Associate Sea Grant Director: 732-872-1300, ext. 31 or prowe@njmssc.org

Questions on Extension Components:

Dr. Peter Rowe, Extension Director: 732-872-1300, ext. 31 or prowe@njmssc.org

Questions / Requests for Forms, What to Submit:

Ms. Jenny McCormick, Coastal Communities Agent

732-872-1300 ext 24 or jmccormick@njmssc.org

Questions on Budget Aspects:

Mr. Augustine Anfuso, Sea Grant Accountant

732-872-1300 ext 26 or aanfuso@njmssc.org

Proposal Submission:

Ms. Tara Shah, Executive Assistant

732-872-1300 ext 10 or tshah@njmssc.org

NJMSC Member Institutions

Brookdale Community College
Burlington County College
The College of New Jersey
County College of Morris
Cumberland County College
Georgian Court University
Gloucester County College
Kean University
Monmouth University
Montclair State University
New Jersey City University
NJ Institute of Technology
Ocean County College
Ramapo College of New Jersey
Rowan University
Rutgers University
Seton Hall University
Stevens Institute of Technology
Stockton College
Union County College
University of Medicine and Dentistry of New Jersey
William Patterson University