



**MARYLAND SEA GRANT COLLEGE**

A photograph of a coastal scene. The foreground shows shallow water with dense, brownish-green submerged vegetation. The middle ground shows a calm body of water reflecting the sky. In the background, there are trees and a distant shoreline under a clear sky.

**REQUEST FOR  
PROPOSALS**

**Funding Period  
February 1, 2014 - January 31, 2016**

# Request for Proposals

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## MARYLAND SEA GRANT COLLEGE PROGRAM

*Two – Year Funding Period:  
February 1, 2014 - January 31, 2016*

**Pre-proposals due February 13, 2013**  
**Full Proposals due early July 2013**

### RESEARCH PROGRAM SUMMARY

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#### General Information

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**Program Title:** Maryland Sea Grant 2014-2016 Omnibus RFP

**Synopsis of Program:** The Maryland Sea Grant College (MDSG) seeks pre-proposals for its next funding cycle, February 1, 2014 – January 31, 2016. Research projects within Maryland's coasts and watersheds focused in three areas will be considered: 1) resilient ecosystem process and responses; 2) sustainable fisheries and aquaculture; and 3) resilient communities and economies. Additional funding opportunities exist for regional research that addresses specific joint priorities for Mid-Atlantic Sea Grant programs (MD, VA, DE, NC, NJ, NY, PA). This Request for Proposals (RFP) contains a listing of relevant research questions, a description of regional Sea Grant research opportunities, and information about the format and timetable for submitting pre-proposals and proposals. Both small-scale pilot studies and large interdisciplinary research projects will be considered. PIs should focus on outcomes that can be achieved in a 24-month period. Maryland Sea Grant is particularly interested in proposals that have a clear **connection to the needs of management and policy** and include a clear **outreach plan** for disseminating that information to targeted audiences. Maryland Sea Grant support is offered on an open, competitive basis.

#### Program Contacts:

Maryland Sea Grant College, 4321 Hartwick Road Suite 300, College Park, MD 20740  
(301) 405-7500

- Fredrika Moser, Director: [moser@mdsg.umd.edu](mailto:moser@mdsg.umd.edu)
- Mike Allen, Research Coordinator: [mallen@mdsg.umd.edu](mailto:mallen@mdsg.umd.edu)
- Jenna Clark, Program Assistant: [research@mdsg.umd.edu](mailto:research@mdsg.umd.edu)

#### Award Information

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**Anticipated Type of Award:** Standard Grant.

**Award Duration and Start Date:** Two year duration starting February 1, 2014.

**Anticipated Funding Support:** We hope to support 6 – 8 projects at about \$70,000 per award per year, contingent on availability of funds.

## **Eligibility Information**

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Principal Investigators (PIs) must be affiliated with an academic institution or research laboratory in Maryland or the District of Columbia. Co-Principal Investigators (Co-PIs) on projects can be from institutions outside of Maryland or the District of Columbia. Single investigators and multiple investigator research teams from different institutions are encouraged to apply. Maryland Sea Grant encourages participation from the broad science and social science research community within Maryland and the District of Columbia and welcomes participation by investigators new to the Maryland Sea Grant RFP process.

## **Proposal Preparation and Submission Instructions**

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### **A. Proposal Preparation Requirements and Due Dates**

- **Preliminary Proposal (Pre-proposal) Submission:** Required, due February 13, 2013 at 5:00 PM EST
- **Full Proposal Submission:** Required, due July 2013 (exact date TBD)
- **Mandatory Early Registration with Maryland Sea Grant:** To submit a pre-proposal, you must contact Maryland Sea Grant ([research@mdsg.umd.edu](mailto:research@mdsg.umd.edu); 301-405-7500) for an account to use our online proposal submission system. This must be done well in advance of the date for pre-proposal submission to ensure you have time to complete the entire application package. More details are available in the “Pre-proposal Preparation Instructions” section below.
- **Application Instructions:** This solicitation contains specific instructions on the format and content that must be adhered to in each proposal. Failure to follow the instructions outlined in the full text below is grounds for rejection without review.

### **B. Budgetary Information**

- **Cost Sharing Requirements:** 50% non-federal cost match is required for each proposal (\$1 match for every \$2 of Sea Grant funding).
- **Indirect Cost (F&A) Limitations:** Not applicable.

## **Proposal Processing**

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Pre-proposals and full proposals will be subject to external electronic and panel reviews. In general, 50 percent of investigators submitting a pre-proposal will be encouraged to submit a full proposal (though all investigators are welcome to do so) and about 30

percent of full proposals are funded. Approximately 60 percent of the funded projects may receive a Maryland Sea Grant Research Fellowship to support one student for each selected project for two years. Successful full proposals are forwarded to the National Sea Grant Office (NSGO) for final funding approval. Inclusion of a proposal in Maryland Sea Grant's proposal package to the NSGO does not guarantee final approval or funding.

### **Principal Investigators Please Note the Following**

- Funding of all proposals is contingent upon Maryland Sea Grant's allocation from NOAA in the FY2014 federal budget. Modification in the number of and funding for individual proposals may be made based upon the final program budget.
- PIs must provide a strong rationale for how their proposed research will affect policy and/or management decisions and how that information will be communicated outside of academia.
- Maryland Sea Grant encourages Principal Investigators (PIs) to read this document carefully and direct questions concerning the RFP to the Maryland Sea Grant Office (301-405-7500 or email [research@mdsg.umd.edu](mailto:research@mdsg.umd.edu)) early in the pre-proposal development process.

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### I. INTRODUCTION

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The Maryland Sea Grant research, education, and outreach mission is to address gaps in the knowledge needed for science-based efforts to inform conservation, restoration, and sustainability in the Chesapeake Bay estuary, its watershed, and in our coastal bay systems. Federal and state concerns for the management of Maryland's coast, the Chesapeake and coastal bays, and their watersheds have heightened in recent years. The 2009 Presidential Executive Order for Chesapeake Bay and the federal Ocean Policy Task Force focused renewed attention on critical needs in the region. Of special interest are issues related to reduction in nutrient and sediment inputs but also include interest in climate change adaptation in coastal communities, ecosystem-based fisheries management and regional cooperation, communication, and collaboration. Scientific and policy discussions concerning these issues emphasize the need for strong research input to help attain a restored and sustainable Chesapeake Bay and watershed. However, success also depends on linking research efforts with resource uses, economics, and human communities — from rural to suburban and urban.

In this Request For Proposals, Maryland Sea Grant seeks responsive research that provides scientific and socioeconomic information, as well as policy guidance for fisheries management, climate change adaptation, and ecosystem restoration in coastal systems and communities in Maryland. Using laboratory studies, field investigations, models and/or socioeconomic tools, projects should improve understanding of coastal ecosystem function and help predict the responses of ecosystems and communities to natural change or management action. Projects must show a connection with users beyond academia, such as resource managers, communities, and/or informal and formal learners. Proposed projects should be for a 24-month duration, so PIs should focus on outcomes that can be achieved during this period.

**We are particularly interested in proposals that are novel or exploratory, have a clear connection to management and policy, and link social and environmental research. Proposals must include a well-defined plan for disseminating information to targeted audiences. To that end, PIs are encouraged to engage and collaborate with extension agents and end users to develop a comprehensive outreach plan in the full proposal.**

## II. RESEARCH FOCI

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This solicitation invites proposals that address issues outlined below and are specifically relevant to the Maryland Sea Grant Strategic Plan: 2014-2017's goals and strategies (<http://www.mdsg.umd.edu/programs/about/strategic/>). These goals and strategies link directly with the goals of NOAA's National Sea Grant Program (<http://www.seagrant.noaa.gov/focus/index.html>) and are closely tied to the science and policy needs of the Chesapeake Bay and coastal waters of Maryland and the Mid-Atlantic Region.

### A. Maryland Strategic Research Priorities

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Sound policy decisions for Maryland's coast and the Chesapeake Bay watershed demand comprehensive scientific information to address the challenges of climate change, threatened fisheries resources, pollutant abatement, and unsustainable coastal uses. Effective coastal restoration and adaptive management require a broad understanding of many complex issues including coastal ecosystem function, watershed processes, social consequences, and economic opportunities in coastal communities (rural or urban). Projects must demonstrate a connection between the focus areas of emphasis (one or more) highlighted in this RFP and the proposed research. Proposals must demonstrate integration among their scientific approaches, their research outcomes, and their outreach plan. We encourage projects that are crosscutting, integrative in scope, and that couple social and natural sciences research.

Maryland Sea Grant is soliciting research proposals in three focus areas:

- Resilient Ecosystem Processes and Responses
- Sustainable Fisheries and Aquaculture
- Resilient Communities and Economies

#### **Focus Area: Resilient Ecosystem Processes and Responses**

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##### **Research Emphasis: Understand and predict large-scale ecosystem responses**

Achieving sustainability within the Chesapeake and coastal bays and their surrounding watersheds demands research to improve our understanding of ecosystem responses and to inform science-based management decisions that consider how conservation and restoration efforts can be most effective. Achieving future ecosystems that function more desirably will depend on identifying potential thresholds in the system and places or systems where targeted restoration/conservation efforts may result in significant ecosystem responses. Research proposals should consider temporal and spatial changes in ecological systems as they respond to changing conditions, such as changes in wetlands, acidification, species shifts, coastal/marine food webs, and/or land-use. As responses to climate change are likely to affect both ecosystems and human communities, climate-focused research in this focus area is likely to closely couple with the Resilient Communities and Economies focus area. Maryland Sea Grant encourages research with emphasis on the following areas:

- Understanding ecosystem resilience and response in the Chesapeake Bay watershed and coastal bays.

- Multi-disciplinary research to broaden understanding of coupled ecosystem and societal responses to restoration efforts.
- Assessing how ecosystem function and ecosystem components (e.g., fish and shellfish populations, submerged aquatic vegetation, food webs, etc.) are affected by climate change, urbanization/ land use change, nutrient loading, TMDL requirements, etc.
- Understanding wetland and stream dynamics across different temporal and spatial scales.
- Improved prediction of inundation, coastal erosion, and increased intensity of weather events.
- Rigorous statistical analyses of existing data sets that focus on how coastal ecosystems respond over time to natural forcing, land use changes, and/or specific management actions. These data sets may include time series on ecological properties, water quality, and human activities such as fisheries harvests and loadings from nutrients, sediments, and contaminants).

### **Focus Area: Sustainable Fisheries and Aquaculture**

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#### **Research Emphasis: Inform ecosystem-based fisheries management efforts**

Research to support the implementation of ecosystem-based fisheries management (EBFM) is integral to building a comprehensive approach to conservation, restoration and sustainable use of Maryland's coastal resources. Recent efforts in Chesapeake Bay focus on five fisheries (blue crab, striped bass, menhaden, alosines, and oysters). MDSG is interested in research, particularly small-scale projects, that yield focused products to inform management decisions and advance integrative approaches. Research should recognize the important link between the social and natural sciences in achieving effective natural resource management. Specifically, we invite research that addresses one or more of the following:

- Understanding important ecosystem issues for individual species and critical interactions between them, with emphasis on projects that can lead to development of new tools for management.
- Advancing the development of quantitative ecosystem reference points with respect to (1) stock dynamics, (2) habitat, (3) food webs, and (4) socioeconomic factors for the five target species.
- Developing, refining, and applying models to improve understanding of Chesapeake Bay fishery scenarios.
- Understanding the role of recreational fishing, local seafood demand, and aquaculture to developing EBFM strategies and restoration efforts.

### **Focus Area: Resilient Communities and Economies**

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#### **Research Emphasis: Understand linked environmental–socioeconomic responses to environmental change and efforts to restore the Bay**

Restoration of the Chesapeake Bay will require an improved understanding of ecosystem processes and the application of that understanding to human communities. Closely coupled to research needs discussed in the Resilient Ecosystem Process and Responses focus area, defining sustainable relationships between ecosystems and human systems can prove especially challenging where growing populations and increased development alter traditional communities and landscapes. PIs are encouraged to consider multi-

disciplinary research that focuses on understanding critical decision points in community and land use planning that affect coastal and watershed ecosystem resilience and consider the socioeconomic consequences of responding to climate change, restoration, and adaptation. Research proposals should offer clear, well-designed plans to transfer findings to communities, planners, and industry.

MDSG invites PIs to consider research efforts in the following areas:

- Developing tools/strategies and increasing understanding to address the socioeconomic and ecological consequences of water resources management options.
- Developing spatial and geographic tools, new strategies, and risk assessment models to help community leaders make informed choices about issues related to sustainable coastal communities (e.g. stable shorelines, tourism, and recreation).
- Understanding how policies, regulations, and socio-economic factors affect the relationship between livable communities and healthy aquatic ecosystems and watersheds.
- Developing decision-making tools and communication strategies for managers/communities to help evaluate possible scenarios for adapting to landscape change, sea level rise, and increased precipitation, and assessing the uncertainty, risk, and possible economic and social consequences of these decisions.
- Supporting marine spatial planning for vulnerable habitats and multiple uses in coastal zone and watersheds.

### **Research Emphasis: Understanding community and ecological responses to Total Maximum Daily Loads (TMDL) and Watershed Implementation Plans (WIPs)**

Many communities in Chesapeake Bay are facing new compliance requirements to adopt TMDL standards and develop WIPs. Maryland Sea Grant is interested in supporting natural and social science research regarding efforts to implement TMDLs and WIPs. We seek research to understand ecological and societal responses to these new regulations. Such projects may include research comparing the efficacy of prevention measures and remediation or behavioral studies assessing community actions to meet these new regulations. **MDSG is not focused on efforts to develop new remediation technologies or to support monitoring.** MDSG invites PIs to consider research areas that address areas such as:

- Understanding and developing indicators to evaluate and measure ecological or social change/behavior as TMDLs are adopted.
- Developing models that evaluate ecological, economic, and/or societal responses to meet TMDL requirements.

### **B. Regional Sea Grant Research**

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The Mid-Atlantic Sea Grant Programs are interested in coordinated research efforts that bring together researchers across multiple states to address specific issues of regional priority that transcend state Sea Grant boundaries. Research teams are requested to contact their respective Sea Grant program directors to discuss ideas and regional relevance prior to submitting a pre-proposal. Because funding is limited, funding for only



one or two regional efforts for the 2014-2016 biennium is expected. **The full regional RFP will be released on January 15, 2013, and has its own unique deadlines and procedures.** Virginia Sea Grant will coordinate the regional research proposal solicitation effort.

### **Regional Research Priorities**

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The Mid-Atlantic Sea Grant Programs are interested in regional proposals that address at least one of the following issues:

- Climate impacts and adaptation (e.g., sea level rise adaptation solutions).
- Coupled social-ecological systems science that links social science and natural science research (e.g., science related to fisheries management, marine spatial planning, water quality and quantity management).
- Land-estuarine or land-sea interactions (e.g., watershed-wide nutrient research and management, freshwater-marine and estuarine-ocean interactions).
- Cross-disciplinary, integrative research that analyzes and synthesizes existing data to address major, large-scale issues of relevance to coastal and marine communities, and translates these research results into useful information for coastal managers and stakeholders.

Within the four focus areas, the RFP seeks to support research that not only examines broader regional scales but also brings together integrative research teams that can develop innovative ideas and approaches. Successful proposals will demonstrate a high degree of integration and clear mechanisms for regional interaction and coordination.

### **Process and Review**

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To participate in a regional research proposal, PIs from two or more of the participating states in the Mid-Atlantic region (DE, MD, NC, NJ, NY, PA, VA) should coordinate their research around one or more of the targeted topic areas and submit to Virginia Sea Grant through their eSeaGrant system (<https://evaseagrant.vims.edu/RFP/proposals/>).

**The pre-proposal deadline is March 15, 2013 at 5:00 PM EDT.**

Separate budgets conforming to state guidelines should be included by PIs from each state in the pre-proposal. The state SG programs relevant to each regional proposal will coordinate the review of the pre-proposals and provide feedback to the research team(s) prior to encouraging a full proposal. Any investigator conforming to the requirements above may submit a full proposal.

The full solicitation with instructions specific to the regional RFP will be available at <http://vaseagrant.vims.edu/research-opportunities/>.

## **III. SCHEDULE AND DELIVERABLES**

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### **A. Preliminary and Full Proposal Schedule**

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*December 17, 2012* — Request for Proposals issued

*February 13, 2013* — Pre-proposals due

*Mid-April 2013 (approximate)* — Pre-proposals reviewed, PIs notified, Guidelines for full proposals available

*June 2013 (approximate)* — Full proposals due

*Mid-September 2013 (approximate)* — Final proposal selection, PIs notified  
*Mid-October 2013 (approximate)* — Omnibus proposal to NOAA  
*February 1, 2014 – January 31, 2016* — Funding cycle

## **B. Pre-proposal Deliverables**

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You must submit one electronic version of the complete pre-proposal online at <http://www.mdsg.umd.edu/programs/research/funding/rfp/submit> (pdf format only). **The deadline is February 13, 2013 at 5:00 pm EST. Pre-proposals not received by the deadline will not be accepted.** An identical signed original and one hard copy must be received at the Maryland Sea Grant Office by February 15, 2013. Researchers are reminded to conform to the submission policies of their host institutions particularly with regard to obtaining institutional endorsements and requirements for original signed signature pages.

If you do not have online access, please contact the Maryland Sea Grant Office.

## **IV. PRE-PROPOSAL PREPARATION INSTRUCTIONS**

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### **A. Pre-proposal Outline**

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**PIs must follow the instructions regarding pre-proposal format as explained in this document or risk pre-proposal rejection.**

**PIs are required to use the Maryland Sea Grant online project summary form (90-2), budget form (90-4) and budget justification form.** To do so you must request an account from [research@mdsg.umd.edu](mailto:research@mdsg.umd.edu) or call 301-405-7500 to speak with Mike Allen or Jenna Clark. To obtain your account login credentials, provide us with your full name as it will appear in your pre-proposal. Please register for your account well before the pre-proposal submission date. The URL for accessing the online proposal worksheets is <http://www.mdsg.umd.edu/programs/research/worksheets>.

**Each pre-proposal must include the following sections in this sequence:**

- Signature cover sheet
- Project summary form (90-2)
- NOAA budget form 90-4 (note: Sea Grant Research Fellow and Matching Funds) and budget justification
- Body of the pre-proposal (major headings), 4 page double-spaced limit:
  - Problem statement
  - Objectives
  - Methods
  - Anticipated benefits
  - Outreach plan
  - Facilities and equipment
  - Personnel description
- References
- Data management plan
- Summary of accomplishments of previously funded Sea Grant projects

- Curriculum vitae, with updated publication list
- List of current and pending support.

## **B. Formatting**

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Use Helvetica (or Arial if Helvetica is not available) font type, size 11-point or greater. **Use double spacing**, left justified only, and one carriage return between paragraphs. All margins should be 1 inch. The body of the pre-proposal should be typed continuously (that is, do not start a new page for each new section). The end matter, including the *References*, *Data Management Plan*, *Summary of Accomplishments of Previously Funded Sea Grant Projects*, *Curriculum Vitae*, and *List of Current or Pending Support* should each start on new pages and are not included in the 4-page double-spaced limit required for the body of the pre-proposal. The first page of the body of the pre-proposal should be numbered 1, and numbering should continue through the *Curriculum Vitae* section. Please save the completed pre-proposal as a pdf to upload to our online pre-proposals submission system.

## **C. Explanation of Pre-proposal Components**

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Pre-proposals should present a succinct but sufficiently detailed synopsis of the project in order to evaluate its relevance to the Maryland Sea Grant Strategic Plan, its technical feasibility, and the PIs' qualifications. Pre-proposals are not letters of intent and will be evaluated rigorously in a highly competitive process. Pre-proposals should include a description of:

- Problem (question(s) to be addressed)
- Rationale for the research
- Methodologies and tools to be used in the effort
- Benefits likely to be derived from the anticipated results

Download pre-proposal form templates for the signature cover sheet from <http://www.mdsg.umd.edu/programs/research/forms>.

### **SIGNATURE COVER SHEET**

Principal Investigators are responsible for routing the pre-proposal through their campus' research administration and for obtaining all required institutional endorsements prior to submitting. A signature template is available from <http://www.mdsg.umd.edu/programs/research/forms>.

### **PROJECT SUMMARY FORM (90-2)**

The project summary form is located online at the Maryland Sea Grant Proposal Worksheets (<http://www.mdsg.umd.edu/programs/research/worksheets>). You must contact Maryland Sea Grant to set up your account to use this online system. Once you have your account, log in to the system, and it will take you to the "Beginning Page" for completing the project summary form, budgets, and budget justification.

On the "Beginning Page" check to determine whether the **ICode**, which corresponds to the grantee institution, and **Affiliation Code**, which is associated

with each PI, Co-PI, and Associate Investigator, are correct. Both codes are available at <http://www.mdsg.umd.edu/programs/research/icode/>. Code changes may be requested through Maryland Sea Grant.

**Proposal Title:** Select "New" in the drop down box and then continue with the "go on" button to **Project Summary (90-2)**. On that form enter your title in the box provided.

Subsequently, when you log in to the system your title will be stored in the drop down box with "New" on the "Beginning Page" and *you must select your proposal title to access the forms you are working on or have completed*. DO NOT REPEATEDLY SELECT "New" WHEN YOU LOG IN AFTER YOUR ACCOUNT IS SET UP.

**Project Status** is either "New" or "Continuing." **Co-PIs** full names are entered. A co-PI must include any person requiring a budget sheet. From one to three **Sea Grant Strategic Plan Classification Codes** (<http://www.mdsg.umd.edu/programs/research/sgclasscodes/>) for the pre-proposal topic may be used. **Key Words** should not exceed five.

Be sure to summarize project objectives, methodologies and rationale clearly and concisely. Please limit the information under each heading to one short paragraph.

#### *Objectives*

This should summarize the objectives stated in the body of the proposal.

#### *Methodology*

Highlight methods necessary for conducting the research, such as standard models or techniques to be followed, specialized equipment needed, and new or previously designed techniques resulting from other Sea Grant projects or related research.

#### *Rationale*

This must include statements describing the particular issue addressed by this project and how the project results will further the understanding of the issue and its relevance to problems in Maryland's coastal and estuarine systems. Save your work and proceed to the "Beginning Page" to complete additional worksheets.

### **NOAA BUDGET FORM 90-4 AND BUDGET JUSTIFICATION**

After completing the Project Summary (90-2) form you can access the Budget and Budget Justification forms on the "Beginning Page." **Explanation, show, and hide** are links to information about completing and expanding the budget form. **Budget Justification** text is required for each cost entered in the budget form. Further details are on the form. Completed 90-2, 90-4, and budget summary forms should be printed as a pdf from the "Beginning Page" to include in the complete application package.

### *Matching Funds*

A 50 percent match is sought on all Sea Grant proposals (e.g., a \$100K budget must have a match of \$50K). Please contact the Maryland Sea Grant office if any questions arise about the eligibility of matching funds.

Note that it is important to specify match contributions carefully to demonstrate sources and amounts. Any match contributions identified by investigators are subject to federal audit that may result in additional costs to the institution. Match may be in the form of selected "in-kind" services or additional funds from a specified institution, agency, industry, or non-federal program. No funds from federal agencies can be used as match.

### *Sea Grant Research Fellow*

Under a **separately funded, competitive fellowship program**, Maryland Sea Grant offers two years of support for graduate students working on Sea Grant funded projects as part of their work towards a graduate degree. Fellowships provide a stipend, tuition remission, and other benefits. Fellows are required to participate in several activities sponsored by Maryland Sea Grant that are designed to help fellows develop an understanding of the link between science and outreach. These activities will not deflect from the primary research focus of the fellowship; rather, they are designed to enhance it in a meaningful way. Funds for these students are limited, and not every project supported by Maryland Sea Grant can be awarded a Fellow. PIs also have the option of including student support as a line item in their budgets and must include all associated costs incurred. **If you would like to request a Sea Grant Research Fellow, please check the box at the end of the electronic NOAA Form 90-4.** Do not include the cost of a Fellow in the estimated budget for your project.

## **BODY OF THE PRE-PROPOSAL**

The body of the pre-proposal (excluding references) is limited to **four pages of double-spaced text**. Write your pre-proposal using the headings in the sequence listed previously in this document and following the formatting instructions above.

### *Problem Statement*

Indicate the specific problem addressed by the proposed effort and provide sufficient background information to allow a preliminary assessment of the relationship of the problem to the research questions posed in this RFP.

### *Objectives*

State the objectives of the research effort as they would appear in a full proposal. Research hypotheses should be clearly stated.

### *Methods*

You need not explain methods in detail. However, readers should be able to make a preliminary determination of the appropriateness of the proposed approach, including statistical analyses, for achieving the stated objectives.

### *Anticipated Benefits*

Briefly explain the anticipated results and potential implications of those results in relation to Sea Grant program objectives.

### *Outreach Plan*

The outreach plan paragraph should explicitly describe how the proposed research will **link to policy and/or management decisions** and how the results of the study will be **translated** for end-users outside of direct scientific peers. There should be a clear connection between the proposed research emphasis(es) and possible policy or management outcomes. The paragraph should include how PIs will connect with users, specifics about the user, and how the user's needs integrate with the research project. The description should explain how the PI intends to inform and advise interested parties outside of academia about how the research findings could help inform specific policy and management actions. Outreach efforts may also include translation of research to K-12 education and informal learners through specific lesson building and teacher training activities or community engagement.

Investigators are strongly encouraged to contact the Maryland Sea Grant office to discuss potential outreach approach and audiences (including industry, policy-makers, the broad researcher community, and the public). **Discussions with Sea Grant Extension Program faculty are encouraged in the early stages of pre-proposal development.** A list of Sea Grant Extension personnel can be found at: <http://www.mdsg.umd.edu/programs/about/staff/>. A more detailed outreach plan and form are required for the full proposal.

### *Facilities and Equipment*

List any facilities or equipment currently available and/or necessary for conducting the project. Give a justification for any equipment requested.

### *Personnel Description*

List names of PI(s), senior technical staff, and students (if appropriate) and briefly outline their roles in the project.

## **REFERENCES**

List references on a separate page. Reference pages are not included in the four-page maximum for the project description.

## **DATA MANAGEMENT PLAN**

The America Competes Act requires the federal government to ensure that data from federally supported research is accessible to the public. NOAA is requiring Sea Grant programs to have mechanisms in place to meet these data access requirements.

For the pre-proposal, Maryland Sea Grant requests that each PI acknowledge that his or her data will be accessible in a manner consistent with the data sharing requirements of the PI's university and other federal grants the PI may already receive. PIs that have mechanisms in place to meet the requirements of the

America Competes Act need only reference those mechanisms. A more extensive data management plan will be required in the full proposal, and a description of the plan requirements will be provided in the MDSG Full Proposal Guidelines. More details regarding NOAA's data management obligations are available under the "NOAA Data Management Information" header at:  
<http://www.mdsg.umd.edu/programs/research/forms/>.

## **SUMMARY OF ACCOMPLISHMENTS OF PREVIOUSLY FUNDED SEA GRANT PROJECTS**

Principal investigators who have been funded by Maryland Sea Grant since 2009 are requested to submit a one-page summary of the accomplishments of their previous research funded by Maryland Sea Grant. Information on research findings and publications, outreach efforts, and students supported as part of the research should be highlighted in the one page summary. **The summary will not be considered as part of the pre-proposal page limit.**

## **CURRICULUM VITAE**

Provide a **2-page** (maximum) curriculum vita for each of the professional personnel. Include all applicable sections (Education, Experience, Research Interests, Professional Activities) and recent (post 2007) publications.

## **LIST OF CURRENT AND PENDING SUPPORT**

This list specifies projects in which PIs are currently involved that are funded by Maryland Sea Grant and other agencies or are under consideration for such funding. Please provide a brief explanation of any overlap between this proposal and any of those mentioned here.

## **V. FULL PROPOSAL PREPARATION GUIDANCE**

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Investigators interested in submitting a full (15 page) proposal will have electronic access to "Guidelines for Preparing the Full Proposal," which contains information on content, format, and necessary forms for full proposals. In the early spring the Guidelines will be available for you to download from our web site at:  
<http://www.mdsg.umd.edu/programs/research/funding/rfp/guidelines>. These guidelines will provide instructions for complying with federal government requirements.

NEW THIS YEAR: PIs will be required to include a section on your "Data Management Plan" in your full proposal. These plans must demonstrate that data are being archived and made available, typically within two years of creation and consistent with federal and university policies. Guidance on structuring this plan will be shared in the full proposal guidelines.

## **VI. PROPOSAL SUBMISSION PROCESS**

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To submit a pre-proposal (or full proposal) through our online system (<http://www.mdsg.umd.edu/programs/research/funding/rfp/submit>), you must do the following:

- Make a pdf of your completed online project summary (90-2), budget (90-4), and budget justification forms.
- Make a pdf of all the other required proposal materials.
- Combine all pdfs into one final pdf of all required proposal materials.
- Log onto the proposal online submission system at the link above.
- Complete the required fields. **Note: The title for your pre-proposal will also be the title for submitting a full proposal.**
- Upload the proposal pdf using the browse button.
- Press the submit button.

## VII. PROPOSAL REVIEW PROCESS

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### A. Pre-proposal Review

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Maryland Sea Grant will conduct an extensive pre-proposal review to determine those submissions best qualified to compete for inclusion in the 2014 Maryland Sea Grant College Omnibus funding request to NOAA. After the pre-proposal review process is completed, Maryland Sea Grant will contact all PIs who have submitted pre-proposals. Those PIs whose pre-proposals pass the initial review will be encouraged to submit full proposals.

Pre-proposals will be evaluated based on the following criteria:

- Scientific and technical feasibility of the proposed study
- Relevance, as articulated in this RFP, as well as the goals and strategies of the Maryland Sea Grant Strategic Plan: 2014-2017 (<http://www.mdsg.umd.edu/programs/about/strategic/>)
- Planning and potential for significant outreach activities over the course of the project
- Potential for successful completion of the work within the proposed budget and timeframe
- Principal investigator's expertise and publication record
- Use of collaborative or multidisciplinary teams where appropriate
- Leveraging of Sea Grant resources through coordination and collaboration with other programs and funding sources
- Appropriateness of Sea Grant support relative to support from other sources

Pre-proposals will be evaluated by:

- External reviewers
- Maryland Sea Grant Extension agents and specialists
- An outreach panel
- Maryland Sea Grant's Academic Advisory Committee (provides final consensus recommendations based on all evaluations)

### B. Full Proposal Review

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After full proposals are received, they will be sent out for external electronic review. In addition, an external review panel and an outreach panel will be convened consisting of researchers and faculty with expertise in the disciplines represented by proposals under



consideration. Based on its own review and the external written reviews, this panel will recommend a set of proposals for Sea Grant to support. The specific criteria for these reviews will be laid out in the full proposal guidelines.

Depending on funding constraints and reviewers' comments, Maryland Sea Grant may ask PIs to revise their proposed budgets and scope of work, for example, by considering modifications to a proposed study.

## VIII. AWARD ADMINISTRATION INFORMATION

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### A. Notification of the Award

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Notification of the award is made to the submitting organization by the Maryland Sea Grant. Organizations whose proposals are declined will be advised as promptly as possible. Copies of reviews, not including the identity of the reviewer, will be provided to the Principal Investigator.

### B. Reporting Requirements

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As part of all award agreements, Maryland Sea Grant and NOAA require mandatory yearly progress reports and a final report to evaluate the project. Grant money may be withheld pending completion of reports as outlined in the project terms and award conditions.

## IX. CONTACTS FOR ADDITIONAL INFORMATION

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If you would like further information about this request for proposals, please contact either Fredrika Moser ([moser@mdsg.umd.edu](mailto:moser@mdsg.umd.edu) or [research@mdsg.umd.edu](mailto:research@mdsg.umd.edu)) or Mike Allen ([mallen@mdsg.umd.edu](mailto:mallen@mdsg.umd.edu)) at the Maryland Sea Grant Office. The mailing address is:

Maryland Sea Grant College  
University System of Maryland  
4321 Hartwick Road, Suite 300  
College Park, Maryland 20740  
Phone: 301-405-7500  
Fax: 301-314-5780

A list of Maryland Sea Grant Extension agents and specialists can be found at the following website: <http://www.mdsg.umd.edu/programs/about/staff>.

## X. OVERVIEW OF MARYLAND SEA GRANT

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The Maryland Sea Grant College is a partnership between the National Oceanic and Atmospheric Administration (NOAA) and the University System of Maryland, a partnership that serves the state of Maryland and is administered by the University of Maryland Center for Environmental Science. To learn more about Maryland Sea Grant's mission and previously funded research, visit <http://www.mdsg.umd.edu>.

For more details on the NOAA National Sea Grant Strategic Plan: 2014-2017 referenced in this document, visit <http://www.seagrants.noaa.gov/aboutsg/planning.html>.

Information about additional funding opportunities is available on the Maryland Sea Grant web site (<http://www.mdsg.umd.edu>) and directly from our office in College Park.