

FY2024-2026 Request for Proposals

Deadline for Preproposal Submittal: January 12, 2023

Deadline for Full Proposal Submittal: April 7, 2023

Note: Full proposals will only be considered if applicants have submitted a Preproposal. All applicants that submit a Preproposal are permitted to submit to the full proposal process.

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1. Summary

The purpose of this document is to provide details and instructions on how to apply for the FY24 MIT Sea Grant Request for Proposals (RFP). Research at MIT Sea Grant is directed by the four Focus Areas and their Objectives and Outcomes as outlined in the MIT Sea Grant Strategic Plan. This RFP outlines research topics that are in line with our Strategic Plan and provides instructions on submitting preproposals and full proposals, as well as the evaluation process for each phase and specific evaluation criteria used, are described in detail in the following sections.

Important Dates and Details:

- **Deadline for eSeagrant registration:** January 9, 2023.
- **Deadline for Preproposals:** January 12, 2023 by 5pm.
- **Deadline for Full Proposals:** April 7, 2023 by 5pm.
- Eligibility: All researchers from academic, research and educational institutions (e.g., museums) within the state of Massachusetts who are eligible to submit a proposal according to his/her home institution may apply.
- **Requested Funding:** Budget requests may not exceed \$170,000 annually, for a total of \$340,000 over a two-year period. A 50% non-federal match is required.
- **Submitting:** Submittals are through eSeaGrant, our <u>online proposal system</u>. Please contact MIT Sea Grant (<u>seagrantinfo@mit.edu</u>) for access prior to January 9, 2023 in order to avoid missing the deadline due to technical issues.

Contact Information:

- RFP Process: Robert Vincent, Assistant Director for Advisory Services, seagrantinfo@mit.edu
- Budgets: Caroline Johnston, Financial Administrator, carolin@mit.edu
- eSeaGrant: MIT Sea Grant, seagrantinfo@mit.edu
- MIT Sea Grant Marine Advisory Services Group: (Click here for webpage)

2. Introduction - MIT Sea Grant

MIT Sea Grant is part of NOAA's National Sea Grant College Program (NSGCP), one of the 34 programs located in coastal and Great Lakes states, Puerto Rico, and Guam. Research at MIT Sea Grant is directed by four Focus Areas and their Goals and Outcomes. The Focus Areas, Goals, and Outcomes guide us in supporting scientific and/or technology development research that aims to understand and improve ecosystem health and the human use of coastal and marine environments. The four Focus Areas and related MIT Sea Grant Goals and Outcomes are described in detail in our Strategic Plan. Applicants should refer to the MIT Sea Grant Strategic Plan throughout the planning process and make sure to address which focus area their project falls under. Please note that all MITSG research is driven by constituent input and success is judged based on addressing needs specific to Massachusetts and having the results adapted by our constituents. Hence, early engagement with constituents, directly or through our Advisory staff at MITSG, and a robust outreach plan are crucial elements of our evaluation, in addition to scientific excellence.

One of MIT Sea Grant's cross-cutting principles is to enhance Diversity, Equity, Inclusion, Justice, and Accessibility (DEIJA). MIT Sea Grant is striving to enhance cultural understanding and enable Sea Grant to pursue its vision and mission effectively and efficiently. Our program and the NSGCP encourages applicants from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from economically or educationally disadvantaged backgrounds.

3. FY2024-2026 Topics and Topic Selection

For each RFP, MIT Sea Grant selects certain high priority research topic areas, relevant to Massachusetts, to focus on the priorities identified in the MIT Sea Grant Strategic Plan. These topics take advantage of MIT Sea Grant's unique abilities to address issues impacting coastal and marine waters; conduct innovative research to increase the capabilities of industry and resource managers; and ensure communities have access to science, tools, and technologies to support informed decision-making for the conservation of sustainable marine resources. The specific topics for this year are presented below.

- 1. Coastal and/or offshore aquaculture: Supporting sustainable coastal aquaculture, developing offshore aquaculture, supporting seafood industries, and improving the efficiency and safety of farming practices, through biological, engineering, and robotics technologies is a growing effort within MIT Sea Grant. Projects can include, but are not limited to, innovative approaches to improving farm operations, hatcheries, and seafood processing; addressing invasive species that impact growers and ecosystems; and aiding workforce development and market expansion opportunities for current and currently underutilized species.
- 2. **Ocean acidification:** Assessing the effects of ocean acidification on coastal and marine resources, including innovations in monitoring and sensor development, computer modeling and geospatial visualization, and biological and water quality research to improve ecosystem health and ameliorate the effects of ocean warming and ocean acidification. Creating novel Artificial Intelligence methods for analysis, mapping, modeling, and visualizations of ocean data are of interest.
- 3. **Mitigating marine debris.** The focus is on identifying, mapping, and/or reducing marine debris (e.g., derelict fishing gear, plastic bottles, and other trash, including microplastics and nanoplastics) in the environment, and/or at the source. Proposals may focus on regions of the coast of Massachusetts and the Gulf of Maine with relevancy to MA state priorities.
- 4. **Biotechnology for ocean sustainability.** The first two decades of the 21st century have seen a technological revolution in biotechnology. Two of the key drivers of this revolution are next-generation sequencing and CRISPR genome editing, however, these powerful technologies have rarely been applied to ocean sustainability and climate change. MITSG is interested in exploratory proposals that investigate utilizing these technologies to address questions of ocean environmental change or disruption, as well as bioremediation.
- 5. **Technology for observation and underwater manipulation, and fisheries management:** The focus is on robotics and novel actuators and sensors to enable surface and underwater manipulation, and intervention, and enabling multiple robot collaborative

operation through autonomy. Also, on machine learning applications to meet the needs of fisheries management, industry, and local communities.

An informational Open House for the FY2024 RFP was held virtually on December 1, 2022 to provide guidance for interested applicants. Meeting slides are available for download here.

Applicants are encouraged to attend the Open House, review the topics and materials presented, and to ask questions at the Open House. Contact Rob Vincent (rvincent@mit.edu), the Assistant Director of the MITSG Advisory Services Group, to discuss community groups and outreach relevant to your proposal topic is also strongly encouraged prior to developing your proposal.

4. Proposal Information

4.1 Funding

The maximum allowable annual research budget request is \$170,000, for a total of \$340,000 for a two-year project. This does not include the required matching funds provided by the PI, which amount to at least 50% of the figure requested from MIT Sea Grant. Projects may be up to two years in length.

The Principal Investigator (PI) must not be the recipient of other MIT Sea Grant funding during the period of the grant (i.e., 2/1/2024 to 1/31/2026). The Director may, at his/her discretion, remove a proposal from further consideration at any point in the process if an investigator has overdue obligations to MIT Sea Grant under a previous research award or contract.

4.2 MIT Sea Grant Marine Advisory Services Group

Sea Grant research proposals featuring strong research accompanied by meaningful engagement/outreach components will be more competitive, and PIs are encouraged to discuss their outreach and engagement plans with the MIT Sea Grant Advisory Services Group. The Advisory Services Group specializes in constituent engagement, outreach, education, and assessments, and are well connected with partners and collaborators throughout Massachusetts and the region. Most of the Advisory Services Group staff are research scientists that design and conduct research, bringing a thorough understanding of how to combine research and outreach that develops and transfers information and technology in support of constituent needs and the Sea Grant mission. Contact Rob Vincent (rvincent@mit.edu), assistant director of Marine Advisory Services, to locate specialists who might be able to assist you or connect you with others as you develop your outreach and engagement plan. Involving MIT Sea Grant Advisory staff early in the planning and preparation process is strongly encouraged.

Once proposals are funded, a close connection should be established between the PI and one of our staff members to ensure continuous coordination so as to engage with our constituents. All PIs must attend a first kick-off meeting to present their plans for engaging with our advisory staff. Annual research symposia throughout the duration of the project will be held in March to present the research accomplishments to fellow researchers, all constituents, and the MIT Sea Grant staff.

4.3 RFP Schedule

The proposal process is initiated each year when the RFP Open House is announced. These deadlines are strictly enforced, and the contents of proposals must be complete by the dates and times given in the RFP Schedule presented in Table 1. Preproposals and/or full proposals that are

incomplete or not submitted by the deadlines will not be moved forward in the competition, and rebuttals submitted after the deadline will not be included in the review process.

This is a multi-step process, so please be aware of each due date.

Table 1. RFP Schedule

RFP Open House	December 1, 2022
Access to eSeaGrant requested by 5:00 local time	January 9, 2023
Preproposal due by 5:00 pm local time	January 12, 2023
Full proposals due by 5:00 pm local time	April 7, 2023
Blinded peer reviewer comments sent to Principal Investigators	May 25, 2023
Optional PI rebuttals due by 5:00 pm local time	June 22, 2023
Technical Review Panel Meeting	August 2023
Principal Investigators notified of funding decisions	September 2023
Beginning of FY2024 funding	February 2024

5. Preproposal

Once the PI has selected a topic, please contact MIT Sea Grant (<u>seagrantinfo@mit.edu</u>) as soon as possible for access to eSeaGrant, MIT Sea Grant's online submission portal in order to avoid missing the deadline due to technical issues.

5.1 Preproposal Instructions

A preproposal is required in order to submit a full proposal. Preproposals must be submitted to MIT Sea Grant through eSeaGrant by 5:00 pm local time on January 12, 2023. Please read the detailed directions for each form in eSeaGrant for further instruction.

5.1.1 Start Here (Required)

You will be asked to assign a title to your proposal and to provide some topical keywords. The project initiation and completion dates are set by default but can be changed if your proposal is less than two years in duration.

5.1.2 Resumes/CVs: Principal Investigator (Required) and Co-Principal Investigator (Optional)

Enter information for the PI and Co-Principal Investigators (co-PI), including name, mailing address, email address, phone number, university/organization, and Department. Note that the PI must be eligible to submit a proposal according to his/her home institution.

Attach a CV/resume at the bottom of the forms for each PI and co-PI. CVs must be no more than two pages long and submitted as PDFs.

5.1.3 Additional Personnel (Optional)

List graduate students, post docs, community collaborators, and staff that will be involved in the project and are listed in the budget. Resumes or CVs are not required for these individuals.

5.1.4 Preproposal Narrative (Required)

The project narrative may be up to four pages long and must be a PDF that is double-spaced, in 12 pt Times New Roman font with 1-inch margins. References/bibliography are not included in the page count and can be appended to the end of the narrative.

The narrative should address the following:

- Identify the marine-related problem, issue, need, or hypothesis requiring this work. You must identify the project's relevance to one or more of the topics identified above, including how these will be advanced by supporting the proposed work. You may also consult the MIT Sea Grant focus areas as detailed in the MIT Sea Grant Strategic Plan.
- Describe your approach. Include theoretical studies, laboratory analyses, fieldwork, and the approximate amount of time needed for these activities.
- Explain how this project contributes to the basic scientific discipline involved.
- Explain how this project demonstrates support, cooperation and/or collaboration with industry, government, and community groups within the state of Massachusetts.
- Briefly describe your outreach and extension plan activities. Contact Rob Vincent, Assistant Director of the Marine Advisory Services Group, for guidance on extension and outreach opportunities.
 - Describe how the work addresses constituent-driven needs and how results will be made available to the user and/or the general public. Describe any associated engagement throughout the course of the project and/or educational activities that are a result of the project.
 - Describe how the proposed activity broadens the participation of individuals from underrepresented groups in STEM fields and how this research will have broader societal impacts on constituents from underrepresented or underserved communities.
- Please provide your institutional UEI number and indicate if your institution has received federal funding during the past 5 years.

5.1.5 Preproposal Funding Request for Years One and Two (Required)

Note that matching funds must be at least 50% of the funds requested from Sea Grant and the matching funds must come from non-federal sources.

5.1.6 Suggested Reviewers (Optional)

You may provide contact information for potential peer reviewers. Reviewers should be scientific peers who are qualified to provide independent and knowledgeable reviews of your project in the full proposal phase. MIT Sea Grant peer reviewers should not be from Massachusetts institutions.

5.1.7 Preproposal Summary (Required)

Once you are satisfied with your submittal, submit by clicking SUBMIT on the Proposal Summary form. This will time stamp your submission and generate an acknowledgement email

for your records. If you have not pressed the SUBMIT button by the deadline, your preproposal will not be processed and will not move forward in the competition. No exceptions can be made.

5.1.8 Demographic and Other Optional Data (optional)

NOAA is collecting demographic data to understand who is applying for and being awarded federal funding. It is required that this question be asked, but your response is voluntary. Please answer this question as the PI of the proposal. All information will be reported to NOAA anonymously and will not be linked to your proposal. Your response to the questions will not impact the review process.

5.2 Preproposal Evaluation

All complete preproposals submitted through eSeaGrant by 5:00 pm local time on the due date (January 12, 2023) will be evaluated by the MIT Sea Grant Advisory Committee. The MIT Sea Grant Advisory Committee is comprised of a diverse group of academic, industry, tribal, and professional community members of Massachusetts. All members are required to sign a Non-Conflict of Interest form as part of agreeing to serve and no Advisory Committee member will take part in the review of any proposal with which they have a Conflict of Interest.

The MIT Sea Grant Advisory Committee will read all preproposals (except as noted above) for scientific soundness, relevance to the MIT Sea Grant Strategic Plan, innovativeness, and responsiveness to the RFP, and provide one overall score using the scoring criteria outlined in section 7. The Advisory Committee will then meet to select the preproposals that will receive a recommendation to submit a full proposal. MIT Sea Grant Marine Advisory staff who do not have a conflict of interest may also participate in the meeting or separately review preproposals for education, outreach, engagement components, and relevance to the MIT Sea Grant Strategic Plan.

6. Full Proposal

Based on the outcome of the preproposal evaluation process, principal investigators whose projects are scientifically sound and are aligned with the MIT Sea Grant Objectives and Outcomes will be encouraged to submit a full proposal. Full proposals will not be accepted unless a preproposal was submitted and reviewed. Per the NSGCP's National Competition Policy, all PIs who submitted preproposals are eligible to submit full proposals, even if they are not encouraged. However, preproposals that are not encouraged are unlikely to be successful at the full proposal stage. MIT Sea Grant will inform all PIs as to whether, or not they are encouraged to submit a full proposal in mid-February. Full proposals must be submitted to MIT Sea Grant through the eSeaGrant online portal by 5:00 pm local time on April 11, 2023.

The rest of this section explains the eSeaGrant forms that are part of the full proposal submittal.

6.1 Full Proposal Instructions

6.1.1 Start Here (Required)

You will be asked to assign a title to your proposal and to provide some topical keywords. The project initiation and completion dates are set by default but can be changed if your proposal is less than two years in duration.

6.1.2 Budget (Required)

You are strongly encouraged to begin the budget preparation process early. If your budget is completed with justifications in eSeaGrant five (5) business days before the deadline, the MIT Sea Grant Program Support Team will review it for completeness and correctness. PIs are encouraged to submit their budgets early as an incorrect budget may lead to the proposal being removed from further consideration. Please contact the MIT Sea Grant Financial Officers Caroline Johnston (carolin@mit.edu) with any questions you may have regarding the budget.

The budget must include all direct (including fringe benefits) and indirect costs of the project. Be sure to indicate which salaries and wages are subject to indirect costs, and those not subject to indirect costs on the worksheets. Applicants must budget for all costs of the project, including anticipated salary and wage increases for year 2 and costs of the extension, communications, and publication activities.

Detailed information on how to fill out the budget worksheets can be found on the Budget Instructions tab in the Budgets form. You will need to fill out an online budget worksheet for each year and each year of each subaward.

Home Institution Approval: Applicants should contact the appropriate office of their home institution to obtain the current rates for fringe benefits and indirect costs. In addition, the PI's home institution must review and approve the proposal's budget, including matching fund estimates, prior to submission to MIT Sea Grant.

Matching Funds: Every MIT Sea Grant-funded investigator is required to match 50% of the contributions from NOAA with funding from non-federal sources. The source of matching funds must be specified in the budget. Sources of matching funds include but are not limited to: private foundation grants, state and local government contracts, co-sponsorship by industry, up to one month's salary per year for the PI, waived tuition, equipment, supplies, cash, and in-kind contributions. Examples of in-kind contributions include salaries, wages / benefits of investigators and students working on the project, expendable supplies and equipment, ship time, and donated supplies, space, or equipment. Foreign government funds also qualify, but funds from federal sources do not. Note that matching funds from an external source require a letter of commitment from that organization.

Budget Justifications: Budget justifications must be prepared for each budget category (e.g., Salaries and Wages, Fringe Benefits). This feature is integrated into the eSeaGrant online tool and justifications must be entered as line-by-line descriptions. Failure to include complete budget justifications, or if the budget justifications do not match the budget worksheet, may result in your proposal being removed from the competition. Subcontracts must have their own budget justifications. Please refer to eSeaGrant's budget justification examples for complete guidance on developing your budgets with proper justification.

6.1.3 Resumes/CVs: Principal Investigator (Required) and Co-Principal Investigator (Optional)

Enter information for the PI and Co-Principal Investigators (co-PI), including name, mailing address, email address, phone number, university/organization, and Department. Note that the PI must be eligible to submit a proposal according to his/her home institution.

Attach a CV/resume at the bottom of the forms for each PI and co-PI. CVs must be no more than two pages long and submitted as PDFs.

6.1.4 Additional Personnel (Optional)

List additional personnel such as sub-awardees, graduate students, post docs, community collaborators, and staff that will work on the project and listed in the budget. While resumes or CVs are not required for these individuals, please include them if they are considered key staff.

6.1.5 Objectives, Methodology, Rationale, Data Management Plan Summary (Required)

Please provide a brief summary of each of the following: objectives, methodology, rationale, and Data Management Plan. See the eSeagrant form for more detailed instructions.

6.1.6 Focus Areas and Classifications (Required)

In the form fields in eSeagrant, please select a Primary Focus Area, Secondary Focus Area, and up to two Sea Grant Classifications. See the eSeagrant form for more detailed instructions.

6.1.7 Proposal Narrative (Required)

The project narrative may not exceed fifteen (15) double-spaced pages, in Times New Roman font (at least 12 pt font), and with 1-inch margins. Narratives longer than 15 pages WILL NOT be accepted. The 15-page limit for project narratives includes items b-h in the list below and all tables and figures. References and literature citations (i) should demonstrate your familiarity with the literature of your topic, may be single-spaced and do NOT count against the page limit. The project narrative should address the following as explicit sections:

- a. Cover page, including the project title and names, titles, affiliations, and contact information (email and phone) of the PI and any co-PIs
- b. Project abstract
- c. Introduction / Background / Justification
- d. Project objectives
- e. Project details or methods
- f. Anticipated outcomes (including how the project advances MIT Sea Grant's Strategic Plan)
- g. Project Timeline
- h. References and literature citations
- i. Outreach and/or Engagement Plan: All MIT Sea Grant research is driven by constituent input and success is judged in part by having the results disseminated and adapted by all our constituents and not just researchers. A robust outreach and engagement plan is expected as part of the full proposal. To ensure this, PIs are strongly encouraged to contact the MIT Sea Grant Marine Advisory Group for guidance on the types and techniques that could be used to disseminate your research to a broad and general audience. Contact Rob Vincent, Assistant Director of the Marine Advisory Services Group, to discuss who on the team can advise you on this section.

6.1.8 Current and Pending Support (Required)

Demonstrating that your project has other sources of support will strengthen your application. Make sure you complete every field, or attach a PDF of current and pending support.

6.1.9 Data Management Plan (Required)

Data and information collected and/or created under NOAA grants and cooperative agreements, including this RFP, must be made visible, accessible, and independently understandable to

general users, at no cost (or no more than the cost of reproduction) free of charge and in a timely manner, except where limited by law, regulation, policy or by security requirements. NOAA grant applications for projects expected to produce environmental data must include a Data Management Plan (DMP) describing how the PIs plan to make the data available. The plan must conform to NOAA's Data Sharing Directive for Grants, Cooperative Agreements, and Contracts. PIs are expected to fully execute the plan.

If your project does not generate datasets, a simple statement such as "This proposal will not generate environmental data. Therefore, a Data Management Plan is not required as part of the Proposal" is all that is necessary to satisfy the DMP requirement. Please refer to the MIT Sea Grant Data Sharing Directive Policy found on eSeaGrant for more information.

6.1.10 Letters of Support (Optional)

If other organizations are described as contributing to your project in the narrative portion of your proposal, it is advisable to include a letter of support from them detailing their intentions and commitment. In addition, letters of support from constituents that will benefit from the work may also be submitted. Address letters to Dr. Michael Triantafyllou, Director, MIT Sea Grant.

6.1.11 Letters of Commitment (Required for cost-sharing and subawards)

A letter of commitment is required from:

- The contractor of each subaward
- Any external source for cost-sharing (match)
- For MIT PI's: if you are using another PI's salary

Failure to provide letters of commitment for either of these may impact consideration of your proposal. Please note federal funds, including equipment purchased with federal funds, cannot be used as match.

6.1.12 NEPA Short Form (Required)

Download the form from the eSeaGrant NEPA form or at the bottom of <u>this website</u>. Leave the field 'Grant number and/or Project ID' blank. Please see eSeagrant for further instruction.

Per the requirements in the NEPA, potential PIs must include with their full proposal a list of all state and federal permits required to complete the project, including copies of the permits that have already been acquired, in the appropriate section of the questionnaire. Applications of pending permits are not required but must be listed. If a partner institution will be responsible for acquiring permits, this should be stated in the application. The responsibility for acquiring permits lies with the funded PI, and failure to secure permits may result in delayed receipt of funds or reduction to the scope of work proposed.

6.1.13 Suggested Reviewers (Optional)

You may give us contact information for potential peer reviewers. Reviewers should be scientific peers who are qualified to provide independent and knowledgeable reviews of your project in the full proposal phase. MIT Sea Grant peer reviewers should not be from Massachusetts institutions.

6.1.14 Proposal Summary (Required)

Submit by clicking SUBMIT on the Proposal Summary form. This will time stamp your submission and generate an acknowledgement email for your records. If you have not pressed the SUBMIT button by the deadline, your full proposal will not be processed. No exceptions can be made.

6.2 Full Proposal Evaluation

Per the NSGCP National Competition Policy Guidance, each full proposal will receive a minimum of three written peer reviews for each proposal. Peer reviewers will be experts in the field(s) which are covered in the proposals and will be chosen to avoid any potential conflict of interest. In the event that an in-state reviewer needs to be used, the selection will be justified to the federal program officer. Peer reviewers will be tasked with evaluating the proposal package using the criteria identified in the Evaluation Criteria section (section 7) of this RFP. Each reviewer will be rate their proposal(s) and submit their entire review to MIT Sea Grant via eSeaGrant.

Blinded peer reviews for each proposal will be sent to the PI of that proposal by the end of May 25, 2023. The PIs then have until 5:00 pm Eastern time on June 22, 2023, to respond to the reviewer's comments. Rebuttals are optional and not required of any PI.

The full proposal, blinded peer reviews, and the PI's rebuttals (if provided) are submitted to a Technical Review Panel (TRP) which meets in August for extensive discussion of the technical merits of the full proposals.

The Director will present the results of the TRP to the MIT Sea Grant Advisory Committee for additional programmatic insight and discussion and will make the final funding recommendations based on the TRP's rank order except in instances where the Director may deviate from the rank order based on certain selection factors:

- 1. Strategic priority;
- 2. number of proposals within each Topic;
- 3. diversity in applicant pool (e.g., institution, geography, career stage, end-user groups);
- 4. prior award performance (e.g., timeliness of reports); and
- 5. availability of funding.

Final funding recommendations will then be submitted by the MIT Sea Grant Director in a Letter of Intent to the National Sea Grant Office for final approval. Principal Investigators will be informed of the funding decision following final authorization by the National Sea Grant Office.

7. Evaluation Criteria

Below are criteria used by both peer reviewers and technical review panelists in evaluating proposals for funding by the MIT Sea Grant program. As part the review process, all reviewers are assessed for conflicts of interest. Peer and TRP reviewers will provide a written review of the proposal taking into consideration the list below:

- 1. Rationale the degree to which the proposed activity addresses an important issue, problem, or opportunity in development, use, or management of marine or coastal resources.
- **2. Scientific or Professional Merit** the degree to which the activity will advance the state of the science or discipline through use and extension of state-of-the-art methods.

- **3.** Relevance to Sea Grant Priorities degree to which the proposed activity relates to priorities, goals, and outcomes provided in the MIT Sea Grant Strategic Plan.
- **4. Innovativeness** the degree to which new approaches to solving problems and exploiting opportunities in resource management or development, or in public outreach on such issues will be employed; alternatively, the degree to which the activity will focus on new types of important or potentially important resources and issues.
- **5.** Qualifications and Past Record of Investigators degree to which investigators are qualified by education, training, and/or experience to execute the proposed activity; record of achievement with previous funding.
- **6. Appropriate and Cost-Effective Budget** degree to which the proposed budget is adequate to accomplish the objectives and of the budget justification in explaining the need for resources.
- 7. Outreach: the degree to which investigators have incorporated an engagement plan for the project and/or outreach plan for the research findings or tools they plan to develop, relevance to Massachusetts constituency-driven needs, and the likelihood the work will inform the public and decision-makers, benefit industry and/or communities, support underrepresented groups, and provide meaningful constituent impacts as a result of the efforts. PIs are expected to have discussed their outreach plan the MITSG Advisory Services Group.
- **8. Timeliness:** degree to which the proposed activity addresses a little-known or emerging field and builds a foundation for additional research.

8. Scoring Definitions

The Advisory Committee, peer reviewers and technical reviewers will assign an overall proposal score by choosing one of the following:

- **5 Excellent -** Exhibits outstanding scientific quality; demonstrates research strategy and methods well-designed to address problem; contributes to basic discipline as well as more general Sea Grant goals in marine resource development, use, management; and has outlined a meaningful engagement plan, including the identification of constituents. collaborators and/or linkages to user groups
- 4 Very Good With careful consideration of recommended changes, would be rated Excellent
- **3 Good -** Routine but acceptable scientific quality; needs revision in some major part of the proposal; for example, the methodology, linkage to user groups, clarification of relationship to similar projects, or major budget changes necessary to achieve objectives
- **2 Fair -** Marginal scientific approach to a potentially interesting problem; limited understanding of how proposed research related to general Sea Grant goals; major deficiencies in problem definition, research strategy, and methods; inadequate institutional support
- 1 Poor Proposal has major deficiencies and should not be funded