

Texas Sea Grant Request for Research Proposals FY2018-2020

I. Introduction

The Texas Sea Grant College Program supports integrated research and extension projects that improve the understanding, wise use and stewardship of Texas' coastal and marine resources. The overarching goals of Texas Sea Grant's research program are to support *outcome-oriented* research that spans broad areas of natural, physical, social, behavioral and economic sciences and engineering, and to make research investments that will generate substantial long-term impacts in Texas. Outcome-oriented research is defined as research that provides quantifiable evidence for short-term (learning: awareness, knowledge, skills, motivations), medium-term (action: behavior, practice, decisions, policies), and/or long-term (consequences: social, economic, environmental) impacts in Texas.

Texas Sea Grant undergoes a rigorous annual evaluation by the National Sea Grant Office (NSGO) to ensure the greatest benefit from its federal and state investments and to assess the program's progress toward its strategic plan. This annual review includes Texas Sea Grant-funded research outcomes and their contribution toward the program's strategic plan. Therefore, the most competitive research proposals will align with one or more of the following focus areas: 1) Resilient Communities and Economies, 2) Sustainable Fisheries and Aquaculture, 3) Healthy Coastal Ecosystems, and 4) Education and Workforce Development, and address one or more of the research priorities established for this RFP (see p. 2).

Approximately \$750,000 per year will be available to support 4-6 proposals, contingent on availability of funds from NOAA. Proposal budgets should be no greater than \$150,000 in combined direct and indirect costs per year. 50% non-federal cost-sharing is required.

Timeline:

Pre-proposal Webinar: Pre-proposal Due Date: Pre-proposal Feedback to PIs: Full Proposal Due Date: Notice of Funding Decisions: Award Start Date: Award End Date: January 6, 2017, 1:00 PM CST January 20, 2017, 5:00 PM CST February 24, 2017 April 3, 2017, 5:00 PM CST October 2017 February 1, 2018 January 31, 2020

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II. Research Priorities

Texas Sea Grant encourages research with an emphasis in one or more of the following focus areas and topics:

- 1. Focus Area: Resilient Communities and Economies
 - Investigating the economic costs of Harmful Algal Blooms (HABs) and/or hypoxia and their impact on coastal communities.
 - Advancing knowledge to improve the development of and adaption to community resiliency plans with the aim of reducing vulnerability of coastal communities to natural hazards and extreme events.
 - Developing methods to measure ecological resilience and its impacts on communities, the built environment and people.
 - Investigating the effectiveness of green infrastructure to reduce flood and storm water hazards and associated economic impacts.
 - Investigating regulatory and policy mechanisms that are most effective at increasing community and economic resilience to coastal hazards and identifying best management practices in ecosystem-based management and coastal resiliency.
 - Quantitative science-based evaluation of the effect of sea-level rise, storm surges, and coastal physical processes (e.g., erosion, sedimentation, wind action, etc.) on coastal communities.
- 2. Focus Area: Sustainable Fisheries and Aquaculture
 - Understanding and identifying seafood marketing strategies to support the Texas shrimp fishery.
 - Improved methods for by-catch reduction in Texas commercial and recreational fisheries.
 - Improved understanding of the socio-economic consequences of current commercial and/or recreational fishery management policies and regulations.
 - Developing new technologies and techniques to ensure safety of wild-caught, maricultured or imported seafood.
 - Improving current methods or developing new methods to restore or enhance oyster reefs.
- 3. Focus Area: Healthy Coastal Ecosystems
 - Developing tools to evaluate restoration success of living marine resources and their habitats.
 - Evaluating and quantifying the impacts of habitat restoration methods and practices on water quality and quantity.
 - Improved understanding of dynamic ocean systems and their impacts on the distribution and abundance of living marine resources.
 - Understanding the ecological, economic, and societal impacts of ocean acidification.
 - Understanding how freshwater management policies, regulations, and socio-economic factors affect the relationship between sustainable coastal communities and healthy coastal ecosystems.
- 4. Focus Area: Education and Workforce Development
 - Developing innovative and effective outreach and science communication methods that will result in a reduction of marine debris from land-based sources.
 - Analysis of coastal/marine industry and workforce trends to identify significant changes and threats to Texas coastal economies.

III. Eligible Applicants

- Universities and colleges: Texas universities and two- and four-year colleges (including community-colleges) acting on behalf of their faculty members.
- Nonprofit, non-academic institutions: Independent museums, observatories, research laboratories, professional societies and similar organizations in Texas that are directly associated with educational or research activities.
- For-profit organizations: Commercial firms, especially small businesses with strong capabilities in scientific or engineering research or education. Texas Sea Grant is interested in supporting collaborative projects between universities and the private sector.
- State, local and Indian tribal governments.
- Unaffiliated persons: Individuals who have no affiliations with organizations that could act as grantee organizations may receive support for meritorious research if they have the capability and use of facilities needed to perform the work and agree to fiscal arrangements satisfactory to Texas Sea Grant and Texas A&M University.

Investigators may submit <u>no more than two pre-proposals as PI and/or co-PI</u>. Successful investigators will receive a maximum of one grant.

IV. Proposal Submission and Merit Review Process

There are two phases to the merit review process – a pre-proposal phase and a full proposal phase. Preproposals and full proposals are scored and ranked by technical review panels guided by objective criteria. These scores and ranks form the basis of Texas Sea Grant's decision to "encourage/not encourage" preproposals for development into full proposals, and to "fund/not fund" full proposals.

Merit Review Criteria

Texas Sea Grant modeled the core values of its merit review process after the National Science Foundation's (NSF) gold standard of scientific review. Similar to the NSF, Texas Sea Grant merit review includes two criteria: Intellectual Merit and Broader Impacts. The Broader Impacts criterion is further divided into two sub-categories: Education and Outreach. Each criterion will be considered during the review and decision-making process.

The Intellectual Merit criterion encompasses the potential of a project to advance knowledge and understanding within its own field or across different fields. The Broader Impacts criterion encompasses the potential to prepare the next cadre of scientists by engaging undergraduate and graduate students in research, PK-12 and/or informal education applications, and the potential to advance societal outcomes by outreach and extension activities.

Phase I: Pre-proposal

Pre-proposal Submission Process

Texas Sea Grant uses a web-based system called eSeaGrant for proposal submission; it may be accessed at <u>http://eseagrant.texasseagrant.org/index.php</u>. Prior to submitting a proposal, the principal investigator (PI) must complete a one-time registration process in eSeaGrant. An eSeaGrant PI Manual is available on our website at <u>http://texasseagrant.org/funding/2018-2020-rfp/</u>. Only pre-proposals submitted using the eSeaGrant online system will be considered.

Pre-proposals submitted in response to this solicitation must be prepared and submitted in accordance with the instructions in the Pre-proposal Submission Process FY2018-2020 document on our website at http://texasseagrant.org/funding/2018-2020-rfp/. It is the PI's responsibility to ensure that the pre-proposal is compliant. For collaborative pre-proposals, only the lead institution should submit the pre-proposal.

Administrative Review

Texas Sea Grant's Research Coordinator will conduct an administrative review of all pre-proposals to ensure completeness and conformance with the instructions. If the pre-proposal does not adhere to the instructions, it will not move forward to technical review.

Technical Review

A technical review panel of subject matter experts and extension specialists will review the pre-proposals. Pre-proposals will be either "encouraged" or "not encouraged" for full proposal submission, based on the subject (i.e., Does it reflect one of the desired research priorities?), the likelihood that the proposed research will generate outcome-oriented results within the two-year grant award period, and the proposed project's integration of research and extension. Reviewers' comments (blinded) will be made available to the lead PI. There will be no rebuttal or response process. Up to **24 pre-proposals will be encouraged for development into full proposals.**

Phase II: Full proposal

Full Proposal Submission Process

Investigators who successfully submitted a pre-proposal for this RFP will be eligible to submit a full proposal, regardless of recommendation following the pre-proposal review. The scope of work proposed in the full proposal should not deviate substantially from the pre-proposal. Full proposals must be submitted using eSeaGrant.

Administrative Review

Texas Sea Grant's Research Coordinator will conduct an administrative review of all full proposals to ensure completeness and conformance with the instructions. If the full proposal does not adhere to the instructions, it will not move forward to ad hoc review or technical review.

Ad Hoc Review Process

Each full proposal will be reviewed by at least three out-of-state scholars and extension specialists with expertise relevant to the proposed research and outreach to evaluate the Intellectual Merit and Broader Impacts of the proposal. These reviews will be provided to the technical review panels.

Technical Review Process

Following the ad hoc review, each proposal will be sent to one of two technical review panels – a natural and physical sciences technical review panel, or a social, behavioral and economic sciences technical review panel. Each proposal will receive two scores – one score for Intellectual Merit and a second score for Broader Impacts. The technical review panels will be comprised of out-of-state subject matter experts and extension specialists. The Research Coordinator will make a recommendation to the Texas Sea Grant Director for each proposal based on the scores from the technical review panels. The Texas Sea Grant Director will select the proposals to be submitted to NOAA for funding. Reviewers' comments (blinded) will be made available to the lead PI. There will be no rebuttal or response process.

Phase III. Award Processing

Funding is contingent upon Texas Sea Grant's allocation from NOAA. Modification in the number of and funding for individual proposals may be made based upon the final program budget.

Business Review

All proposals recommended for funding will undergo a review by Texas Sea Grant for business, financial and policy implications and the processing and issuance of a grant award by Texas A&M University Sponsored Research Services.

Award Issuance

A Texas Sea Grant award consists of (i) an award agreement that includes standard terms and condition of the award; (ii) an itemized budget, on which Texas Sea Grant has based its support; and (iii) the proposal referenced in the award agreement.

Reporting Requirements

For all Texas Sea Grant-funded projects, the lead PI is required to submit an Annual Project Report and Final Project Report; see http://texasseagrant.org/funding/texas-sea-grant-award-reporting/ for specific requirements. These reports collect information about project participants, students supported, research activities, outcomes, publications, tools and technology developed, management and decision-making processes influenced, education products and programs developed, and other metrics, accomplishments and impacts critical to Texas Sea Grant's own annual performance evaluation. Though not all projects are expected to have information to report in all of these categories, each project should contribute significantly to Texas Sea Grant's impacts in Texas.

VIII. Program Contacts

For questions about proposal development, submission and review or the eSeaGrant system, please contact Texas Sea Grant's Research Coordinator, Mia Zwolinski, at <u>mzwolinski@tamu.edu</u> or 979-458-0449.

For questions about funding priorities, please contact Texas Sea Grant's Director, Dr. Pamela Plotkin, at <u>plotkin@tamu.edu</u> or 979-845-3902.