FLORIDA SEA GRANT COLLEGE PROGRAM
Priorities & Funding Opportunities for 2020-2022

Call for Proposals
for Applied Research Projects

Deadline: June 3, 2019
(3:00 PM Eastern Standard Time)

This document includes an overview and three sections:
A. Funding and Proposal Information
B. Priorities for Applied Research Projects
C. Research Proposal Guidelines

This document is available online from:
April 22 to June 3, 2019 at
www.flseagrant.org

Science Serving Florida's Coast

Florida Sea Grant is a university-based program that supports research, education and extension to conserve coastal resources and enhance economic opportunities for the people of Florida. We are a partnership between the State University System of Florida, the National Oceanic and Atmospheric Administration, and Florida's citizens and governments.

April 22, 2019

FLORIDA SEA GRANT RESEARCH COMPETITION

ELIGIBILITY REQUIREMENTS

To have your research proposal considered in the review process, four criteria must be met, with no exceptions:

1. All required materials identified in this call for proposals must be submitted using our online system on or before 3 PM Eastern Standard Time on June 3, 2019.

2. The topic of the proposed project must match a priority identified in section B.

3. The PI must identify how they will comply with the NOAA data sharing requirement (see below).

4. Only projects that were submitted in response to the January 7, 2019 call for letters of intent are eligible for consideration in this review of full proposals.

OVERVIEW

This is a solicitation for two-year coastal and ocean applied research grants. Any proposal submitted to Florida Sea Grant that meets the 4 criteria listed above will be reviewed and scored based on criteria identified below. Only investigators who previously submitted a Letter of Intent in response to the January 7 Call of Letters of Intent are eligible to apply for a research grant.

- The research priorities in this solicitation process were developed from the 2018-21 Florida Sea Grant strategic plan, address three of our focus areas: Healthy Coastal Environments; Sustainable Fisheries and Aquaculture; and Resilient Communities. There also is a cross-cutting priority that spans multiple focus areas.
- This is an open state-wide competition for any principal investigator (PI) who can meet the previously described eligibility criteria.
- The maximum Florida Sea Grant award is $200,000 for two years, with no more than $100,000 in each individual budget year. If you are submitting from outside of the University of Florida (UF), be aware that UF will take overhead on the first $25,000 of pass-through funds. Therefore if you are at another university or outside organization, submit a budget for no more than $185,000 ($92,500 per year) and we will address the UF overhead in a separate budget form.
- A 50% match of non-federal funds is required. So if you apply for $50,000 of federal funds, you need to match with $25,000. Volunteer hours are not allowed as match because they cannot be effectively documented.
- Because Letters of Intent were evaluated largely for relevance and end-user engagement, full proposal evaluation is more heavily weighted on technical merits, likelihood that a project can meet stated objectives in two years, and capability of the team to carry out the tasks identified in the proposal. However, we continue to expect clear evidence that an end-user is actively involved in development of the proposal and execution of the project.
- We anticipate funding between 8 and 9 proposals in this biennial cycle, depending on federal funding levels.

PURPOSE

This document describes the process to apply for Florida Sea Grant funding for two-year applied research projects beginning in Spring 2020. It provides an overview of the Florida Sea Grant proposal and review process, defines priority areas, and presents guidelines for the preparation of Letters of Intent.

A. Florida Sea Grant Proposal Information 2020 - 2022

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1. Sea Grant Funding Cycle

Florida Sea Grant research projects are normally funded for two years. Thus, projects proposed should be for the period February 1, 2020 to January 31, 2022.

Key dates:

2019

January 7	Call for Letters of Intent
February 14	Letters of Intent Due by 3 PM EST (no late Letters of Intent will be accepted)
April 16-17	Technical Review Panel Meets to Review Letters of Intent
April 19	Faculty Notified of Results
April 22	Call for Proposals
April 22-June 2	Invited Research Proposals Written
June 3	Research Proposals Due by 3 PM EDT (late proposals will not be accepted)
June-July	Peer Review Conducted
August 6-7	Technical Panel Meets to Review Research Proposals
August 12	Faculty Notified if Proposal Successful
September 4	Letter Response to Peer Reviews Due
October 6	Omnibus Florida Sea Grant Proposal Submitted to National Sea Grant Office, NOAA
2020	New projects start. The date when funds are released depends on when they are provided to Florida Sea Grant by NOAA, and this in turn depends on Federal appropriations.

2. The Research Proposal Narrative

In no more than 12 pages including embedded figures and tables (11 point new times roman font) provide background, relevance and objectives, a detailed description of methods, the end-user engagement, the anticipated outcomes of the research project, and how those outcomes are expected to advance the understanding of an issue related to an end-user identified coastal or ocean problem. For that last component it will be critical to have the end-user involved in writing a convincing proposal. The 12 page limit does not include literature citations, PI biographical sketches, the NOAA data sharing plan or any of the required forms identied below. When working with the private sector, it is critical that we have documentation that the project is broader than working with a single company in an industry sector. We will fund projects that address issues identified as critically important by industry sectors at large, whether that be local, state-wide or regional.

3. Participation

Principal Investigators may be employees of universities, agencies, non-profits or private corporations. Because we are by nature a college program, one of our preferences is support of students. For principal investigators not employed by a university, an effective way to address this criterion is to team up with a faculty member at one of Florida's many universities. Furthermore, salary support included in proposals must be for students who are working on the project under the supervision of one of the PIs. We do not allow salary funds for technicians or the PIs themselves unless they are FL university students.

Investigators may participate in just one proposal as a PI, and no more than one additional proposal as a collaborator.

4. Size of Grant Award

The maximum Florida Sea Grant award is $200,000 for two years, with no more than $100,000 in each individual budget year. If you are submitting from outside of the University of Florida (UF), be aware that UF will take overhead on the first $25,000 of pass-through funds. Therefore if you are at another university or outside organization, submit a budget for no more than $185,000 ($92,500 per year) and we will address the UF overhead in a separate budget form.

5. Student Involvement Is Expected

Sea Grant is a college program and student participation in Sea Grant funded research is expected.

6. Criteria for Reviewing Research Proposals

Florida Sea Grant will obtain three expert reviews, and convene a panel of broadly-experienced out of state professionals who are recognized for both their disciplinary and program leadership expertise. They will discuss the reviews at a panel meeting in August and provide Florida Sea Grant with a numeric ranking of proposals that we will follow to determine which projects to fund – within our budgetary constraints.

A. **Technical Merit (50%)** -- the technical merits of the proposal in the context of state-of-science in the particular subject area. In considering technical merit, the panel will evaluate whether the research plan that is put forward is likely to provide a rigorous and scientifically-valid test of hypotheses or new approaches designed to solve an identified problem. This includes experimental design, data analysis, modeling approaches, and other attributes of research methodology.

B. **End-User Engagement (25%)** -- the degree to which end-users of the results of the proposed project have been brought into the planning of the project, will be brought into the execution of the project, and will use results. Professional colleagues are not considered as end-users. An end-user is an industry, local government, organization or agency partner that makes use of a research product to address some coastal or ocean or coastal issue. If the end-user is in the private sector, there must be evidence that the results are of value to the broad industry sector.

C. **Anticipated Outcomes and Impacts (25%)** -- the degree to which the project is expected to create new commercial opportunities, improve technological and economic efficiency, promote environmental sustainability, increase community resilience, or improve management decisions, in Florida or possibly nationally.

7. Compliance with NOAA Data Sharing Requirement

Once a research project is complete, all data collected or created with funding from the NOAA award must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner. This includes field data, data from experiments, data from surveys, calibration and verification data for models, model output, spatial data, physical, chemical and biological data. Spatial data are challenging but can be provided as GIS shape files. We require that no later than two years after completion of a Florida Sea Grant-funded research project, your data are uploaded to a publicly accessible data portal, and that Florida Sea Grant be provided with an email that references the project number, title, the nature of data that were uploaded, and a link to the portal. We will maintain a table on our website with links to all data collected in research projects. The data portal that you select must be one with documented longeivity, and there must be both metadata and data available to prospective users. A good example is provided from a study in the Everglades that placed data onto a NSF Long-Term Ecological Research data portal: https://portal.lternet.edu/nis/mapbrowse?scope=knb-lter-fce&identifier=1220.

Alternatively, submission of data to the NOAA National Centers for Environmental Information (NCEI) is one way to satisfy data sharing requirements; however, NCEI is not obligated to accept all submissions and may charge a fee, particularly for large or unusual datasets. It is the PI's responsibility to identify the most appropriate alternative for meeting this data sharing requirement.

The PIs must explain how the data and metadata will be developed, described and archived for public access. Funds may be budgeted in the project for this task.

8. Environmental Compliance

Principal investigators must submit a completed National Environmental Policy Act (NEPA) form for review to ensure that the project complies with established federal policies.

9. Diversity

Florida Sea Grant values diversity, equity and inclusion in both our program and the people we serve. We will strive to make access to research funds equally available to everyone, regardless of race, color, religion, place of origin, gender, sexual orientation, age, socio-economic status, disability or veteran status.

10. Outreach

For each funded project, we require that in addition to the traditional journal articles, and the PI's direct interactions with end-users, a user-friendly executive summary document be prepared that is readily understood by educated lay audiences. We encourage PIs to use innovative approaches including web pages, blogs and zines. An example is provided here: Example Zine.

Where such cooperation is feasible and logical for a particular project, PIs are encouraged to work with local Florida Sea Grant extension faculty – recognizing that if they are asked to do outreach work for the project, their time, travel and other costs must be included in the budget.

11. Submitting Proposal:

2020-2022 Florida Sea Grant proposals must be submitted online through the Florida Sea Grant website **http://seagrant.ifas.ufl.edu/CallForProposals/proposalsubmission/**. (PAPER COPIES ARE NOT ACCEPTED). Please read and follow directions carefully. You will receive a confirmation by email when your proposal has been successfully submitted.

> **Deadline for receipt is June 3, 2019 by 3:00 p.m. Eastern Standard Time (No extensions.)**

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9. For Additional Information:

Contact for administrative questions:

Mary Patton
Assistant to the Director
mpatton@ufl.edu
Telephone: (352) 392-5870

Contact for technical questions about proposals:

Chales Sidman, PhD
Research Associate Director
csidman@ufl.edu
Telephone: (3520 392-5870

B. Florida Sea Grant College Program Priorities for 2020 to 2022

The following research priorities, taken from our new strategic plan, have been identified for the 2020 to 2022 funding cycle.

Healthy Coastal Environments

- **Acquire new actionable information about how altered freshwater flow affects estuaries and their ecosystem services.**

- **Develop and test innovative new approaches for restoring coastal habitat, especially approaches that increase habitat resilience to storms and sea level rise.**

Sustainable Fisheries and Aquaculture

- **Develop new models, tools and technologies for sustainably managing fisheries resources or more effectively protecting at-risk species.**

- **Develop new tools, technologies, methods and approaches to support cost-effective, sustainable and environmentally-friendly aquaculture and the harvest, processing and sale of wild aquatic products.**

- **Develop an unbiased, efficient and effective approach that could be used on a recurring basis by resource management agencies to estimate the full economic value of commercial vs. recreational marine fisheries in a particular region.**

<u>Resilient Communities and Economies</u>

- **Quantify the socio-economic impacts resulting from Florida cyanobacteria blooms. We are particularly interested in how the workforce in water-dependent communities around the St Lucie and Caloosahatchee Estuaries are affected by these events.**

- **Estimate the future impacts that sea level rise could have on nutrient export from septic tanks into estuaries and other coastal ecosystems.**

- **Quantify the efficacy of new and existing approaches for increasing the resilience of coastal communities to extreme weather, storm surge and sea level rise.**

<u>Cross-Cutting</u>

- **Develop new tools or methods that will more rapidly detect harmful organisms or materials in water or seafood products, or that will allow for rapid identification or authentication of species or origin of products. Past examples have included a rapid test for brevetoxin in coastal waters, DNA fingerprinting of illegally harvested shark fins, and a rapid test to determine if seafood is properly labelled.**

C. Guidelines for Proposals

INSTRUCTIONS: Proposals **MUST BE SUBMITTED ONLINE** through the Florida Sea Grant web site using the "**Submit a Proposal**" link located on the 'Faculty Funding' page. You are allowed a maximum of **12, single-spaced pages for the narrative with embedded figures and tables as applicable**, not counting the pages that provide literature citations, your biosketches, the NOAA data sharing plan, letters of support, and other forms identified below. Use 11-point new times roman font.

From the Florida Sea Grant 'Faculty Funding' page click the link to "**Submit a Proposal.**" This will take you to a webpage that will allow you to download and use the Microsoft formatted worksheets to prepare your proposal and bioscketches. Convert the completed proposal and biosketch forms to PDF files using Adobe Acrobat, and use the "upload" button on the Florida Sea Grant "Faculty Funding" webpage link "**Submit a Proposal**" to submit your research proposal. NO PAPER COPIES OR EMAIL SUBMISSIONS WILL BE ACCEPTED DIRECTLY BY THE FLORIDA SEA GRANT OFFICE. **PROPOSALS RECEIVED AFTER 3 PM ON JUNE 3, 2019 WILL NOT BE CONSIDERED FOR REVIEW, AND THERE ARE NO EXCEPTIONS TO THIS GUIDELINE, SO PLEASE PLAN AND SUBMIT EARLY.** We are not responsible for the internet being down or other things happening just before the deadline.

Important: Prior to submitting your proposal you must go to the **"Submit a Proposal"** web page, where in order to login, you will be prompted to enter the LOI-2019-number (the same number as your LOI), your email address and the password that you established when you submitted your LOI. This will take you to a page that will allow you to download the various forms needed to submit your proposal. Once you complete the forms off-line, log back into the system, and click on the header menu option called "attach proposal." This will take you to the page that will allow

you to attach the three elements of your proposal (1. Proposal narrative sections and associated forms A-H); Cost Sharing Letter section I; Biosketches section J).

Each research proposal must address each of the following headings. Additional required forms are listed at the end, with links provided on the submittal website.

Proposal Narrative Section and Forms to Be Combined as Sections A-H on Submittal Website

1. PROPOSAL NUMBER. This is the unique identifier number that you will receive after completing the first page of the on-line submission process for your LOI. Remember this number because you will need it for submitting the proposal, cost sharing letter and the biosketches.

2. PROJECT TITLE: (Make this succinct while also reflecting the anticipated application, opportunity or need to be addressed, or problem to be solved. It should clearly relate to a Florida Sea Grant priority listed in Section B of this call for proposals.

3. PROJECT PRIORITY. Identify the priority in section B that your project addresses.

4. PRINCIPAL INVESTIGATOR(S): (Provide faculty name, academic department, and institution)

5. CO-PRINCIPAL INVESTIGATOR(S): (Provide faculty name, academic department, and institution)

6. ASSOCIATE INVESTIGATOR(S): (Provide faculty name, academic department, and institution)

7. PROPOSED BUDGET: YEAR 1 -- SEA GRANT: $_____, MATCH YEAR 1: $ _____.
    (No commas)   YEAR 2 -- SEA GRANT: $_____, MATCH YEAR 2: $ _____.

    One non-federal dollar match -- "hard" or "in-kind" -- must be provided by the grantee for every two dollars requested from Sea Grant; round to the nearest $1000 (no commas). Prepare the budget estimate thoughtfully.

8. BUDGET JUSTIFICATION: One of the forms that you are required to complete, identified below, is a NOAA 90-4 budget form. In the budget justification, explain each item listed in that budget form, including both direct and indirect costs, and federal and matching funds.

9. RELEVANCE: Provide contextual background and then describe the problem or opportunity using quantitative information. This section should document the magnitude of the situation, and the relevance of the issue or problem to the Florida Sea Grant priorities. Describe what makes this project innovative. Why is this topic important to the end-user? As warranted or required discuss pilot data that establish a basis for this line of research.

10. OBJECTIVES: Number and list the objectives. Objectives must be attainable within the two-year timeframe of your project.

11. METHODS: Describe the overall project design. How will the problem be tackled with rigorous research? How will the efficacy of new tools, technologies, policies or products be

evaluated? Identify specific methodology and major aspects such as replication, sampling, surveys, modeling approaches, statistical methods, etc.

12. <u>END-USER PARTICIPATION AND DELIVERY OF RESULTS</u>: Identify the specific end-users that will participate in your project. Describe their specific confirmed role. Describe the specific approach that will be taken to transfer the new information, tools, technologies, policies or products to end-users. This may involve coordinating the project with a state or local resource management agency, a governmental organization or a private industry sector. The proposed research must develop linkages with the agency, industry or community for the dissemination and practical application of results. If there is an opportunity to involve a Florida Sea Grant Extension Agent in the project, this is encouraged but not required. If you take this opportunity, be sure to include funds in the budget for time, travel and supplies that are directed towards the project.

13. <u>EXPECTED RESULTS, APPLICATIONS AND BENEFITS</u>: Describe the expected outcomes of the project. If the objectives are attained, how would the problem to be solved create new commercial opportunities, improve technological and economic efficiency, improve management decisions, etc.? What Florida, regional or national impact is envisioned? We recognize that some research initiatives take considerably longer than two years to provide a solution to an identified problem. We want to know that your project is moving the level of understanding or utility of tools or models in a direction toward issue resolution.

14. <u>LITERATURE CITATIONS</u>: Limit this section to no more than 25 relevant references.

15. <u>REVIEWERS / CONFLICTS</u>: Please provide the names, addresses, telephone, and email of three potential reviewers. Please also tell us if particular persons may have a conflict of interest in reviewing your proposal and in those cases, provide an explanation.

Appended dcouments that do not count towards the 12 page limit.

<u>RESPONSE TO LOI REVIEW COMMENTS</u>: Two-page maximum. Describe the measures you took to address reviewer comments made at the LOI stage.

<u>NOAA DATA SHARING PLAN</u>: Two-page limit. Describe how the metadata and all data collected in the project, including field data, data from experiments, data from surveys, calibaration and verification data for models, model output, spatial data, physical, chemical and biological data. Spatial data are challenging but can be provided as GIS shape files. We require that no later than two years after completion of a Florida Sea Grant-funded research project, your metadata and data are uploaded to a publicly-accessible data portal, and that Florida Sea Grant be provided with an email that references the project number, title, the nature of data that were uploaded, and a link to that portal. The data portal that you select must be one with documented longeivity, and there must be both metadata and data available to prospective users.

<u>LETTERS OF SUPPORT</u>**:** You may append letters of support from end-users / project partners.

FORMS: The proposal must have cover letter signed by an authorized representative of your institution. In addition, the proposal must include a completed NOAA **budget form 90-4**, with pages completed for year 1, year 2 and cumulative (self-populating), an **e-90-2 project summary short form**, which largely can be completed by cutting and pasting information from the proposal narrative, and a **NEPA envorinmental compliance form**.

Cost Sharing Letter to be Submited as Section I on Submittal Website

COST SHARING LETTER: Letter from project partner(s) and/or your institution agreeing to provide the mandatory cost share.
Biographica Data Sheets to be Submitted as Section J on the Submittal Website

BIOGRAPHICAL DATA SHEETS: The principal investigator, co-principal investigators and other collaborators to the project must each provide a one-page biosketch. Include professional positions from current to past, education from most recent to past, and other information you consider relevant to defining a level of expertise that is aligned with the project being proposed.

SUBMISSION: To submit your proposal, paste the link below under number 3 "The Steps to Submit a Proposal" or go to the Florida Sea Grant home page at http://www.flseagrant.org and follow the links to "Funding" and 'For Faculty' to '**Submit a Proposal.**' Read all of the instructions and follow them carefully. You will use the LOI number and password you entered to submit your LOI to submit the full-proposal (Sections A-H), cost-share form (Section I) and biosketches (Section J). DO NOT wait until the last day to submit your materials; the process may take longer than you anticipate, and if you miss the deadline, even by one minute, you will be locked out of the on-line system.

The steps to submitting a proposal are:

1. Read all (A) funding and proposal information; (B) priorities for 2020-2022 and (C) guidelines for preparation of a proposal and biosketches.
2. Download the proposal forms and complete them off-line.
3. Access the proposal submission web page: http://seagrant.ifas.ufl.edu/CallForProposals/proposalsubmission/ fill out the required data fields and click submit. You will then receive your unique identifier number.
4. Enter that identifier number on your proposal (first heading on the form) and the biosketch pages that you and your colleagues completed off-line. The PI should have all biosketches prior to accessing the proposal submission process web page. Additional biosketches may be uploaded **prior to the June 3, 2019 3 PM deadline** using a unique identifier number that the PI creates during the initial submission. However, your proposal will not be considered if all biosketches have not been submitted by the deadline.
5. Convert the proposal and biosketches to a PDF format using Adobe Acrobat.
6. Select the option for "This is a biosketch" and click "attach PDF." Repeat for multiple biosketches.
7. After you have attached your proposal and all biosketches click "finish" to complete the submission process.
8. You will receive an email confirming our receipt of your research proposal.

Deadline for receipt of research proposals with all required information included is June 3, 2019 by 3:00 p.m. Eastern Standard Time (no extensions).