# FLORIDA SEA GRANT COLLEGE PROGRAM

Call for FY 2022-2024 Applied Science Projects



Deadline for LOI: February 15, 2021 (3:00 PM EST)

Deadline for Full Proposals: June 4, 2021 (3:00 PM EDT)

This document includes an overview and four sections:

A. Funding and Proposal Information
B. Priority Issues and Interventions
C. Letter of Intent and Full Proposal Narrative Guidelines
D. Review Proces, Evaluation and Project Selection Criteria

This document is available online from: January 13 to June 4, 2021 at www.flseagrant.org

Science Serving Florida's Coast

Florida Sea Grant is a university-based program that supports science, education and extension to sustain 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.

# FLORIDA SEA GRANT APPLIED SCIENCE COMPETITION

#### **PURPOSE**

This document describes the process to apply for Florida Sea Grant funding for two-year applied and actionable science projects beginning in Spring 2022. It provides an overview of the Florida Sea Grant proposal eligibility requirements, defines priority areas and interventions, presents guidelines for the preparation of Letters of Intent (LOI) and Full Proposals and describes the review criteria.

#### **ELIGIBILITY REQUIREMENTS**

To have your LOI and Full Proposal considered in the review process, all of the following criteria must be met, with no exceptions:

- 1. LOI's and Full Proposals must adhere to guidelines and requirements in Section A. Funding and Proposal Information, including the deadlines for submittion of all materials using the online system. Note that late submissions, for any reason, will be rejected and that <u>full</u> proposals will only be accepted from PI's who submit a LOI.
- 2. The topic of the proposed project must align with a priority issue and intervention type identified in Section B. Priority Issues and Interventions.
- LOIs and Full Proposals must be formatted and submitted according to the instructions in Section C. Letter of Intent and Full Proposal Narrative Guidelines, including attachment of all investigator biographical data sheets and required forms.
- 4. LOI's and Full Proposals must meet Applied and Actionable Science Standards, which emphasize the application, results and benefits of the project according to the following criteria:
  - a. Applied Science Standard:
    - Meeting the needs of end-users, who are actively engaged in the development of the LOI, the full proposal, the execution of the project, and in applying and evaluating the results and benefits of the project.
  - b. Actionable Science Standards:
    - Developing a new and/or appyling an existing science-based framework with outreach to address a priority issue through an intervention as described in Section B: Priority Issues and Interventions.
    - Developing and applying a framework for quantifying and reporting the economic, societal and/or environmental benefits, accomplishments or impacts accrued from the project from the perspective of end-users.

# A. Funding and Proposal Information

## 1. Sea Grant Funding Cycle

Florida Sea Grant science projects are funded for up to two years. Thus, proposed projects should be for the period February 1, 2022 to January 31, 2024.

# Key dates:

#### 2021

January 13 Call for Science Projects Release Date February 15 Letters of Intent Due by 3 PM EST

April 21 Investigators Notified of Results of LOI Review

May 5 Investigators Notify Florida Sea Grant with Intention to Submit Full Proposals

June 4 Full Proposals Due by 3 PM EDT

August 13 Investigators Notified if Full Proposal Successful

September 3 Principal Investigator Written Response to External Reviews Due (if applicable)

2022 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. Proposal Process

The LOI must be no more than 5 pages including embedded figures and tables (11 point Times New Roman font). The LOI represents the first stage of proposal development and should be written in accordance with the Applied and Actionalble Science Standards presented above and in strict accordance with guidance offered in Section C. Letter of Intent and Full Proposal Narrative Guidelines. The LOI responds to a set of priority issues and interventions relevant to Florida Sea Grant's areas of programmatic focus. The LOI describes how the proposed project will address priority issues and apply interventions that meet the needs of end-users and result in quantifiable environmental, societal or economic benefits which accrue from the project.

Although brief, the LOI is the basis for Florida Sea Grant to decide on whether to encourage or discourage submittal of a Full Proposal. Preparation of the narrative sections outlined in Section C. Letter of Intent and Full Proposal Narrative Guidelines should be done thoughtfully.

**Full proposals will only be accepted from PI's who submit a LOI**. The PIs of top-rated LOIs will be encouraged to submit a full proposal based on evaluation criteria described in Section D. Review Process and Evaluation Criteria. Principal investigators who submitted a LOI that are not encouraged may submit a full proposal at their discretion. <u>PI's who submitted a LOI that are not encouraged but who plan to submit a full proposal must notify Florida Sea Grant of this intent by May 5, 2021</u>.

Full proposals will elaborate on the information provided in the LOI but must be no more than 12 pages including embedded figures and tables (11 point Times New Roman font) and address each of the narrative sections described in Section C. Letter of Intent and Full Proposal Narrative Guidelines. The 12 page narrative limit for full proposals includes literature citations and the data sharing plan. Investigator biographical data and other required forms described in Section C are submitted separately through the website.

# 3. Participation

Pls must be affiliated with universities, agencies, local governments, non-profits or private corporations in Florida. Co-Pl's and associate investigators may be from outside of Florida. Investigators may participate on no more than two LOI or full proposals, and as PI on just one. On average, Florida Sea Grant receives about 75 LOI, encourages 20 full proposals, and funds 7-9 projects.

#### 4. Size of Grant Award

The maximum two-year award that Florida Sea Grant will provide is \$200,000 (i.e., a maximum of \$100,000 in each budget year). For each Sea Grant dollar, a 50% matching fund commitment is required for the amount requested (i.e., if you request \$200,000 of federal dollars, you must provide \$100,000 of non-federal match). The match must be made in each year (i.e., if you request \$100,000 in year 1 and \$50,000 in year 2, you must match with \$50,000 in year 1 and \$25,000 in year 2). Externally sponsored projects are ineligible to serve as match.

Since Florida Sea Grant is hosted by the University of Florida (UF), all awards to non-UF employees are subject to indirect costs as a sub-award to another institution; as such, the first \$25,000 are subject to the on-campus research rate of 52.5% - \$13,125 in IDC total. Therefore, the budgets of non-UF PIs are capped at \$186,875 inclusive of the submitting organizations own indirect costs.

#### 5. Student Involvement Is Essential

Sea Grant is a college program and student participation in Sea Grant funded science is essential. For PIs not affiliated with a university, an effective way to address this criterion is to team up with a faculty member at one of Florida's many universities.

#### 6. Compliance with NOAA Data Sharing Requirement

At the full proposal stage, principal investigators will be required to describe a plan for sharing data. Once a 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, calibaration and verification data for models, spatial data, and physical, chemical and biological data. The data portal must also be one with documented longeivity, and there must be both metadata and data available to prospective users. Informaion about the NOAA data sharing plan requirement and directive can be found at the following link: <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

**For the LOI**, the PI must simply agree in writing that they and any other investigators/sub-contractors will comply with NOAA's data sharing policy should their project involve the collection of data.

**For the full proposal,** the PI must explain how the data and metadata will be developed, described and archived for public access and identifying the intended portal if known. Funds may be budgeted in the project full proposal for this task.

# 7. Environmental Compliance

At the full proposal stage, principal investigators will be required to complete an Environmental Compliance Questionnaire (NEPA) for review to ensure that the project complies with established federal policies. NEPA compliance forms can be found at the following link: <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

### 8. Diversity, Equity and Inclusion (DEI)

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. DEI is a bonus review criterion described in Section D. Review Process and Evaluation Criteria, which can be met by (a) engaging or comprising researchers or participants from underserved universities and/or, (b) supporting projects oriented towards helping underserved populations or communities.

#### 9. Outreach

For projects that involve outreach with end-users we encourage cooperation with a Florida Sea Grant Extension Agent. Where such cooperation is feasible and logical for a particular project, PIs should recognize that if Extension Agents are asked to conduct outreach work for the project, their time, travel and other costs should be included in the budget.

# 10. Submitting Your Letter of Intent and Full Proposal

#### Submitting a LOI:

- Download the templates for the project narrative and biographical data sheets from the LOI submittal forms web page (<a href="http://seagrant.ifas.ufl.edu/CallForProposals/forms.php">http://seagrant.ifas.ufl.edu/CallForProposals/forms.php</a>) to complete off-line.
- Access the LOI submission web page: <a href="http://seagrant.ifas.ufl.edu/CallForProposals/siform.php">http://seagrant.ifas.ufl.edu/CallForProposals/siform.php</a> and complete the required data fields and click "Login" to generate a unique LOI number. This number will begin with 00 (e.g., 0001; 0019).
- 3. Enter the LOI number on your LOI (first numbered heading of the Narrative template and on the biographical data sheet template (e.g., SI-2021-0001; SI-2021-0019).
- 4. Convert the LOI and biographical data sheets to a PDF format using Adobe Acrobat.
- 5. It is best for the PI to upload biographical data sheets for each investigator while submitting the project narrative but additional biographical data sheets may be uploaded **prior to the February 15, 2021 3 PM EST deadline** using a password that the PI creates during the initial submission. Be aware that your LOI will not be considered if all biographical data sheets have not been submitted by the deadline.
- 6. In the Investigators, Biographical Data Forms section click on each investigator to upload his/her biographical data form (click "attach PDF.") Repeat for multiple biographical data sheets.
- 7. After you have attached your LOI and all biographical data sheets click "Submit and Log Out" button to complete the submission process.
- 8. You will receive an email confirming our receipt of your LOI, but it may not be instantaneous. Refer to the contact information in item 11 below if you do not receive a confirmation of your submittal within 24 hours.

Note: LOI and full proposal narrative elements and biographical data sheets must be submitted as pdf documents.

### Submitting a full proposal:

The website to access and submit the forms for the full proposal will open on April 26, 2021.

The submittal process for full proposals is largely the same as that for LOI. You will log into the proposal submission web page <a href="http://seagrant.ifas.ufl.edu/CallForProposals/proposalsubmission/">http://seagrant.ifas.ufl.edu/CallForProposals/proposalsubmission/</a> and use the LOI number (e.g., SI-2021-0001) and password you entered to submit your LOI to submit the full-proposal, cost-share statement, biographical data sheets and other required forms described in Section C. Letter of Intent and Full Proposal Narrative Guidelines. These other required forms can be downloaded directly from the proposal submission web page or from at the National Sea Grant Program's website: <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

Note: failure to receive a confirmation due to a last minute submission, which might indicate an issue with the LOI/full proposal or be a technical issue, is not grounds for resubmission of a complete application after 3pm EST).

Deadline for receipt of LOI via the online portal is February 15, 2021 by 3:00 p.m EST (no extensions or exceptions)

Deadline for receipt of Full Proposals via the online portal is June 4, 2021 by 3:00 p.m EDT (no extensions or exceptions)

#### 11. Additional Information and Contact for Submissions

Dr. Nancy Montes Florida Sea Grant Post-Doctoral Research Affiliate nancymontes@ufl.edu Telephone: (352) 392-5870

# **B. Priority Issues and Interventions**

The following research priorities identified for the 2022 to 2024 funding cycle reflect the Florida Sea Grant 2018-23 Strategic Plan's focus areas including Healthy Coastal Environments; Sustainable Fisheries and Aquaculture; and Resilient Communities and Economies. Planning goals and objectives were refined to identify priority issues and interventions through a survey of advisory council members, marine agents and specialists, and campus coordinators affiliated with 18 academic institutions in Florida.

#### **Healthy Coastal Environments**

Priority: Improve or restore water quality and coastal environments by mitigating harmful algal blooms (micro and macro) and/or pollution within well-defined coastal areas with a focus on one or more of the following interventions:

- (1) Implement science-based **monitoring** to more efficiently and effectively evaluate or mitigate impacts from HABs and/or pollution.
- (2) Apply science-based **technologies**, **adaptations**, or **restoration** for evaluating or mitigating the occurrence and severity of HABs and/or pollution.

# **Sustainable Fisheries and Aquaculture**

Priority: Enhance the productivity and/or sustainability of fisheries (recreational and commercial) or aquaculture (finfish and shellfish) with a focus on one or more of the following interventions:

- (1) Apply and evaluate science-based **technologies**, **adaptations** or **restoration** for managing and/or enhancing the productivity, sustainability, and/or value of fisheries or aquaculture.
- (2) Apply and evaluate science-based technologies or practices for enhancing the monitoring, growing, harvesting, safe processing, and/or value of wild caught and aquacultured seafood.

#### **Resilient Communities and Economies**

Priority: Increase community adaptation and resilience by: addressing threats to natural resources needed by communities; enhancing coastal infrastructure or waterways; supporting water dependent businesses and tourism-based economies, with a focus on one or more of the following interventions:

- (1) Develop and/or apply science-based green engineering and/or construction practices that mitigate effects of extreme weather, sea level rise and/or flooding hazards/threats.
- (2) Implement and/or apply science-based **planning**, **policy**, **communica- tions/outreach tools** to help communities adapt to natural and/or anthropogenic hazards/threats.

Note: It is essential that projects supporting these priorities and interventions engage end-users and yield tangible benefits that are measurable, adapted/applied and valued. Examples of expected benefits to be measured and valued as part of projects include:

- Acres of habitats enhanced or protected.
- Value of products (i.e., tools, technologies and information) generated and used in decision-making.
- Business or industry benefits realized.
- Communities (name and county) benefits realized.
- People engaged or positively impacted (behavior change) by the project.
- Economic benefits (number of jobs created/sustained, number of businesses created/sustained, value of benefits generated).
- Ecosystem services provided (quantification and valuation).
- Value/benefits to commercial and recreational fisherires or aquaculture.

# C. Letter of Intent and Full Proposal Narrative Guidelines

Each LOI and full proposal must address each of the following 11 narrative sections.

- 1. <u>LOI/ FULL PROPOSAL NUMBER</u>. This is the number that you will receive after completing the first page of the on-line submission process. Write this number down and save it because you will need it for submitting the LOI / full proposal and the biographical data forms.
- 2. <u>PROJECT TITLE</u>: 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. Priority Issues and Interventions.
- PRINCIPAL INVESTIGATOR(S): Provide faculty name, academic department and institution
   CO-PRINCIPAL INVESTIGATOR(S): Provide faculty name, academic department and institution

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

4.	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). Please refer to Section A item 4 for reference regarding funding request amounts.

<u>BUDGET JUSTIFICATION</u> This is only required for full proposals. One of the forms that you are required to complete for full proposals is a NOAA 90-4 budget form. Therefore, in the budget justification, explain each item listed in that budget form, including both direct and indirect costs, and federal and matching funds.

- 5. <u>RELEVANCE</u>: 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. Why is this topic important? As warranted or required discuss pilot data that establish a basis for proposed applied and actionable science. Will the proposed project advance Diversity Equity and Inclusion DEI by (a) engaging or comprising researchers or participants from underserved universities and/or, (b) supporting projects oriented towards helping underserved populations or communities?
- 6. GOAL AND OBJECTIVES: In one sentence, concisely state the overall goal of the proposed project. Then, number and list the objectives. Proposals that state objectives in a way that illustrates a logical flow and enables measurable comparison to expected project results and benefits will fare best in review. Objectives and results must be attainable within the two-year project timeframe.
- 7. <u>METHODS</u>: Describe or diagram the overall project design. What are the main technical, analytical or outreach components? Describe the role of students.
- END-USER PARTICIPATION: 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 and private industry sector. The proposed project must develop linkages with the agency, industry or community for the dissemination and practical application of results. If there is a clear opportunity to involve a Florida Sea Grant marine Extension agent in the project, this is encouraged.

Note: 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.

- 9. QUANTIFYING/VALUING BENEFITS AND IMPACT: How will proposed interventions be adapted and applied by project end-users, specifically. Explain the methods you will use to measure and value derived environmental, social or economic benefits. If applicable, orient this valuation around one or more of the Methodology Guides that have been developed by the National Sea Grant Office: https://seagrant.noaa.gov/insideseagrant/economic-impacts
- 10. <u>DATA SHARING PLAN</u>: 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.

**Important:** For LOI, the principal investigator need only agree that all data collected as part of the project will be shared. For the full proposal the principal investigator must describe a plan for making data collected as part of the project available. Guidance for developing data sharing plans is provided on the National Sea Grant Program website: <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

11. <u>LITERATURE CITATIONS</u>: List relevant references. This counts towards the LOI and full proposal page limits.

**BIOGRAPHICAL DATA.** Submit these forms separate from the narrative on the submittal website. They do not count towards LOI or full proposal page limits. The principal investigator, co-principal investigators and other collaborators to the project must each provide a one-page biographical data sheet. 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. Your LOI will not be considered for review if biographical data for all investigators identified in narrative section 3 have not been submitted by the deadline. Submit biographical data forms as separate <u>pdf</u> files (for each investigator identified).

#### For Full Proposals Only

**SIGNED TITLE PAGE.** This form must be completed and appended as the first page of the full proposal narrative. This form can be downloaded from the proposal submittal website or the National Sea Grant Program website <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

**90-4 BUDGET FORM.** This form must be completed and inserted in the "Proposed Budge section of the narrative (narrative element 4). It does not count towards the full proposal narrative page

limit. The 90-4 budget form can be downloaded from the proposal submittal website or the National Sea Grant Program website <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

**COST SHARING LETTER**. Letters from project partner(s)/end user(s) and/or your institution agreeing to provide the mandatory cost share. This letter must be completed and submitted as a separate <u>pdf</u> document. If multiple letters, they should be combined an submitted as a single pdf document. It does not count towards the full proposal narrative page limit. There is no required format for these letters.

**90-2 PROJECT RECORD FORM.** This form (also referred to as the Project Summary Form) must be completed and submitted with full proposals as a separate <u>Exce</u>l file formatted document. The 90-2 form can be downloaded from the proposal submittal website or the National Sea Grant Program website <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

**NEPA ENVIRONMENTAL COMPLIANCE QUESTIONNAIRE**. This short form must be completed and submitted with full proposals as a separate <u>pdf</u> formatted document. It does not count towards the page limit. The NEPA form can be downloaded from the proposal submittal website or the National Sea Grant Program website

https://seagrant.noaa.gov/insideseagrant/Implementation

# D. Review Process, Evaluation and Project Selection Criteria

Florida Sea Grant will implement a review of LOI by a Relevancy Review Pannel comprised of staff, advisory council, marine agents and specialists. Their ratings of LOI according to the criteria described below will be used by Florida Sea Grant to recommend which LOI should be encouraged or discouraged for development into full proposals. A LOI that receives a "not encouraged" recommendation does not preclude the applicant from submitting a full proposal.

Full proposals will be evaluated by a Technical Review Panel (TRP) that includes scientists from federal and state agencies and scientists from outside of Florida applying the same criteria used to evaluate LOIs. At least three quantitative reviews will be obtained for each proposal prior to convening the TRP. The TRP will be convened to discuss each proposal using the results from the quantitative reviews. After the TRP discusses the merits of each proposal, the proposal will be placed into a "fundable" or "not fundable" category.

- A. Applicability (up to 20%) the degree to which the proposed project addresses a priority issue(s) and integrates a priority intervention(s) identified in Section B. Priority Issues and Interventions.
- **B. End-user participation (up to 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 apply and help evaluate the results during the course of the two-year project.
- **C.** Quantifying/valuing benefits and impact (up to 30%) the degree to which the proposed project integrates measures and methods to yield and quantify significant environmental, societal or economic benefits as outcomes of the project.
- **D. Scientific merit (up to 25%)** the degree to which the research plan 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 and/or outreach.

Bonus criterion: Diversity, equity and inclusion (up to 10%) – the degree to which the proposed project supports DEI as defined in Section A. Funding and Proposal Information, item 8.

The Florida Sea Grant director has final discretion to recommend proposal(s) for funding based on the reviews, TRP fundability assessment and discussions, administrative review, availability of funding, and program objective, needs, and priorities. Information about the proposal(s) recommended for funding (ie.g., reviews) will be included in a letter of intent to fund selected proposal(s) submitted by the director to the Federal Program Officer. Proposal PIs will be notified once the project(s) are approved.