The Florida Senate
Local Funding Initiative Request
Fiscal Year 2020-2021

LFIR # 1230

1. **Project Title** UF/IFAS Algal Bloom Research & Mitigation

2. **Senate Sponsor** Joe Gruters

3. **Date of Request** 10/21/2019

4. **Project/Program Description**

In response to impacts of HAB, and pursuant to the Governor's Executive Order 19-12, UF/IFAS will utilize a statewide collaborative initiative that builds on the existing networks among local natural resource managers, land-use planners, private companies, state agencies and UF/IFAS scientists and extension faculty for the following objectives: Determining the specific HAB threats facing different impacted ecosystems;Identifying major forms and sources of algae-growth-supporting nutrients in HAB-impacted ecosystems; Evaluating the viability and feasibility of current and proposed nutrient and bloom management strategies, including techno-economic analyses, as well as developing new mitigation strategies; Developing and implementing successful HAB mitigation strategies to significantly reducing economic impacts.

5. **State Agency to receive requested funds** Board of Governors

State Agency contacted? (•) Yes ( ) No

6. **Amount of the Nonrecurring Request for Fiscal Year 2020-2021**

Type of Funding	Amount
Operations	1,754,000
Fixed Capital Outlay	000
Total State Funds Requested	1,754,000

7. **Total Project Cost for Fiscal Year 2020-2021 (including matching funds available for this project)**

Type of Funding	Amount	Percentage
Total State Funds Requested (from question #6)	1754000	100.0 %
Matching Funds		
Federal	00	0 %
State (excluding the amount of this request)	00	0 %
Local	00	0 %
Other	00	0 %
Total Project Costs for Fiscal Year 2020-2021	1,754,000	100 %

8. **Has this project previously received state funding?** ( ) Yes (•) No

If yes, provide the most recent instance:

Fiscal Year (yyyy-yy)	Amount		Specific Appropriation #	Vetoed
	Recurring	Nonrecurring		

9. **Is future-year funding likely to be requested?** ( ) Yes (•) No

If yes, indicate nonrecurring amount per year.

10. **Details on how the requested state funds will be expended**

Spending Category	Description	Amount
Administrative Costs:		
Executive Director/Project Head Salary and Benefits		
Other Salary and Benefits	13 Post-Doctoral students, 13 Faculty salaries and 3 Extension program staff to facilitate project	1,499,000
Expense/Equipment/ Travel/Supplies/Other	Travel for 28 faculty and staff involved in program, equipment and supplies for 8 departments across UF/IFAS, Communication and outreach.	255,000
Consultants/Contracted Services/Study		
Operational Costs: Other		
Salary and Benefits		
Expense/Equipment/ Travel/Supplies/Other		
Consultants/Contracted Services/Study		
Fixed Capital Construction/Major Renovation:		
Construction/Renovation/ Land/Planning Engineering		
Total State Funds Requested (must equal total from question #6)		1,754,000

11. **Program Performance**

a. What specific purpose or goal will be achieved by the funds requested?

The central goals of the program are to provide guidance and assistance for the identification implementation of effective HAB mitigation strategies for impacted aquatic ecosystems, in collaboration and communication with user-groups, stakeholders and regional water management organizations. The program will use a watershed approach to assess the dominant point and non-point sources of algal-growth supporting nutrients, model the relative contribution of nutrients from each sources to HAB formation, and evaluate the viability and feasibility of current and proposed nutrient management strategies.

b. What activities and services will be provided to meet the intended purpose of these funds?

The programmatic effort will be facilitated by regional UF Extension faculty present in all 67 counties and collaborations between local/state experts and UF scientists, capitalize on existing relationships and partnerships and serve as catalysts for communication of results to government agencies, resource managers, Governor's HAB task forces, other academic institutions and the general public. Specific activities include meetings, workshops, charrettes, focus groups and/or symposiu necessary to assess and identify 1) major forms and sources of algae-growth-supporting nutrients; 2) existing and potential nutrient management strategies; 3) current sources of nutrient and water quality data; and 4) techno-economic analyses of existing and proposed management strategies. Strategic development and dissemination of these tools and reports will assist local municipalities in capitalizing on their available resources to ensure maximum benefit.

c. What direct services will be provided to citizens by the appropriation project?

The services provided by this project will refine and improve on existing Basin Management Action Plans ensuring the best use of local, state and federal tax dollars. The project will also generate workforce-ready professionals aware of HAB issues through our comprehensive academic programs - including formal university instruction, post-graduate certificate programs, and professional short courses-delivered using distance education technologies around the state. Services provided by activities will yield tools and reports to provide geographically specific guidance and practical cost-benefit recommendations for nutrient source control projects.

d. Who is the target population served by this project? How many individuals are expected to be served?

During the 2020-2021 fiscal year, the project will focus on the watersheds of Lake Okeechobee, Caloosahatchee Estuary, and St. Lucie Estuary, which collectively encompass local governments within Charlotte, Highlands, Martin, Okeechobee, Orange, Osceola, and Polk counties. The region serves 2.95 million residents according to 2019 population estimates. The targeted aquatic ecosystems have all been subject to and intense and damaging HAB events.

e. What is the expected benefit or outcome of this project? What is the methodology by which this outcome will be measured?

This project will result in comprehensive regionally specific plans and recommendations for nutrient management and mitigation strategies in the northern Okeechobee, Caloosahatchee and St. Lucie river and estuary watersheds. The project will model nutrient sources, control program feasibility plans, and techno-economic analyses that will build off and refine existing BMAPs. This project will rely on the multi-disciplinary expertise available at UF facilities and through the statewide Extension faculty network. Project outcomes will be determined by the transfer of the project deliverables to local governments and natural resource managers and success will be determined by a post-project assessment by stakeholder groups, that will evaluate the level of use of the program tools and deliverables generated by the program.

f. What are the suggested penalties that the contracting agency may consider in addition to its standard penalties for failing to meet deliverables or performance measures provided for in the contract?

None.

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12. **The owners of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the relationship between the owners of the facility and the entity.**

N/A

13. **Requestor Contact Information**

a. First Name: Jack Last Name: Payne

b. Organization: University of Florida Institute of Food and Agricultural Science

c. E-mail Address: jackpayne@ufl.edu

d. Phone Number: (352)392-1784 Ext.:

14. **Recipient Contact Information**

a. Organization: University of Florida Institute of Food and Agricultural Science

b. Municipality and County: Statewide

c. Organization Type

- ○ For-profit Entity
- ○ Non-Profit 501(c) (3)
- ○ Non-Profit 501(c) (4)
- ○ Local Entity
- ◉ University or College
- ○ Other (please specify)

d. First Name: Sherry Last Name: Larkin

e. E-mail Address: slarkin@ufl.edu

f. Phone Number: (352)2733603

15. **Lobbyist Contact Information**

a. Name: Mary Ann Hooks

b. Firm Name: University of Florida Institute of Food and Agricultural Science

c. E-mail Address: mahooks@ufl.edu

d. Phone Number: (850)3227259 Ext.: