

**FLORIDA RED TIDE**  
**MITIGATION AND TECHNOLOGY DEVELOPMENT INITIATIVE**

**5th REQUEST FOR PROPOSALS**  
**Open: March 3, 2023 – April 7, 2023**

**Background**

Blooms of the toxic dinoflagellate *Karenia brevis* (commonly called red tides) are an almost annual occurrence in Southwest Florida coastal waters. These blooms vary in geographic size, duration and impact. Impacts from red tide can be regional or may affect hundreds of miles of coastline, and blooms can last for months or persist over multiple years. From 2017 to 2019 Florida experienced an unusually large, prolonged, environmentally damaging *Karenia brevis* bloom that negatively impacted human and environmental health as well as state and local economies. This bloom and several occurrences of red tide since have emphasized the need for a coordinated effort to expand existing and develop new strategies to address and mitigate the harmful effects of red tide using state-of-the-art science and innovative technologies.

The Florida Red Tide Mitigation and Technology Development Initiative (Initiative) was established by the Florida Legislature under [379.2273 Florida Statutes](#) and signed into law by Governor DeSantis in June of 2019. The Initiative is an independent and coordinated effort among public and private research entities to develop prevention, control, and mitigation technologies and approaches to address the impacts of red tide on coastal environments and communities in Florida. More information on the Initiative is available on the [Mote Red Tide Initiative](#) website.

Building upon the ongoing and highly productive Florida Fish and Wildlife Conservation Commission (FWC) and Mote Marine Laboratory (Mote) cooperative red tide research and monitoring program, this new applied science Initiative will receive six years of funding (entering Year 5 of 6) from the Florida Legislature that Mote will strategically leverage with other state appropriations, private, and federal funding to:

- Bring together the best and brightest scientists from Florida and around the world;
- Utilize innovative approaches and technologies to determine the most effective and ecologically sound methods for mitigating and decreasing the impacts of red tide;
- Test technologies with combinations of lab-based, large-scale mesocosm, and pilot-scale field studies leading to large-scale field testing and application.

Also established under 379.2273 Florida Statutes is the Initiative Technology Advisory Council that is chaired by Mote, and includes five additional members appointed (one each) by the Governor of Florida, Florida Senate President, Florida House Speaker, Florida Department of Environmental Protection, and FWC. This Council is required to meet twice annually and will provide Mote

with advice and recommendations on overall Initiative implementation and statutory required Annual Reports. Council meeting announcements, agendas, meeting minutes, and presentations are available on the [Initiative Technical Advisory Council](#) website.

As stated in 379.2273 Florida Statutes, Mote Marine Laboratory may, with the concurrence of FWC Fish and Wildlife Research Institute, use a portion of the awarded funds to facilitate additional engagement with other pertinent marine science and technology development organizations in Florida and around the world to pursue applied research and technology development for the control and mitigation of impacts of red tide. Thus, the focus of this Initiative grant funding has been directed toward the development of innovative technologies and approaches to control and mitigate impacts of red tide.

### **5<sup>th</sup> Year Funding Priorities**

Years 1 through 4 of the Initiative focused on finding new and novel red tide mitigation tools/technologies through Tier 1 (Literature Reviews and Lab Testing) and Tier 2 (Tanks, Mesocosms, and Raceways) of a tiered testing process. Tier 2 testing was largely conducted at the Red Tide Mitigation and Technology Development Testing Facility focused on integrating mitigation techniques while monitoring natural ecosystem components — including impacts on water quality and keystone animals such as blue crabs, sea urchins, clams, oysters and shrimp. After investigation of hundreds of new/novel ideas or expanding testing of previously researched products, research is looking promising for approximately a dozen tools/technologies. For more information on Initiative progress please review the Annual Accomplishments and Priorities Report available on the [Mote Red Tide Initiative](#) website.

**Year 5 Request For Proposals has two main priority funding areas:**

- **Existing Initiative Projects: Funding for Tier 3 (Field Testing, Regulatory Approvals, and Engineering/Deployment) and Tier 4 (Commercialization) efforts for projects that have completed or are nearing completion of Tier 2 testing and have begun the regulatory approval process.**
- **New Initiative Projects: Funding for mitigation tools/technologies that have existing federal and state regulatory approvals and have completed testing for other harmful algal bloom control/mitigation, algicidal application, or similar uses and proven capability of Florida marine field deployment by end of 2023 calendar year.**

No funding match is required, but proposals that request funds as a portion of a larger project budget or activity must be clearly defined. Use of Mote facilities and infrastructure developed as part of the Initiative is encouraged as capital requests for lab-based equipment or infrastructure will not be funded – **field testing and implementation equipment and capital requests are allowable.** Coordination, collaboration and/or partnership of proposed projects with Mote and FWC scientists is encouraged, but not required.

### **Required Recognition of the Initiative**

All publications, presentations, and field testing resulting from funded projects must include a specific acknowledgement of the Florida Red Tide Mitigation and Technology Development Initiative funding and partnership with the FWC and Mote. Additional contract conditions and requirements may apply.

### **Eligibility**

This Request for Proposals is open to any and all organizations, but shall be subject to laws of the United States and Florida and contracting requirements and conditions of FWC and Mote. Please also see the Florida Sunshine/Public Records Law section below.

### **Funding Availability**

The fifth year of funding for proposals is estimated at ~\$2 million to primarily focus on technical/engineering aspects of **scaling up previously demonstrated mitigation methods** (see [2023 Accomplishments and Priorities Report](#) for focal mitigation tools/technologies) for larger scale field testing/implementation work. It is anticipated to be awarded in \$250,000 to \$500,000 amounts to 4 or 5 organizations for support of a not to exceed 12 month project period. Based on outcomes of these one-year projects, awardees may subsequently request a second year of funding through the Year 6 Request for Proposals.

### **Process**

Mote is administering the Initiative funds from the State of Florida through an FWC Contract for this partner led granting opportunity. As a focused set of Year 5 proposals for Tier 3 and Tier 4 are requested, Mote will make the final decision as to which proposals will be funded and the related grant conditions.

### **Proposals**

The first page of the proposal should be the completed “Checklist” (attached), which is designed to help proposers make certain that they have complied with all of the requirements of the Request for Proposals.

The proposal should also consist of a cover letter (one page maximum) that briefly introduces the principal investigator, institution/organization, proposed project and how it will address the intent of the Initiative, funding requested, and designates a contact person including contact information, and is signed by the Project Leader.

The project description (five pages maximum) should describe the critical mitigation and/or technologies being researched. The description should include the objectives of the proposal, the scope of work proposed, the goals to be achieved, the proposed deliverables and the deliverable timelines. In addition, the roles and qualifications of all team members should be described. If applicable, the description should also include a detailed discussion of the scientific methods and procedures to be employed.

The proposed project budget (two pages maximum) should describe in detail all proposed expenditures over the life of the project. Personnel expenditures in particular should be sufficiently documented to determine whether the resources

will be efficiently and cost-effectively utilized. The expenditures should include, but not necessarily be limited to: salaries; fringe benefits; equipment; materials and supplies; travel (including the presentation to the Initiative Technical Advisory Council described in the Program Deliverables below); consultants and/or subcontractors; other direct costs; and indirect or overhead costs. If indirect or overhead costs are proposed they should be no higher than the applicant's reasonable, usual and customary rates. An explanation of the rates should also be included as well as the identification of the applicant's cognizant agency, if applicable. Any non-Federal entity that has never received a negotiated indirect cost rate, except for those non-Federal entities described in 2 C.F.R., may elect to charge a de minimis rate of 10% of modified total direct costs.

Proposals will be evaluated based on criteria directly relevant to red tide mitigation and technology development. This will include: Rationale- how well the proposal addresses the project goals and objectives; Merit- how well the project advances the state of red tide mitigation and technology implementation; Feasibility- ability of the project to be successfully completed within time and/or other constraints; Qualifications- demonstrated ability of the Project Leader and/or team to integrate and complete the project successfully; Budget- is the proposed budget reasonable and adequate to complete the proposed project.

### **Proposal Deadline**

In order to be considered, a proposal must be submitted as a single PDF file named as: Principal Investigator\_Project Title. Please submit proposals via email to [proposals@redtidemtdi.org](mailto:proposals@redtidemtdi.org) by 5:00 P.M. EST, April 7, 2023. Please include the Principal Investigator and Project Title in the subject line of the e-mail. Award notification is projected for May 2023 with subcontract funding planned for June 2023.

Mote requires the submission of one electronic copy of the proposal. Risk of delivery by the time and date required will be the sole responsibility of the applicant.

### **Program Deliverables**

A detailed Interim Progress Report and a detailed Interim Financial Report will be due at the mid-point of the project year and no later than six months into the award period. A detailed Final Technical Report and a detailed Final Financial Report will be due at the end of the project and no later than twelve months into the award period. The acceptability of the Reports will be at the sole discretion of Mote.

In addition, **all funded applicants will be required to make a presentation at the Initiative Commercialization Workshop on August 24-25** and may be required to make a presentation of their progress at a public meeting of the Initiative Technology Advisory Council. Presentations should **address the scientific mitigation results, regulatory steps achieved, and progress to commercialize the mitigation tool/technology.**

### **Payment Schedule**

The final payment schedule will be determined upon review of the proposals recommended for funding. However, in general, successful projects will receive 50% of the awarded funds upon contract execution, 25% upon approval of the Interim Report and the remaining 25% upon approval of the Final Report.

### **Florida Sunshine/Public Records Law**

Article I, section 24, Florida Constitution, guarantees every person access to all public records and Chapter 119, Florida Statutes, provides a broad definition of public records. All proposals are public records and available for public inspection unless specifically exempt by law.

If a proposer believes that any portion of the documents, data or records submitted in a proposal are exempt from Florida's Public Records Laws, the proposer must (1) clearly segregate and mark the specific sections of the document, data or records as "Confidential," (2) cite the specific Florida Statute or other legal authority for the asserted exemption, and (3) provide Mote with a separate redacted copy of its proposal (the "Redacted Copy"). The cover of the Redacted Copy shall reference the Initiative, and shall be clearly titled "Redacted Copy." Only those portions of records that are claimed as specifically exempt from disclosure under Florida's Public Records Laws should be redacted. If a Redacted Copy is not provided then Mote is authorized to produce all documents, data and other records submitted in a proposal in response to a public records request for such information.

If a Redacted Copy is provided, then in the event of a public records or other disclosure request under Florida's Public Records Laws or other authority to which the proposal documents, data or records are responsive, Mote will provide the Redacted Copy to the requestor. If a requestor asserts a right to any redacted information, Mote will notify the proposer that such an assertion has been made. It is the proposer's responsibility to respond to the requestor to assert that the information in question is exempt from disclosure under applicable law. If Mote becomes subject to a demand for discovery or disclosure of the redacted information under legal process, Mote shall give the proposer notice of the demand prior to releasing the redacted information (unless otherwise prohibited by applicable law). The proposer shall be responsible for defending its determination that the redacted portions of the information are not subject to disclosure.

The proposer shall protect, defend and indemnify Mote from and against all claims, demands, actions, suits, damages, liabilities, losses, settlements, judgments, costs and expenses (including but not limited to reasonable attorney's fees and costs) arising from or relating to the proposer's assertion that all or any portion of its information is not subject to disclosure.

If a proposer is successful and is funded, the proposer shall:

- (a) Keep and maintain public records that pertain to carrying out the project;

(b) Provide the public with access to public records on the same terms and conditions that Mote would provide the records and at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law;

(c) Ensure that public records that are exempt from public records disclosure requirements are not disclosed except as authorized by law; and

(d) Meet all requirements for retaining public records and transfer, at no cost, to Mote all public records in possession of the proposer upon completion of the project or the discontinuation of funding. All records stored electronically shall be provided to Mote in a format that is compatible with the information technology systems of Mote.

### **Questions**

Any questions about the Florida Red Tide Mitigation and Technology Development Initiative should be directed to Kevin Claridge at [kclaridge@mote.org](mailto:kclaridge@mote.org) or 941-388-4441 ext 275. **If you are interested in submitting a proposal for Year 5 it is suggested you set up an individual planning meeting with Mote to discuss your scope of work and budget.**

## Red Tide Initiative Partner Led Grant Proposal Checklist

Please complete this form and check the appropriate boxes to help make certain that you have fully complied with the requirements of the RFP. Sign and return the form with your proposal.

- Page 1 Proposal Checklist
- Page 2 Cover Letter (1 page max)
  - Project Title
  - Principal Investigator
  - Institution/Organization
  - Brief Project Overview and Why Project Addresses Initiative Focus
  - Funding Amount Requested
  - Agreement to Terms and Conditions
  - Contact Person and Contact Information
  - Project Leader Signature
- Project Description (5 pages max)
  - Research Description
  - Proposal Objective
  - Scope of Work
  - Deliverables to Achieve Initiative Goal
  - Deliverable Timelines
  - Team Roles and Qualifications
  - Scientific Methods, if applicable
- Project Budget (2 pages max)
  - Salaries
  - Fringe Benefits
  - Equipment
  - Materials/Supplies
  - Travel
  - Budget for any Consultants/Subcontractors
  - Indirect/Overhead Costs
- Additional Consideration
  - Matching Funds or In-Kind Work
  - Partnerships
- CV's or References (do not count in page count)

Proposal Title: \_\_\_\_\_

Principal Investigator(s): \_\_\_\_\_

Institution/Organization(s): \_\_\_\_\_

Project Lead Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Institutional Signature: \_\_\_\_\_ Date: \_\_\_\_\_