



Methods to Prevent, Combat or Clean Up Harmful Algal Blooms in Florida's Freshwater Bodies and Estuaries

RFI No.: 2020001

REQUEST FOR INFORMATION (RFI)

METHODS TO PREVENT, COMBAT OR CLEAN UP HARMFUL ALGAL BLOOMS IN FLORIDA'S FRESHWATER BODIES AND ESTUARIES

DEP RFI Posting Number: 2020001

The Florida Department of Environmental Protection (Department) is issuing this Request for Information (RFI), as defined in Section 287.012(22), Florida Statutes (F.S.), to interested entities seeking responses from interested parties relating to scalable methods to prevent, combat or clean up harmful algal blooms in Florida's freshwater bodies and estuaries. Responses to this RFI will be used to inform local and state government officials on options that are commercially available for the purposes described above. Please note that under Section 287.012,(22) F.S., responses to this request are not offers and will not be accepted by the Department to form a contract.

Interested entities can view and download this RFI from the Vendor Bid System (VBS) website at http://www.myflorida.com/apps/vbs/vbs_www.main_menu Once at this site, the steps listed below should be followed to access the VBS.

Click "Search Advertisements"
Under the "Agency" search field, select the "Department of Environmental Protection"
and Click on "Advertisement Search"
Click on the applicable RFI number

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TIMELINE OF EVENTS

DATES	EVENTS	METHOD
July 1, 2019	RFI Advertised	On Vendor Bid System http://www.myflorida.com/apps/vbs/vbs_www.main_menu
July 08, 2019 by COB 5:00 PM, ET	Questions Submitted in Writing via Email	Procurement Contact: Florida Department of Environmental Protection Wanda Norton, Procurement Officer E-mail: Wanda.Norton@FloridaDEP.gov
On or about, July 11, 2019	Answers to Questions Posted	Vendor Bid System http://www.myflorida.com/apps/vbs/vbs_www.main_menu
Wednesday, July 15, 2019 by 5:00 PM ET	Response Due via Email	Submit via email to: Attn: Wanda Norton, Procurement Officer E-mail: Wanda.Norton@FloridaDEP.gov RFI NUMBER MUST BE IN SUBJECT LINE OF EMAIL

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Section 1.00 - INTRODUCTION

1.01. Purpose and Scope. The Florida Department of Environmental Protection ("Department" or "DEP") is requesting information from qualified and interested entities with proven, verifiable and documented expertise regarding scalable methods to prevent, combat or clean up harmful algal blooms in Florida's freshwater bodies and estuaries.

THIS IS NOT A REQUEST OR INVITATION FOR COMPETETIVE BIDS, PROPOSALS OR REPLIES, AND NO CONTRACT WILL BE AWARDED IN RESPONSE TO SUBMISSIONS.

If, the Department decides to pursue a contract(s) to obtain any of the services mentioned, and if interested entities capable of providing such services are identified, a competitive procurement package will be developed and issued at a later date.

Submissions to this RFI will be reviewed for informational purposes only and will not result in the award of a contract. Submitting a response to this RFI shall not disqualify an interested entity from responding to any related subsequent solicitation.

1.02. Procurement Officer.

Wanda Norton, Procurement Officer Procurement Section, Carr Building Florida Department of Environmental Protection 3800 Commonwealth Boulevard, MS#93 Tallahassee, Florida 32399-3000

Email: Wanda.Norton@FloridaDEP.gov

- **1.03. Questions. Information will not be provided by telephone.** Any questions from an interested entity concerning this RFI shall be submitted in writing, identifying the interested entity name and RFI number, to the Procurement Officer no later than the time and date specified in the Schedule of Events. All inquiries must be submitted by email. All questions and answers will be posted on the VBS and it is the interested entity's responsibility to periodically check the VBS for updates. The Department bears no responsibility for any delays, or resulting impacts, associated with an interested entity's failure to obtain the information made available through the VBS.
- **1.04.** Addenda. If the Department finds it necessary to supplement, modify, or interpret any portion of the RFI documents, a written "Addendum" will be posted on the VBS. It is the responsibility of the interested entity to be aware of any Addenda that might have a bearing on their response.

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1.05. Submittal of Response. Responses are due in accordance with VBS and Schedule of Events. An interested entity's response must be submitted electronically via email to the Procurement Officer, identified in Section 1.02. The naming convention for the subject line within your email is:

Subject Line: Your Company Name – DEP RFI No. RFI 2020001

Once received, all RFI responses and attachments shall become the exclusive property of the Department and will not be returned. The Department is not liable for any of the costs incurred by the interested entity in preparing and submitting a response.

Interested entities are encouraged to read all requirements before completing and submitting the response to the Department. Responses that are not completed as requested will not be considered. When preparing the submittal, please:

- Complete all sections and fully answer all questions in Sections 3.00 & 4.00.
- Provide comments in English, define any technical terms, and describe your process in a concise manner.

The response package must at a minimum contain a title page including:

- Entity Name
- Officer/Registered Agent Name
- Address
- Phone Number and Email Address
- Trademark Name
- Trademark Owner Name
- Federal Employer Identification number(s). Multiple entities may be listed under a single FEI number.

In an effort to ensure a clear understanding of the products and service, DEP may use this RFI as the basis for requesting oral presentations, and/or to ask interested entities to perform field demonstrations for fact finding purposes only. These demonstrations will be at the Department's discretion and will be at no cost to DEP. If DEP requests oral presentations or field demonstrations, they will not be noticed as a public meeting.

The oral presentations and demonstrations may be recorded and will be a matter of public record and released if a public records request is received. In accordance with Chapter 119.07, Florida Statutes, if the interested entity asserts that an exemption applies then the basis of the exemption, including the statutory citation to an exemption created or afforded by statute is required. There will be no negotiations or discussions of subsequent procurements during these presentations or demonstrations. There is no dedicated funding for this effort, and the Department will not provide a physical location for interested entities to demonstrate their technology's potential to combat harmful algal blooms, present or future. An interested entity's participation in the oral presentations or field demonstrations is voluntary.

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1.06. Public Records. Any material submitted in response to this RFI will become a public record pursuant to Chapter 119, Florida Statutes. Any claim of confidentiality is waived upon submission, unless addressed as set forth below.

Disclosure and Ownership of Response Contents: An interested entity's response to this RFI shall be a public record and subject to production, disclosure, inspection and copying consistent with the requirements of Chapter 119, Florida Statutes. All information in an interested entity's response (including, without limitation, technical and price information) will be a matter of public record, subject to the provisions of Florida's Public Records Act, Chapter 119, Florida Statutes, regardless of copyright status. Submission of a response to this RFI shall constitute a waiver of any copyright protection which might otherwise apply to DEP's production, disclosure, inspection and copying of such response and contract, or any part thereof, except those parts asserted to be exempt under Chapter 119, Florida Statutes. The response, upon submission shall be the property of DEP (except those parts asserted to be exempt in the manner set forth below), and DEP, in its sole discretion, shall have the right to use, reproduce, and disseminate the response. DEP reserves the right to use any and all information contained in a response received to this RFI.

Any content submitted to DEP which is asserted to be exempt under Chapter 119, Florida Statutes, shall be set forth on a page or pages separate from the rest of the response, and clearly marked "exempt," "confidential," or "trade secret" (as applicable), with the statutory basis for such claim of exemption, confidentiality, or trade secret specifically identified in writing on every page. Failure to segregate and so identify any such content shall constitute a waiver of any claimed exemption, confidentiality, or trade secret as applied to the portion of the response or other document in which the content is set forth.

Per Section 287.012(22), Florida Statutes, "Responses to these requests are not offers and may not be accepted by the agency to form a binding contract." Interested entities submitting information to this RFI are not prohibited from responding to any related subsequent solicitation. DEP reserves the right to use or reject any information supplied in response to this RFI.

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SECTION 2.00 – TECHNICAL REQUIREMENTS

- **2.01. Overview.** The enrichment of water by nutrients such as nitrogen and phosphorus can fuel harmful algal blooms and is one of the leading causes of water quality impairment in Florida. Excess nitrogen and phosphorus in State waterways comes from human and animal waste, and fertilizers. As part of Florida's systematic and aggressive response to reduce nutrient inputs into these waterbodies and to combat eutrophication and proliferation of harmful algae in particular, the Department is interested in technologies and tools to provide an improved response and greater protection of the environment and public health.
- **2.02. Background.** The Department is interested in the protection and management of Florida's water resources, including water quality monitoring, permitting, and ensuring healthy waterways. An essential component of these duties is to support Departmental policies and restoration strategies to improve water quality.
- **2.03. Response.** In an effort to augment and enhance existing technologies and programs implemented to combat excess nutrients and algal proliferation in our waterbodies, the Department is interested in obtaining feedback related to existing as well as innovative products or processes in the market capable of reducing nutrient delivery to surface water bodies and also technologies related to the control and clean-up of harmful algae in a manner that is safe for the ecosystem and poses minimal public safety risks. To be considered, projects must at a minimum address either the removal of phosphorus and/or nitrogen from water and/or sediments (or permanent inactivation of nitrogen or phosphorus in sediments) or the control and/or clean-up of harmful algal blooms.

Specifically, the Department is interested in information that will result in a greater understanding of the costs and associated requirements for scalable methods to address the issues above. Responses should be based upon previous activities associated with nutrient management, algal bloom prevention and/or mitigation and remediation.

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SECTION 3.00 – INTERESTED ENTITY'S CONTACT INFORMATION

Interested entities are asked to provide the following information:

CONTACTS				
Primary contact regarding this	Name:			
submission?	Email Address:			
	Phone:			
	Title or Role in Organization:			
Primary contact to schedule	Name:			
Presentation: (If other than contact above)	Email Address:			
(ii other than contact above)	Phone:			
	Title or Role in Organization:			
Company Website URL:				
Type of Organization (Corporation, Partnership, etc.):				
How long has your company been in	Years:			
this type of business?	Months:			
Location of Project Manager that would	City:			
serve the Department:	State:			
Location of Regional Sales Manager	City:			
that would serve the Department:	State:			

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SECTION 4.00 – REQUESTED INFORMATION

Interested entities are asked to provide answers to the following based on actual experience and results specific to the proposed technology. None of the estimated figures provided below will be binding on the company. These estimates will assist the Department in developing a plan and budget for this solution, including an initial implementation strategy, identify any needed supporting services, and better define realistic, desirable and measurable objectives.

- 1. Please provide a general description of the technology/treatment you are proposing.
 - a. Is the technology based on known and accepted scientific principles of biological, chemical, or physical processes?
 - b. Has it been deployed successfully elsewhere? If Yes, please provide examples.
 - c. How was success measured or determined?
 - d. Does the technology/treatment need to be continuously operated or used to have lasting effects?
- Please describe the rate (volume per time) that can be treated by your technology.
- 3. Please provide the estimate of treatment cleanup cost by either;
 - a. Volume of water treated; (ambient water)
 - b. Area of surface area treated; (sediment)
 - c. Weight of nutrient (at a minimum nitrogen and phosphorus) removed per treatment:
- 4. Please provide estimated disposal costs or income earned for any materials removed using the same units as used to answer question 2 above.
- 5. Please provide the estimated time and area necessary to deploy your technology once a site has been identified.
- 6. Please identify any necessary infrastructure needed to deploy your technology (e.g., electricity, level ground or pavement, disposal well, boat ramp...etc.).
- 7. Please describe the staging and operational footprint minimum required dimensions of your technology while onsite.
- 8. Please provide the estimated time required to stage and start treatment services using the same units as used to answer question 2 above.
- 9. Please provide a Material Data Safety Sheet for any chemicals used as part of your technology.

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- 10. Please provide an estimated target dose (concentration and duration of treatment) of any chemicals used as part of your technology, if appropriate, and explain how those doses were/would be determined.
- 11. If your technology includes the use of a chemical, please describe how it is used. At a minimum, describe whether the chemical is added directly to the ambient surface water or if it is added to a side stream treatment system which will eliminate or significantly reduce the amount of chemical that is introduced into the surface water.
- 12. Please provide the estimated time necessary to demobilize your technology once a site clean-up has been completed.
- 13. Please provide your approximate years of environmental remediation experience with the proposed technology.
- 14. Provide any additional information that DEP should be aware of or should consider. Expand on any relevant topics that were not specifically described in this RFI.
- 15. What constituent(s) of concern is the technology capable of treating?
- 16. Over what range of concentrations and loads, with what percent reduction will the technology treat?
- 17. What are the influent water characteristics such as pH, salinity, alkalinity, or hardness which would render the technology inapplicable?
- 18. What land area and specific location requirements, such as proximity to canals or other conveyance, water control structures and related infrastructure are needed for the applicant to construct a project capable of continuously or batch treating no less than 5 cfs, while being scalable up to 2,500 cfs?
- 19. Yes or No, Can you provide demonstrable proof (data) from previous field applications that the technology works and can achieve the stated removal rates?
- 20. Yes, No or N/A, Have the chemicals been rated by EPA as non-toxic and suitable for use in potable waters?
- 21. Yes, No or N/A, Are there Florida surface water criteria for any of these chemicals?
- 22. Yes, No or N/A, if so, is the technology in question capable of meeting Florida surface water criteria at all times at the recommended dose?

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- 23. If the technology relies on biological organisms, are any of them currently classified, or likely to be classified as invasive, exotic, or pathogenic? The acceptable response to this question should be "NO".
- 24. Yes or No, Does the technology produce any waste products or by-products?
- 25. Yes, No or N/A, Are the waste products or byproducts nontoxic?
- 26. Yes or No, Are any of the waste or byproducts of known concern to the Everglades ecosystem (e.g. sulfate or mercury)?
- 27. Yes or No, Do the waste products or byproducts contain chemicals of concern for the Everglades ecosystem, in a chemically bound or unbound state?
- 28. Yes or No, Is there a strategy that will be used to manage/dispose of the waste or byproducts outside the Greater Everglades watershed(s)?
- 29. Yes or No, Does the interested entity agree that the project's plans for monitoring, audits and site inspections, which are meant to demonstrate and confirm the projects efficacy and reliability, can be prepared in full cooperation with the Department; use EPA or DEP standard methods; use only NELAP certified laboratories; and that the plan must meet the full approval of the District?

The interested entity may be invited to participate in oral presentations, and/or asked to perform field demonstrations. An interested entity's participation in the oral presentations or field demonstration is voluntary. The oral presentation request will be reviewed as a whole using the following:

- 1. Proof of concept through effective demonstration.
- 2. Overall scientific, technical and/or socio-economic merits of the application.
- 3. Potential contribution of the effort to the DEP's specific mission.
- 4. The interested entity's capabilities, staff relevant/related experience, facilities, techniques or unique combinations of these which are integral factors for achieving the application objectives.
- 5. The qualifications, capabilities and experience of the proposed team leader or key personnel who are critical in achieving the proposed objectives.
- 6. Method for dealing with information exchange for technologies identified as confidential or proprietary.
- 7. Permits needed for construction and operation of project.
- 8. Removal of project components post-demonstration phase.

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