

Projects to Reduce Nutrients and Restore Flow in the Lake Okeechobee Basin Management Action Plan (BMAP)

RFI No.: 2020012

# **REQUEST FOR INFORMATION (RFI)**

# PROJECTS TO REDUCE NUTRIENTS AND RESTORE FLOW IN THE LAKE OKEECHOBEE BASIN MANAGEMENT ACTION PLAN (BMAP)

DEP RFI Posting Number: 2020012

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 who have the ability to reduce nutrients [Total Phosphorus (TP), Total Nitrogen (TN)] and restore flow in the Lake Okeechobee Everglades Basin Management Action Plan (BMAP). Responses to this RFI will be used to inform Department officials on options that are commercially available, feasible, and implementable in a short time frame 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 <a href="http://www.myflorida.com/apps/vbs/vbs\_www.main\_menu">http://www.myflorida.com/apps/vbs/vbs\_www.main\_menu</a> 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
09/16/19	RFI Advertised	Vendor Bid System <a href="http://www.myflorida.com/apps/vbs/vbs-www.main-menu">http://www.myflorida.com/apps/vbs/vbs-www.main-menu</a>
09/24/19 by 5:00 PM, ET	Questions Submitted in Writing via Email	Submit via email: Attn: Sabina Flanagan, Procurement Officer E-mail: <a href="mailto:sabina.flanagan@FloridaDEP.gov">sabina.flanagan@FloridaDEP.gov</a>
		RFI NUMBER MUST BE IN SUBJECT LINE OF EMAIL
On or about, 10/01/19	Answers to Questions Posted	Vendor Bid System <a href="http://www.myflorida.com/apps/vbs/vbs_www.main_menu">http://www.myflorida.com/apps/vbs/vbs_www.main_menu</a>
10/15/19 by 5:00 PM, ET	Response Due via Email	Submit via email to: Attn: Sabina Flanagan, Procurement Officer E-mail: <a href="mailto:sabina.flanagan@FloridaDEP.gov">sabina.flanagan@FloridaDEP.gov</a> 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) is requesting information from qualified and interested entities with proven, verifiable and documented expertise regarding scalable methods to reduce nutrients (Total Phosphorus [TP], Total Nitrogen [TN]) and restore flow in the Lake Okeechobee Basin Management Action Plan (BMAP). This request includes specific basins where the Department has reviewed available information and identified targeted restoration areas (TRAs), and these areas may be prioritized for future efforts and resources and may be included in the adopted BMAP.

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 for a specific basin or basins, 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; however, submissions will be evaluated and may be included in the adopted BMAP which prioritizes projects for future funding. Submitting a response to this RFI shall not disqualify an interested entity from responding to any related subsequent solicitation.

#### 1.02. Procurement Officer.

Sabina Flanagan, Procurement Officer Procurement Section, Carr Building Florida Department of Environmental Protection 3800 Commonwealth Boulevard, MS#93 Tallahassee, Florida 32399-3000 Email: sabina.flanagan@FloridaDEP.gov

Telephone Number: 850-245-2187

- **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 Timeline 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 the Timeline 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 Entity and/or Company Name – DEP RFI No. RFI 2020012

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 reviewed. 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(s) The Department will review information from entities (both public and private) working in conjunction on a project or projects.
- Officer/Registered Agent Name(s)
- Address(es)
- Phone Number(s) and Email Address(es)
- Trademark Name (if applicable)
- Trademark Owner Name (if applicable)
- Federal Employer Identification number(s). Multiple entities may be listed under a single FEI number.

At this time, there is no dedicated funding for this specific RFI, but the Department anticipates utilizing this effort to assist in prioritizing funding from various sources targeting restoration in the Lake Okeechobee Watershed (LOW).

**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

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apply to the Departments 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 the Department (except those parts asserted to be exempt in the manner set forth below), and the Department, in its sole discretion, shall have the right to use, reproduce, and disseminate the response. The Department reserves the right to use any and all information contained in a response received to this RFI.

Any content submitted to the Department 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. The Department 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 waste, livestock 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, the Department is interested in projects or activities that reduce nutrients (TP and TN) and restore flow in the Lake Okeechobee BMAP.
- **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, restoration strategies, and activities with the goal of restoring waterbodies to meet water quality standards and designated uses.
- **2.03. Response.** In an effort to augment, enhance, and expedite the restoration of the BMAP waterbody, the Department is interested in information pertaining to existing or potential projects or activities, technologies, and/or programs that can be implemented to address and reduce excess nutrients in referenced TRAs. To be considered, projects or activities must at a minimum address some or all of the following: the removal of phosphorus and/or nitrogen from water, the removal of phosphorus and/or nitrogen from sediments (or permanent inactivation of nitrogen or phosphorus in sediments), or the restoration of flow deficiencies. A response must indicate the restoration activity and the specific basin (or basins) the project or activity will impact, costs to implement over the project up to 20 years (including anticipated operation/maintenance costs), any completed or anticipated permitting requirements, and a schedule for implementation. A more detailed summary of requested information is included later in this document.

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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:
Company Website URL:	
Type of Organization (Corporation, Partnership, etc.):	
How long has your company been in this	Years:
type of business?	Months:
Location of Project Manager that would	City:
serve the Department:	State:
Location of Regional Sales Manager that	City:
would serve the Department:	State:

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#### **SECTION 4.00 - RESTORATION BASINS**

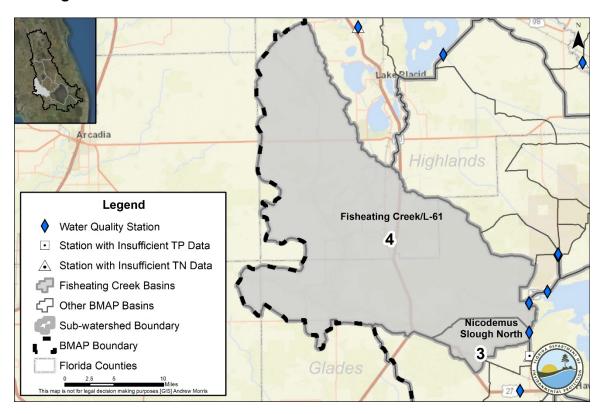
The Department has identified the following TRAs by sub-watershed that require restoration activities.

The TRA ID column contains a numeric identifier for each basin that corresponds to the map for that sub-watershed. The **Basin Name** column contains the names used by South Florida Water Management District (SFWMD) for each basin in that sub-watershed. The Nitrogen (mg/L) Benchmark - 1.54 column contains the average TN concentration for measured data from Water Years 2014 through 2018 (WY14 - WY18; May 1, 2013 through April 30, 2018) used for TN comparison in the BMAP. The **Phosphorus (mg/L)** Benchmark - 0.12 column contains the average TP concentration for measured data from WY14 – WY18 used for TP comparison in the BMAP. The **Flow** column indicates whether the SFWMD has identified a water quantity issue in that TRA or sub-watershed. Existing BMAP Projects in the TRA are listed by the BMAP Project Number which can be used to link to further details about those projects. The **LOWCP Projects** column lists any projects recommended as part of the SFWMD evaluation of the Lake Okeechobee Watershed Construction Project (LOWCP). Additional BMAP and LOWCP project details be downloaded can from http://publicfiles.dep.state.fl.us/DEAR/BMAP/LakeOkeechobee/Projects/RFI 2019/.

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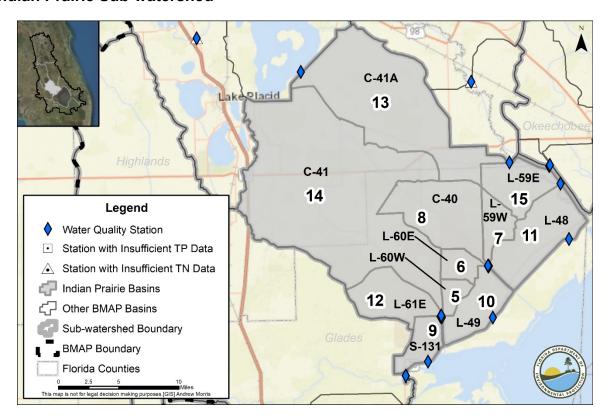
# Fisheating Creek Sub-watershed



TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
3	NICODEMUS SLOUGH NORTH	1.61	0.073	No	FDACS-07, GC-01, SFWMD-21	Source Control 1, 41
4	FISHEATING CREEK/L-61	1.79	0.166	Maybe	FDACS-07, CA-12, GC- 01, SFWMD- 18, SFWMD- 20	Source Control 1, 27, 43, 57, 62, New 3

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#### **Indian Prairie Sub-watershed**



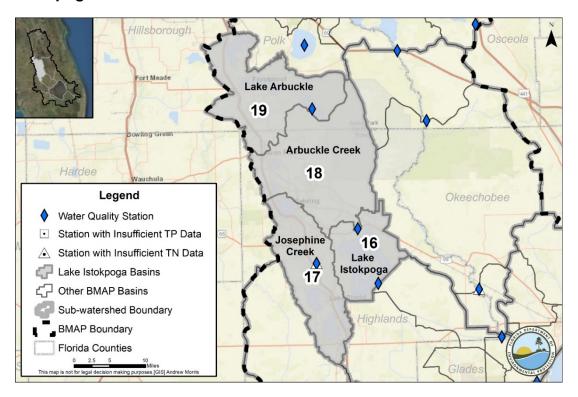
TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
5	L-60W	1.64	0.117	Maybe	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75
6	L-60E	1.65	0.178	Maybe	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75
7	L-59W	1.74	0.225	Maybe	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75, New 9
8	C-40	2.07	0.232	Maybe	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75, 25, New 14

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TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
9	S-131	1.39	0.095	No	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75
10	L-49	1.46	0.046	No	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75
11	L-48	1.95	0.130	No	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75, 44
12	L-61E	2.36	0.127	Maybe	FDACS-08, GC-02	Source Control 1, 60, 63, 64, 68, 75
13	C-41A	1.42	0.072	Maybe	FDACS-08, GC-02, HC- 02	Source Control 1, 60, 63, 64, 68, 75, 16
14	C-41	2.82	0.210	Maybe	CA-01, FDACS-08, GC-02, HC- 02, IMWID- 02, SFWMD- 10, SFWMD- 12, SFWMD- 23, IMWID- 01	Source Control 1, 60, 63, 64, 68, 75, 24, 42, 43, New 4
15	L-59E	2.82	0.199	Maybe	FDACS-08, GC-02, HC- 02	Source Control 1, 60, 63, 64, 68, 75, 44

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# Lake Istokpoga Sub-watershed



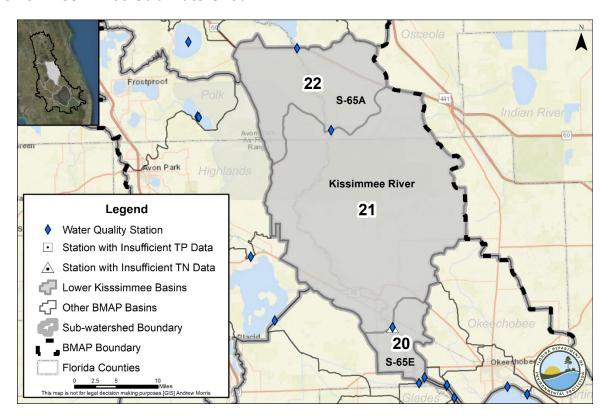
TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
16	LAKE ISTOKPOGA	1.61	0.095	*	CA-08, FDACS-09, HC-03, SLID-01, FDACS-09	Source Control 1, 43
17	JOSEPHINE CREEK	Insufficient Data	0.058	*	FDACS-09, HC-03, HC- 05, HC-06, SEB-01	Source Control 1
18	ARBUCKLE CREEK	1.31	0.121	*	AP-02, FDACS-09, HC-03, OSC-10, OSC-21, SFWMD-11	Source Control 1, 29
19	LAKE ARBUCKLE	1.02	0.084	*	AP-03, FDACS-09, HC-03, OSC-10, OSC-21	Source Control 1

Notes:

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<sup>\*</sup> SFWMD determined that additional investigations are needed regarding whether water quantity is an issue in the Lake Istokpoga Sub-watershed.

#### Lower Kissimmee Sub-watershed



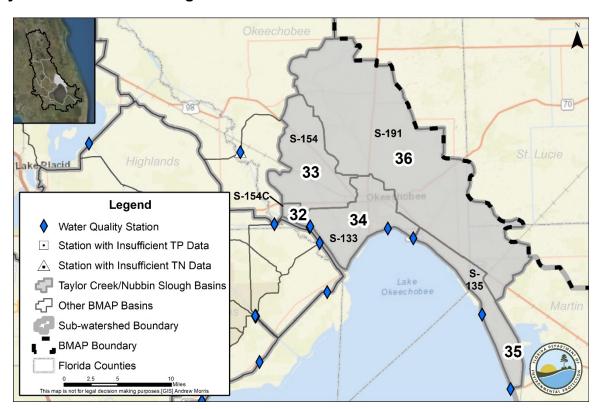
TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
20	S-65E	1.34	0.101	No*	FDACS-10, SFWMD-13, SFWMD-14	Source Control 1, 43
21	KISSIMMEE RIVER	Insufficient Data	0.096	No*	FDACS-10, HC-04, OSC-11, PC- 02, SFWMD- 05, SFWMD- 17, SFWMD- 19	Source Control 1, 18, 19, 20, 21, 33, 43, New 5
22	S-65A	1.22	0.079	No*	CA-05, FDACS-10, HC-04, OSC-11, PC- 02	Source Control 1, 43, New 5

Notes:

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<sup>\*</sup> SFWMD determined that water quantity is not an issue in the Lower Kissimmee Sub-watershed at this time.

Taylor Creek/Nubbin Slough Sub-watershed



TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
32	S-154C	2.18	0.492	No*	FDACS-11	Source Control 1, 58, New 1, New 12
33	S-154	1.70	0.274	No*	FDACS-11, OK-05, SFWMD-15	Source Control 1, 43, 58, New 1
34	S-133	1.88	0.197	No*	CO-01, CO- 02, CO-03, CO-04, FDACS-01, FDACS-02, FDACS-11, OK-01B, OK- 02, OK-03, OK-04, OK- 06, OK-07	Source Control 1, 10, 39, 56, 58, New 1, New 12

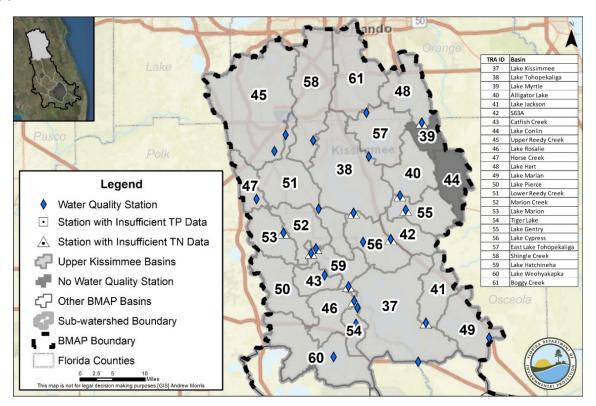
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TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
35	S-135	1.55	0.113	No*	CA-04, FDACS-11, SFWMD-03	Source Control 1, 51, 55, 58, New 1
36	S191	1.81	0.493	No*	FDACS-03, FDACS-05, FDACS-06, FDACS-11, FDOT1-01, FDOT1-02, FDOT1-03, SFWMD-01, SFWMD-02	Source Control 1, 10, 11, 12, 23, 39, 46, 51, 55, 58, 66, New 1, New 7, New 8

Notes:

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# **Upper Kissimmee Sub-watershed**



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<sup>\*</sup> SFWMD determined that water quantity is not an issue in the Taylor Creek/Nubbin Slough Sub-watershed at this time.

TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
37	LAKE KISSIMMEE	1.37	0.084	No*	FDACS-12, OSC-10, OSC-21, SFWMD- 04, SFWMD- 09, SFWMD- 16, SFWMD-22	Source Control 1, 43, 48
38	LAKE TOHOPEKALIGA	Insufficient Data	0.042	No*	FDACS-12, FDOT5-08, FDOT5-09, FDOT5-10, FDOT5-11, FDOT5-12, FDOT5-24, FDOT5-25, KS-01, KS-02, KS-03, KS-04, KS-05, KS-06, KS-07, KS-06, KS-07, KS-06, CSC-09, OSC-10, OSC-10, OSC-13, OSC-14, OSC-14, OSC-14, OSC-18, OSC-20, OSC-21, OSC-22, OSC-26, OSC-26,	Source Control 1, 48
39	LAKE MYRTLE	Insufficient Data	Insufficient Data	No*	FDACS-12, OSC-10, OSC-21	Source Control 1, 48
40	ALLIGATOR LAKE	Insufficient Data	0.025	No*	FDACS-12, FDOT5-24, FDOT5-25, FDOT5-26, FDOT5-27, OSC-10,	Source Control 1, 48

TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
					OSC-21, OSC-23	
41	LAKE JACKSON	Insufficient Data	0.077	No*	FDACS-12, OSC-10, OSC-21	Source Control 1, 48
42	S63A	Insufficient Data	0.081	No*	FDACS-12, OSC-10, OSC-21	Source Control 1, 48
43	CATFISH CREEK	1.78	0.071	No*	CA-13, FDACS-12, OSC-10, OSC-21, PC-03, SFWMD-06	Source Control 1, 48, 78
44	LAKE CONLIN (CLOSED BASIN)	Insufficient Data	Insufficient Data	No*	FDACS-12, OSC-10, OSC-21	Source Control 1, 48
45	UPPER REEDY CREEK	0.50	0.045	No*	FDACS-12, FDOT5-06, FDOT5-07, FDOT5-24, FDOT5-25, FDOT5-35, FDOT5-36, OC-01, OC- 18, OC-28, OC-42, OC- 43, OC-56, OSC-06, OSC-07, OSC-08, OSC-10, OSC-21, OSC-21, OSC-29, OSC-32, PC-03, RCID-01, RCID-02, TW-01	Source Control 1, 48
46	LAKE ROSALIE	Insufficient Data	0.079	No*	FDACS-12, OSC-10, OSC-21, PC-03	Source Control 1, 48

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TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
47	HORSE CREEK (CLOSED BASIN)	1.32	0.067	No*	FDACS-12, OSC-10, OSC-21, PC-03	Source Control 1, 48
48	LAKE HART	Insufficient Data	0.021	No*	FDACS-12, OC-01, OC- 05, OSC- 10, OSC-21	Source Control 1, 48
49	LAKE MARIAN	Insufficient Data	1.281	No*	FDACS-12	Source Control 1, 47, 48
50	LAKE PIERCE	1.97	0.052	No*	FDACS-12, OSC-10, OSC-21, PC-03	Source Control 1, 48
51	LOWER REEDY CREEK	1.21	0.086	No*	FDACS-12, FDOT5-14, FDOT5-15, FDOT5-24, FDOT5-25, OSC-10, OSC-15, OSC-21, PC-03	Source Control 1, 48
52	MARION CREEK	Insufficient Data	0.067	No*	FDACS-12, OSC-10, OSC-21, PC-03	Source Control 1, 48
53	LAKE MARION	1.25	0.100	No*	FDACS-12, OSC-10, OSC-21, PC-03	Source Control 1, 48
54	TIGER LAKE	0.87	0.139	No*	FDACS-12, OSC-10, OSC-21, PC-03, PC- 04	Source Control 1, 17, 48
55	LAKE GENTRY	Insufficient Data	0.074	No*	FDACS-12, OSC-10, OSC-21	Source Control 1, 48
56	LAKE CYPRESS	1.17	0.045	No*	FDACS-12, OSC-10, OSC-21,	Source Control 1, 48

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TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
					PC-03, SFWMD-07	
57	EAST LAKE TOHOPEKALIGA	0.71	0.023	No*	FDACS-12, KS-01, KS- 02, OC-01, OSC-01, OSC-02, OSC-03, OSC-04, OSC-10, OSC-12, OSC-16, OSC-17, OSC-21, OSC-21, OSC-24, OSC-27, OSC-31	Source Control 1, 48
58	SHINGLE CREEK	0.61	0.048	No*	FDACS-12, FDOT5-05, FDOT5-16, FDOT5-17, FDOT5-18, FDOT5-19, FDOT5-22, FDOT5-23, FDOT5-24, FDOT5-25, FDOT5-28, FDOT5-29, FDOT5-30, KS-01, KS-02, OC-01, OC-05, OC-11, OC-13, OC-14, OC-13, OC-14, OC-15, OC-15, OC-16, OC-17, OC-24, OC-49, OC-51, OC-53, OC-59, OC-60, OC-61, ORL-09, ORL-10, ORL-	Source Control 1, 48

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TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
					11, ORL- 13, ORL- 14, ORL- 15, ORL- 16, ORL- 17, ORL- 18, OSC- 10,OSC-19, OSC- 21,OSC-25, OSC-30, OSC-33, VWCD-01, VWCD-02	
59	LAKE HATCHINEHA	Insufficient Data	0.065	No*	FDACS-12, OSC-10, OSC-21, PC-03, SFWMD-08	Source Control 1, 48
60	LAKE WEOHYAKAPKA	0.87	0.034	No*	FDACS-12, OSC-10, OSC-21, PC-03	Source Control 1, 17, 48
61	BOGGY CREEK	0.63	0.036	No*	FDACS-12, FDOT5-01, FDOT5-02, FDOT5-03, FDOT5-04, FDOT5-13, FDOT5-20, FDOT5-21, FDOT5-24, FDOT5-25, OC-01, OC-02, OC-03, OC-04, OC-05, OC-07, OC-09, OC-10, OC-12, OC-19, OC-12, OC-19, OC-20, OC-21, OC-22, OC-23, OC-25, OC-26, OC-27, OC-29,	Source Control 1, 48

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TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
					OC-30, OC-31, OC-32, OC-33, OC-34, OC-35, OC-36, OC-37, OC-38, OC-44, OC-41, OC-44, OC-47, OC-48, OC-50, OC-52, OC-54, OC-55, OC-57, OC-58, ORL-01, ORL-02, ORL-03, ORL-06, ORL-07, ORL-08, ORL-04, ORL-05, ORL-16, ORL-17	

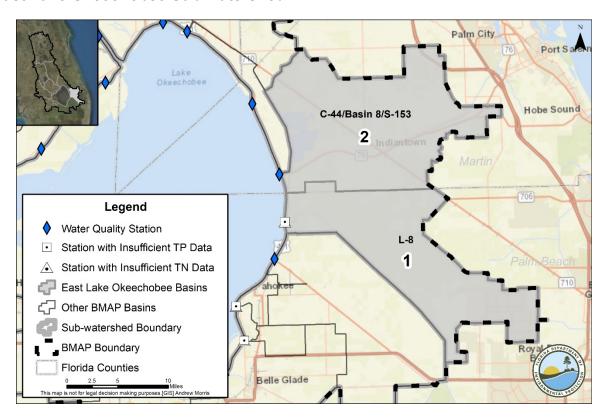
Notes:

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<sup>\*</sup> SFWMD determined that water quantity is not an issue in the Upper Kissimmee Sub-watershed at this time.

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#### East Lake Okeechobee Sub-watershed



TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
1	L-8	Variable	Variable	No*	FDACS-13	Source Control 1
2	C- 44/Basin 8/S-153	Variable	Variable	No*	FDACS-13, FDOT4-01, FDOT4-02, FDOT4-03, FDOT4-04	Source Control 1

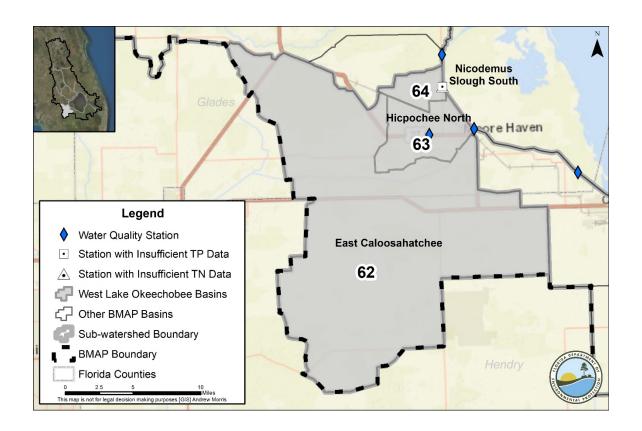
Notes:

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<sup>\*</sup> SFWMD determined that water quantity is not an issue in the East Lake Okeechobee Sub-watershed at this time. Variable: Flows to the lake in this area are inconsistent and the concentrations are variable.

#### West Lake Okeechobee Sub-watershed



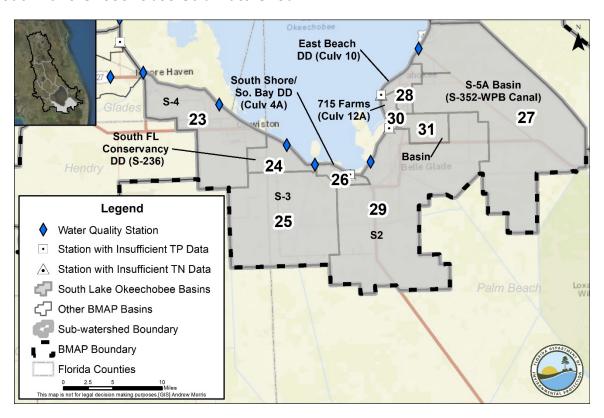
TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
62	EAST CALOOSAHATCHEE	Variable	Variable	No*	FDACS- 15	Source Control 1
63	HICPOCHEE NORTH	Variable	Variable	No*	FDACS- 15, GC- 03, GC-04	Source Control 1
64	NICODEMUS SLOUGH SOUTH	Variable	Variable	No*	FDACS- 15	Source Control 1

Notes:

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<sup>\*</sup> SFWMD determined that water quantity is not an issue in the West Lake Okeechobee Sub-watershed at this time. Variable: Flows to the lake in this area are inconsistent and the concentrations are variable.

#### South Lake Okeechobee Sub-watershed



TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
23	S-4	Variable	Variable	No*	FDACS-14	Source Control 1
24	South FL Conservancy DD (S-236)	Variable	Variable	No*	FDACS-14	Source Control 1
25	S-3	Variable	Variable	No*	FDACS-14	Source Control 1
26	South Shore/ So. Bay DD (Culv 4A)	Variable	Variable	No*	FDACS-14	Source Control 1
27	S-5A Basin (S-352-WPB Canal)	Variable	Variable	No*	FDACS-14	Source Control 1
28	East Beach DD (Culv 10)	Variable	Variable	No*	FDACS-14	Source Control 1
29	S2	Variable	Variable	No*	FDACS-14	Source Control 1

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TRA ID	Basin Name	Nitrogen (mg/L) Benchmark – 1.54	Phosphorus (mg/L) Benchmark – 0.12	Flow	Existing BMAP Projects	LOWCP Projects
30	715 Farms (Culv 12A)	Variable	Variable	No*	FDACS-14	Source Control 1
31	East Shore DD (Culv 12)	Variable	Variable	No*	FDACS-14	Source Control 1

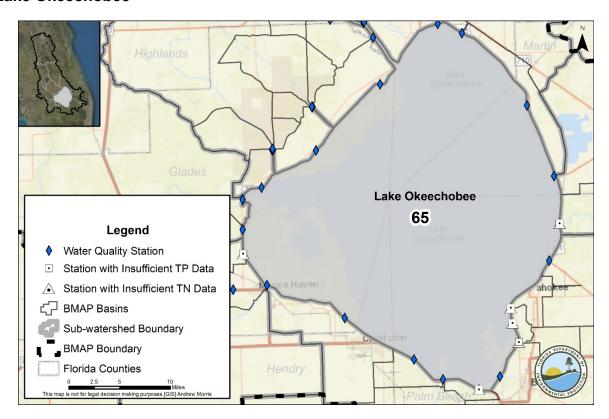
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<sup>\*</sup> SFWMD determined that water quantity is not an issue in the South Lake Okeechobee Sub-watershed at this time. Variable: Flows to the lake in this area are inconsistent and the concentrations are variable.

#### Lake Okeechobee



The DEP recognizes that treatment of legacy loads in the lake is important for restoration and has therefore designated Lake Okeechobee as TRA ID 65. The 2014 Lake Okeechobee BMAP lists *In-lake strategies muck scraping and tilling* as a BMAP initiative. Projects recommended as part of the SFWMD evaluation of the LOWCP are 35 (*In-Lake Strategies - Low-stage, Muck Scraping and Tilling*) and 83 (*In-Lake Strategies*). Any responses related to in-lake treatment should reference TRA 65.

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#### **SECTION 5.00 – REQUESTED INFORMATION**

Interested entities are asked to provide answers to items listed below. These answers should coincide with a specific TRAs that the entity is targeting. This must be clearly stated for review purposes. None of the estimates provided 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, prioritization of activities, identification of necessary supporting services, and better defined realistic, desirable and measurable objectives. Please provide the following information:

- 1. Specific TRA ID and basin name.
- If a private entity is the lead contact, please list any local governments that may be a part of the team. Local government involvement is not a requirement but for this effort is encouraged.
- 3. What parameter the project or activity will address (TN/TP/flow). If the project or activity addresses multiple parameters, please state in the response.
- 4. A general summary of the project or activity being proposed and include at a minimum:
  - a) Whether the project or activity is based on known and accepted scientific principles of biological, chemical, or physical processes.
  - b) Whether it has been deployed successfully elsewhere and provide examples.
  - c) How success is measured or determined.
  - d) Whether the technology/treatment been previously permitted in the state of Florida. Please identify the permit type and identification (or the associated permit if part of a larger project or activity).
- 5. Estimate of total costs for the project or activity, including operation and maintenance costs if applicable. If a multi-year project or activity provide a cost breakdown by year for up to a 20-year period.
- Estimated reduction benefits (TN/TP concentration or load please state clearly if using another metric) to the specific basin or basins and include how that calculation was developed. If a multi-year project or activity provide reduction benefits by year.
- 7. Estimated flow restoration benefits (volume) to the specific basin or basis and include how that calculation was developed. If a multi-year project or activity provide flow benefits by year.

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- 8. Monitoring plan that will quantify benefits from the project or activity. If the monitoring plan includes data associated with a regulatory permit or requirement, state in the plan.
- 9. Any applicable permits (existing or expected) that may be associated with the project or activity.
- 10. A schedule that includes estimated time and readiness to proceed for the project or activity. The Department anticipates any project or activity – that meets criteria listed in this request - that is implementable within three years will have a higher priority if funding is made available.
- 11. Identify any necessary infrastructure needed for this project or activity (e.g., electricity, connection to sewer, land easements). Provide a plan to address any infrastructure deficiencies that may be present at the location of the project or activity.
- 12. Does this project or activity include the purchase or lease of land? If Yes, provide a summary of agreements, leases, or pertinent information to demonstrate status of land acquisition.
- 13. For any project or activity that includes treatment technologies, please provide the following:
  - a) Material Data Safety Sheet for any chemicals used as part of the technology.
  - b) Estimated target dose (concentration and duration of treatment) of any chemicals used as part of the technology, if appropriate, and explain how those doses were/would be determined.
  - c) If the project or activity includes the use of a chemical(s), 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.
  - d) What are the influent water characteristics such as pH, salinity, alkalinity, or hardness which would render the technology inapplicable?
  - e) Provide demonstrable proof (data) from previous field applications that the technology works and can achieve the stated removal rates?

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- f) Yes, No, or N/A, Have the chemicals been rated by the U.S. Environmental Protection Agency (EPA) as non-toxic and suitable for use in potable waters?
- g) Yes, No, or N/A, Are there Florida surface water criteria for any of these chemicals? If yes, is the technology in question capable of meeting Florida surface water criteria at all times at the recommended dose?
- h) If the technology relies on biological organisms, are any of them currently classified, or likely to be classified as invasive, exotic, or pathogenic?
- i) Yes or No, Does the technology produce any waste products or byproducts? If yes, are the waste products or byproducts nontoxic? Please provide a waste management plan that details disposal methods and locations of disposal.
- j) Yes or No, Are any of the waste or byproducts of known concern to the Everglades ecosystem (e.g. sulfate or mercury)? If yes, are they in a chemically bound or unbound state?
- 14. Provide any additional information the Department should be aware of or should consider. Expand on any relevant topics that were not specifically described in this RFI.
- 15. Yes or No, Does the interested entity agree that the plans for monitoring, audits and site inspections, which are meant to demonstrate and confirm the project or activities efficacy and reliability, can be prepared in full cooperation with the Department; use EPA or Department standard methods; use only laboratories with National Environmental Laboratory Accreditation Program (NELAP) certification; and that the plan must meet the full approval of the SFWMD?

The Department will review all responses to this RFI, and potentially include in future updates to the BMAP. At a minimum, the Department will use the following information for review purposes;

- 1. Proof of concept and overall scientific, technical and/or socio-economic merits of the project or activity.
- 2. Readiness to proceed.
- 3. Potential contribution of the effort to the Departments specific mission.
- 4. Reductions and/or flow restoration estimates including information on how the information was derived and how the project or activity.
- 5. Costs/Benefits of the project or activity.
- 6. Compliance with existing regulatory provisions.
- 7. Completeness of the submitted RFI.

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