WEBINAR HOUSEKEEPING

Attendee Participation

Open your control panel

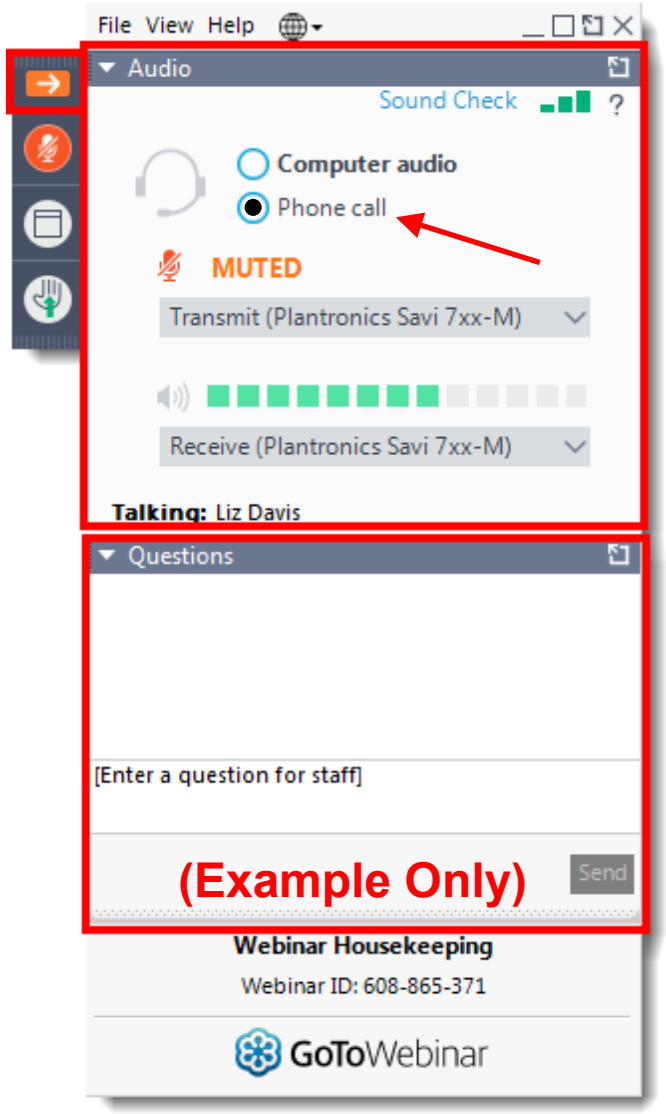
Join audio:

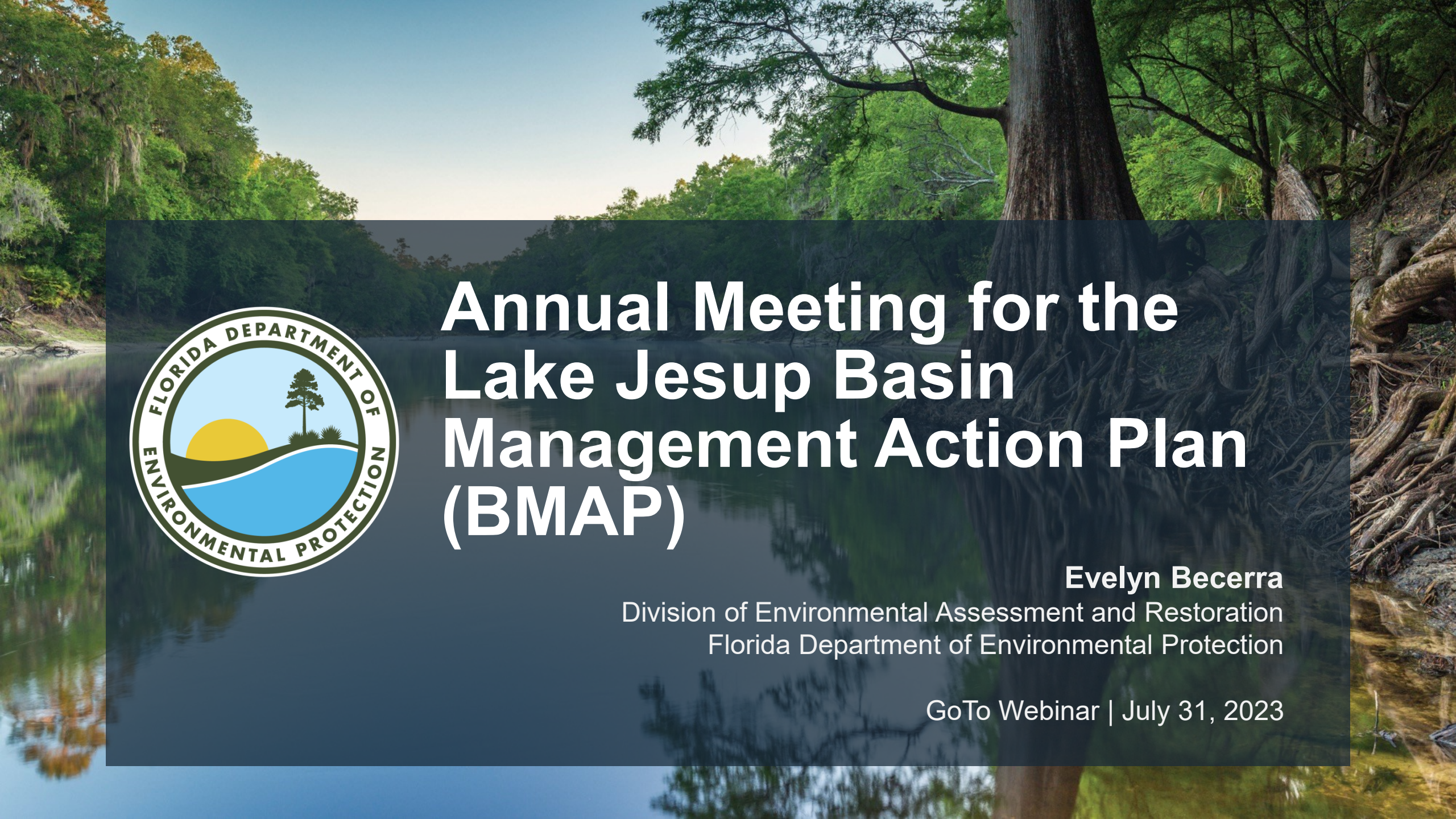
- Choose **Phone Call** and dial using the information provided
- Or choose **Computer Audio** to use your computer's speakers for audio
- Attendee audio will be muted

Submit questions and comments via the Questions panel

If viewing this webinar as a group, please provide a list of attendees via the Questions panel

Note: Today's presentation is being recorded and will be provided on the FTP after the webinar.





Annual Meeting for the Lake Jesup Basin Management Action Plan (BMAP)

Evelyn Becerra
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

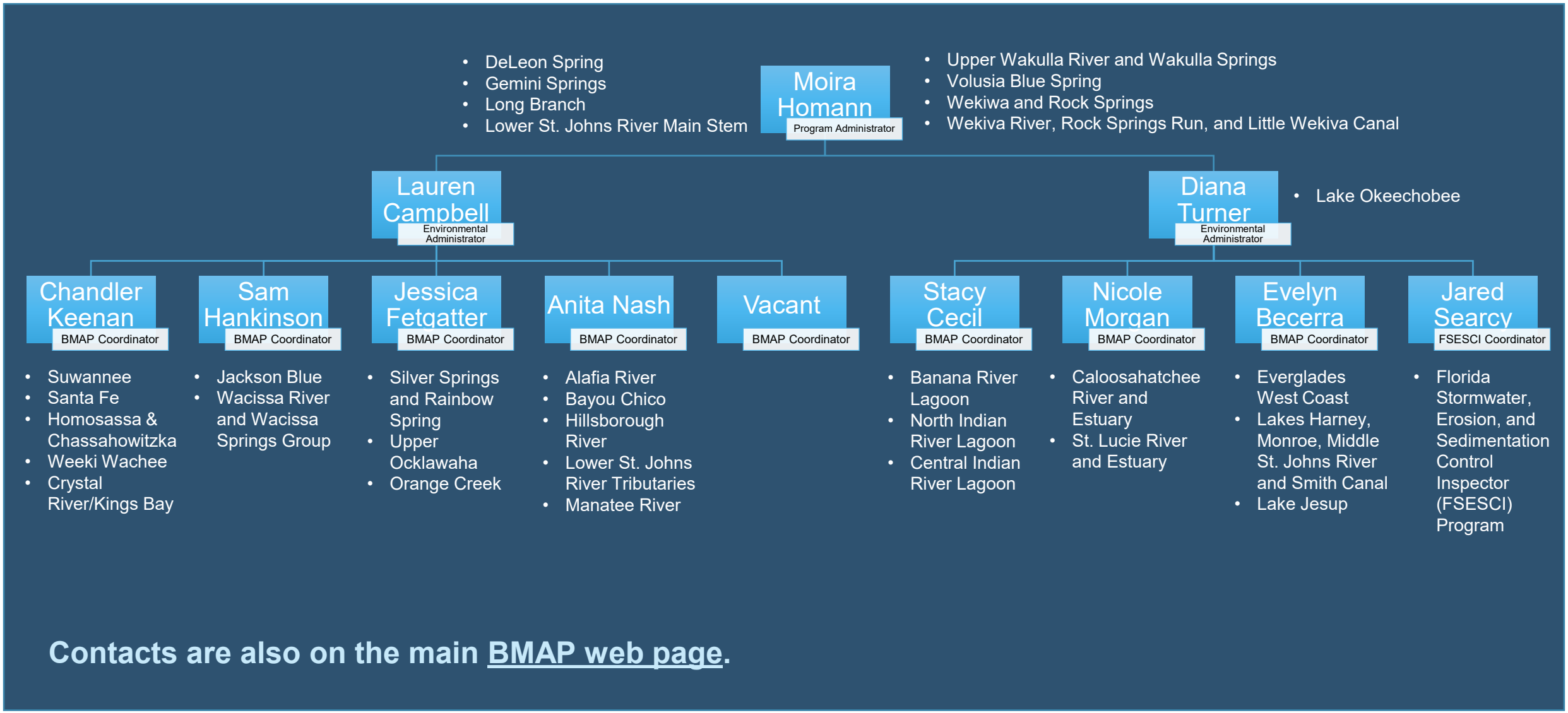
GoTo Webinar | July 31, 2023

ANNUAL MEETING AGENDA

Presentation Agenda

- BMAP Updates
- St Johns River Water Management District (SJRWMD) Update
- Florida Department of Agriculture and Consumer Services (FDACS) Update
- Agriculture Enforcement Update
- Funding Opportunities

BMAP PROGRAM STAFF UPDATE



Contacts are also on the main BMAP web page.

The Florida Stormwater, Erosion, and Sedimentation Control Inspector (FSESCI) Program

To become qualified to conduct National Pollutant Discharge Elimination System (NPDES) Construction Generic Permit (CGP) Stormwater Inspections, take this class to learn:

- Construction Best Management Practices – Common Techniques and Technologies,
- Proper compliance with the NPDES CGP,
- Creating and reviewing a Stormwater Pollution Prevention Plan (SWPPP),
- Florida specific stormwater regulation, and
- How to conduct stormwater inspections.

For more information and a list of public classes, visit:

- www.fsesci.com, or
- www.FDEPstormwaterclass.com.

Become an FSESCI Instructor for your organization:

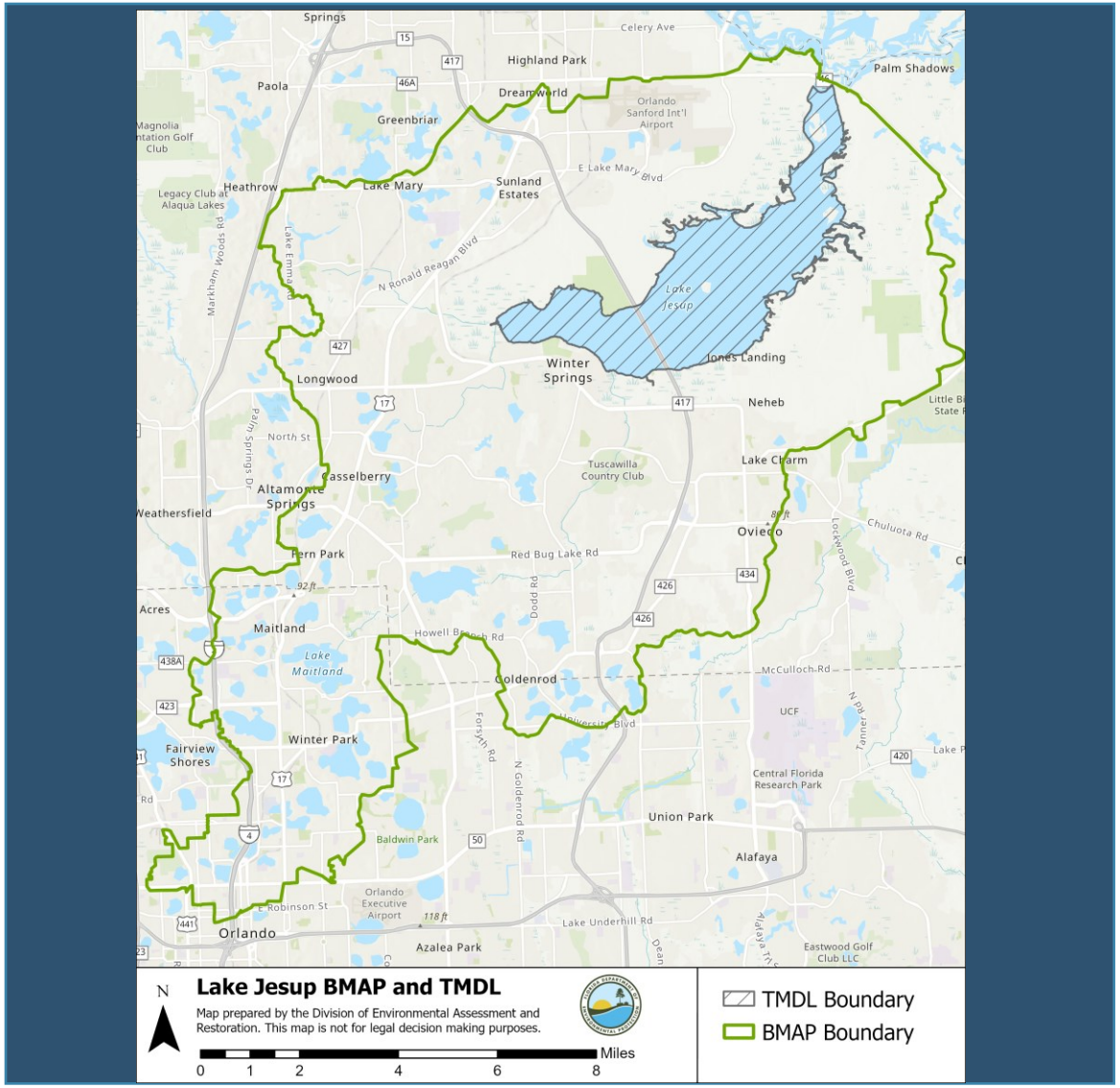
- www.fsesci.com/newinstructor/.

FDEP Statewide Training Coordinator:

Jared Searcy
Jared.Searcy@floridadep.gov
850-245-8445

BACKGROUND

Lake Jesup BMAP



Lake Jesup TMDL

- Adopted 2006 for Total Phosphorus (TP) and Total Nitrogen (TN).

Lake Jesup BMAP

- Adopted April 2010 to implement the TMDL.

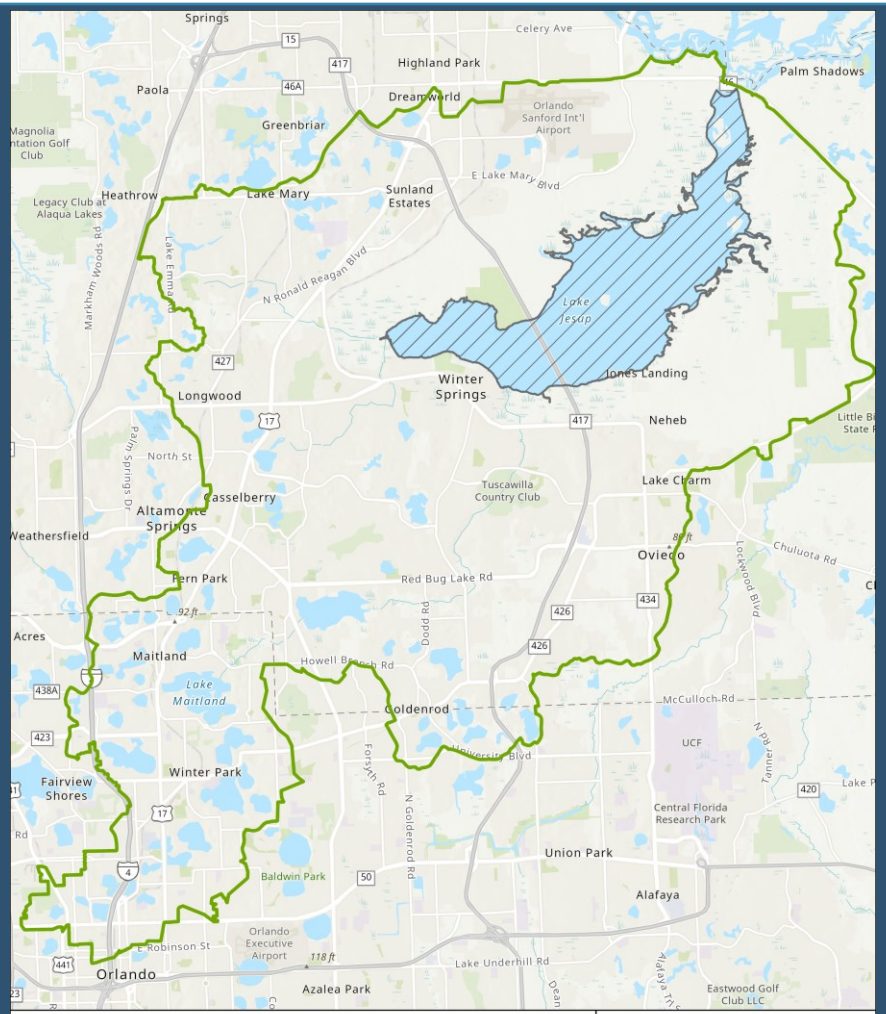
BMAP Amendment:

- Adopted July 2019.
- Provides information on changes since the 2010 BMAP was adopted.

- Total required reductions:
  - 11,019 lbs/yr TP.
  - 55,013 lbs/yr TN.

BACKGROUND

Lake Jesup BMAP



Stakeholders
City of Altamonte Springs
City of Casselberry
City of Lake Mary
City of Longwood
City of Maitland
City of Orlando
City of Oviedo
City of Sanford
City of Winter Park
City of Winter Springs
FDACS
FDOT District 5
Orange County
Seminole County
SJRWMD
Site 10
Town of Eatonville
Turnpike Enterprise

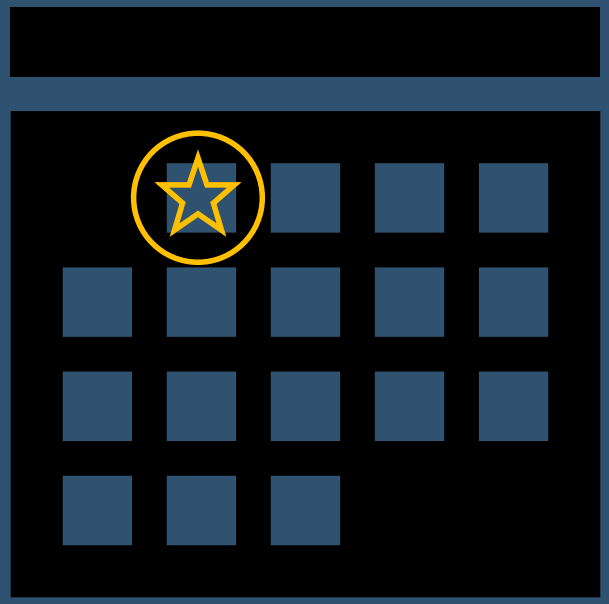
STAR
STATEWIDE ANNUAL REPORT

What is it and where can you find it?

How was the information collected?

STAR
STATEWIDE ANNUAL REPORT

Report submitted July 1, 2023



https://floridadep.gov/STAR

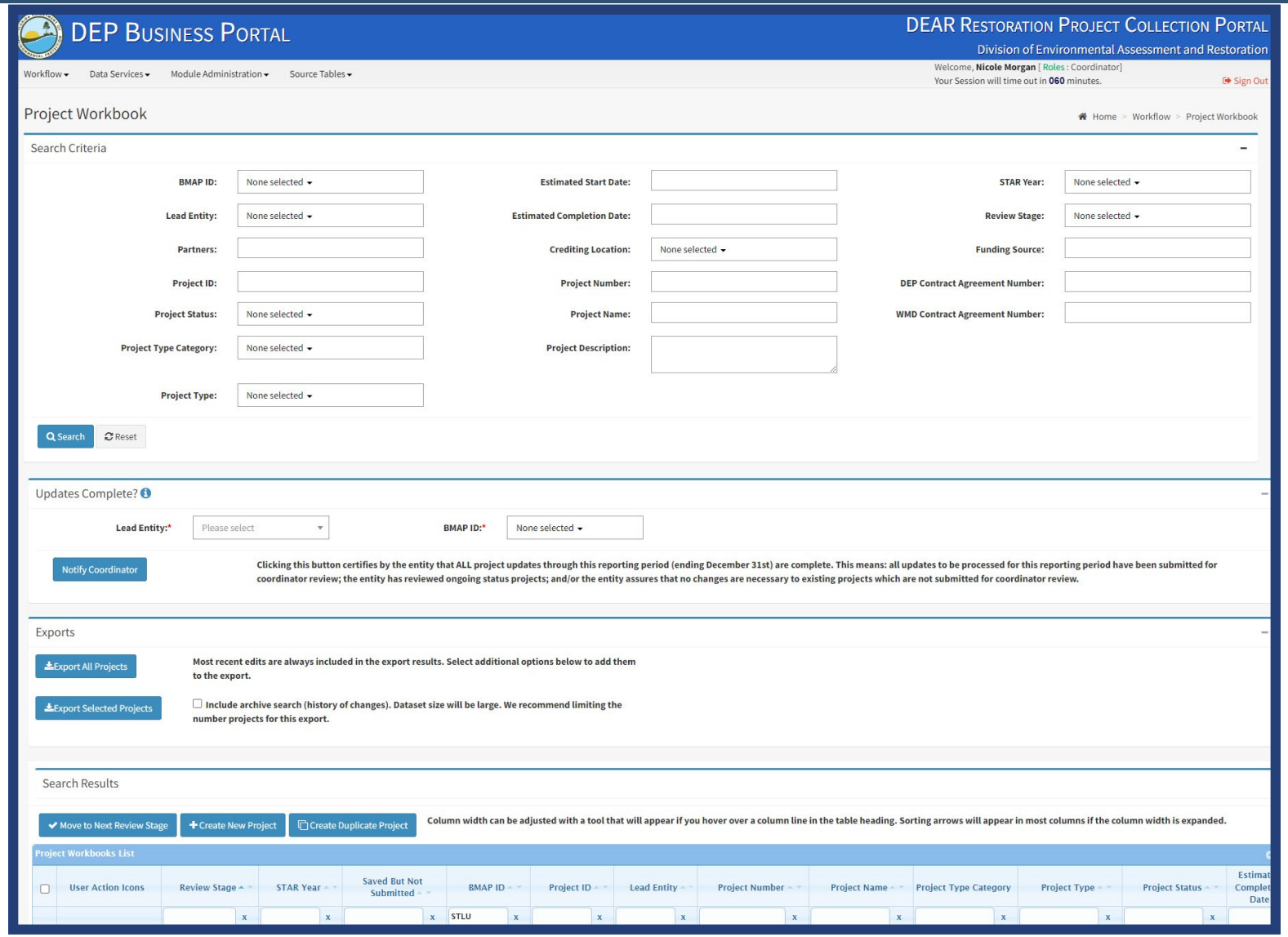
- What's in the STAR?
  - Summarizes accomplishments in the BMAPs statewide.
  - Reports on restoration projects and management strategies.

- STAR had a digital makeover!
  - Moved to visual-driven experience.
  - Data download available.

STAR
STATEWIDE ANNUAL REPORT

https://floridadep.gov/STAR

STAR
BMAP PORTAL IMPLEMENTATION



STAR
BMAP PORTAL IMPLEMENTATION

Timeliness
Portal kept everyone on same timeline, which keeps us on time.

Consistency
Real-time error messages allowed for more accurate information to be entered for projects.

Guided Data Entry
Drop-down menus allow for consistent categories and required information limits data gaps.

***Almost* ALL reporting stakeholders used the portal this year.**

Program Debugging
Development errors took more time fixing than anticipated.

Communication
Coordinators needed to do more outreach to ensure stakeholder participation.

STAR UPDATES

Lake Jesup BMAP

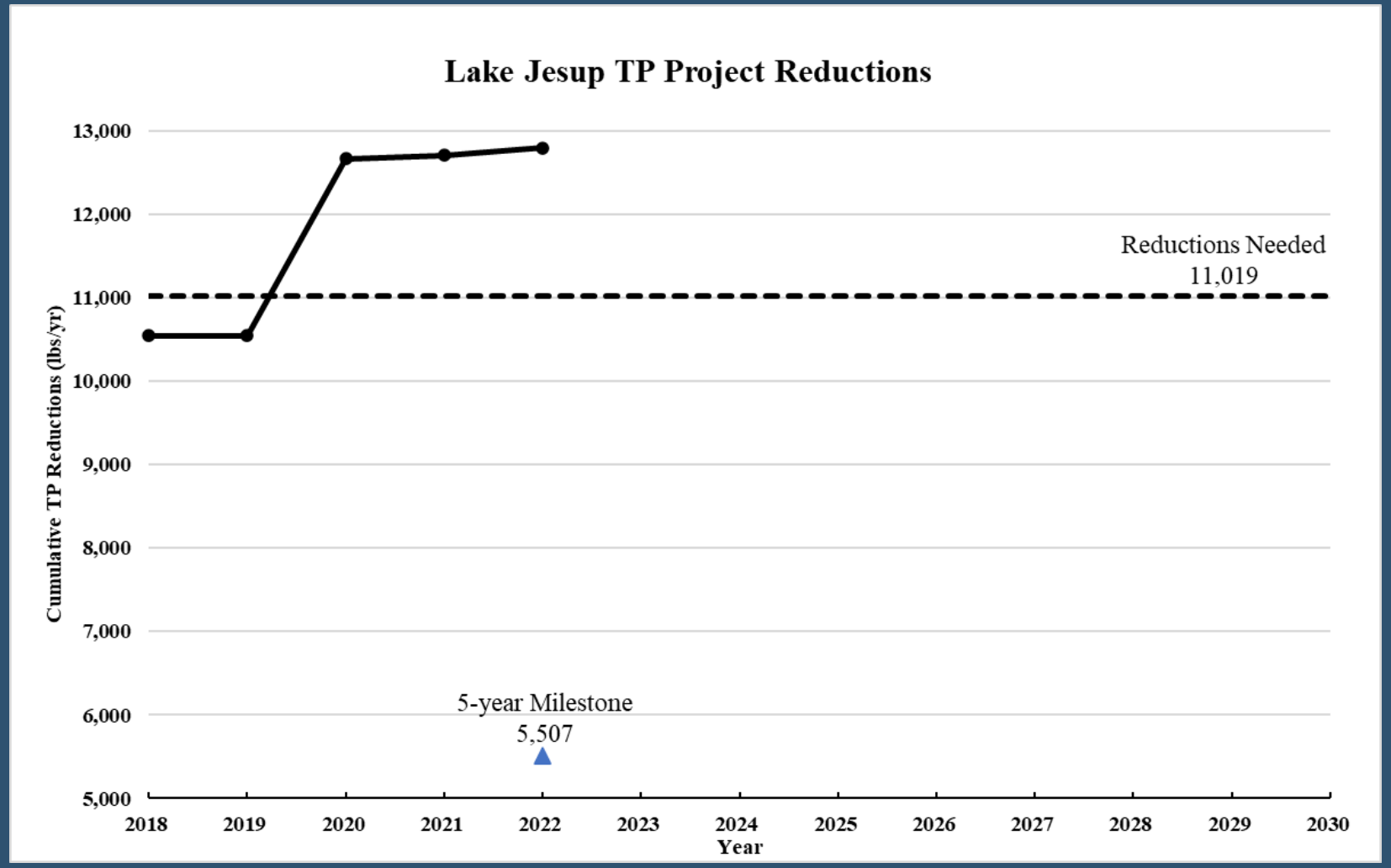
Projects Through December 31, 2022

Lead Entity	Completed	Ongoing	Planned	Underway	Total
City of Altamonte Springs	2	3			**5**
City of Casselberry	8	4	1	3	**16**
City of Lake Mary	1	3			**4**
City of Longwood	13	6	4	2	**25**
City of Maitland	6	4	6	3	**19**
City of Orlando	6	4	3		**13**
City of Oviedo	5	4	11		**20**
City of Sanford	2	2	2		**6**
City of Winter Park	8	2	1	5	**16**
City of Winter Springs	6	8	2	2	**18**
FDACS	1	1		1	**3**
FDOT District 5	10	2		3	**15**
Orange County	4	4		1	**9**
Seminole County	10	4	1	1	**17**
Site 10	1				**1**
Town of Eatonville		2			**2**
Turnpike Enterprise	1	2			**3**
Total	**84**	**55**	**31**	**21**	**191**

STAR UPDATES

Lake Jesup BMAP

Total Phosphorus Progress through December 31, 2022

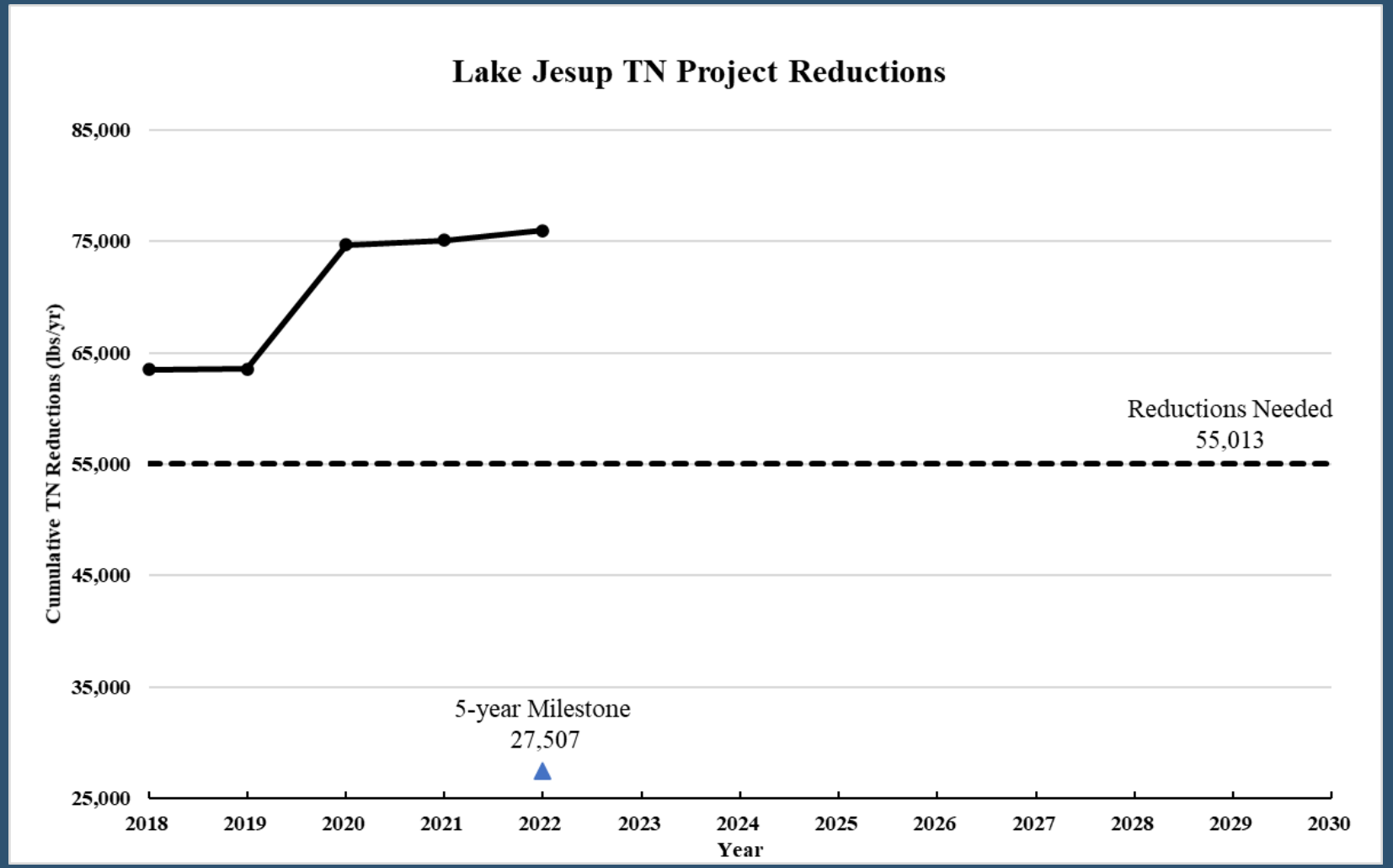


Completed and ongoing projects only.

STAR UPDATES

Lake Jesup BMAP

Total Nitrogen Progress through December 31, 2022



Completed and ongoing projects only.

MORE INFORMATION
STORY MAPS

Lake Jesup Basin Management Action Plan

Introduction | Overview | Location | Water Quality | Projects | Progress | Contacts & More Information

Introduction

Welcome to the Lake Jesup Basin Management Action Plan (BMAP) Story Map

A Basin Management Action Plan (BMAP) is a framework for water quality restoration, containing local and state commitments to reduce pollutant loading through current and future projects and strategies. BMAPs contain a comprehensive set of solutions, such as permit limits on wastewater facilities, urban and agricultural best management practices, and conservation programs designed to achieve pollutant reduction established by a Total Maximum Daily Load (TMDL).

These broad-based plans are developed with local stakeholders and rely on local input and commitment for development and successful implementation. BMAPs are adopted by DEP Secretarial Order and are legally enforceable.

This Story Map reflects the status of BMAP projects as of the most recently published **Statewide Annual Report (STAR). Please use the tabs above to navigate through this Story Map and learn more about the Lake Jesup BMAP. Last updated June 2023.**

* The story map will display differently depending on the screen size and resolution being used. Story map best viewed in Chrome or Firefox.

Photo: Rhys Asplundh CC BY 2.0

Additional information is presented in the BMAP Story Map.

Lake Jesup BMAP Story Map

WHAT'S NEXT?

- St. Johns River Modeling Efforts.
- Water Quality Trend/Hot Spot Analysis.
- SB 712: Clean Waterways Act Requirements.
- HB 1379: Environmental Protection.

https://floridadep.gov/subscribe

WHAT'S NEXT?
WATER QUALITY TREND/HOT SPOT ANALYSIS

- **Methodology** is being developed.
  - Started with process in South Florida BMAPs.
  - Tailored to fit individual BMAPs.
- **Goal**: Find areas for project prioritization and opportunities to monitor progress.
  - Identify areas for regional projects and greatest impacts.
  - Prioritize funding.
- Trend/hotspot analysis.

First Steps

Concentration 5-yr Average

↓

Compare to BMAP Target Concentration(s)*

↓

Priority 1: Greater than twice the benchmark.

Priority 2: Greater than the benchmark but less than twice benchmark value.

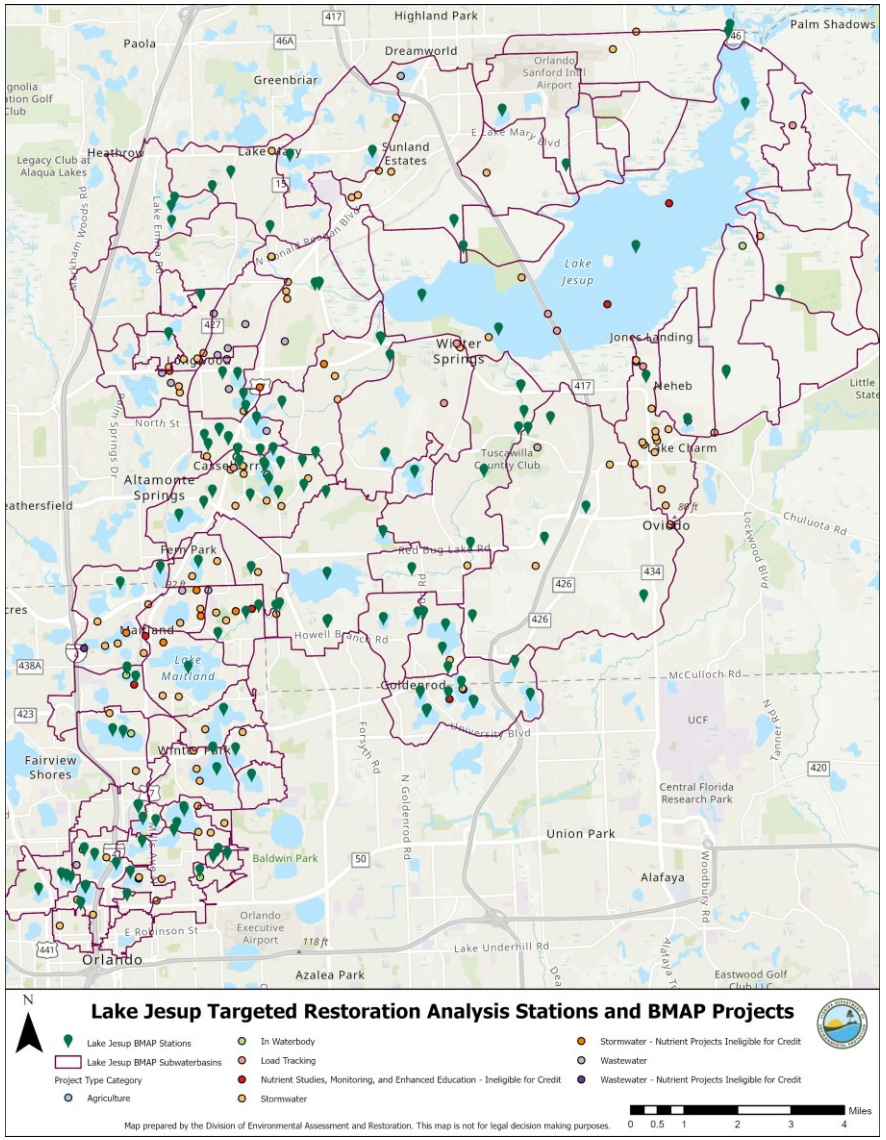
Priority 3: Equal to or less than the benchmark

*Can use the Numeric Nutrient Criteria if a target concentration is not defined for the waterbody.

WHAT'S NEXT?

WATER QUALITY TREND/HOT SPOT ANALYSIS

- Lake Jesup methodology is being developed.
  - BMAP divided into subbasins.
  - Filtered for stations with consistent sampling.
  - Subbasin averages compared to benchmark for priority ranking.
  - Subbasin averages compared to BMAP project locations.



CLEAN WATERWAYS ACT (SB 712)

Wastewater Treatment Plans and Onsite Sewage Treatment and Disposal System Remediation Plans

Upcoming deadlines:

- Draft plans must be submitted to the department by
  - **February 1, 2024.**
- Final plans must be submitted to the department by
  - **August 1, 2024.**
- These plans must be incorporated into the BMAPs by
  - **July 1, 2025.**

June 26th Informational Webinar Meeting Materials

Clean Waterways Act Requirements for Wastewater & Onsite Sewage Treatment and Disposal Systems Plans in Nutrient BMAPs | Florida Department of Environmental Protection

WASTEWATER TREATMENT PLANS

Summary of expected elements of the Wastewater Treatment Plans:

- Inventory of WWTFs within jurisdiction of local governments.
- Summary of each facility's current status, which may include:
  - Permitted capacity.
  - Average discharge.
  - Permitted nutrient limits.
  - Average nutrient concentration.
  - Estimated average nutrient load.
- Summary of capacity analysis for each facility.
  - Including plans for future growth.
- Ranking or list of facility upgrades needed to meet requirements.
- Timelines/milestones for all projects.
- Funding estimates for all projects.

OSTDS REMEDIATION PLANS

Summary of expected elements of the OSTDS Remediation Plans:

- Inventory of OSTDS within jurisdiction of local governments.
- Plan to address OSTDS in the future:
  - Areas for sewering and/or enhancements & prioritization of those areas.
  - Summary of capacity analysis for wastewater facilities that would accept newly sewered areas.
  - Timelines/milestones for projects.
  - Funding estimates for all projects.
  - Future growth considerations.

HB 1379: ENVIRONMENTAL PROTECTION

Enhances Water Quality Protection in the Indian River Lagoon.

Strengthens Water Quality Protections and Basin Management Action Plans (BMAPs).

Improves Local Government Long-Term Comprehensive Planning.

Expands Funding Opportunities to Address Water Quality Impairments.

IMPROVING COMPREHENSIVE PLANNING

BMAP Projects:

- Requires local governments to include BMAP projects in their comprehensive plans so that these projects can be prioritized to achieve restoration benefits.

Sanitary Sewer:

- Except for rural areas of opportunity (RAO), requires local governments to assess the feasibility of providing sanitary sewer for developments of 50 lots or more, on a 10-year planning horizon.
  - → Deadline for updates with new sanitary sewer requirements is July 1, 2024.

Wastewater Facility Upgrades:

- Requires prioritization of advanced wastewater treatment (AWT) in comprehensive plans.

STRENGTHENING BMAPS

List of Identified Projects:

- Requires a list of projects and strategies that will achieve the 5-year implementation milestones to meet total maximum daily loads (TMDLs).
- Requires each identified project to include an estimated amount of nutrient reduction, a planning-level cost estimate and an estimated date of completion.
- Requires DEP to increase coordination with local governments, water management districts and other stakeholders to identify projects.

Agricultural Nonpoint Sources:

- Where agricultural nonpoint sources contribute at least 20 percent of nonpoint source nutrient discharges, requires a list of cooperative agricultural regional water quality improvement element(s) submitted by the Department of Agriculture and Consumer Services which, in combination with the best management practices, additional measures, and other management strategies will achieve the needed pollutant load reductions established for agricultural nonpoint sources.

IMPROVING DOMESTIC WASTEWATER

Wastewater Facility Upgrades:

- By 2033 – requires all wastewater facilities discharging to an impaired water to upgrade to Advanced Wastewater Treatment (AWT).
- After July 1, 2023 – requires any facility discharging to a waterbody impaired for nutrients or subject to a BMAP or reasonable assurance plan (RAP) area to upgrade to AWT within 10 years.

More Stringent Wastewater Treatment Standards:

- Authorizes DEP to require a more stringent treatment standard (greater than AWT) if required to meet the total maximum daily load (TMDL) within a BMAP.

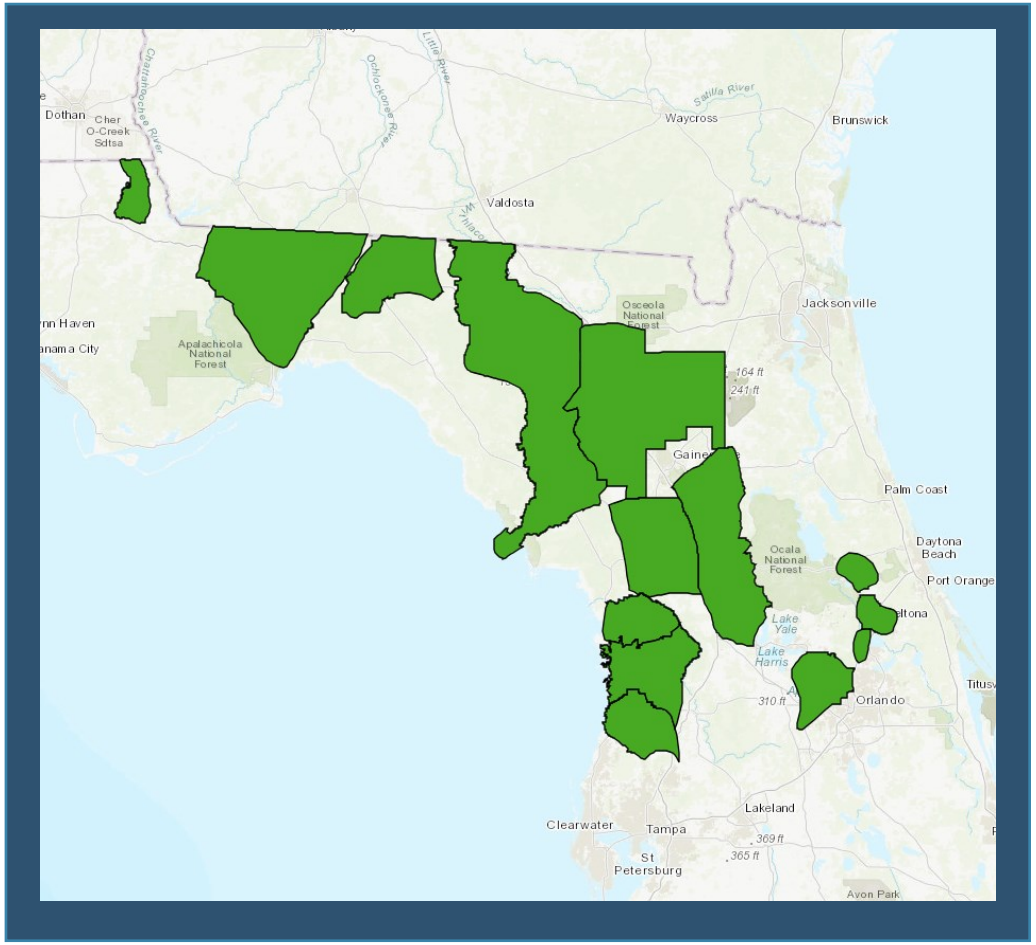
Onsite Sewage Treatment Disposal Systems (OSTDS):

- Requires new OSTDS on lots 1 acre or less within a BMAP to connect to central sewer if available, or if unavailable, to upgrade to an enhanced nutrient-reducing system or other wastewater system that achieves 65 percent reduction.

ENHANCED PROTECTIONS FOR OUTSTANDING FLORIDA SPRINGS

Expanding current prohibitions in priority focus areas to entire Outstanding Florida Spring (OFS) BMAP areas:

- New conventional OSTDS on lots one acre or less - Where connection to a sewer system is not available, all new OSTDS on lots one acre or less must be enhanced nutrient-reducing systems (at least 65% nitrogen reduction).
- New domestic wastewater disposal facilities with permitted capacities of 100,000 gallons per day or more unless they meet AWT standards.
- New HAZMAT disposal facilities.
- Land application of Class A or B biosolids not in accordance with a DEP-approved nutrient management plan.
- New agricultural operations not implementing best management practices (BMPs).



THANK YOU

Evelyn Becerra
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

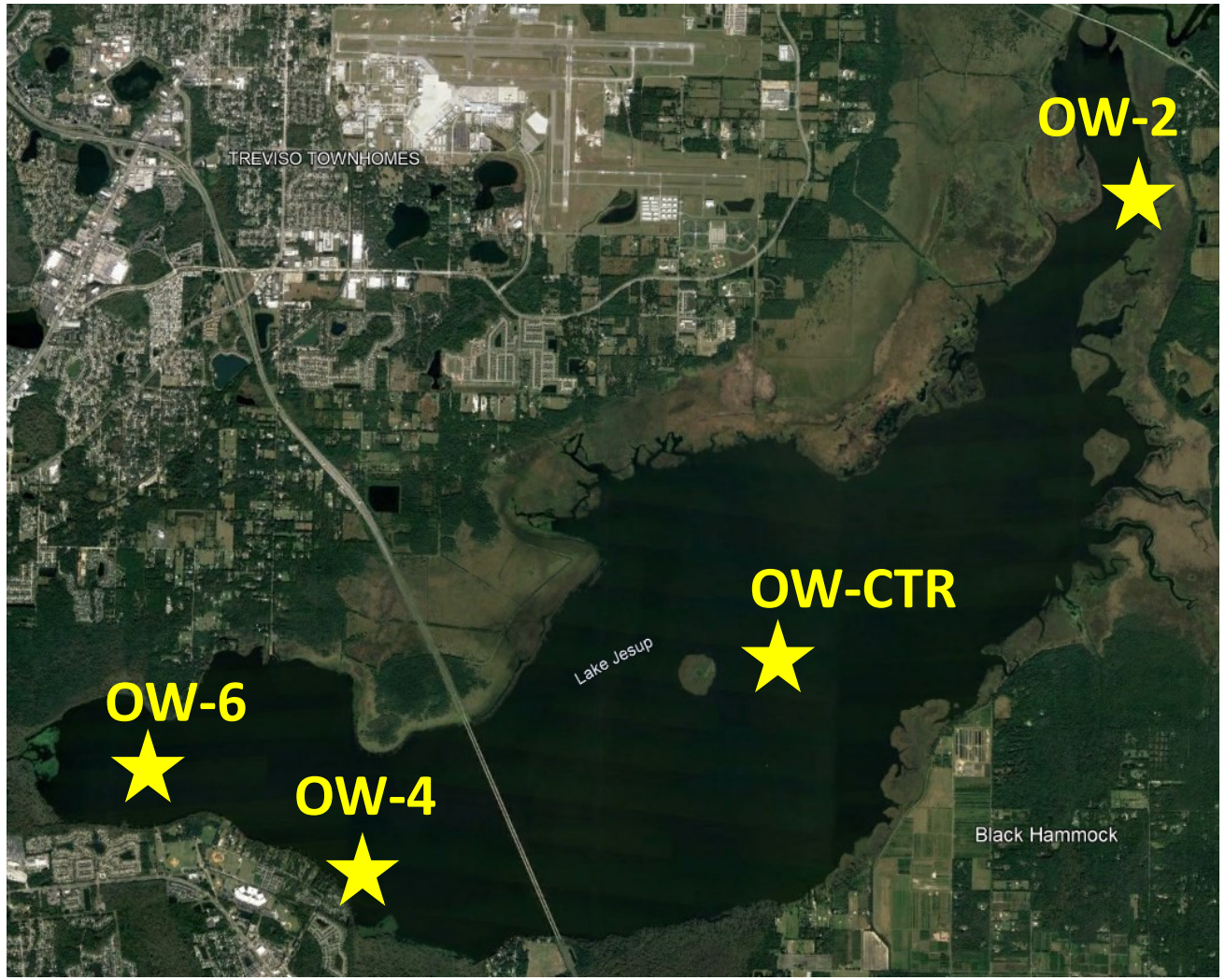
Contact Information:
850-245-8547
Evelyn.Becerra@FloridaDEP.gov

Lake Jesup BMAP Update

Tiffany Trent, St John's River Water Management District

St. Johns River
Water Management District

Water Quality Update

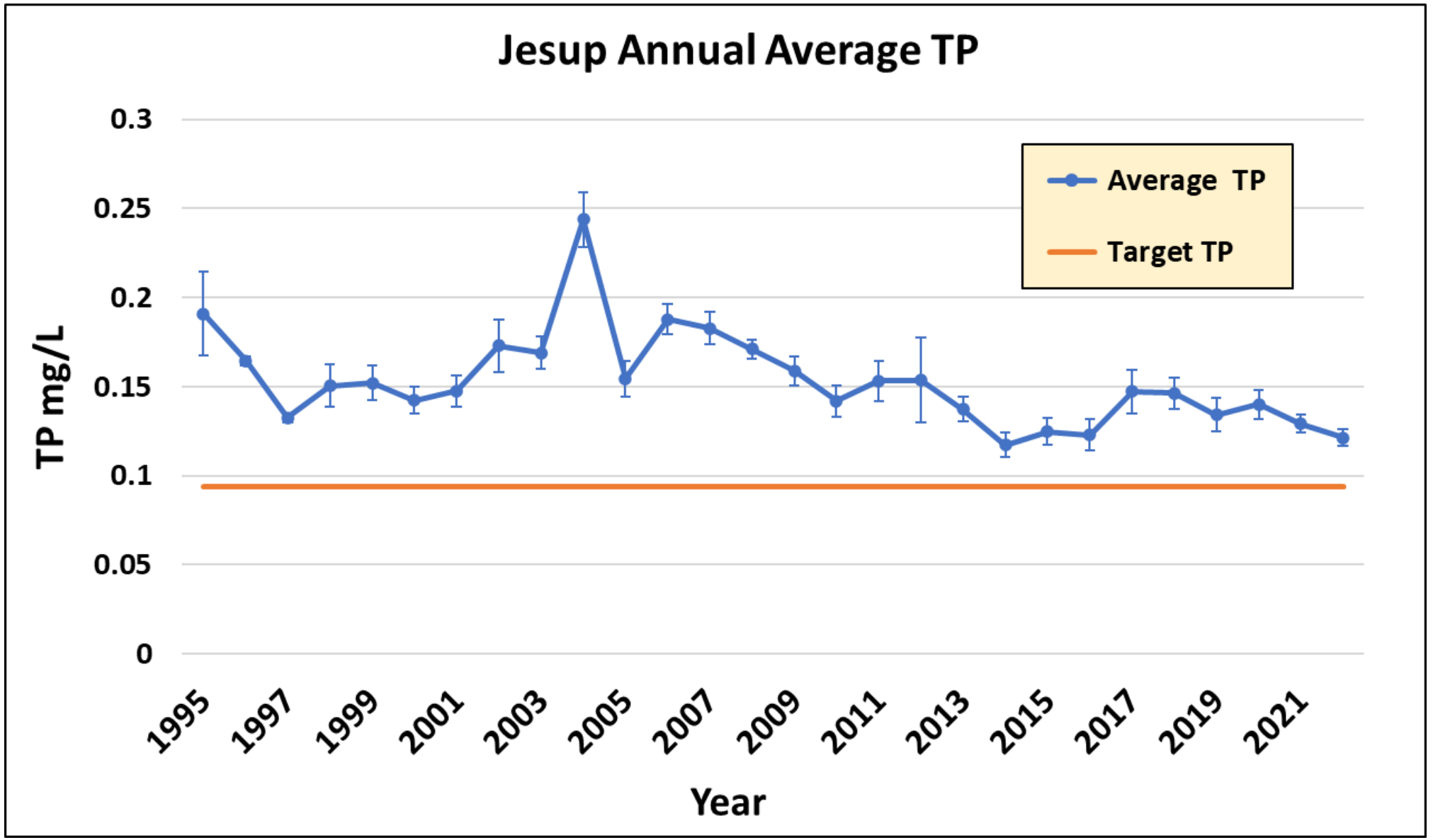


- Focusing on 3 analytes: TN, TP, and Chl-a
- Water quality data obtained from St Johns River Water Management database
- Lake Jesup had samples in every quarter, so arithmetic means were used
- Harmful Algal Bloom Data provided by DEP HAB website
- In-Lake Phosphorus Reduction summary

TMDL Targets and Load Allocation Summaries

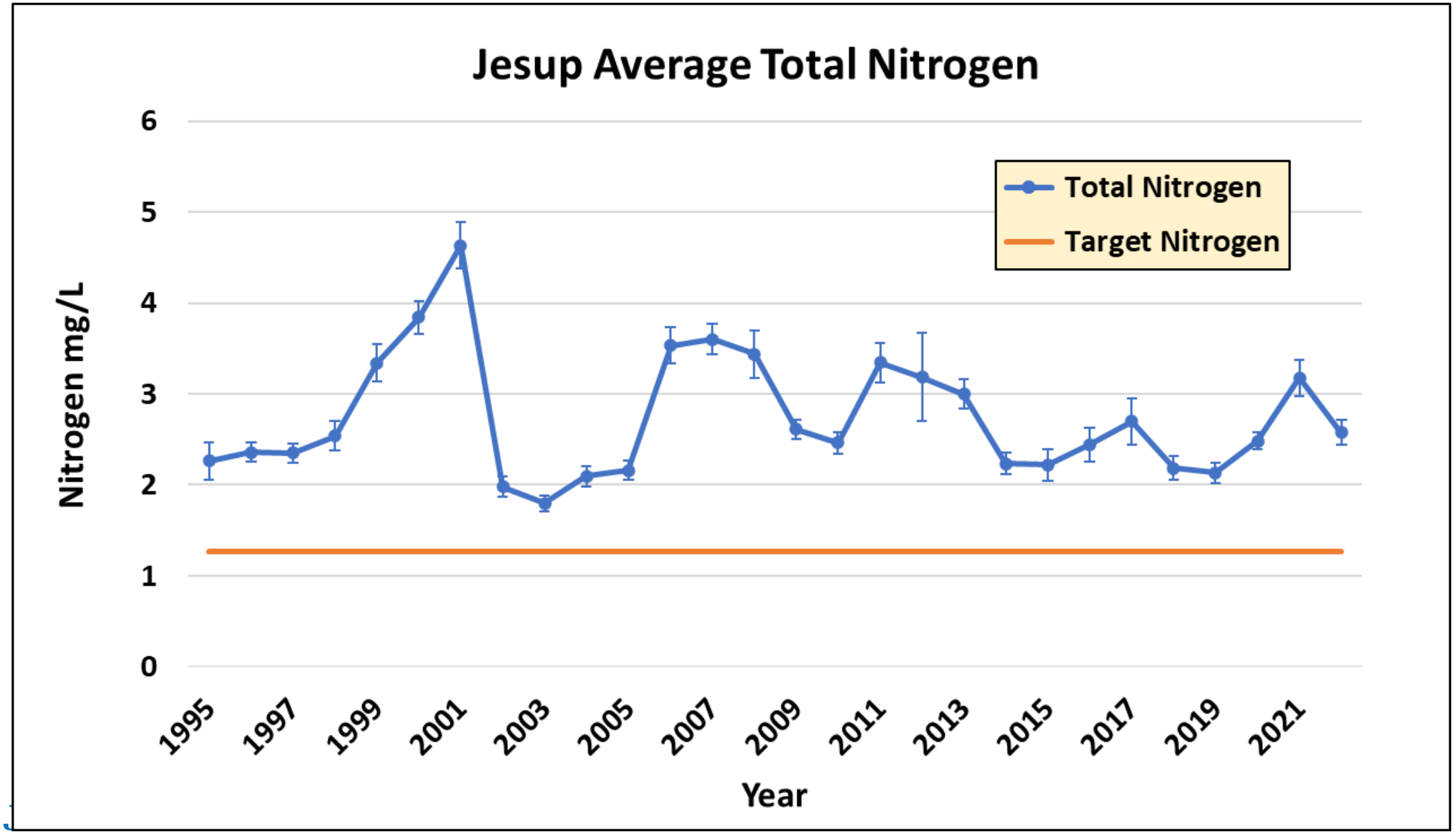
Analyte	Target Concentration (mg/L)	2022 Mean TMDL (mg/L)	TMDL (kg)
TN	1.27	2.63	224,386
TP	0.096	0.121	17,236
Chl-a	0.0312	0.0799	N/A

Total Phosphorus

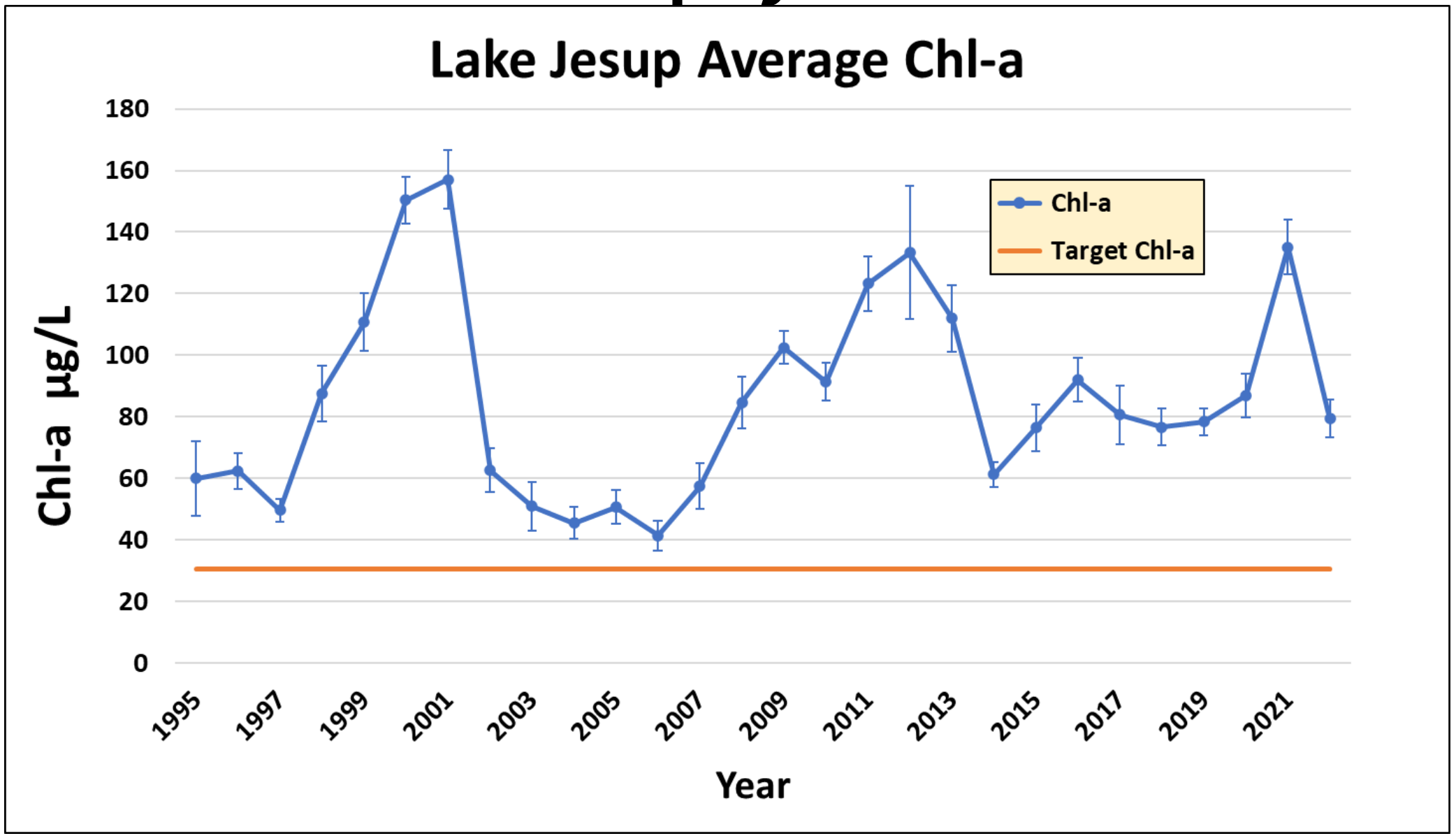


St. Johns River
Water Management District

Total Nitrogen



Chlorophyll-a

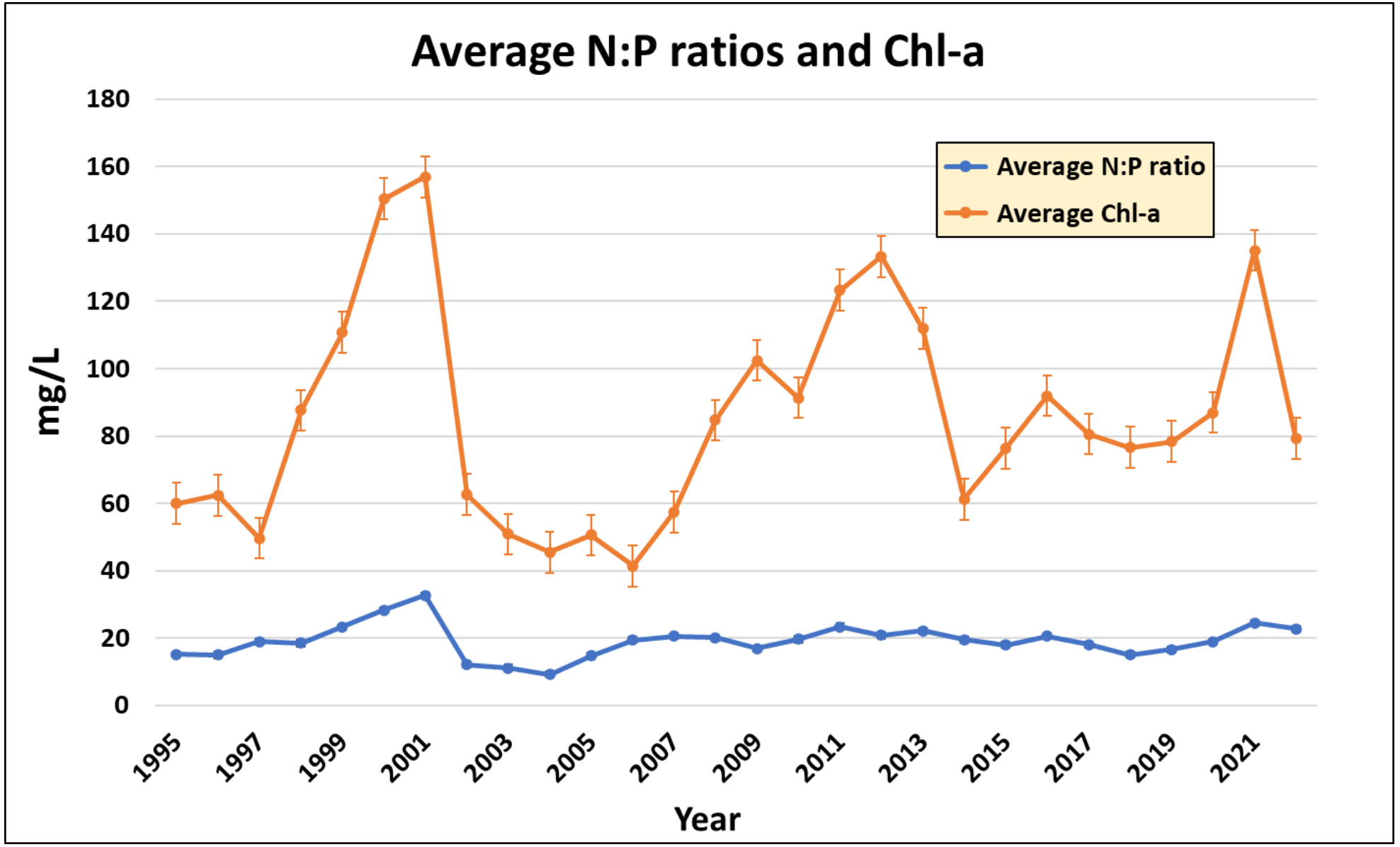


St. Johns River
Water Management District

Algal Blooms 2022

- 13 samples were collected. Four samples resulted in Microcystin above the MDL, 3 samples had Cylindrospermopsin detects
- None of the toxin samples exceeded their respective EPA limits (15 µg/L for Cylindrospermposin and 8 µg/L for Microcystis) and all were under 1 µg/L
- Half the samples had no clear dominant cyanobacteria, and the other half was dominated by a mix of Microcystis and Cylindrospermopsis

Average N:P and Chl-a Values



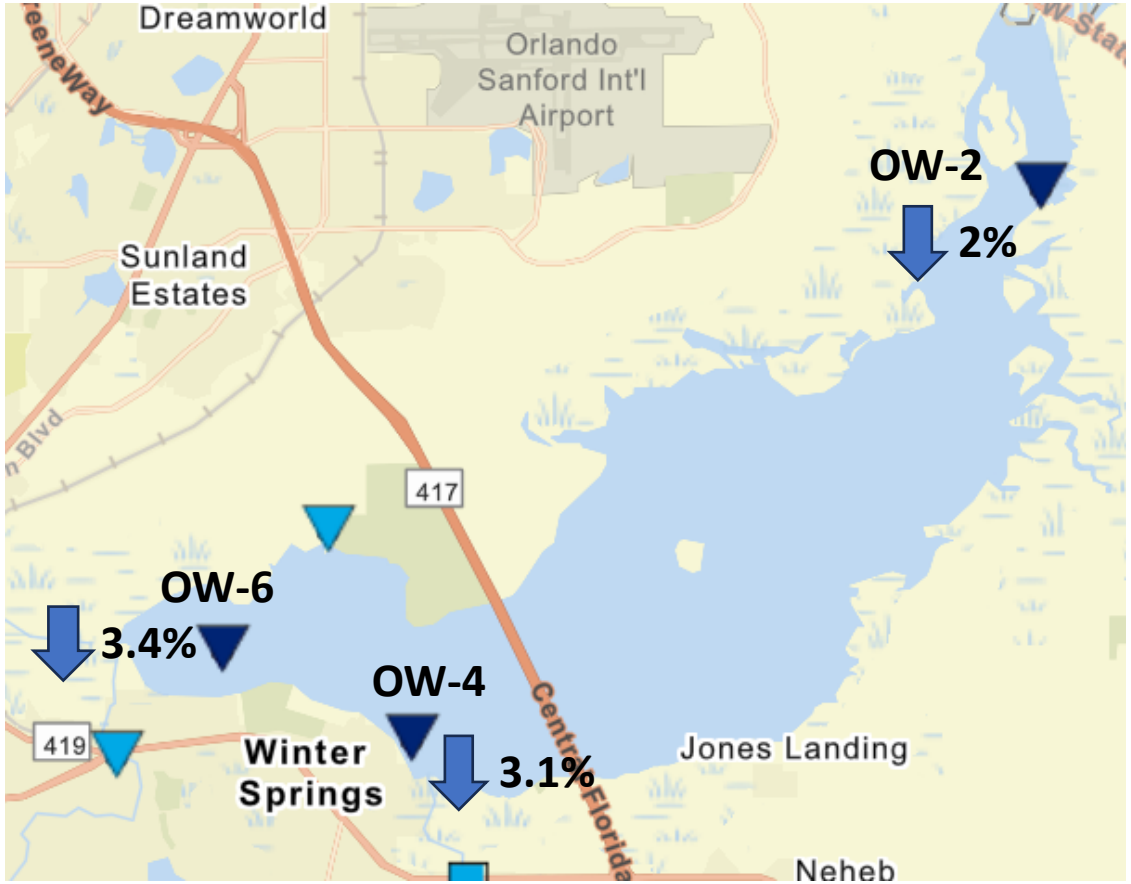
St. Johns River
Water Management District

Water Quality Summary

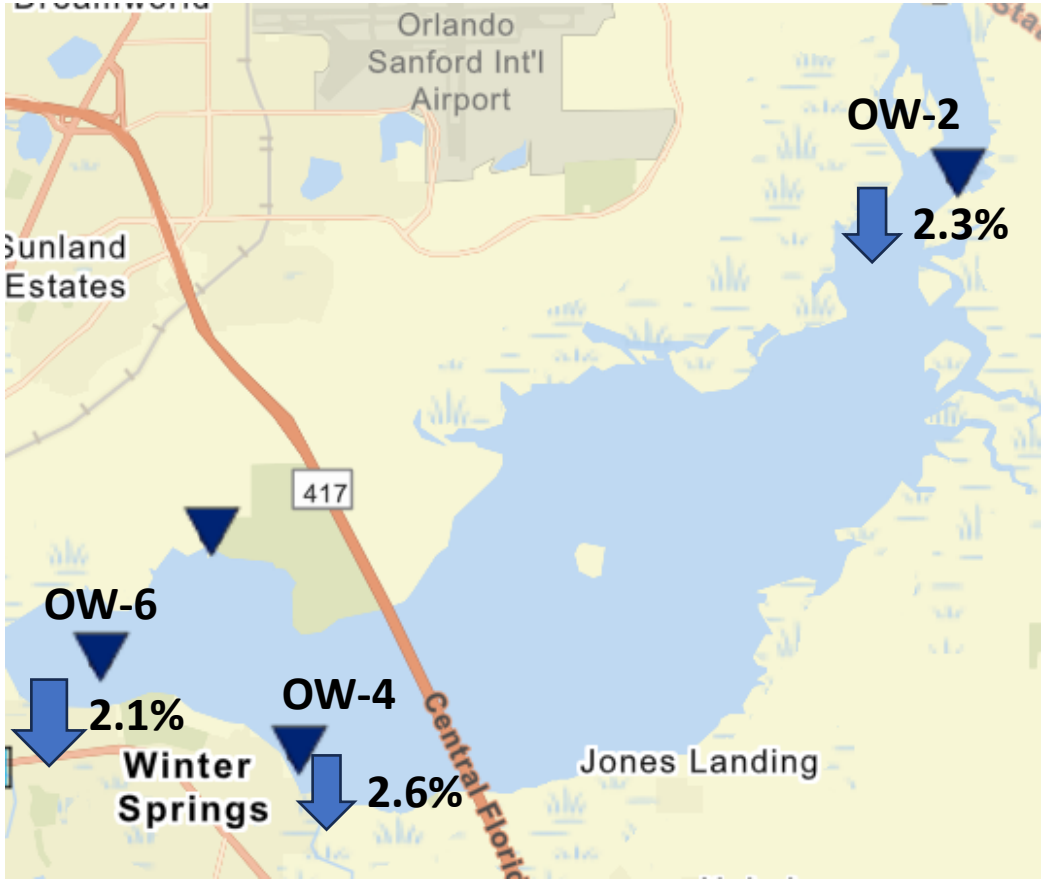
- While Jesup did not meet any of its TMDL targets, values in all 3 parameters dropped from 2021-2022 and came closer to their targets
- Seven algal bloom collections contained either Microcystin or Cylindrospermposin, but none were above 1 µg/L and were well below the EPA recreation limit
- N:P ratios were slightly positively correlated to Chl-a values
- Different genera dominated algal bloom samples at different dates and different N:P ratios

Water Quality Summary

TN 15-year Trend



TP 15-year Trend



St. Johns River
Water Management District

In-Lake Phosphorus Reduction

Goal is to evaluate the effectiveness of 3 soil phosphorus binding amendments

Bench Assessment and lab study

- CDM Smith was contracted to investigate various amendments and methods on effectiveness on phosphorus reduction
- An extensive literature review was conducted examining improvements in water quality, nutrient removal, feasibility, and cost of each method
- Findings recommended a mesocosm study and three amendments were selected for their effectiveness in laboratory study: Phoslock, Virophos and Nclear TPX

Lake Sediment Characterization (completed)

- Sediment muck thickness and characterization
- Compared to previous results from Cable (1997) and ERD (2014)
- Results among studies were similar and allowed us to better understand TP distribution in sediments throughout the lake
- Three samples were collected for in-house flux study

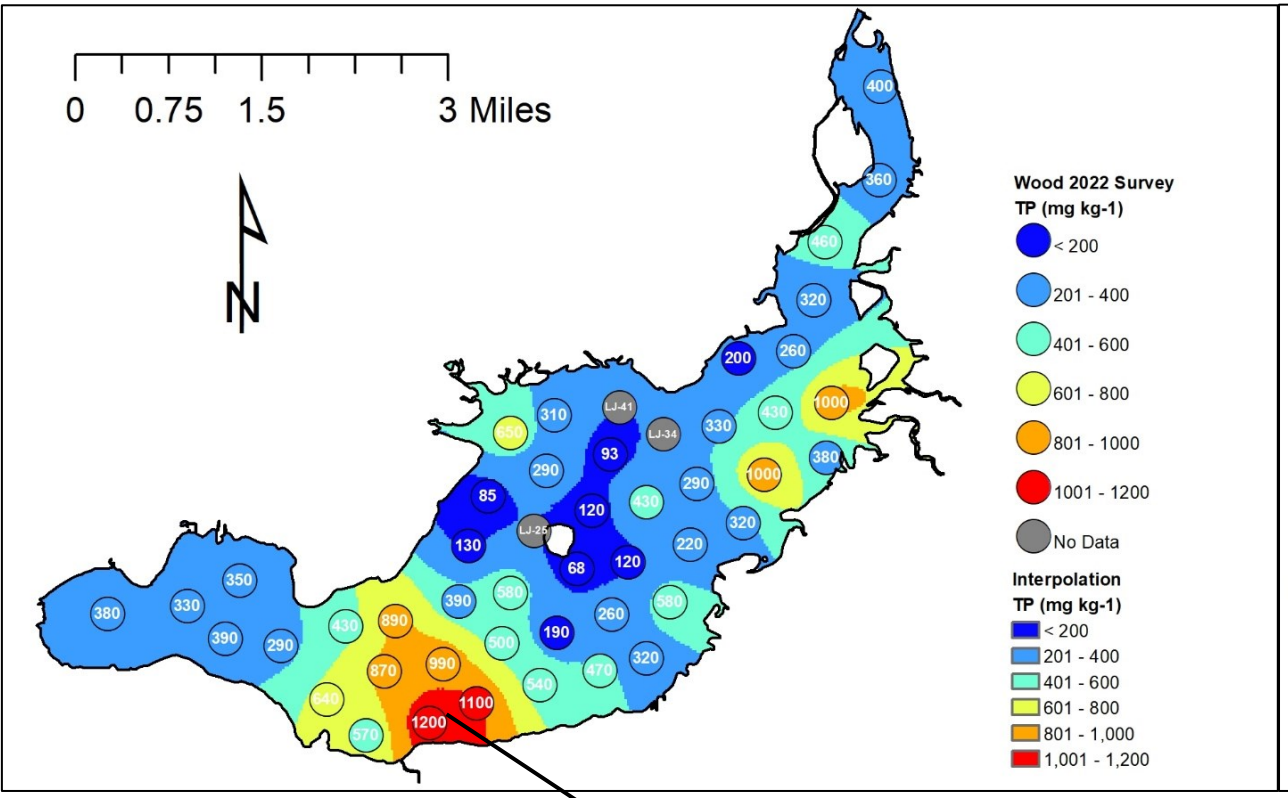
Toxicity Evaluation (in progress)

- Peer-reviewed literature was examined for the 3 products
- Acute, chronic toxicity results for elutriate will conducted for both sediment and freshwater organisms
- Bioassays will be performed if the test concentrations in literature are less than the manufacturer application rates

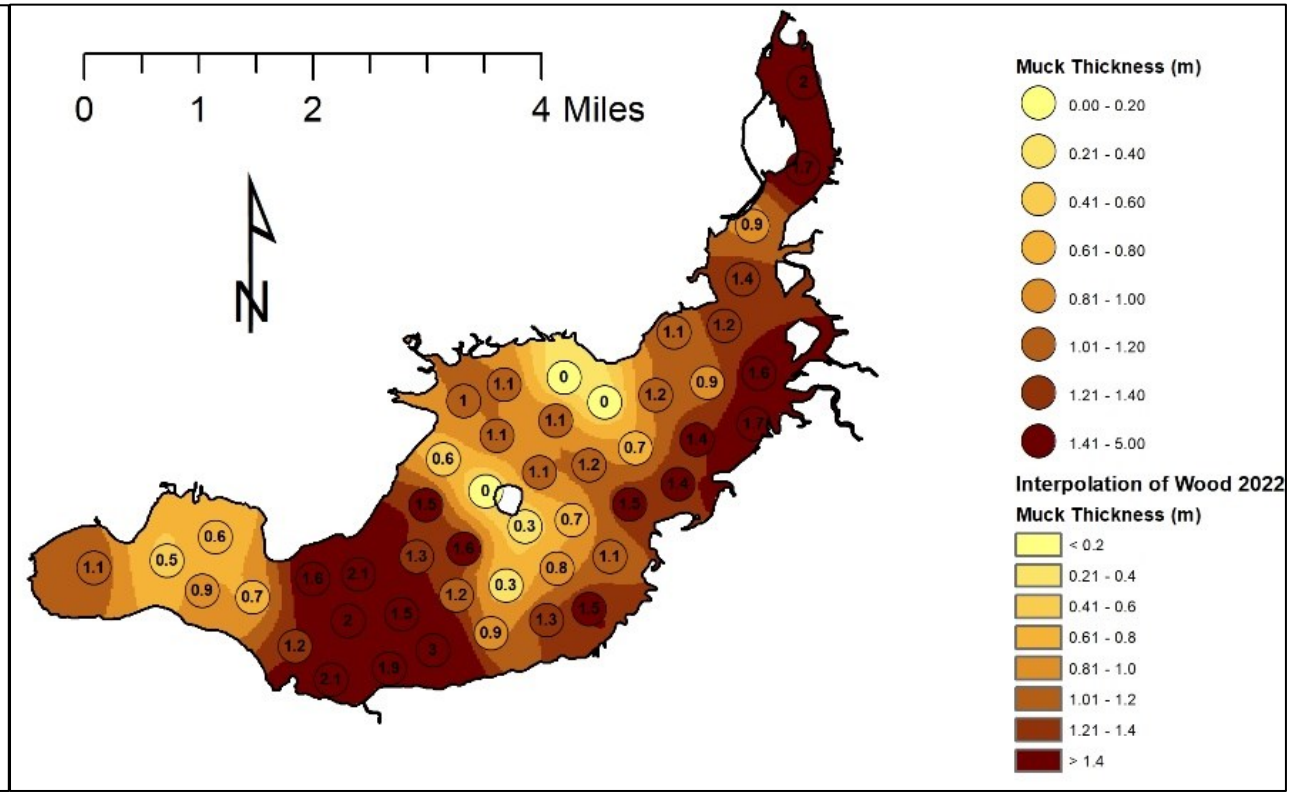
Lake Sediment Characterization

- Sediment characterization via thickness survey, water depth, and physical/chemical characterization
- Areas with the highest TP concentration were selected for limnocorral deployment

Soil Total Phosphorus Concentrations



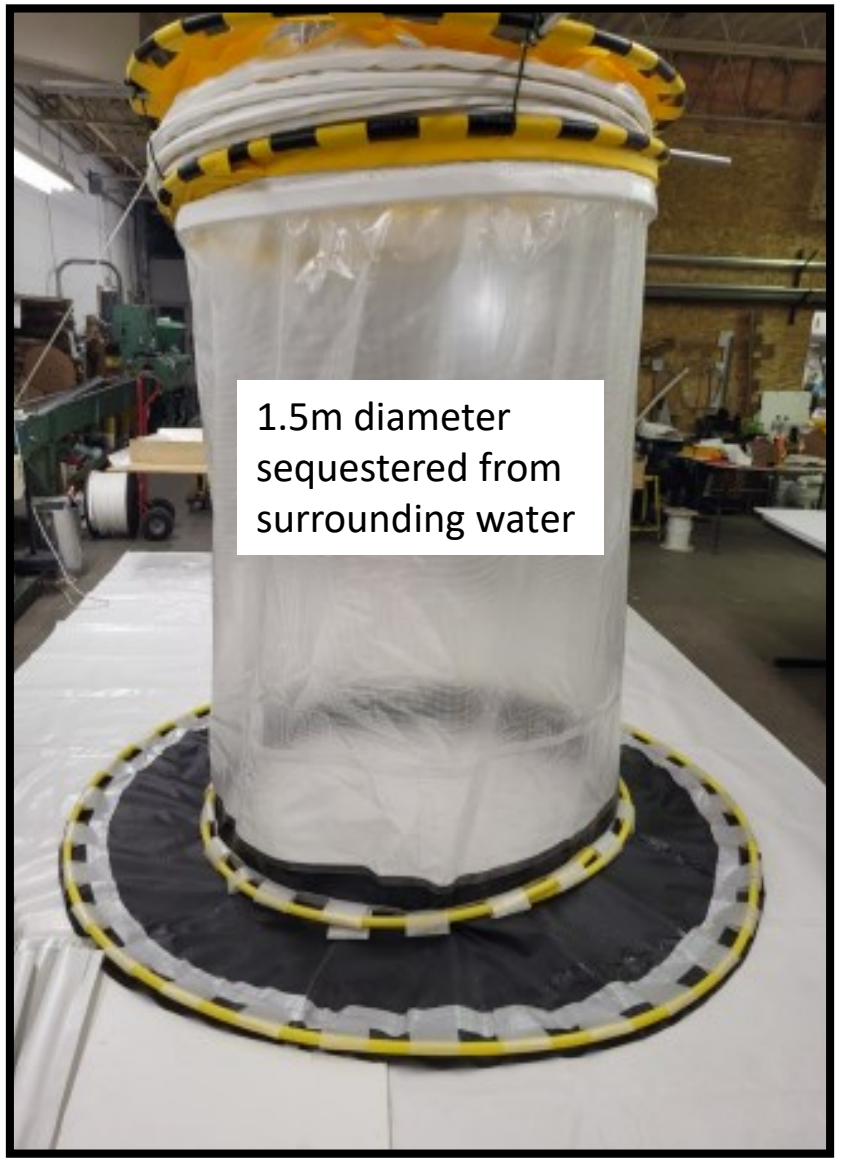
Muck Thickness



Limnocorral Locations

St. Johns River Water Management District

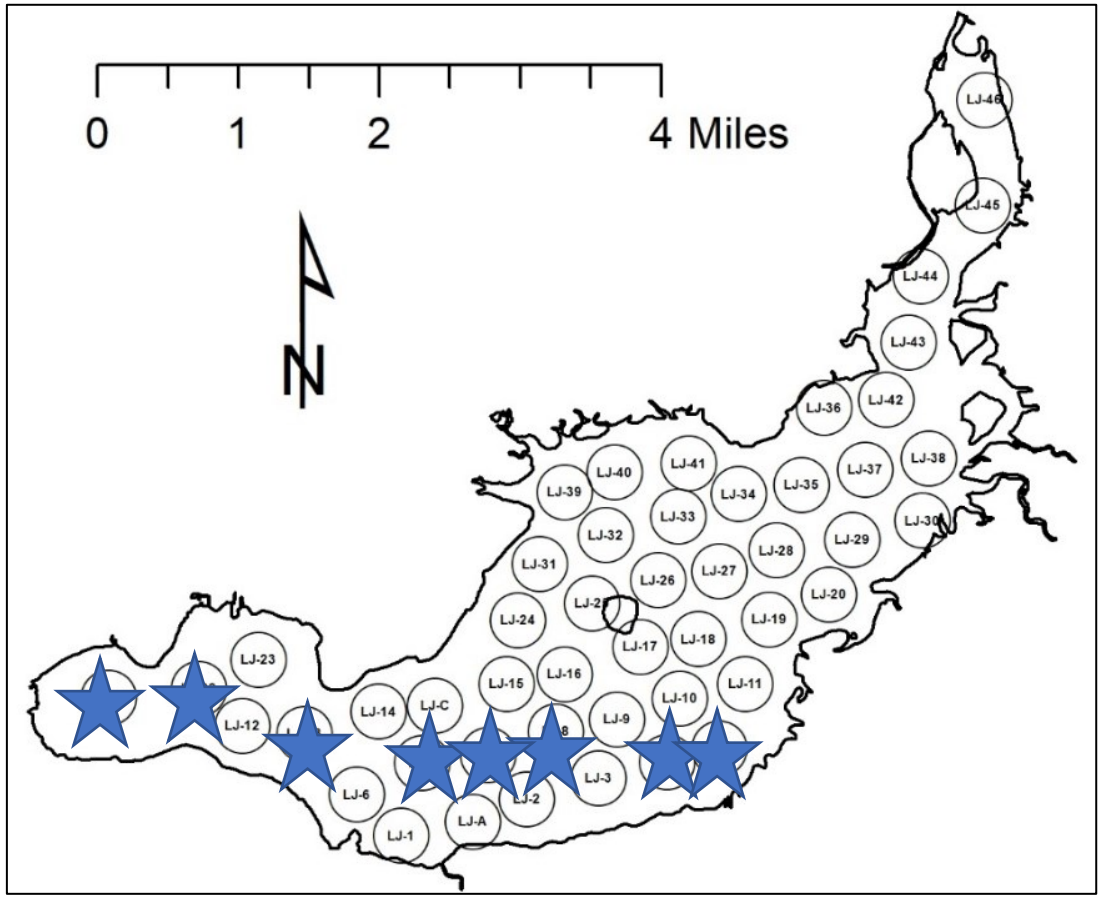
Experimental Limnocorrals



Summer mesocosm sampling

- 8 Mesocosms were deployed on May 23, 2023
- After 1 week, In-situ measurements, water chemistry, and phyto/zooplankton samples were collected from each of the corrals
- Six corrals were dosed with amendments (2 replicates each) and 2 were left as controls
- Bi-weekly In-situ measurements and water chemistry samples are taken
- Lake water levels are monitored for adjustments in mesocosms anchors
- Mesocosms will remain for a total of 6 months, after which final In-situ measurements, water chemistry, and phyto/zooplankton samples will be taken
- All mesocosms and all associated equipment will be removed in late November 2023
- Will also remove the soil fill associated with each mesocosm
- WSP final report will be due in April 2024

Additional Flux core sampling



- 32 core sediment flux incubations; 4 from each site, 2 aerobic, and 2 anaerobic
- Water quality and in-situ grab samples, depth profiles will be collected at each site
- Ambient water will be collected within 1 meter of the sediment surface
- Flux will be evaluated in sediments with varying TP concentrations
- Nutrient flux estimations will be calculated based on the change of nutrient concentration over time

Knowledge learned from this information will ultimately help estimate the annual nutrient load from internal cycling in Lake Jesup

St. Johns River
Water Management District

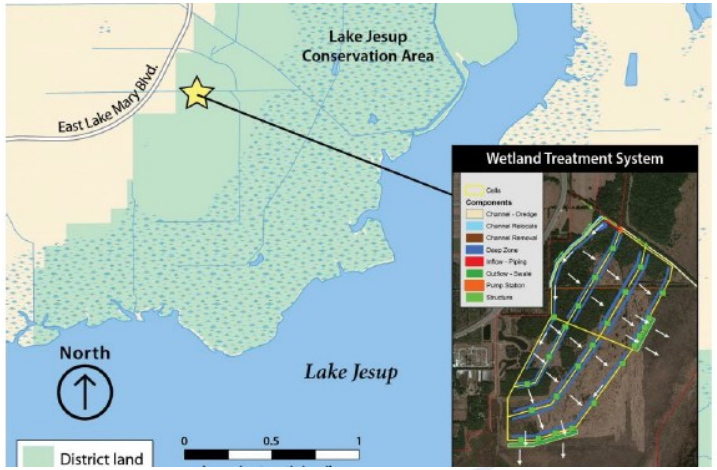
WSP In-House Flux

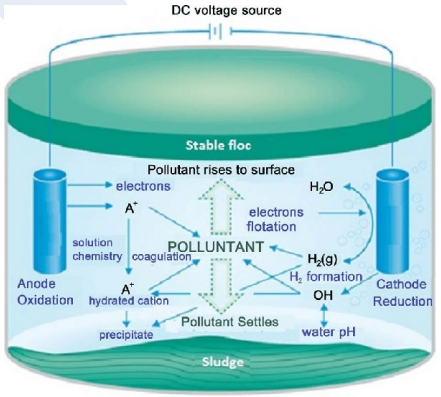
WSP Laboratory Overview

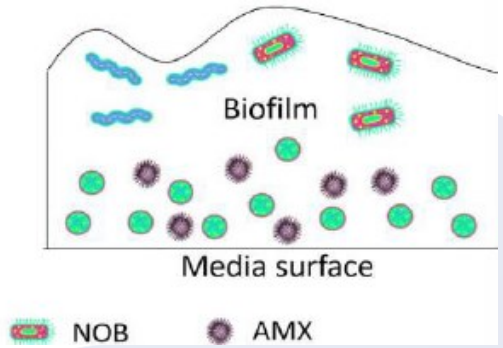
Sediment flux samples

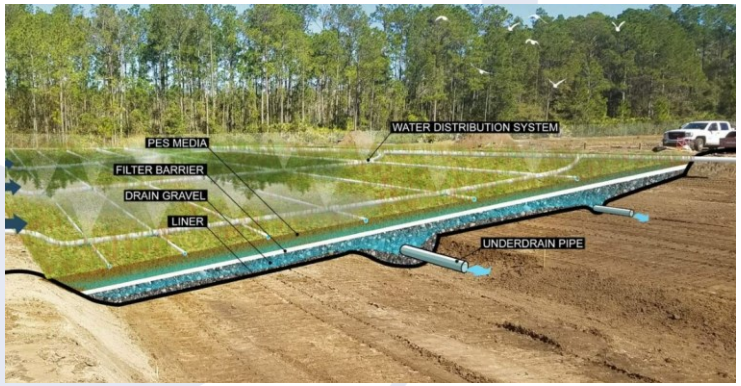
St. Johns River
Water Management District

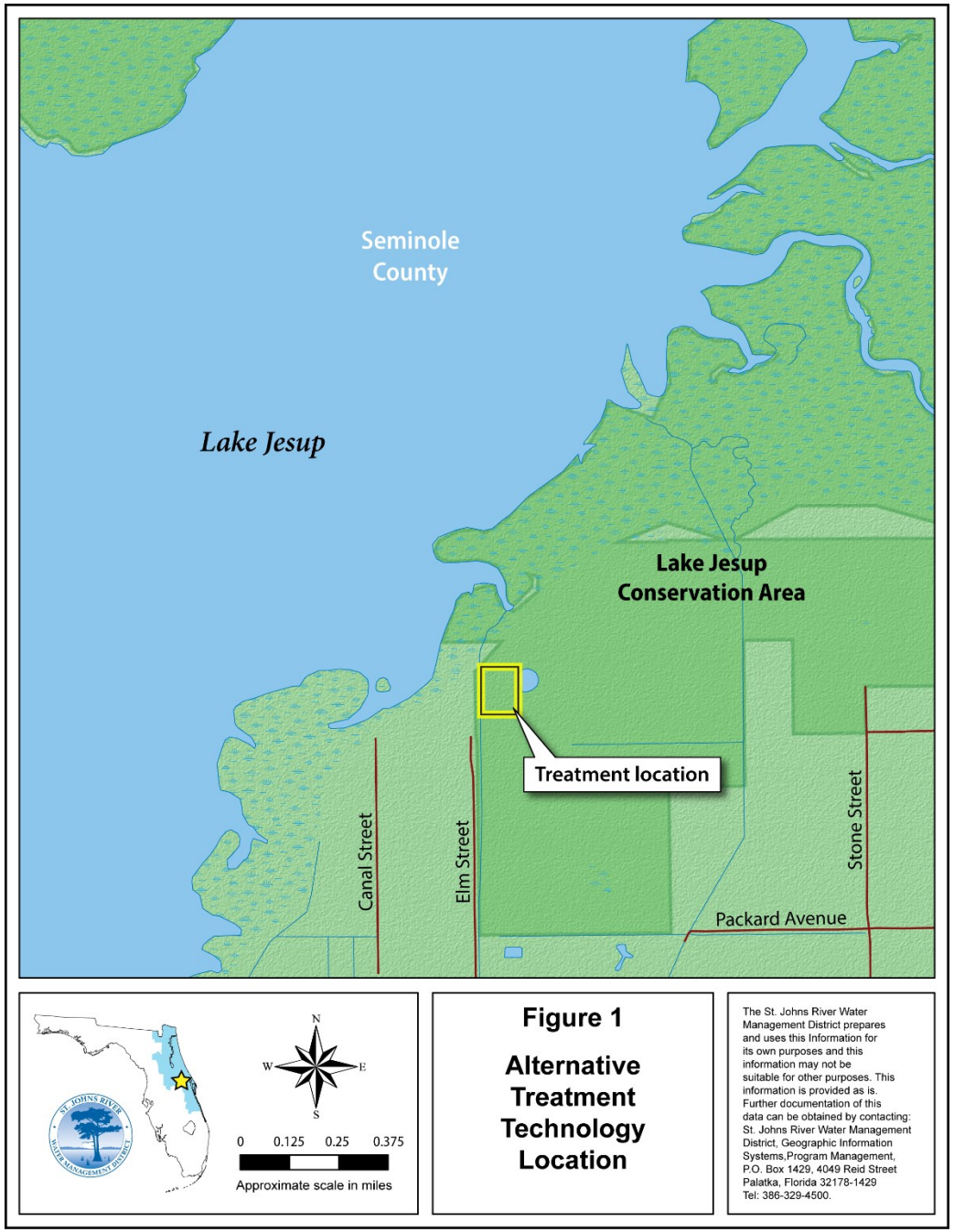
Lake Jesup Water Column Nutrient Reduction











St. Johns River
Water Management District

Path Forward

- RFQ advertised mid-July
- Treatment system sited on 9.7 acre upland property
- Anticipated to remove over 6,000 lbs TP and 70,000 lbs TN per year.
- Treatment shall not alter water quality apart from removal of TN and TP

St. Johns River
Water Management District

Questions?

St. Johns River
Water Management District


FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Lake Jesup BMAP Annual Meeting

July 31, 2023

Cori Hermle

Florida Department of Agriculture and Consumer Services

Office of Agricultural Water Policy

Overview

- Agricultural Best Management Practices (BMP)
- FDACS Role in BMP Implementation
- Enrollments within the Lake Jesup Basin
  - Unenrolled Agricultural Lands Classification
- BMP Implementation Verification (IVs)
- Producer Outreach
- Legislative Report

Office of Agricultural Water Policy (OAWP) Staff Update

- **N. West Gregory;** Director West.Gregory@fdacs.gov
- **Bret Prater;** Asst. Director Bret.Prater@fdacs.gov
- **Angela Chelette;** Chief of Policy Planning and Coordination (PPC) Section Angela.Chelette@fdacs.gov
- **Yesenia Escribano;** Environmental Administrator-BMAPs Yesenia.Escribano@fdacs.gov
- **Cori Hermle;** Environmental Consultant, SJRWMD liaison Cori.Hermle@fdacs.gov

Agricultural Best Management Practices

- Management strategies, tools and practices that improve water quality, conserve water, enhance soil health and protect water resources
- Based on the best available science and technology
  - Work closely with FDEP staff
- Must balance production and water resource protection

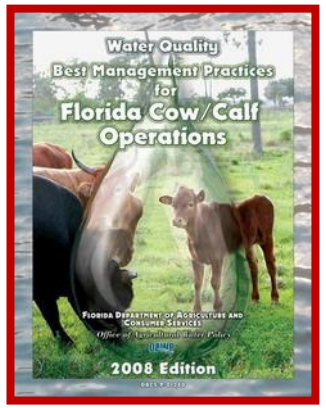
Benefits of Agricultural Best Management Practices

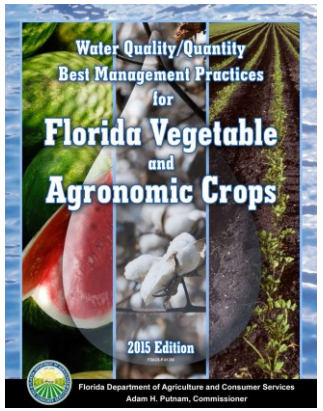
- Increase efficiencies in nutrient, irrigation and water management
- Conservation and protection of water and environmental resources
- Improve soil health
- Promote groundwater recharge
- Enhance wildlife habitat

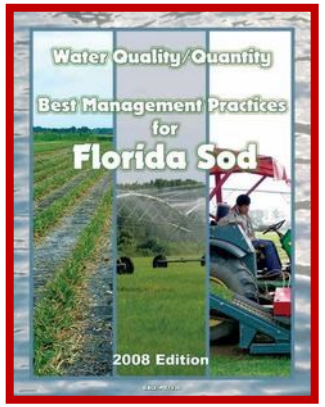
FDACS Role in BMP Implementation

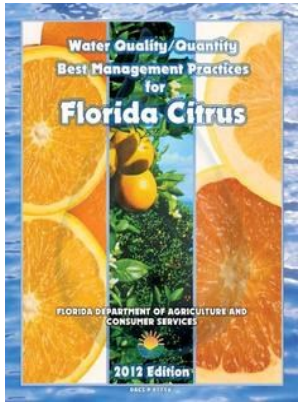
- Develop BMPs in Manuals and adopt BMPs by Rule
- Assist Producers with BMP Enrollment
- Identify and support targeted cost-share of select BMPs
- Fund research to develop new, innovative BMPs that improve nutrient and irrigation use efficiencies
- Verify proper implementation through site visits and record review

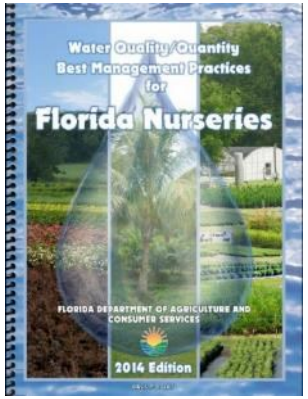
Adopted BMP Manuals

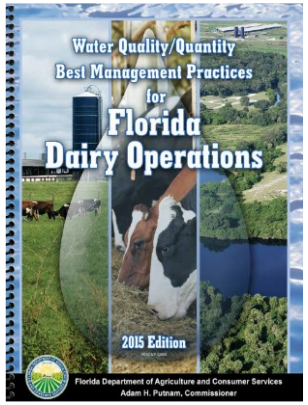


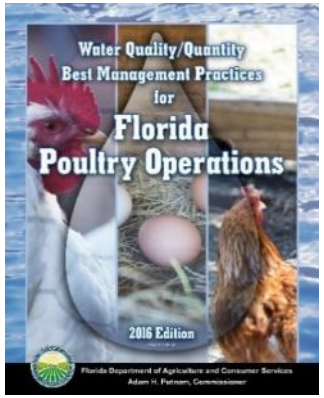


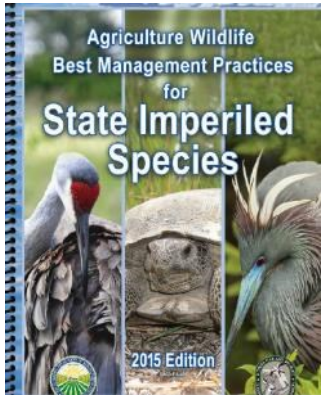












Producer Options in BMAP Areas

1. Sign a Notice of Intent (NOI) and properly implement applicable BMPs for presumption of compliance, OR
2. Follow an FDEP or WMD-prescribed water quality monitoring plan at a Producer's expense

Enrollments within the Lake Jesup BMAP

- 29% of all agricultural acres are enrolled in the BMP program
  - Total Ag Acres = 7,790
  - Enrolled Ag Acres = 2,228
- 77% of all irrigated agricultural acres are enrolled in the BMP program
  - Total Irrigated Ag Acres = 1,128
  - Enrolled Irrigated Ag Acres = 873
- Majority of enrollments are Cow/Calf and Nursery

BMP enrollment as of Dec 2022 and the 9th Florida Statewide Agricultural Irrigation Demand (FSAID) Geodatabase

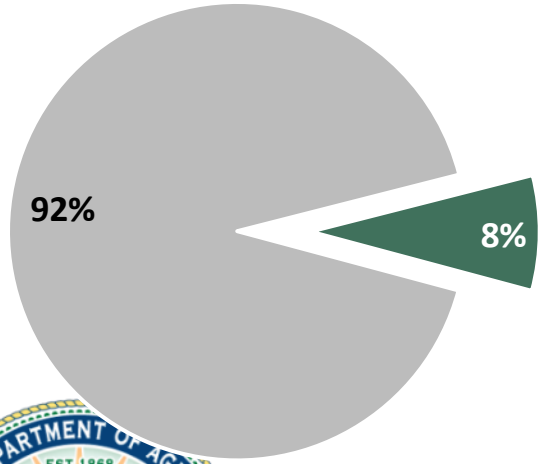
Agricultural Acres Enrolled within Lake Jesup BMAP

BMP Manual	Acres
Citrus	211
Cow/Calf	950
Equine	17
Multiple Commodities	152
Nursery	661
Row/Field Crop	28
Sod	209
Total	**2,228**

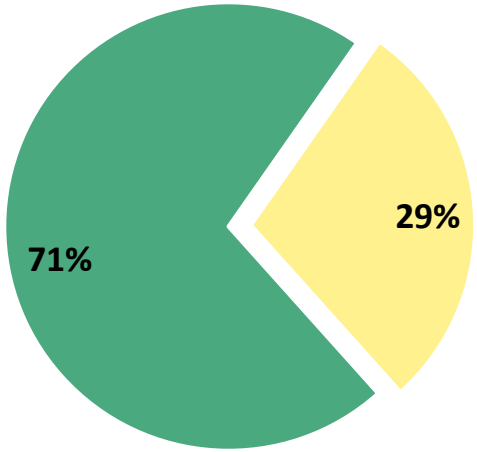
Agricultural Lands within Lake Jesup BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres	Unlikely Enrollable Acres	Potentially Enrollable Acres
87,927	7,790	2,228	5,550	2,401	828

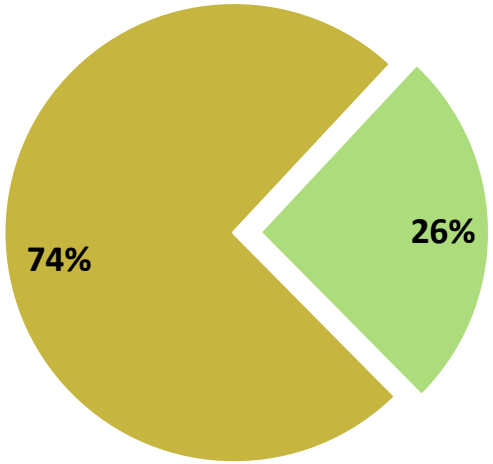
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres

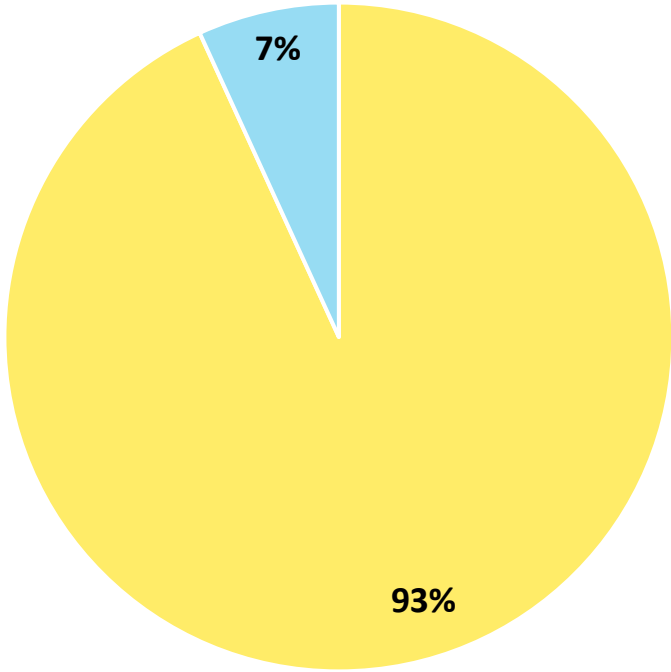


Unlikely Enrollable Agricultural Lands within Lake Jesup BMAP

Category	Acres
State Lands	2,321
Timberland and Aquaculture *	0*
Not Agriculture [e.g., DOR Use Code 70-99 (industrial or institutional use, acreage not zoned agricultural), Non-Ag Entity]	2,237
Not Enrollable [e.g., Missing Parcel Information, Slivers, Tribal Lands]	164

Unlikely Enrollable Acres: 2,401

Remaining Acreage: Unlikely Ag Breakdown

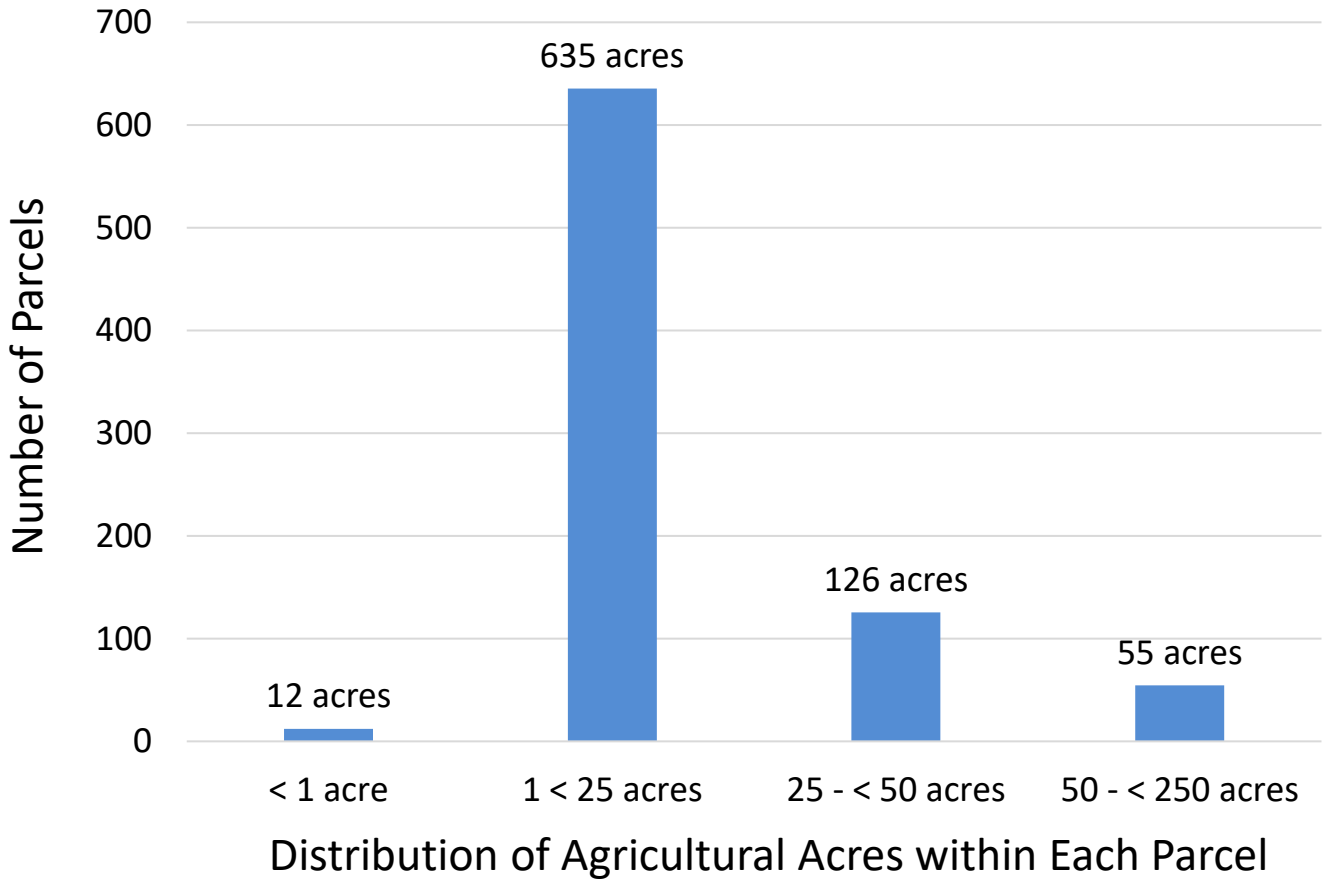


* *May be eligible to be enrolled under the FDACS Florida Forest Service's Silviculture BMP Manual or the FDACS Division of Aquaculture's Aquaculture BMP manual.*

Potentially Enrollable Agricultural Lands within Lake Jesup BMAP

Ag Acres within Parcel	Parcel Count	Total Ag Acres
< 1	21	12
1 - < 25	118	635
25 - < 50	4	126
50 - < 250	1	55

Potentially Enrollable Acres: 828



BMP Implementation Verification (IV)

- Process to verify the status of implementation of BMPs
- **Clean Waterways Act - SB 712 (July 2020)**
  - Requires IV site visits every 2 years
    - 100% completed
  - Requires collection, review, and retention of N and P fertilizer records
    - Nutrient Application Record Form (NARF)
  - FDACS reports total N and P applications to FDEP for utilization in BMAP assessments

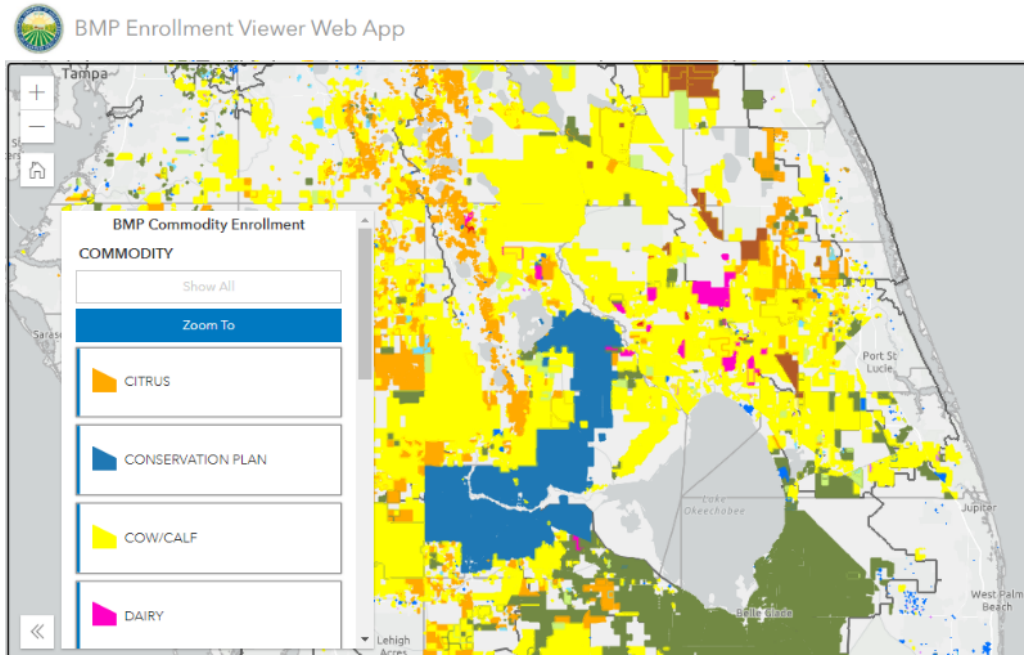
** IVs completed as of Dec 31, 2022

Producer Outreach: Coming Soon….

- BMP Program Videos

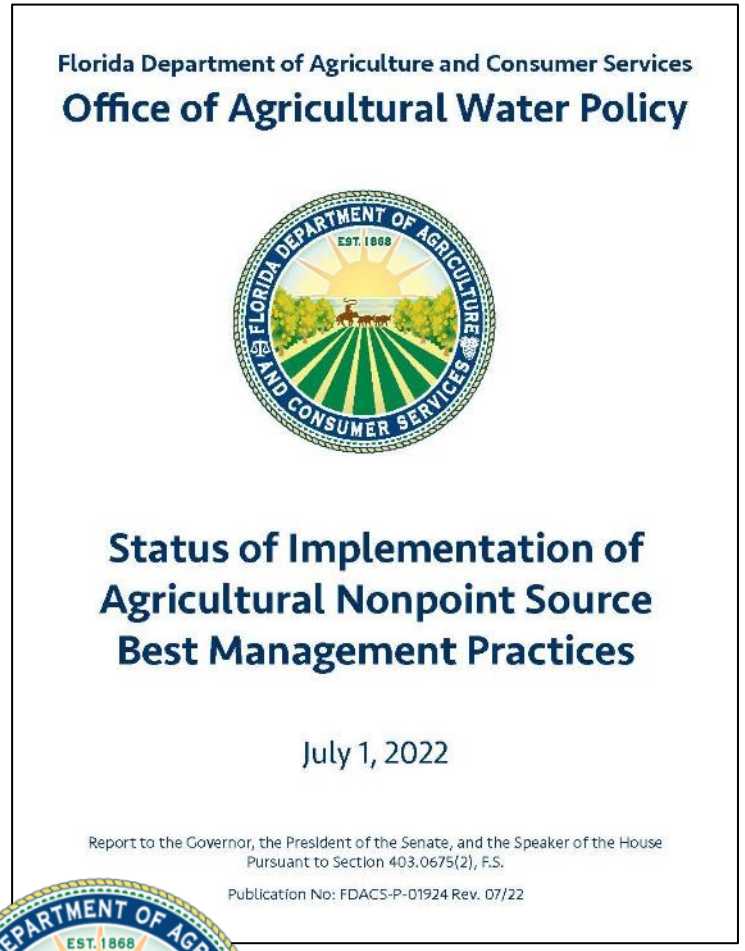
[Agricultural Water Policy - About BMPs – YouTube]

- New Online Features
  - Are you in a BMAP?
  - BMP Enrollment Viewer Web App



[Agricultural Best Management Practices / Water / Agriculture Industry / Home - Florida Department of Agriculture & Consumer Services (fdacs.gov)]

2023 FDACS Legislative Report



Florida Department of Agriculture and Consumer Services

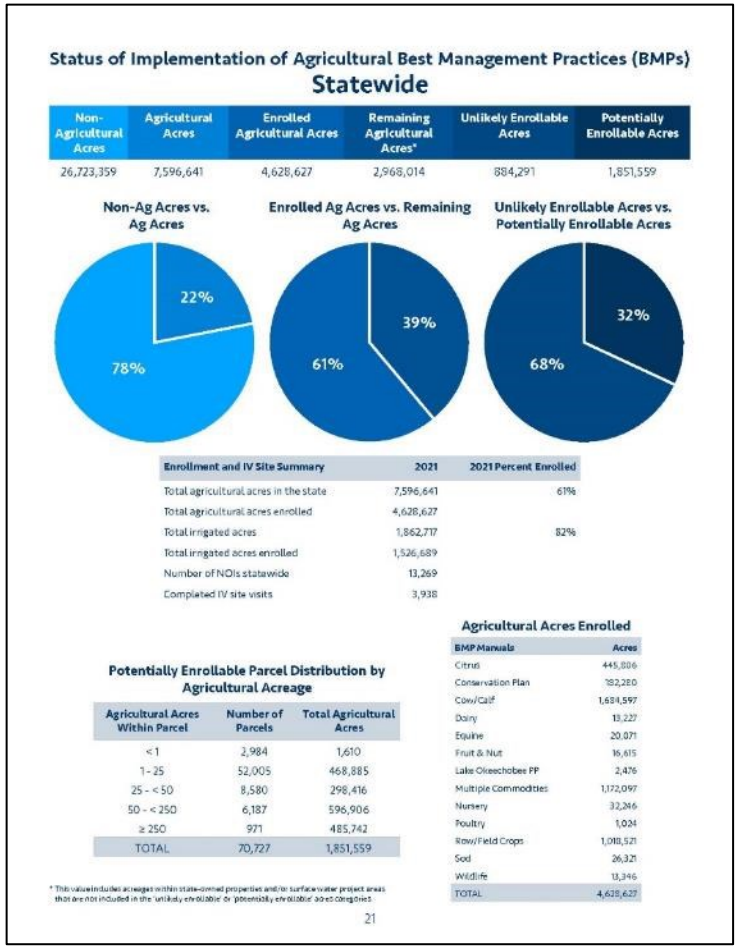
Office of Agricultural Water Policy

Status of Implementation of Agricultural Nonpoint Source Best Management Practices

July 1, 2022

Report to the Governor, the President of the Senate, and the Speaker of the House Pursuant to Section 403.0675(2), F.S.

Publication No: FDACS-P-01924 Rev. 07/22



Status of Implementation of Agricultural Best Management Practices (BMPs)
Statewide

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
26,723,359	7,596,641	4,628,627	2,968,014	884,291	1,851,559

Non-Ag Acres vs. Ag Acres

Enrolled Ag Acres vs. Remaining Ag Acres

Unlikely Enrollable Acres vs. Potentially Enrollable Acres

Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the state	7,596,641	61%
Total agricultural acres enrolled	4,628,627	
Total irrigated acres	1,862,717	82%
Total irrigated acres enrolled	1,526,689	
Number of NOIs statewide	13,269	
Completed IV site visits	3,938	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

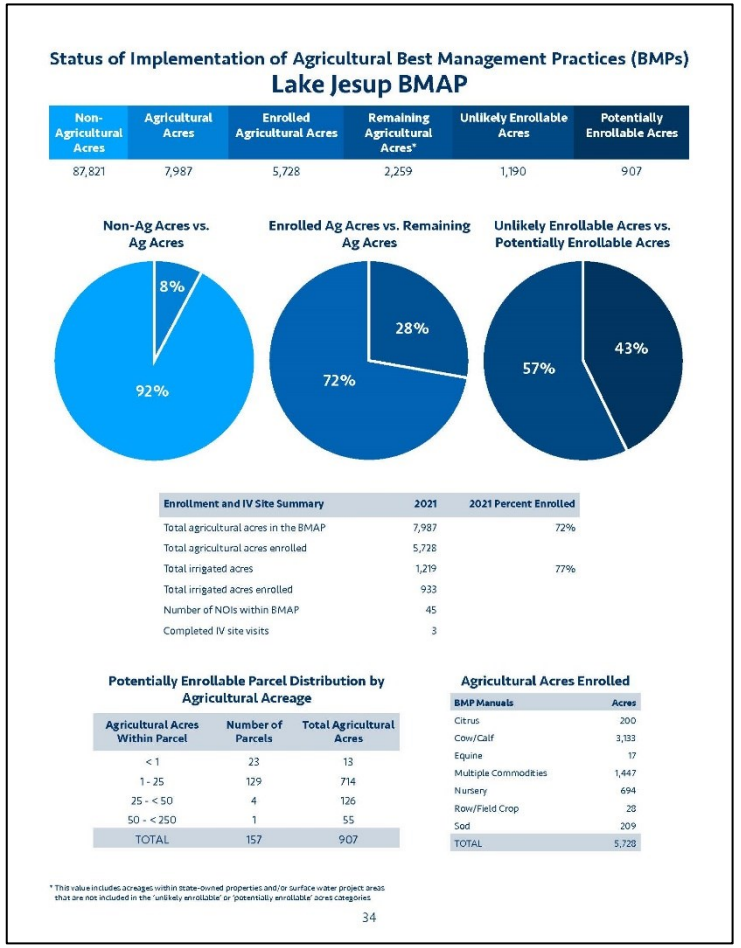
Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	2,984	1,610
1 - 25	52,005	468,885
25 - < 50	8,580	298,416
50 - < 250	6,187	596,906
≥ 250	971	485,742
TOTAL	70,727	1,851,559

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	445,806
Conservation Plan	182,280
Cow/Calf	1,684,597
Dairy	13,227
Equine	20,071
Fruit & Nut	16,615
Lake Okeechobee FP	2,476
Multiple Commodities	1,172,097
Nursery	32,246
Poultry	1,024
Row/Field Crops	1,018,521
Sod	26,321
Wildlife	13,346
TOTAL	4,628,627

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

21



Status of Implementation of Agricultural Best Management Practices (BMPs)
Lake Jesup BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
87,821	7,987	5,728	2,259	1,190	907

Non-Ag Acres vs. Ag Acres

Enrolled Ag Acres vs. Remaining Ag Acres

Unlikely Enrollable Acres vs. Potentially Enrollable Acres

Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	7,987	72%
Total agricultural acres enrolled	5,728	
Total irrigated acres	1,219	77%
Total irrigated acres enrolled	933	
Number of NOIs within BMAP	45	
Completed IV site visits	3	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	23	13
1 - 25	129	714
25 - < 50	4	126
50 - < 250	1	55
TOTAL	157	907

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	200
Cow/Calf	3,133
Equine	17
Multiple Commodities	1,447
Nursery	694
Row/Field Crop	28
Sod	209
TOTAL	5,728

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

34

https://www.fdacs.gov/Divisions-Offices/Agricultural-Water-Policy

Thank You!

http://www.fdacs.gov/Divisions-Offices/Agricultural-Water-Policy

Cori Hermle, Environmental Consultant
Corinne.Hermle@fdacs.gov (850) 688-6156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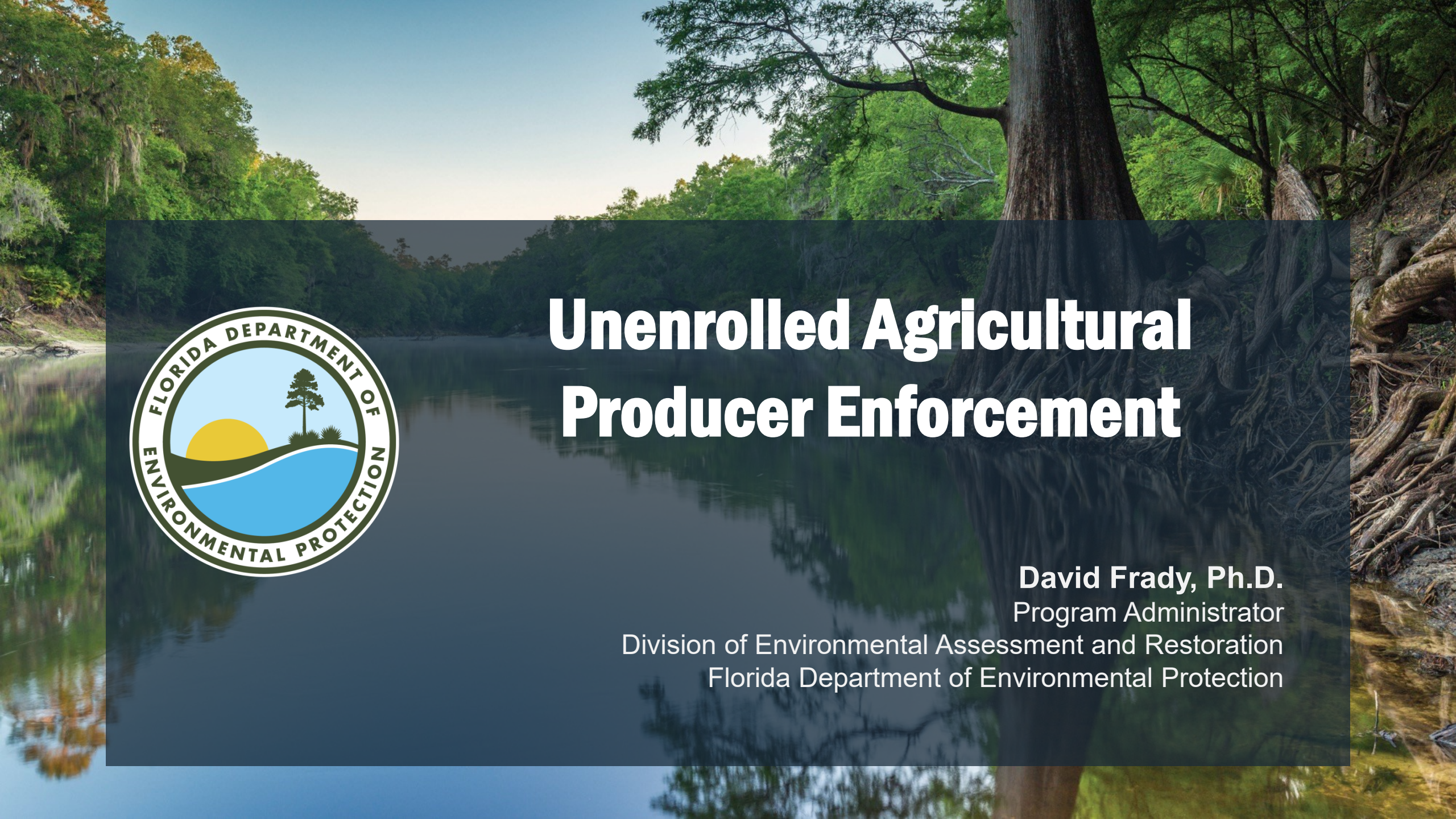

Unenrolled Agricultural Producer Enforcement

David Frady, Ph.D.
Program Administrator
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Clean Waterways Act

- The Clean Waterways Act (SB 712) was signed into law by Governor DeSantis in 2020
  - The law requires a wide range of water quality protection provisions aimed at minimizing impacts from known nutrient pollution sources
  - Agricultural landowners and producers within a Basin management Action Plan (BMAP) must enroll in one of two programs:
    - FDACS' Best Management Practices (BMP) program
    - Water Quality Monitoring approved by DEP
  - The law also requires FDACS to:
    - conduct on-site implementation verification (IV) site visits on properties enrolled in the BMP program every two years
    - Collect fertilizer data via the Nutrient Application Record Form (NARF)
    - **identify agricultural parcels within a BMAP that are out of compliance and refer them to DEP for enforcement**

Unenrolled Agricultural Producer Enforcement

FDACS Identifies non-compliant producers

- The Florida Department of Agriculture and Consumer Services (FDACS) uses various database to identify parcels within a BMAP that may be agricultural operations

FDACS refers non-compliant producers to FDEP for enforcement

- After confirming agricultural activity and attempting to enroll the producer in the BMP program, FDACS refers non-compliant producers to FDEP for enforcement

FDEP conducts outreach and engagement to bring producers to compliance

- It saves taxpayers money and is better for the environment to bring producers into compliance quickly through education and outreach efforts prior to taking formal enforcement action against small farmers

FDEP Initiates enforcement action

- If an agricultural producer fails to come into compliance, DEP initiates a civil suit to compel them to come into compliance
- FDEP is prioritizing enforcement actions based on parcel size and impact to the environment

Outreach and Engagement Has Been Successful

- DEP takes immediate action when a producer is referred for enforcement
  - More than 98% of the unenrolled agricultural parcels identified by FDACS and referred to FDEP have been brought into compliance

- There are no parcels greater than 100 acres out of compliance and the majority are smaller than 10 acres

- FDEP is engaged in an ongoing campaign to educate landowners of their requirements and bring them into compliance quickly through additional outreach and on-site visits

THANK YOU

David Frady

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Contact Information:
850-245-8559
David.Frady@FloridaDEP.gov


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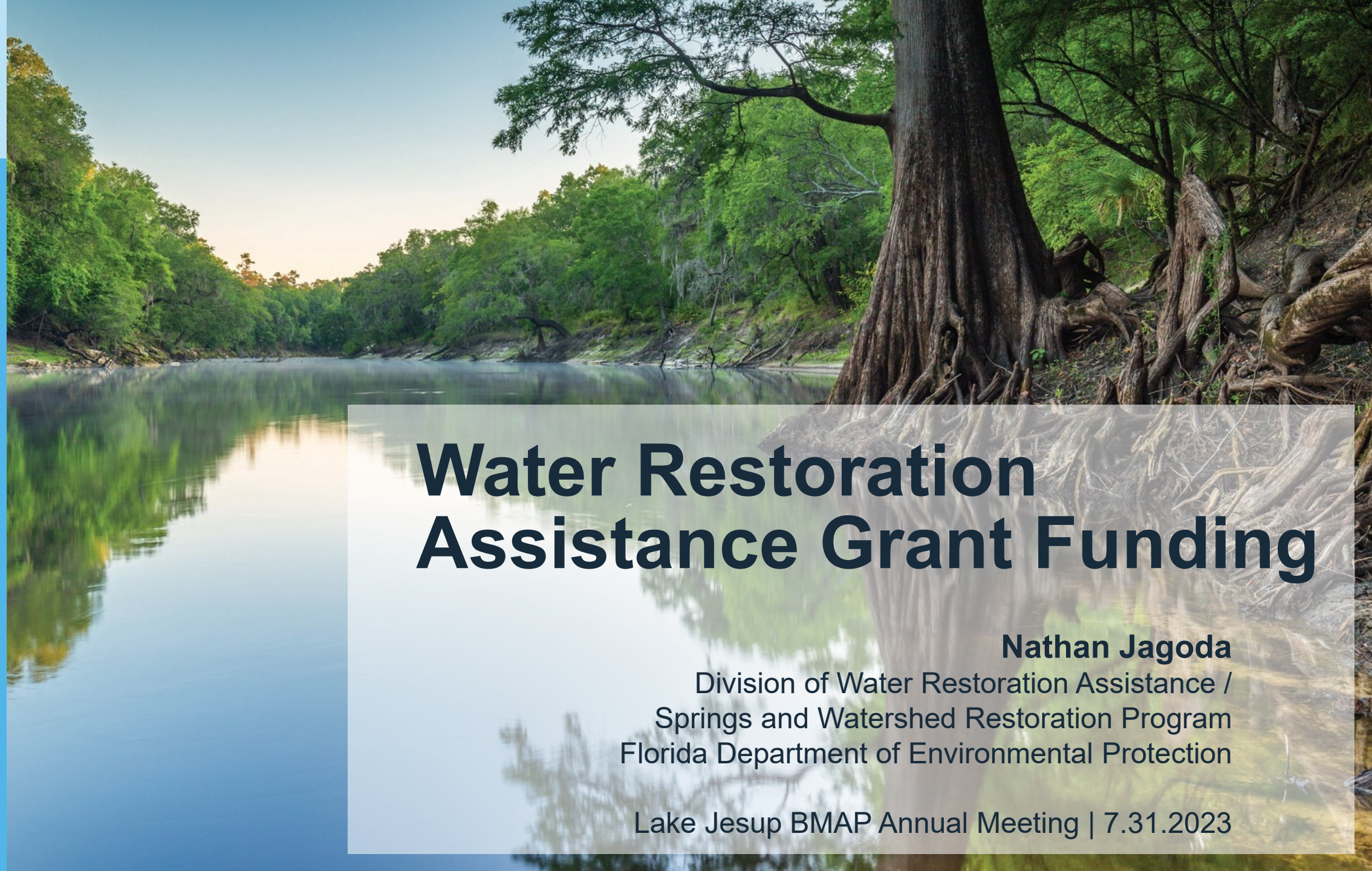
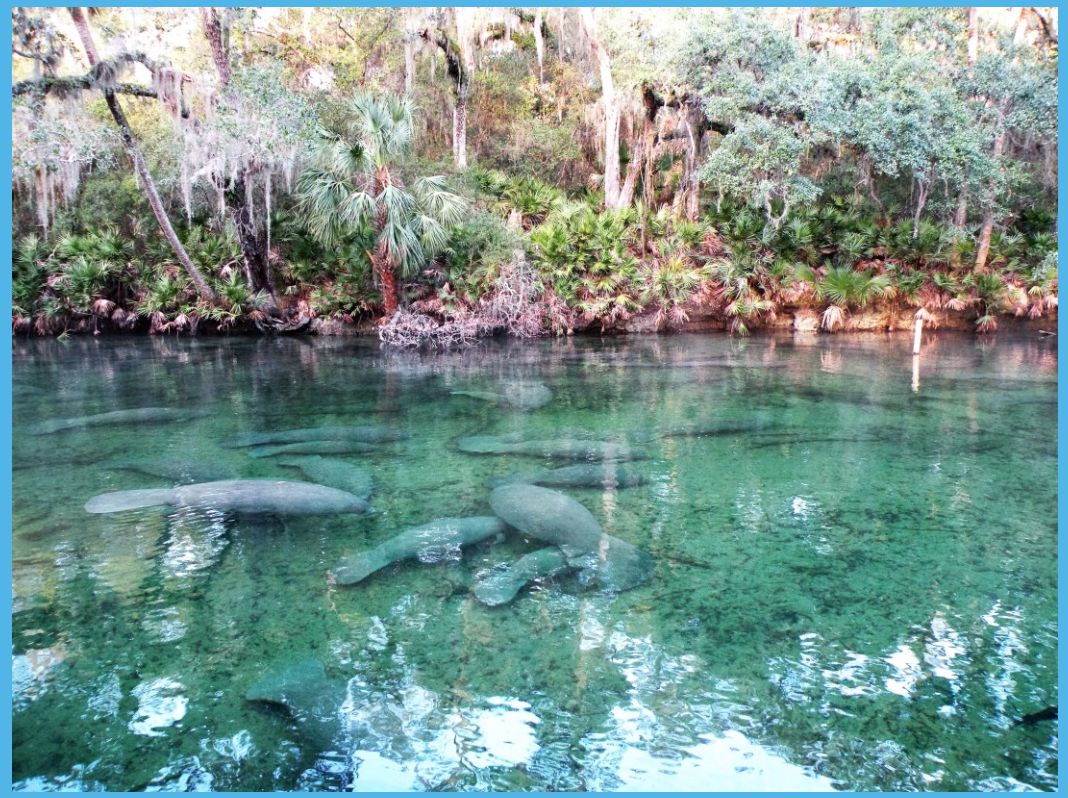


Water Restoration Assistance Grant Funding

Nathan Jagoda
Division of Water Restoration Assistance /
Springs and Watershed Restoration Program
Florida Department of Environmental Protection

Lake Jesup BMAP Annual Meeting | 7.31.2023

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



About The Springs Grant

Annual state appropriation. Typically $50m

Eligible projects are land acquisition and capital projects that protect the quality and/or quantity of water from springs:

- **Agricultural Best Management Practices**
- **Wastewater**
- **Water Conservation**
- **Hydrologic Restoration**
- **Stormwater**
- **Other types of Water Quality and Quantity**

Springs Grant Submittal Process

Project proposals are submitted to the corresponding jurisdictional Water Management District

- WMDs begin solicitation in late fall to early winter
- Projects are evaluated by the WMD and reviewed by the Governing Board at a public meeting
- Project proposals sent to DEP in May

Springs Grant Evaluation

- DEP consolidates list of proposed projects and posts for public comment
- DEP will review and make recommendations
- Factors considered in evaluating projects:
  - Nutrient reductions
  - Water savings
  - Cost sharing
  - Readiness to proceed
  - Whether project is in BMAP area
  - Whether project impacts spring that has an MFL
- Springs awards were announced in early December 2022

Water Quality Improvement Grant

- Established under 403.0673, F.S. (Formerly the Wastewater Grant)
- To be eligible for funding, a project must improve the quality of waters that:
  - Are not attaining nutrient or nutrient-related standards;
  - Have an established total maximum daily load; or,
  - Are located within a BMAP or a reasonable assurance plan area adopted by final order, an accepted alternative restoration plan area, or located within a rural area of opportunity.
- Project proposals may be submitted through the Protecting Florida Together portal (open through August)

Water Quality Improvement Grant

Eligible projects include:

- Septic to sewer projects
- Wastewater treatment facility improvements that result in improvements to surface water or groundwater quality
- Stormwater treatment projects
- Projects that qualify as a cooperative agricultural regional water quality improvement element as part of a BMAP
- Where central sewerage is not available, retrofitting OSTDS to upgrade such systems to enhanced nutrient-reducing onsite sewage treatment and disposal systems or other equivalent wastewater system that achieves 65% reduction in total nitrogen
- BMAP projects

NONPOINT SOURCE MANAGEMENT: EPA 319(H) NONPOINT SOURCE GRANT

Federal Grant through the U.S. EPA

- Construction, education and monitoring.
- 40% match requirement, may use state grant/loans towards match.
- Monitoring requirement.
- Planning and design may be eligible for match.
- May take two years to receive grant award.

Eligibility

- Green stormwater infrastructure
- Water quality improvement/restoration
- Groundwater protection
- Stormwater BMPs
- Agricultural BMPs
- Nonpoint source education
- Septic to sewer connections

NONPOINT SOURCE MANAGEMENT: STATE WATER QUALITY ASSISTANCE GRANT (SWAG)

State grant for projects that reduce stormwater pollutant loadings in impaired waterbodies.

- Shovel-ready construction projects.
- No required match.
- No required water quality monitoring.
- Fast application to grant award date.

Eligibility:

- Green stormwater infrastructure
- Water quality improvement
- Groundwater protection
- Water quality restoration
- Best management practices
- Reuse water

NONPOINT SOURCE MANAGEMENT: HOW TO SUBMIT A PROPOSAL?

Grant proposals for 319 and SWAG grants are accepted throughout the year:

- Contact Nonpoint Source Program grant coordinator for a copy of the latest grant proposal form.
- Department review and evaluation periods occur twice per year.
- If funding is available, grant awards may be awarded out of cycle.
- Project proposals may be submitted through the Protecting Florida Together portal (open through August).

Questions:

- If you are considering a grant application, contact the Nonpoint Source Program grant coordinator to discuss eligible grant components, funding available, match requirements, etc.

STATE REVOLVING FUND (SRF)

Florida's largest financial assistance program for water infrastructure, capitalized by federal grants through EPA.

- Low-interest loans to local governments to plan, design, and build or upgrade water, wastewater and stormwater facilities.
- Interest rates on loans are below market rates and vary based on the economic wherewithal of the community.
- Discounted assistance (e.g., very low interest rates, grants, etc.) for small communities is available.
- Federal requirements for fair wages, American Iron and Steel, asset management plans.
- Eligible as match to the 319(h) and SWAG grants.

THANK YOU

Nathan Jagoda
Division of Water Restoration Assistance
Springs and Watershed Restoration Program

Contact Information:
850-245-2946
Nathan.Jagoda@FloridaDEP.gov

Protecting Florida Together
https://protectingfloridatogether.gov/state-action/grants-submissions

Division of Water Restoration Assistance
https://floridadep.gov/wra


FLORIDA DEPARTMENT OF
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THANK YOU

Evelyn Becerra
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Contact Information:
850-245-8547
Evelyn.Becerra@FloridaDEP.gov