# Caloosahatchee River and Estuary Basin Management Action Plan (BMAP) Annual Meeting

**Via Webinar**
Webinar Registration Link:

https://attendee.gotowebinar.com/register/2505574148548458839

*April 28, 2025*
*1 PM EDT*

## Agenda

- Caloosahatchee River and Estuary Basin Management Action Plan (BMAP) Background.
- Statewide Annual Report and Reduction Progress for Caloosahatchee River and Estuary BMAP.
- Programmatic Updates.
- Questions/Comments.
- Technical Updates.
- Look Ahead and Resources.
- Questions/Comments.

Please note the site for documents relating to the Caloosahatchee River and Estuary BMAP:
BMAP Public Meetings | Florida Department of Environmental Protection

For more information on the Caloosahatchee River and Estuary BMAP, contact: Tony Tomalewski, 850-245-8683.
Anthony.Tomalewski@FloridaDEP.gov

# WEBINAR HOUSEKEEPING

## Attendee Participation

Open your control panel.

Join audio:

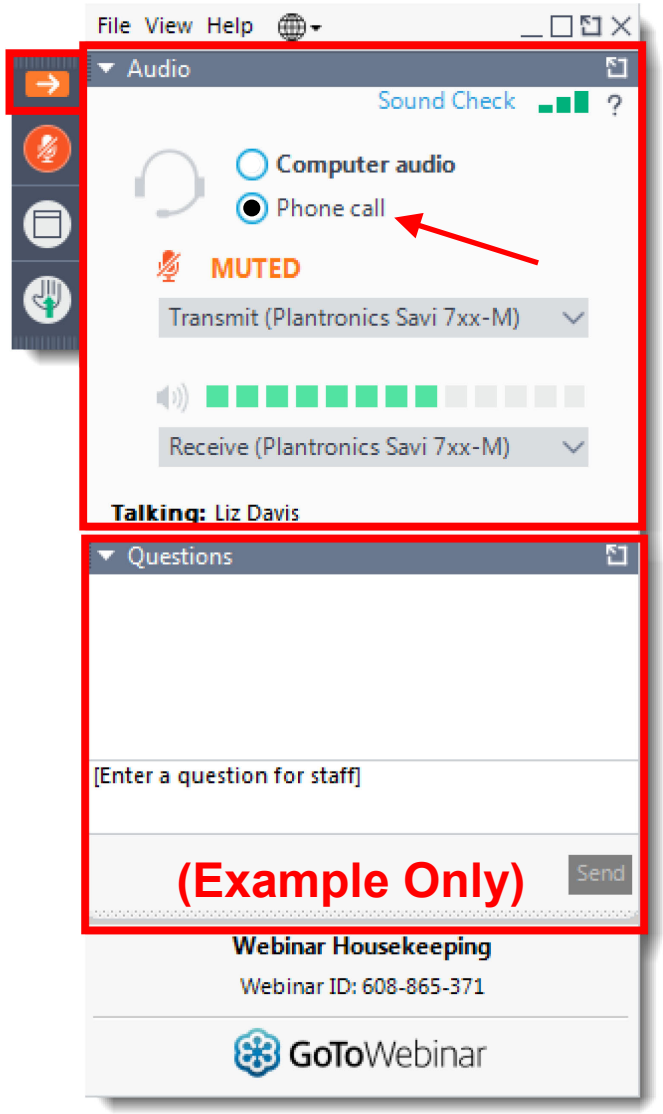
- Choose Computer Audio **or**
- Choose Phone Call and dial using the information provided with your registration.

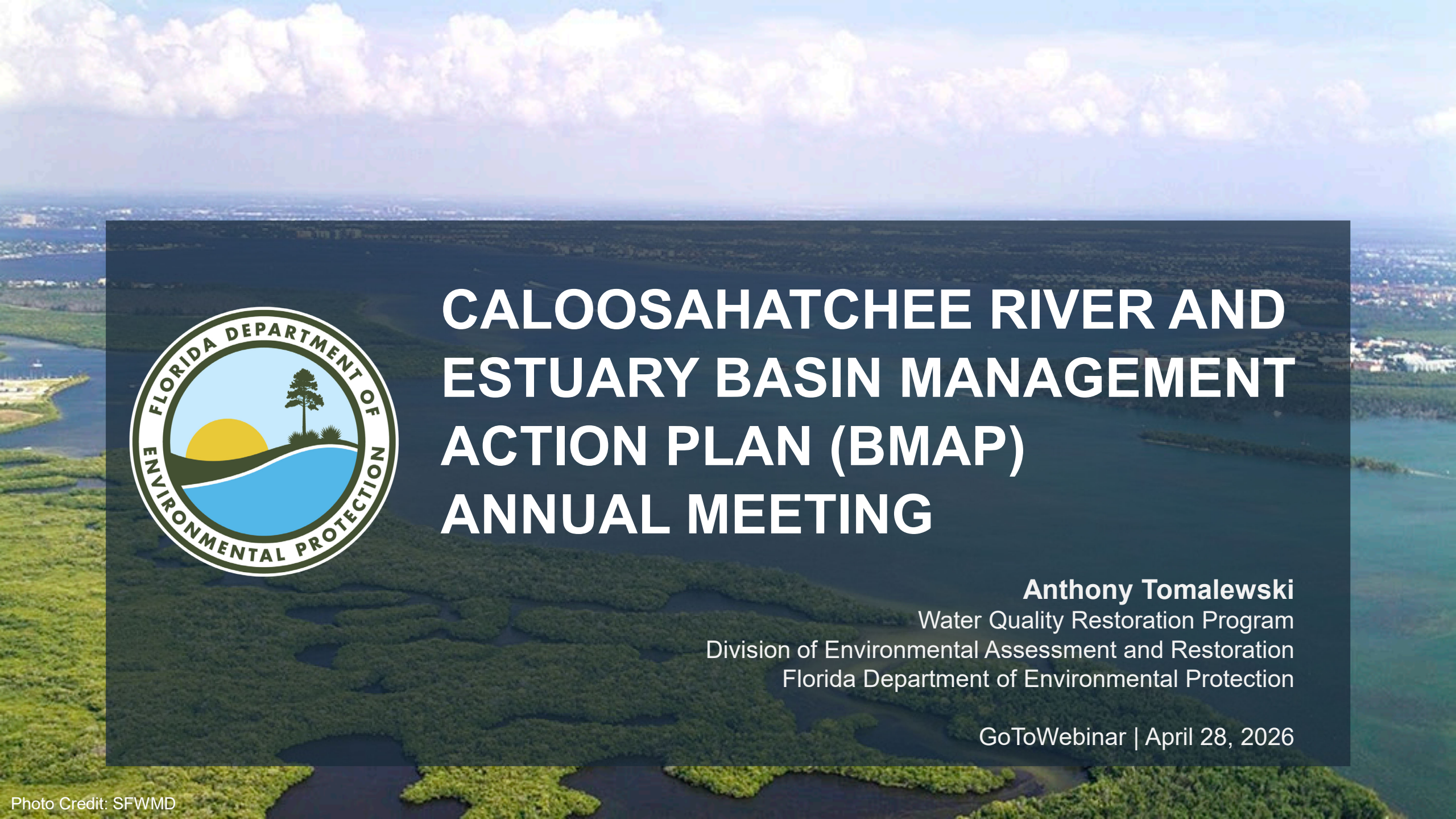
Attendee audio will automatically be muted.

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 file transfer protocol (FTP) site after the webinar.





# CALOOSAHATCHEE RIVER AND ESTUARY BASIN MANAGEMENT ACTION PLAN (BMAP) ANNUAL MEETING

**Anthony Tomalewski**
Water Quality Restoration Program
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

GoToWebinar | April 28, 2026

Photo Credit: SFWMD

# ANNUAL MEETING AGENDA

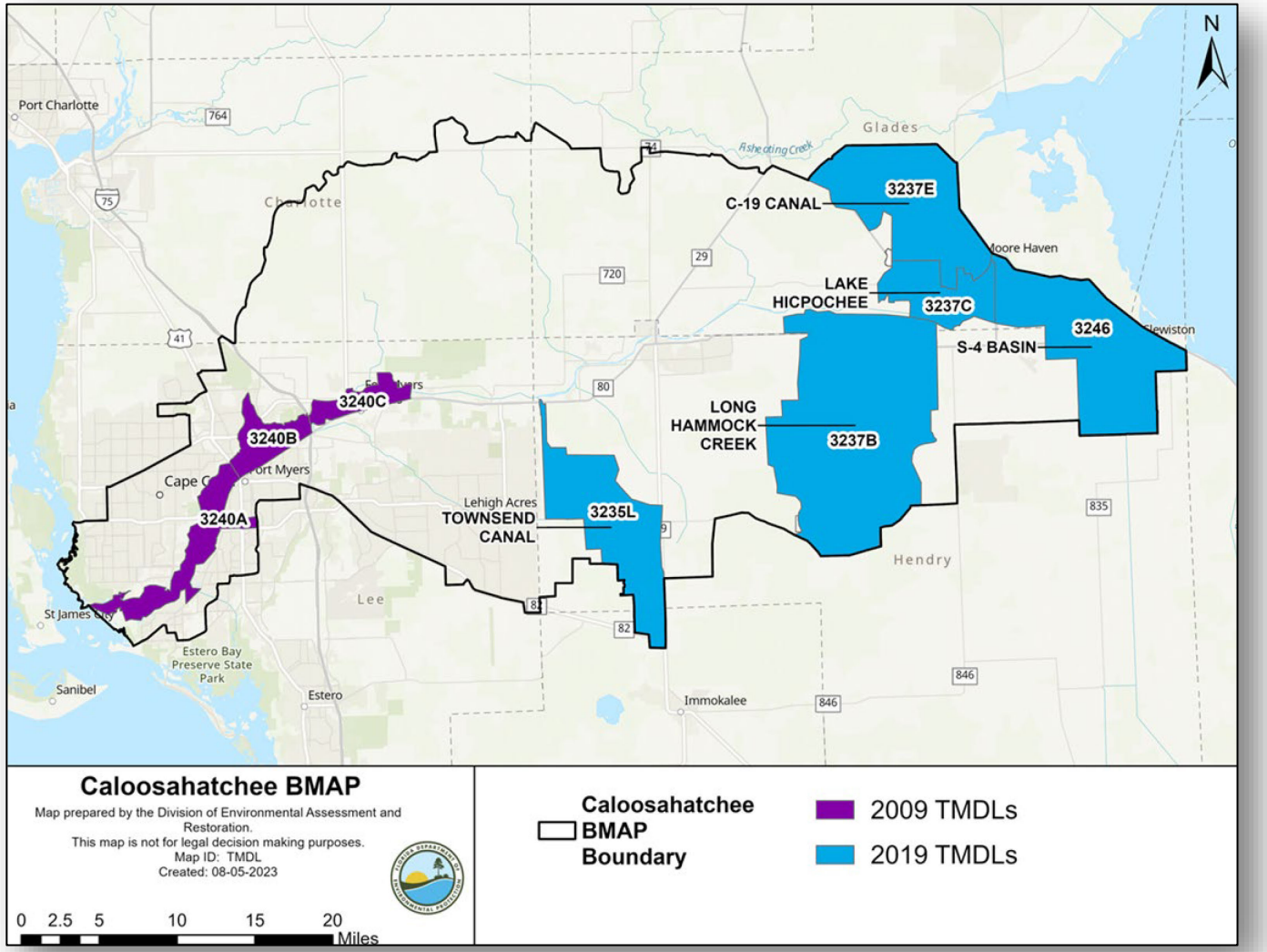
## Agenda

- Preliminary Statewide Annual Report (STAR) 2025.
- Florida Department of Environmental Protection (DEP) Year in Review.
- Stakeholder Project Highlight.
- Florida Department of Agriculture and Consumer Services (DACS) Updates.
- South Florida Water Management District (SFWMD) Updates.
- Water Quality Analysis Results.
- Allocation Approach.
- Looking Ahead.


Photo Credit: SFWMD

# CALOOSAHATCHEE RIVER & ESTUARY BMAP

## BACKGROUND




### Tidal BMAP:

- Developed in 2012 to address Total Nitrogen (TN) in the estuary.

### Current BMAP:

- Developed in 2020 to encompass complete watershed and include new Tributary Total Maximum Daily Loads (TMDLs)
- Updated in 2025 to include legislative updates.

# CALOOSAHATCHEE RIVER AND ESTUARY BMAP
## STAKEHOLDERS

| Type of Organization/Entity | Name | |
|---|---|---|
| **Responsible Entities** | Agriculture | River Hall CDD |
| | Charlotte County | Sail Harbour CDD |
| | Collier County | Verandah East CDD |
| | Glades County | Verandah West CDD |
| | Hendry County | Barron Water Control District |
| | Lee County | Clewiston Water Control District |
| | City of Cape Coral | Collins Slough Water Control District |
| | City of Clewiston | County Line Drainage District |
| | City of Fort Myers | Cow Slough Water Control District |
| | City of LaBelle | Devil's Garden Water Control District |
| | City of Moore Haven | Disston Island Conservancy District |
| | Lucaya Community Development District (CDD) | Flaghole Drainage District |
| | | Gerber Groves Water Control District |
| | Moody River Estates CDD | Hendry-Hilliard Water Control District |
| | Port LaBelle CDD | Lehigh Acres Municipal Services District |
| | Portico CDD | Sugarland Drainage District |
| **Responsible Agencies** | County Health Departments<br>DACS<br>Florida Department of Environmental Protection (DEP)<br>Florida Department of Transportation (DOT) District 1<br>SFWMD | |

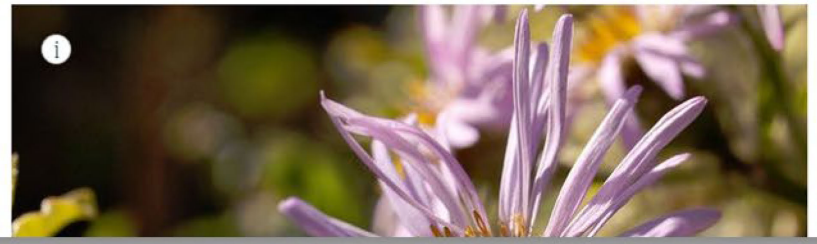
# CALOOSAHATCHEE RIVER AND ESTUARY BMAP
## STORYMAP

Overview | Summary of BMAP Requirements | Projects | Water Quality | Milestones/Required Reductions | Progress | TN Trend Results | TP Trend Results | Deadlines | Contacts and More Information

### Overview

The Caloosahatchee Estuary BMAP was first adopted in November 2012 to implement the total nitrogen (TN) TMDL in the watershed. Executive Order 19-12 required an update to this BMAP in 2020. The updated **Caloosahatchee River and Estuary BMAP**, adopted in February 2020, replaced the original BMAP, incorporated new TMDLs for tributaries to the Caloosahatchee River, and included components that were recommended in the 2017 5-Year Review.

In 2023, House Bill 1379 added the additional requirement that BMAPs be assessed and updated every five years. The most recent 5-Year Review, completed in 2023, informed the latest BMAP update adopted on June 27, 2025. The BMAP includes management strategies or projects to be implemented by the responsible stakeholders that aim to reduce elevated levels of nitrogen and phosphorus in the estuary.



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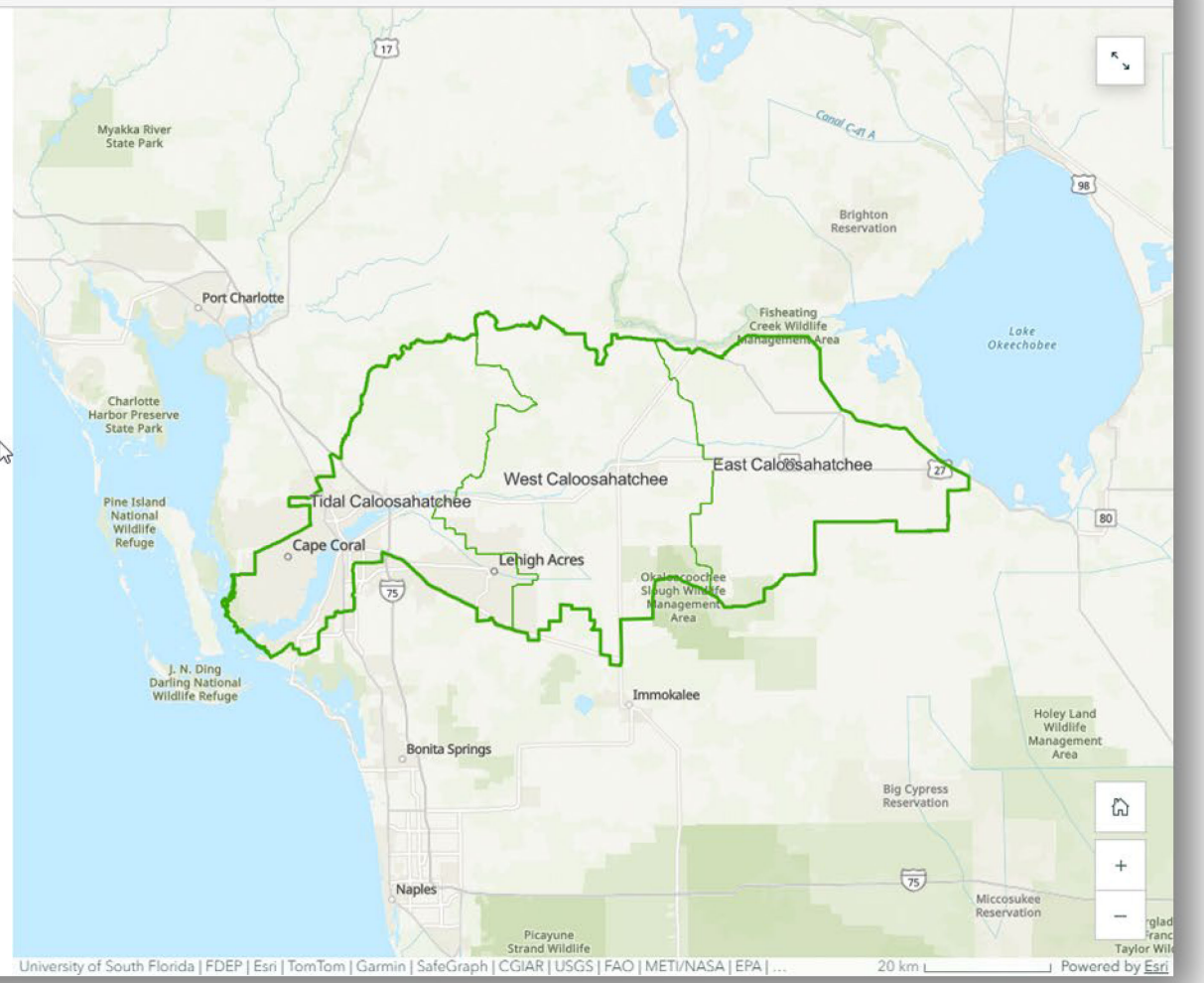
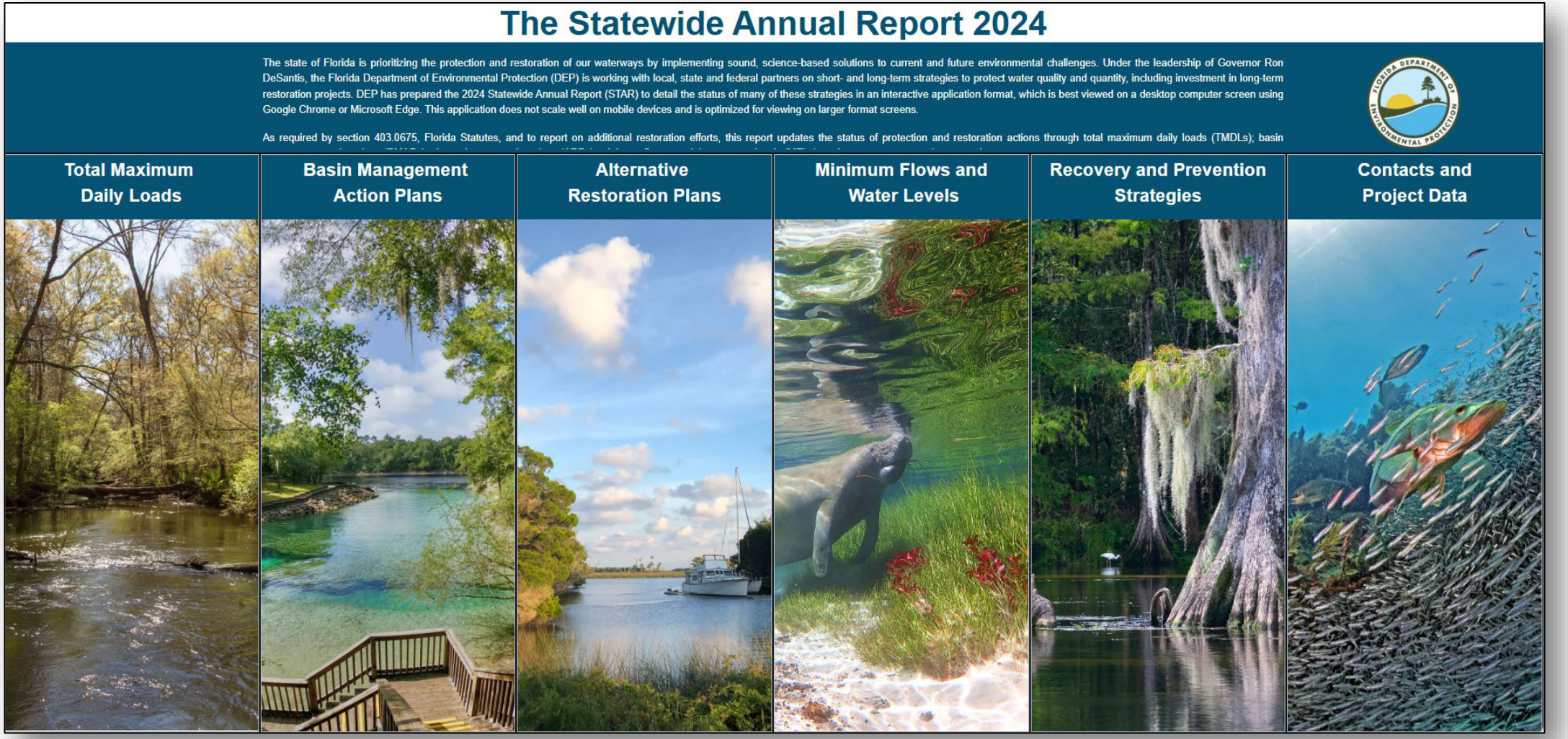


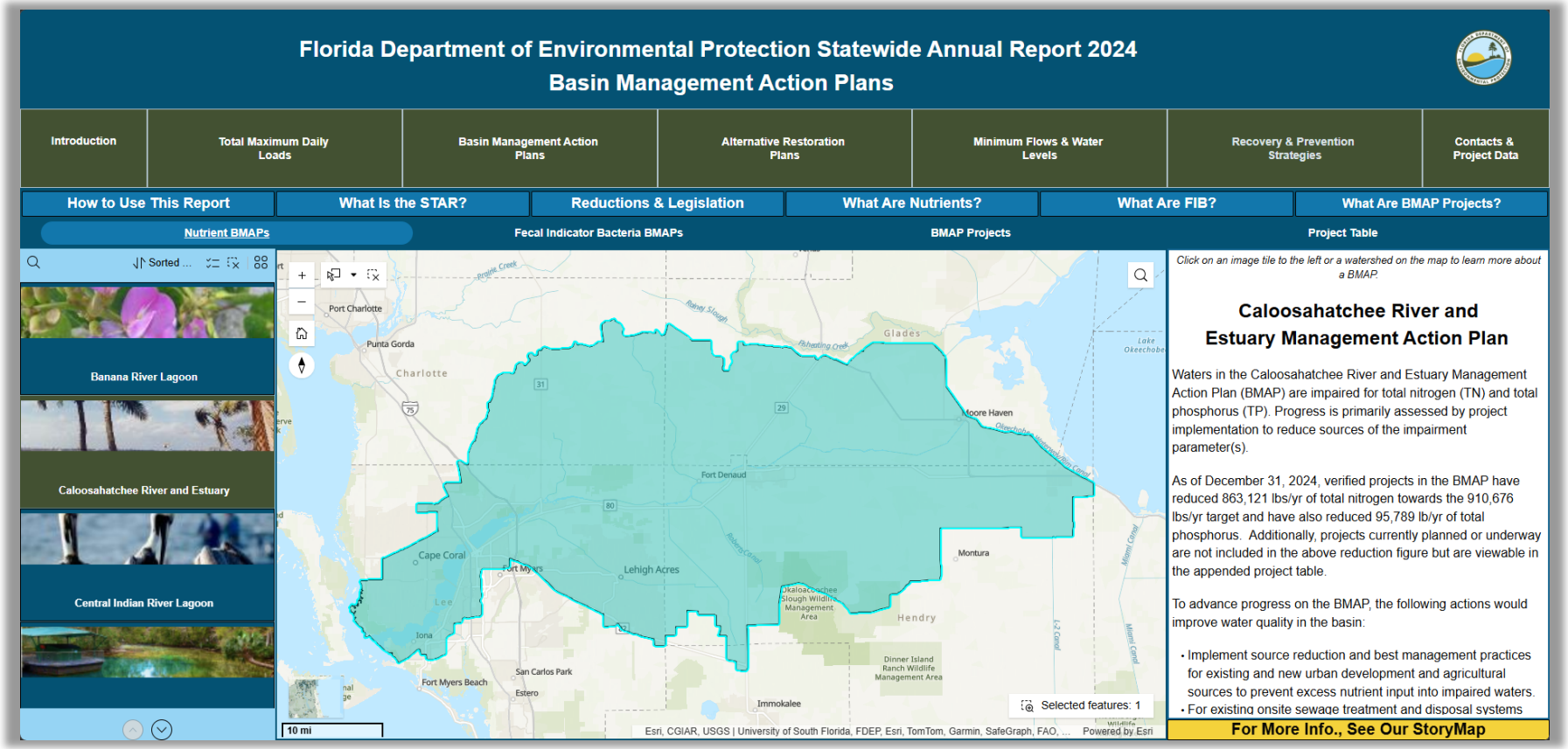

Caloosahatchee Basin Management Action Plan

# STAR
## STATEWIDE ANNUAL REPORT




https://floridadep.gov/STAR

# STAR
## STATEWIDE ANNUAL REPORT

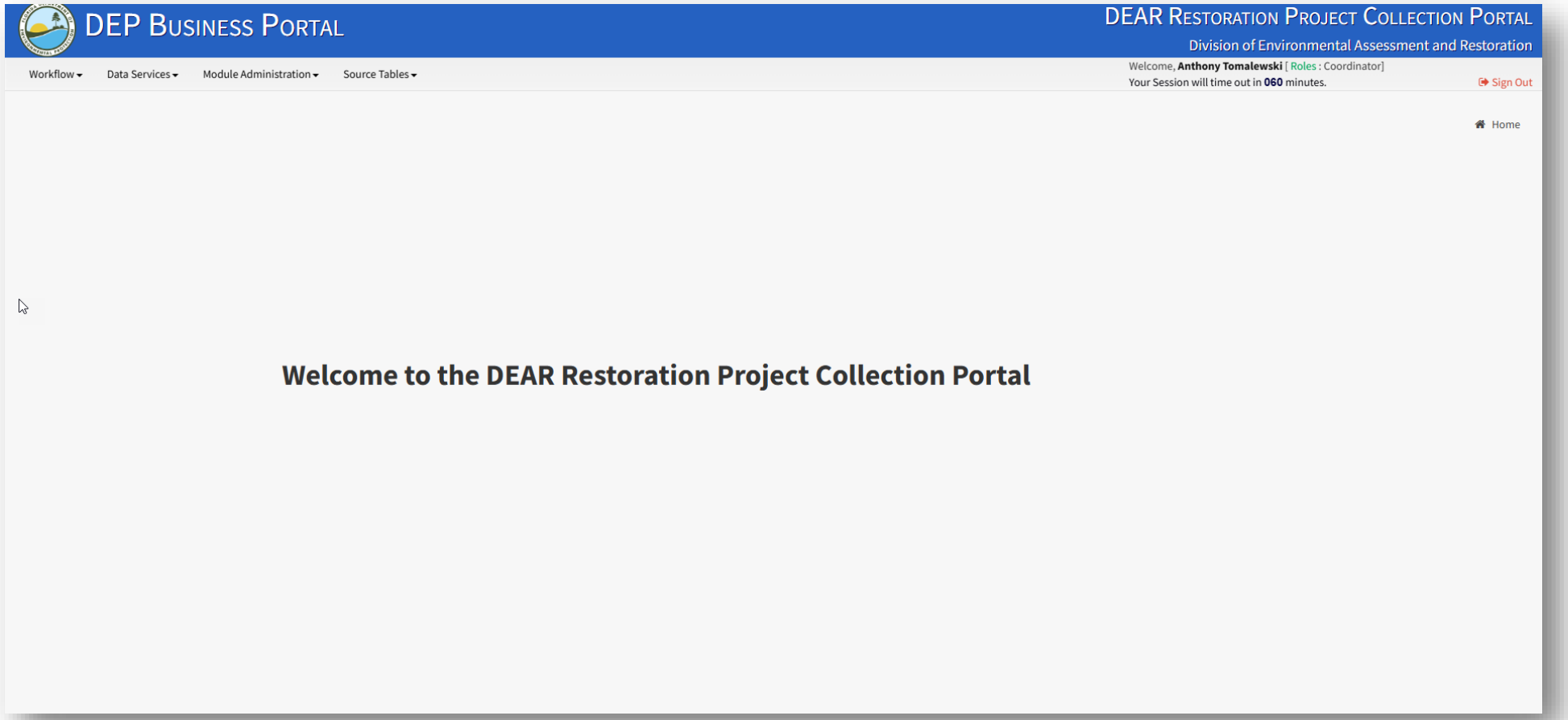



- Report will be published by July 1, 2026, to update reporting through Dec. 31, 2025.
- Summarizes accomplishments in the BMAPs statewide.
- Reports on restoration projects and management strategies.
- Data download available.

# STAR

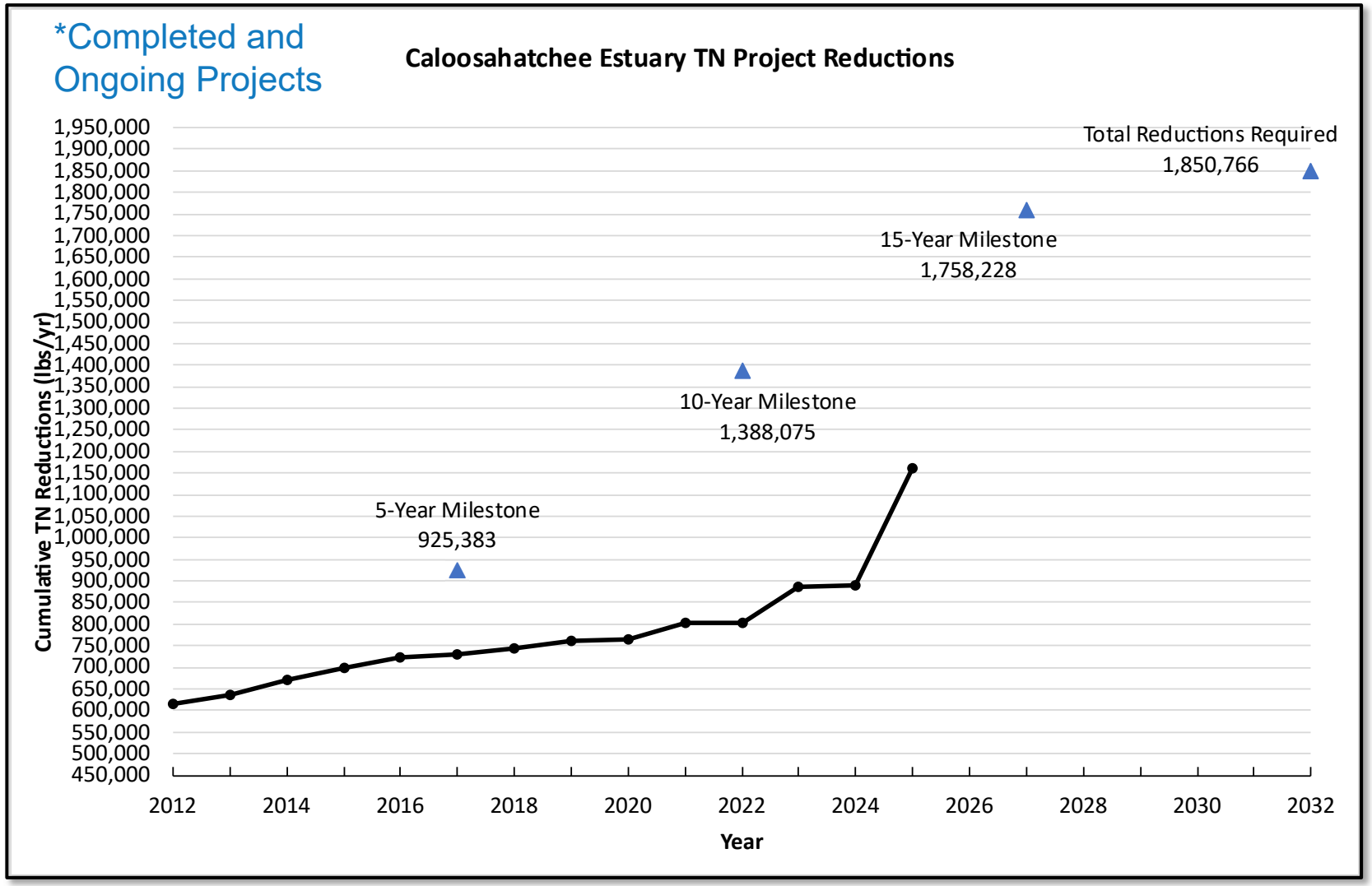
## BMAP PORTAL FOR PROJECT COLLECTION

Notify your BMAP coordinator if changes in access to the portal are needed.



# CALOOSAHATCHEE RIVER & ESTUARY BMAP

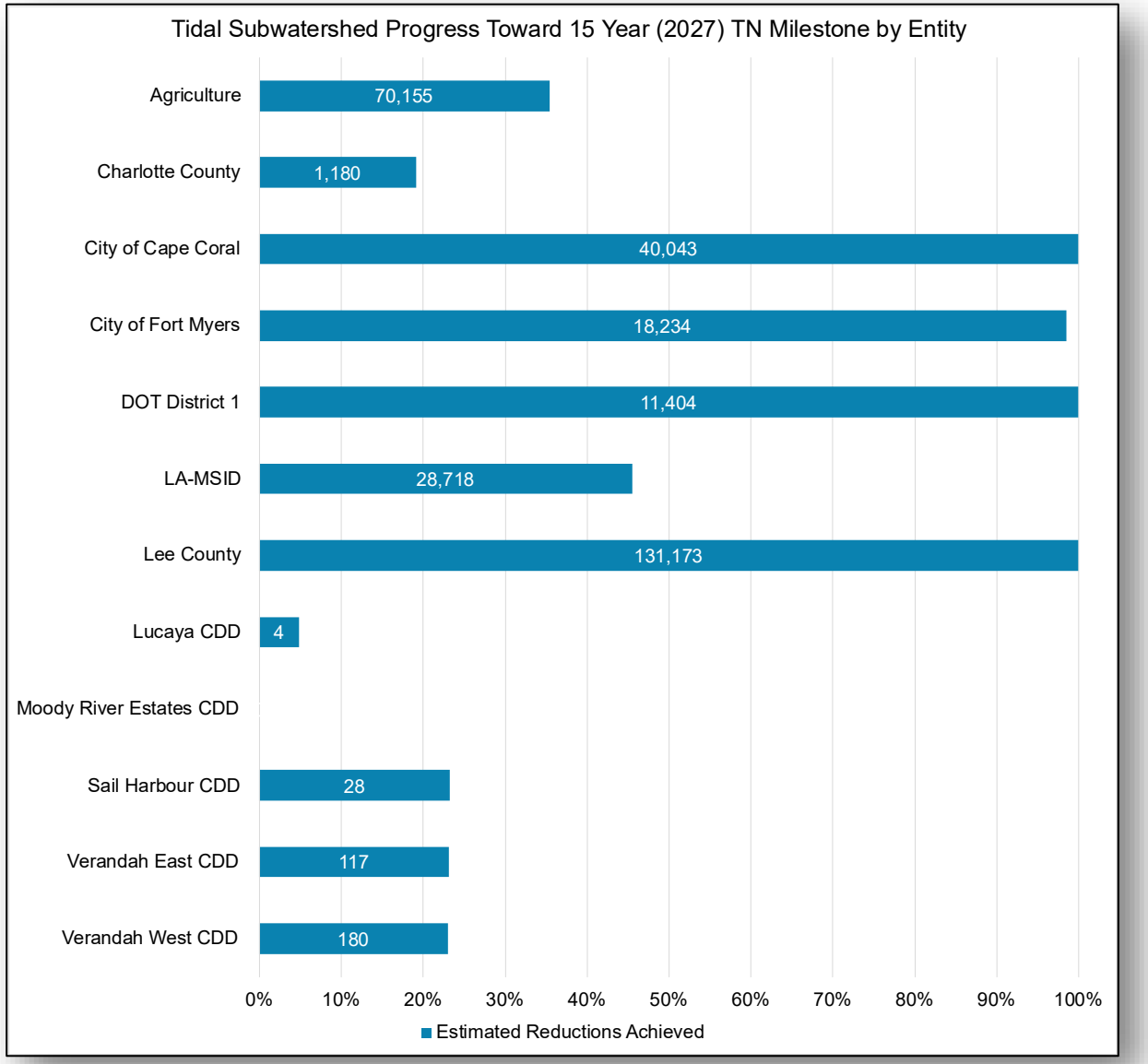
## *PRELIMINARY 2025 STAR UPDATE – ESTUARY




lbs/yr = pounds/year

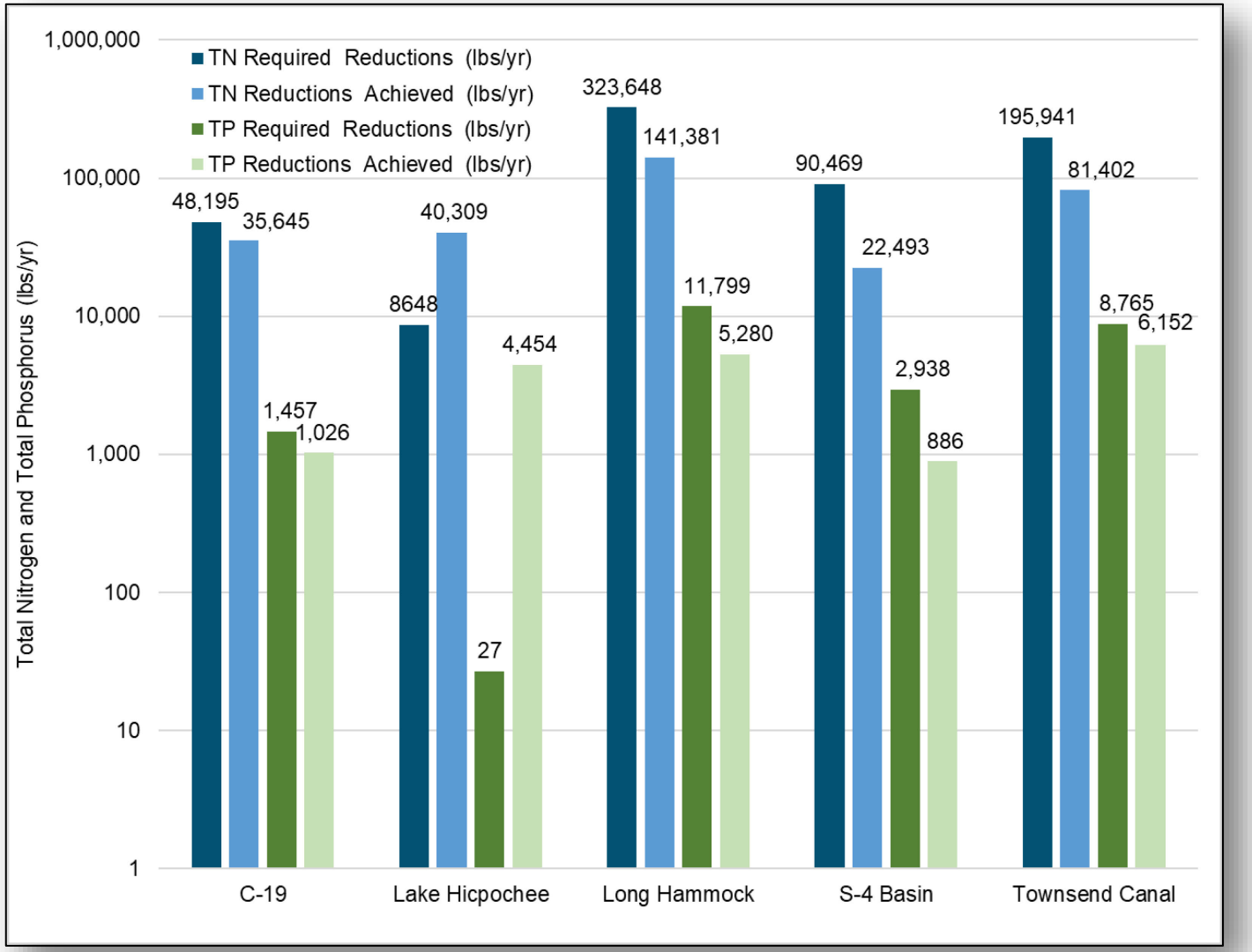
# CALOOSAHATCHEE RIVER & ESTUARY BMAP

## *PRELIMINARY 2025 STAR UPDATE – TIDAL SUBWATERSHED



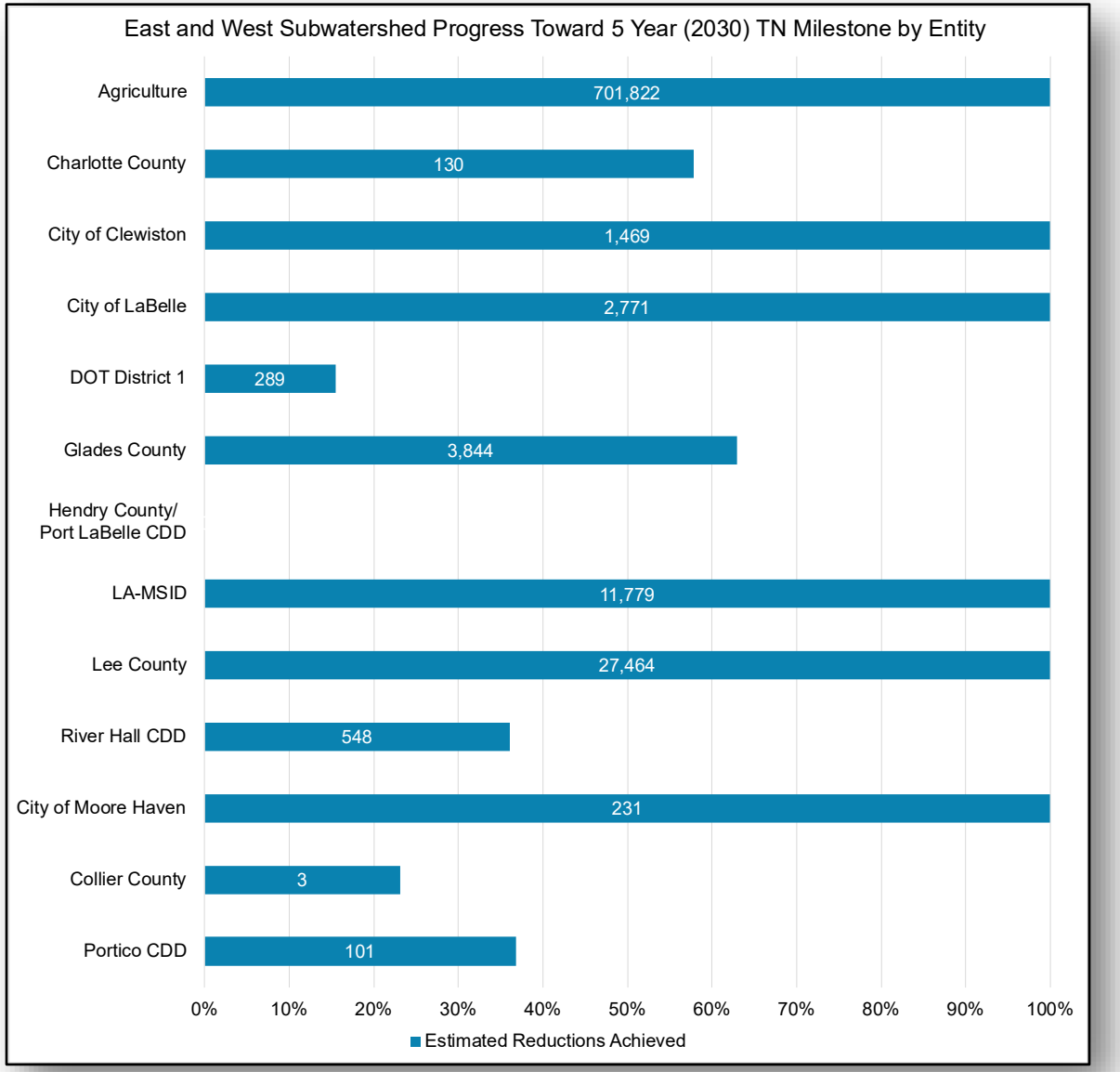
# CALOOSAHATCHEE RIVER & ESTUARY BMAP

## *PRELIMINARY 2025 STAR UPDATE – TRIBUTARIES



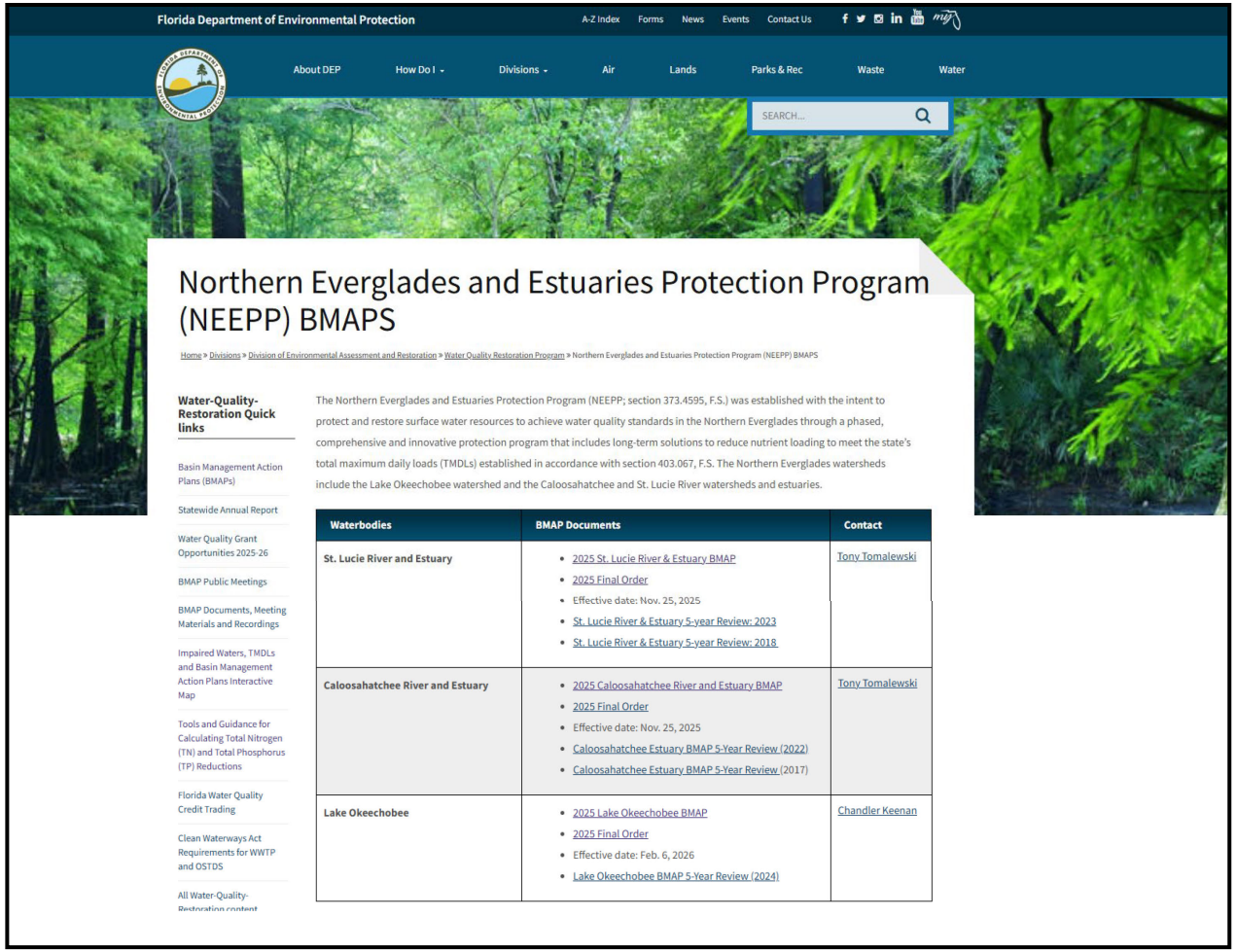
# CALOOSAHATCHEE RIVER & ESTUARY BMAP

## *PRELIMINARY 2025 STAR UPDATE – TRIBUTARIES



# BMAP UPDATES
## COMPLETED AND ONGOING EFFORTS

- Water quality data evaluation.
- Water quality trend analyses.
- Hotspot analysis.
- Evaluation of the monitoring network.
- Planning and development of regional projects with partner agencies.
- Identification of projects for BMAP milestones.
- Increased outreach to local governments, special districts and industry.
- Incorporation of Clean Waterways Act requirements.
- Incorporation of House Bill (HB) 1379 and HB 1557 requirements.



# POLICY AND REPORTING REMINDERS

| Source | Topic | Requirement |
|---|---|---|
| Wastewater | Wastewater Effluent Limits | Where the law does not provide effluent limits or a compliance timeframe, new effluent standards **will take effect at the time of permit renewal or no later than five years after BMAP adoption**, whichever is sooner. Tables 15 and 16 in the BMAP document. |
| Wastewater | Connection to Sewer | **Beginning February 2026 and every two years thereafter**, utilities with sewer lines in BMAPs must provide DEP a list of properties with existing OSTDS where sewer is available (as defined in 381.0065, F.S.) but have not connected. |
| Agriculture | Concentrated animal feeding operations (CAFOs) - Dairies | To minimize infiltration of liquid manure, if a dairy uses a clay liner or some other type of engineered waste storage pond system, **within two years of BMAP adoption,** the dairy must submit to DEP an evaluation identifying the environmental, technical, and economic feasibility of upgrading to a concrete or geosynthetic liner. |

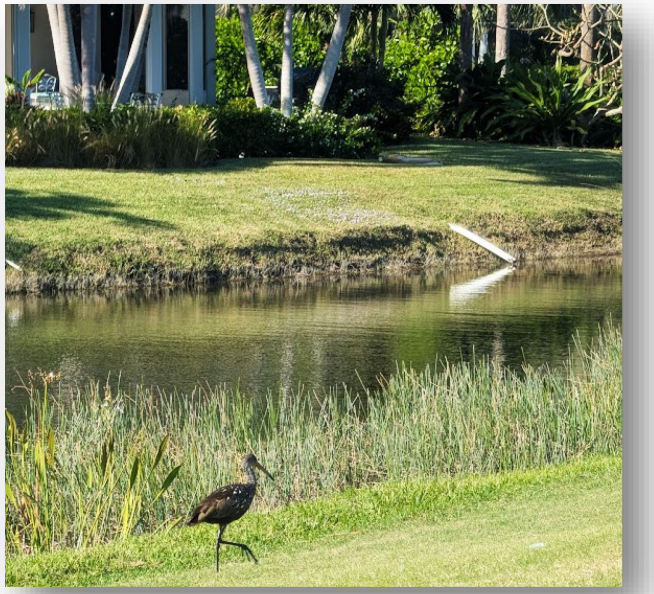
# GOLF COURSE REQUIREMENTS

| Date | Requirement for Public Golf Courses | Requirement for Private Golf Courses |
|---|---|---|
| **Nov. 27, 2026** | Draft Nutrient Management Plan (NMP) Due | Draft NMP Due |
| **Dec. 31, 2026** | Superintendents must have completed their University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Golf Course Best Management Practices Program Certification | - |
| **Nov. 27, 2027** | Final NMP Due | Final NMP Due |
| **Mid-November to Mid-January Annually** | Annual reporting during STAR. Beginning November 2028. | Annual reporting during STAR. Beginning November 2028. |

# BMAP UPDATES
## COMPLETED AND ONGOING EFFORTS

- Stakeholder meetings held:
  - Four (4) public meetings/workshops.
  - Twelve (12) individual entity meetings.
- New stakeholder group added to the BMAP: Golf Courses.
  - Required creation of a golf course database, which did not exist prior to 2025.
  - One informational webinar held in 2025, one planned for May 2026.
  - Outreach ongoing.
- Caloosahatchee Hydrological Simulation Program – FORTRAN (HSPF) model updates and ArcNLET model development completed.

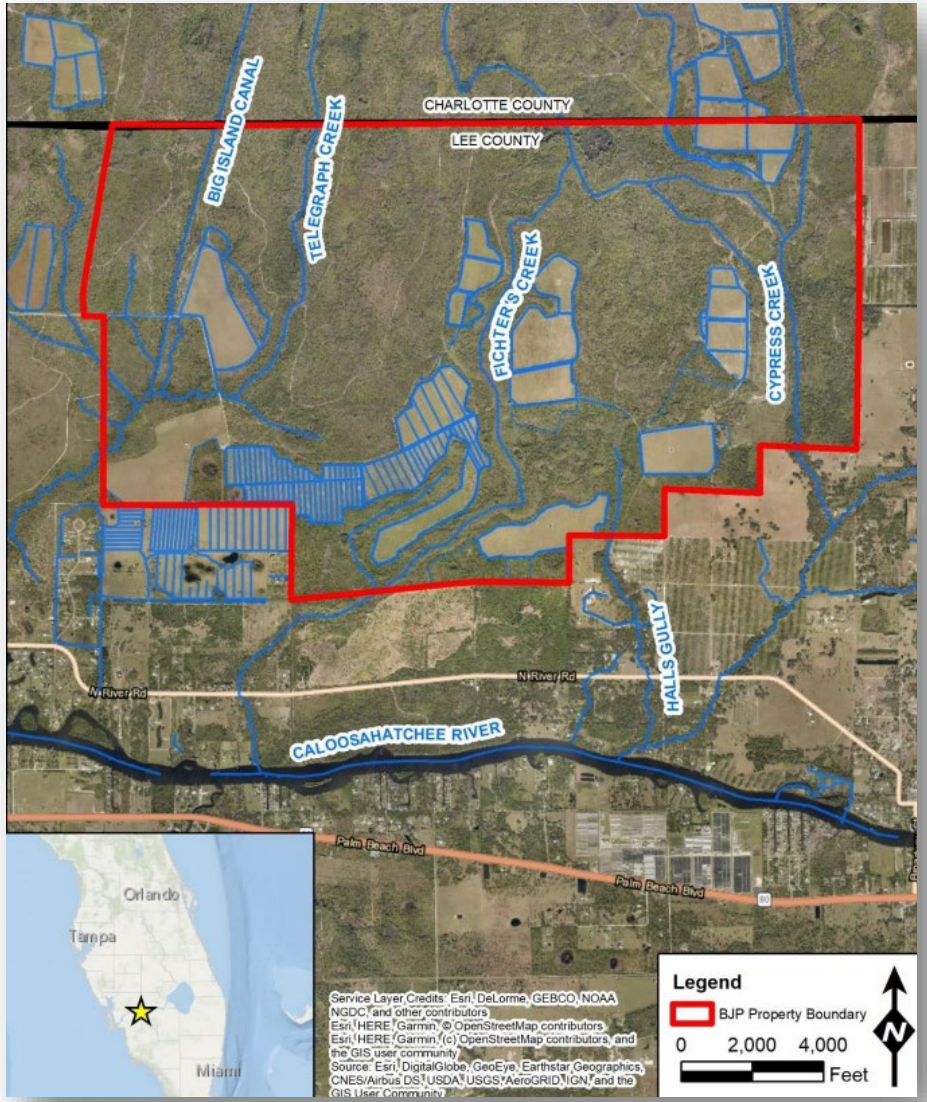
Limpkin seen on a South Florida golf course during site visit.



In person technical meeting with responsible entities in Fort Myers.

# BMAP STAKEHOLDER SPOTLIGHT

## LEE COUNTY'S BOB JANES RESTORATION PROJECT






Project Benefits:

- Reducing water discharge by 55 ac/ft
- 1,439 lbs/yr of TN reductions
- 225 lbs/yr of TP reductions

ac/ft = acre-foot

# *Caloosahatchee River & Estuary BMAP Annual Meeting*

**April 28, 2026**

**Jennifer Thera**

**Florida Department of Agriculture and Consumer Services**

**Office of Agricultural Water Policy**

# Office of Agricultural Water Policy (OAWP) Team

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# Mission

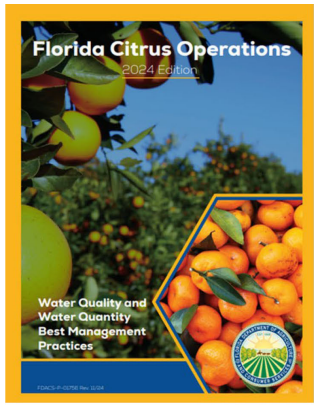
Implement strategies that protect Florida's water resources while promoting the sustainability of agriculture.

# Strategic Goals

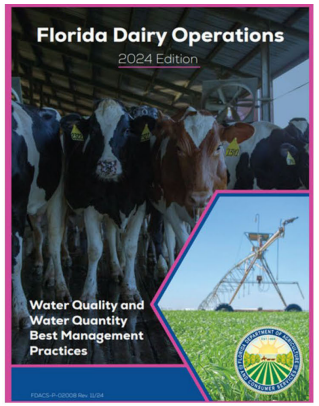
- Expand and enhance agricultural Best Management Practice (BMP) implementation.
- Ensure the availability of an adequate and sustainable agricultural water supply.
- Manage cost share programs that support agricultural non-point source BMP implementation and water resource protection projects.

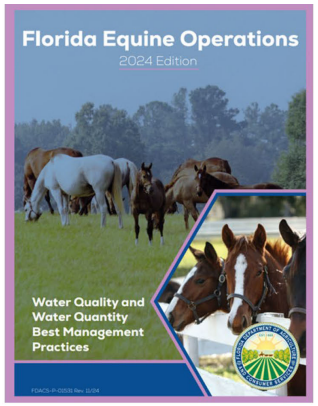
# BMP Manuals

OAWP recently updated 9 manuals and adopted a 10th, new manual for Small Farms and Specialty Livestock

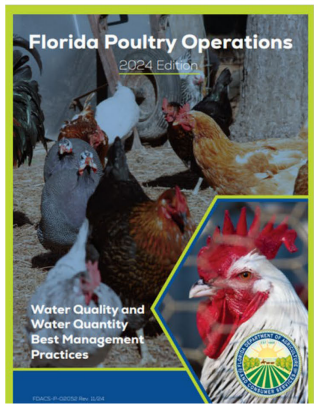


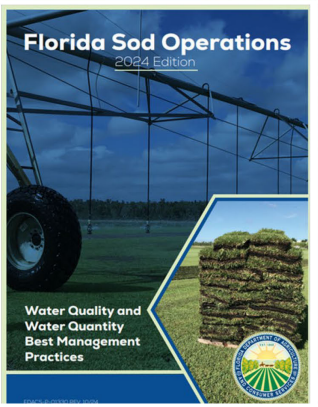


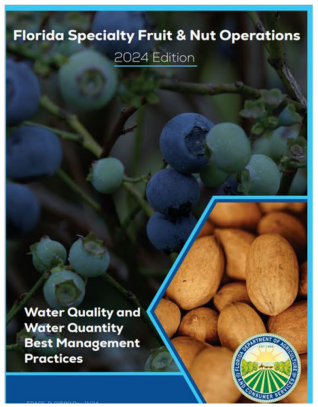


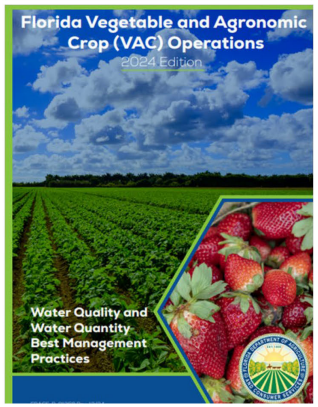



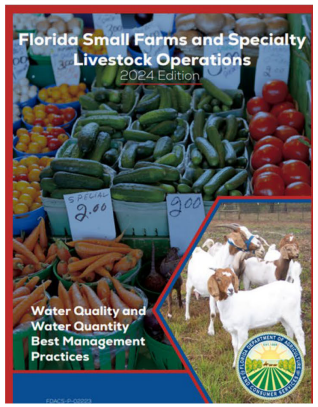





| Manual | Last Updated | Stage | Dates |
|---|---|---|---|
| Sod | 2008 | Rule Effective | November 12, 2024 |
| Cattle | 2009 | Rule Effective | December 22, 2024 |
| Procedures | 2021 | Rule Effective | October 30, 2024 |
| Small Farms and Specialty Livestock | New! | Rule Effective | February 23, 2025 |
| Specialty Fruit and Nut | 2011 | Rule Effective | February 24, 2025 |
| Citrus | 2013 | Rule Effective | March 4, 2025 |
| Nursery | 2014 | Rule Effective | March 12, 2025 |
| Vegetable and Agronomic Crop | 2015 | Rule Effective | February 27, 2025 |
| Poultry | 2016 | Rule Effective | February 13, 2025 |
| Dairy | 2016 | Rule Effective | March 5, 2025 |
| Equine | 2012 | Rule Effective | March 12, 2025 |

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

# Producer Options in BMAP Areas

1. Enroll in our BMP Program 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 Caloosahatchee BMAP

| Subwatershed | Total Ag Acres | Enrolled Ag Acres | % Enrolled | Irrigated Acres | Enrolled Irrigated Acres | % Enrolled |
|---|---|---|---|---|---|---|
| Tidal Caloosahatchee | 53,442 | 43,307 | **81%** | 2,068 | 1,863 | **90%** |
| West Caloosahatchee | 178,048 | 149,093 | **84%** | 29,770 | 27,184 | **91%** |
| East Caloosahatchee | 190,472 | 171,814 | **90%** | 107,249 | 101,968 | **95%** |

FDACS BMP Program enrollment as of Dec 2025 and the Draft 13th FSAID Geodatabase

# Enrollments within the Caloosahatchee Tributaries BMAP

| Tributary | Total Ag Acres | Enrolled Ag Acres | % Enrolled | Irrigated Acres | Enrolled Irrigated Acres | % Enrolled |
|---|---|---|---|---|---|---|
| Townsend Canal | 28,091 | 26,376 | **94%** | 8,130 | 7,992 | **98%** |
| C-19 | 24,457 | 23,335 | **95%** | 12,808 | 12,056 | **94%** |
| Lake Hicpochee | 5,037 | 4,541 | **90%** | 3,212 | 3,203 | **100%** |
| Long Hammock Creek | 66,206 | 55,368 | **84%** | 31,392 | 29,759 | **95%** |
| S-4 | 29,024 | 27,308 | **94%** | 27,480 | 26,295 | **96%** |

FDACS BMP Program enrollment as of Dec 2025 and the Draft 13th FSAID Geodatabase

# Agricultural Acres Enrolled within Caloosahatchee BMAP

| BMP Manual | Acres |
|---|---|
| Cattle | 83,899 |
| Citrus | 16,871 |
| Conservation Plan | 39,895 |
| Dairy | 141 |
| Equine | 31 |
| Multiple Commodities | 157,583 |
| Nursery | 834 |
| Poultry | 40 |
| Specialty Fruit & Nut | 152 |
| Sod | 132 |
| Temporarily Inactive | 1,740 |
| Vegetable & Agronomic Crop | 62,896 |
| **TOTAL** | **364,213** |

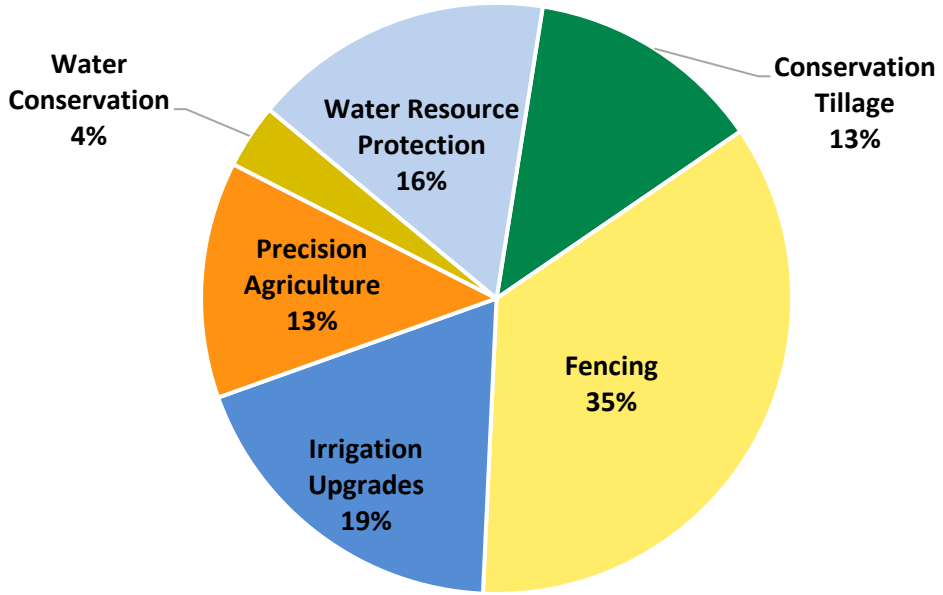
# BMP Cost Share within NEEPP

## Since 2024

Project Count: 89

Reimbursement: $4,046,090

Producers: 71




| Category | Examples of Information Collected |
|---|---|
| Fencing | Grazing schedule; Map of fence cost-share; Map of resource concerns on site; Stocking rate (greater/less than threshold depending on species and property size); Sensitive features on the property; Purpose of fencing (e.g., rotational grazing) |
| Irrigation Upgrades (often automated) | Mobile Irrigation Lab (MIL) data; Irrigated acres; Irrigation frequency; Whether fertigating; Nitrogen and phosphorus rates from fertigation; Prior irrigation type; Whether irrigation systems are automated; Number of automated vs. non-automated systems |
| Alternative Water for Livestock | GPS location; Sensitive features on the property; Whether rotational grazing will be used year-round; Presence of cross-fencing; Top three benefits for the operation |
| Culverts | Volume; Whether a nutrient reduction has been calculated (and whether one could be calculated to support funding); Active time of year; Presence of open culverts (if applicable) |

# Agricultural Regional Projects

**Floating Aquatic Vegetative Tilling (FAVT)**

- East Caloosahatchee (1)
- Arbuckle Creek (5)*
- Fisheating Creek (6)

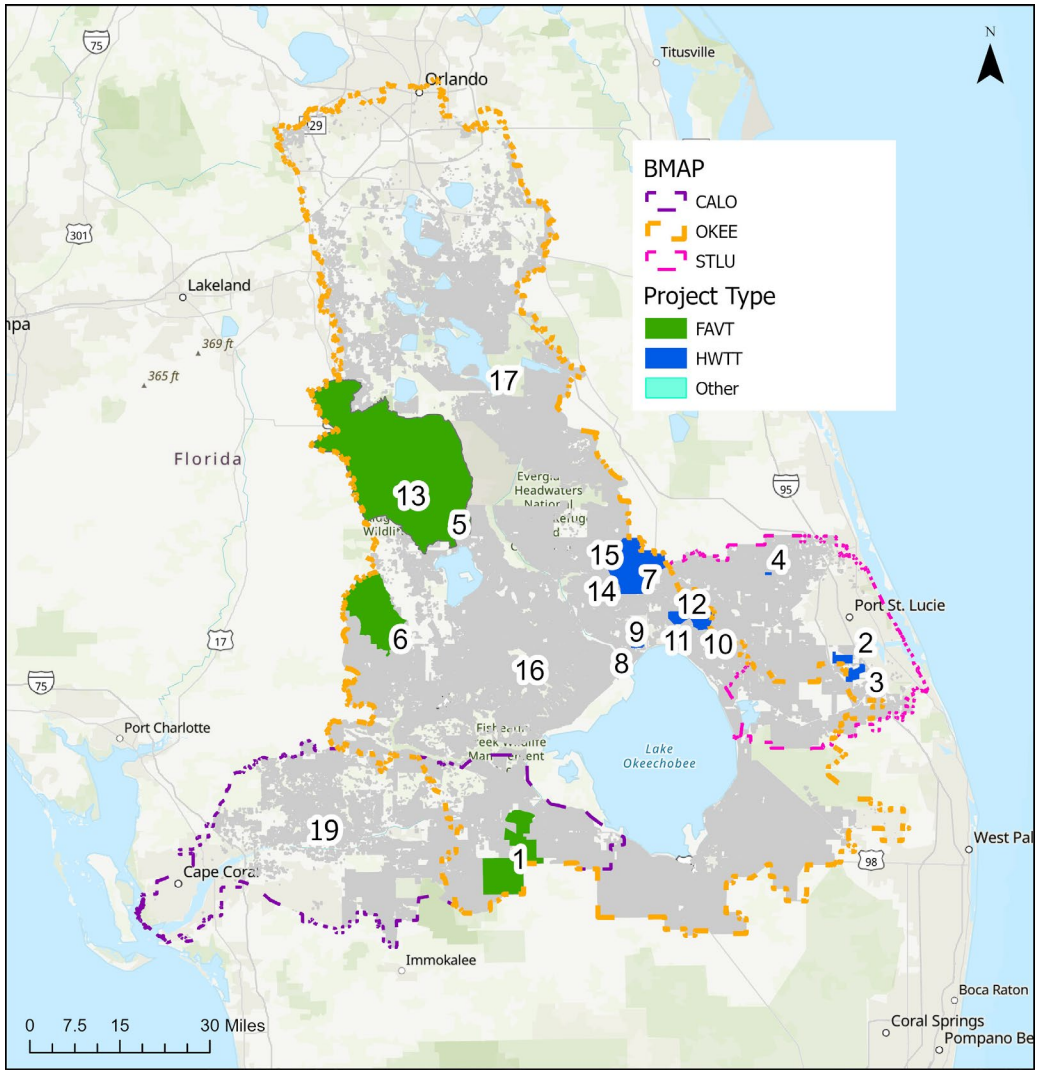
**Hybrid Wetland Treatment Technology (HWTT)**

- Bessey Creek (2)
- Danforth Creek (3)
- Grassy Island (7)
- Ideal Holding (4)
- Lemkin Creek (8)/Wolff Ditch (9)
- Nubbin Slough (10)
- Mosquito Creek (11)
- Taylor Creek/Nubbin Slough (18)*

**Other Projects**

- Larson Dairy (12)*
- Triple G Dairy (13)*
- Milking R Dairy (14)*
- Bassett Grove Water Storage & Treatment (15)*
- Lykes Brothers - Harney Pond (16)
- Cypress Chapter (17)*
- Four Corners (19)

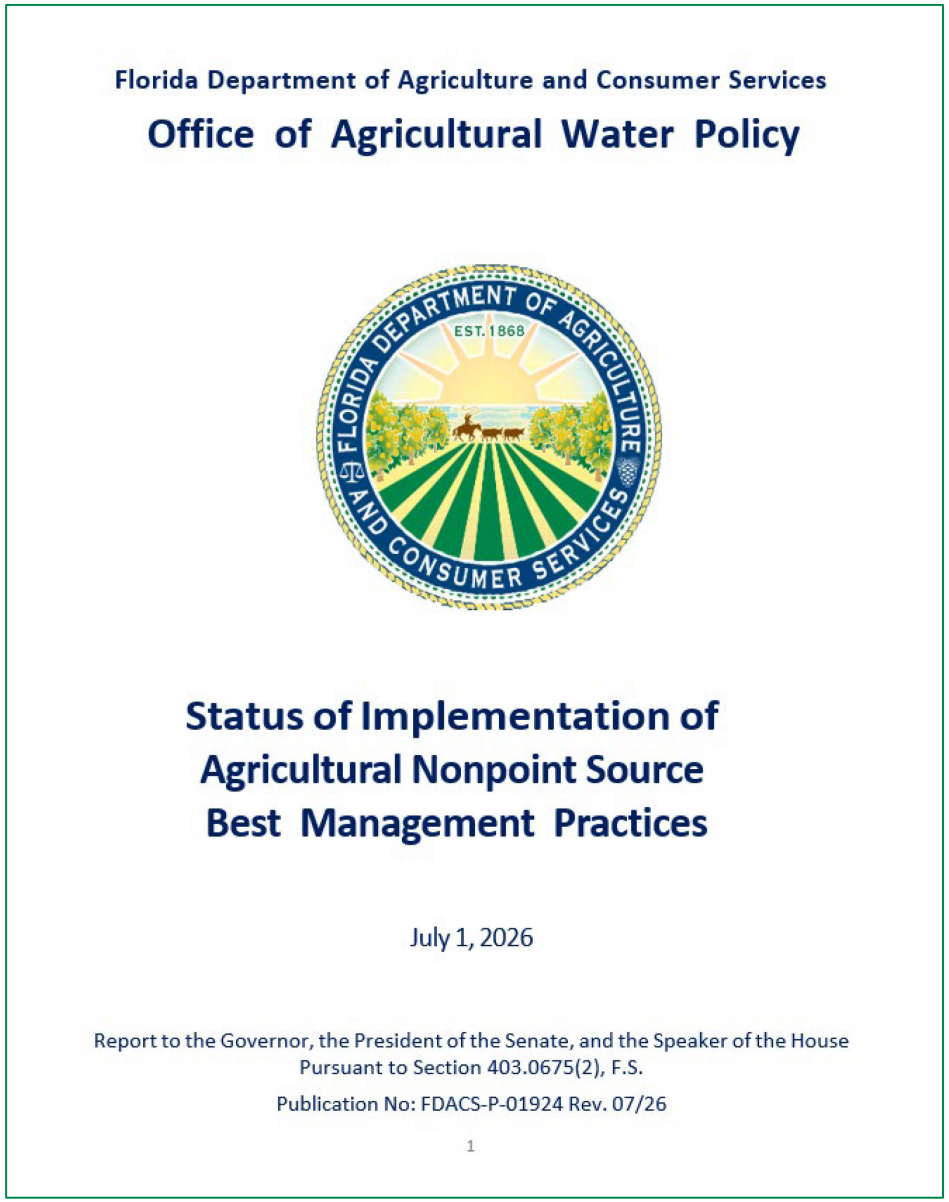
*New projects that have not been completed




Caloosahatchee:
Total TN Reductions: 36,284 lbs/yr
Total TP Reductions: 5,522 lbs/yr

# 2025 FDACS Legislative Annual Report – Available July 1

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



Florida Department of Agriculture and Consumer Services

Office of Agricultural Water Policy

Status of Implementation of Agricultural Nonpoint Source Best Management Practices

July 1, 2026

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. 07/26

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# Thank You!

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

**Jennifer Thera, Environmental Consultant**
**Jennifer.Thera@FDACS.gov – (850) 617-1722**

# SFWMD Update

## Caloosahatchee River Watershed Construction Project

**Stacey Ollis, PMP**

Principal State Policy Analyst

Everglades and Estuaries Protection Bureau

Caloosahatchee River and Estuary BMAP Annual Meeting

April 28, 2026

# SFWMD Update

*Caloosahatchee Estuary oyster reef*

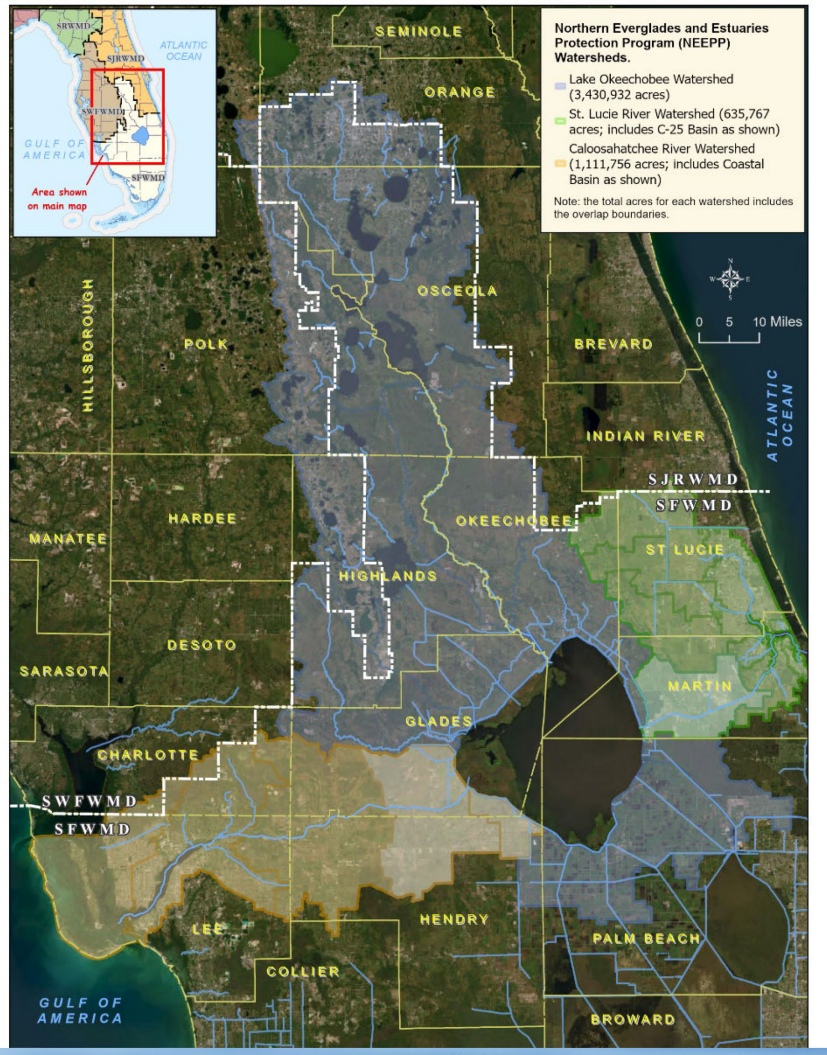
- Northern Everglades Program Overview
- 2026 Caloosahatchee River Watershed Construction Project Review
  - Project Spotlights
  - Water Storage Benefits
- Watershed Protection Plan Reporting

# Northern Everglades and Estuaries Protection Program (NEEPP)

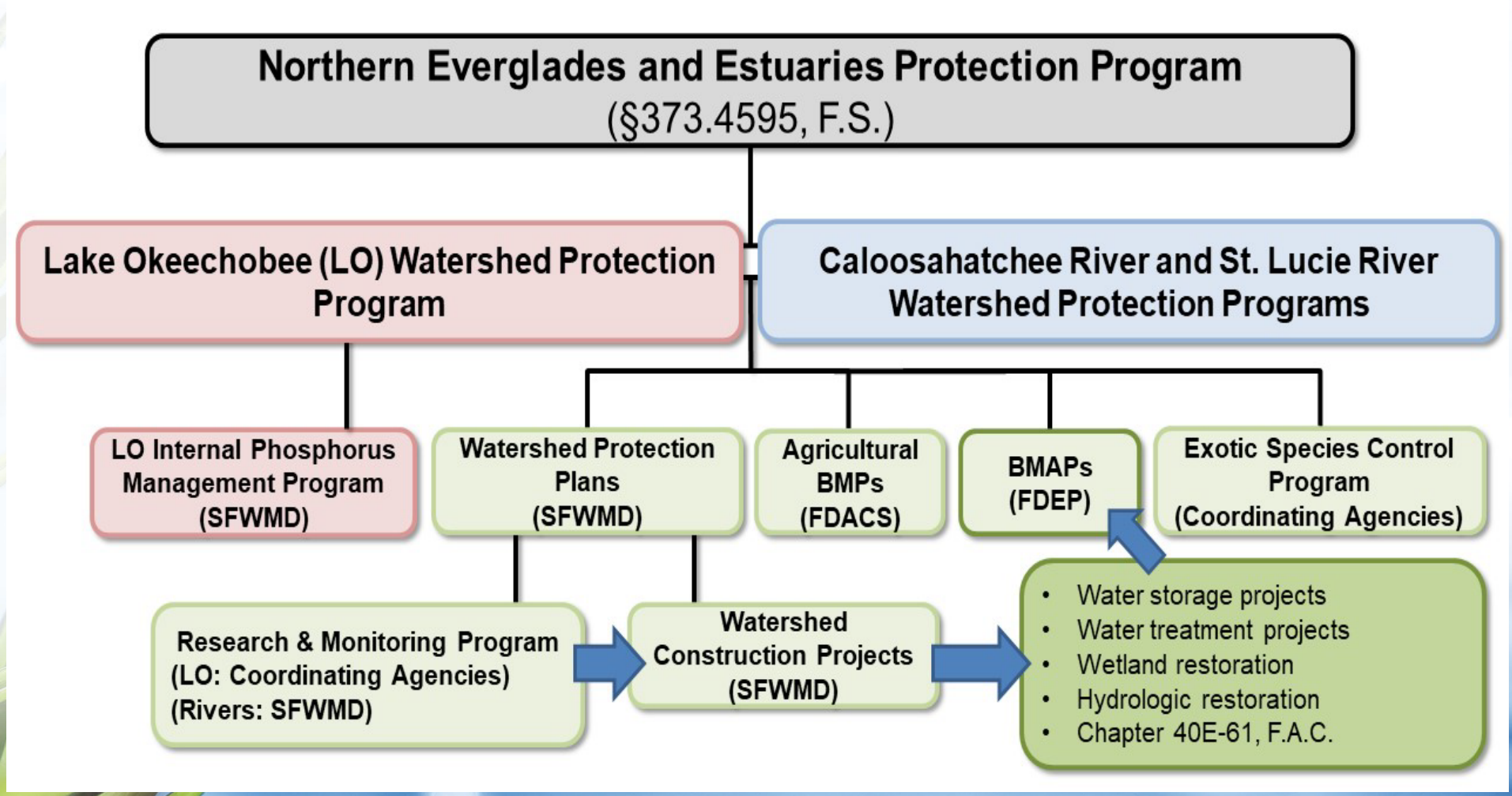
- Purpose: Protect and restore surface water resources by improving hydrology and water quality for the Northern Everglades ecosystem (§373.4595, Florida Statutes)

- Goal: Improve Water Quality
  - Lake Okeechobee: Total Phosphorus (TP)
  - Caloosahatchee Estuary: Total Nitrogen (TN)
  - St. Lucie Estuary: TP and TN

- Goal: Manage Water Quantity
  - Increase water storage north of Lake Okeechobee and in Caloosahatchee and St. Lucie River Watersheds



# NEEPP: Coordinating Agencies Roles





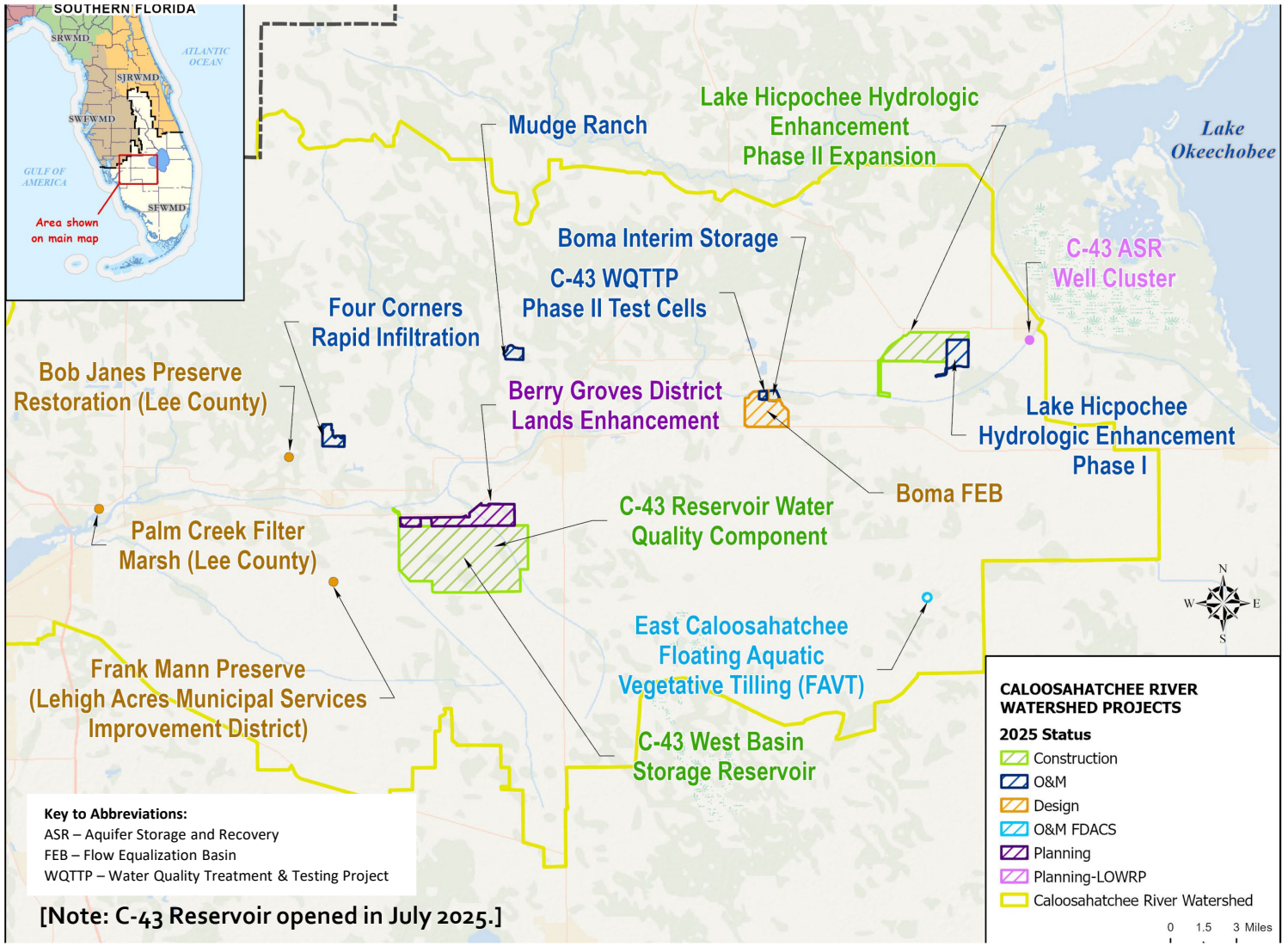

Presenter: Stacey Ollis

# Caloosahatchee River Watershed Construction Project Review

- Since 2020, SFWMD completed annual Caloosahatchee River Watershed Construction Project (CRWCP) reviews, as part of the Watershed Protection Plan (WPP) reviews
- Annual reviews are important to:
  - Maintain transparency and accountability in BMAP process
  - Assist to progressively move toward achieving state's TMDLs
  - Consolidate into NEEPP annual progress reporting (South Florida Environmental Report, or SFER) per §373.4595(6), F.S.
  - ***Develop and update WPPs required every five years***
- 2026 CRWCP Review
  - Project performance – Water Year (WY) 2025 (Apr. 1, 2024–May 30, 2025)
  - Key accomplishments – Fiscal Year (FY) 2025 (Oct. 1, 2024–Sept. 30, 2025)
  - Final 2026 SFER – Volume I, Chapter 8D (March 1, 2026) at SFWMD.gov/SFER

# Project Progress

- 2025 CRWCP Status:
  - 2 projects – planning/design
  - 3 projects – construction
  - 5 projects – operations

# Project Spotlights

- C-43 West Basin Storage Reservoir and Water Quality Component
- Berry Groves District Lands Enhancement
- Four Corners Rapid Infiltration
- Boma Flow Equalization Basin (FEB) and C-43 Water Quality Treatment & Testing Facility – Phase II, Test Cells
- Lake Hicpochee Hydrologic Enhancement – Phase II Expansion

*Caloosahatchee (C-43) Reservoir Ribbon Cutting (July 15, 2025)*

US Army Corps of Engineers

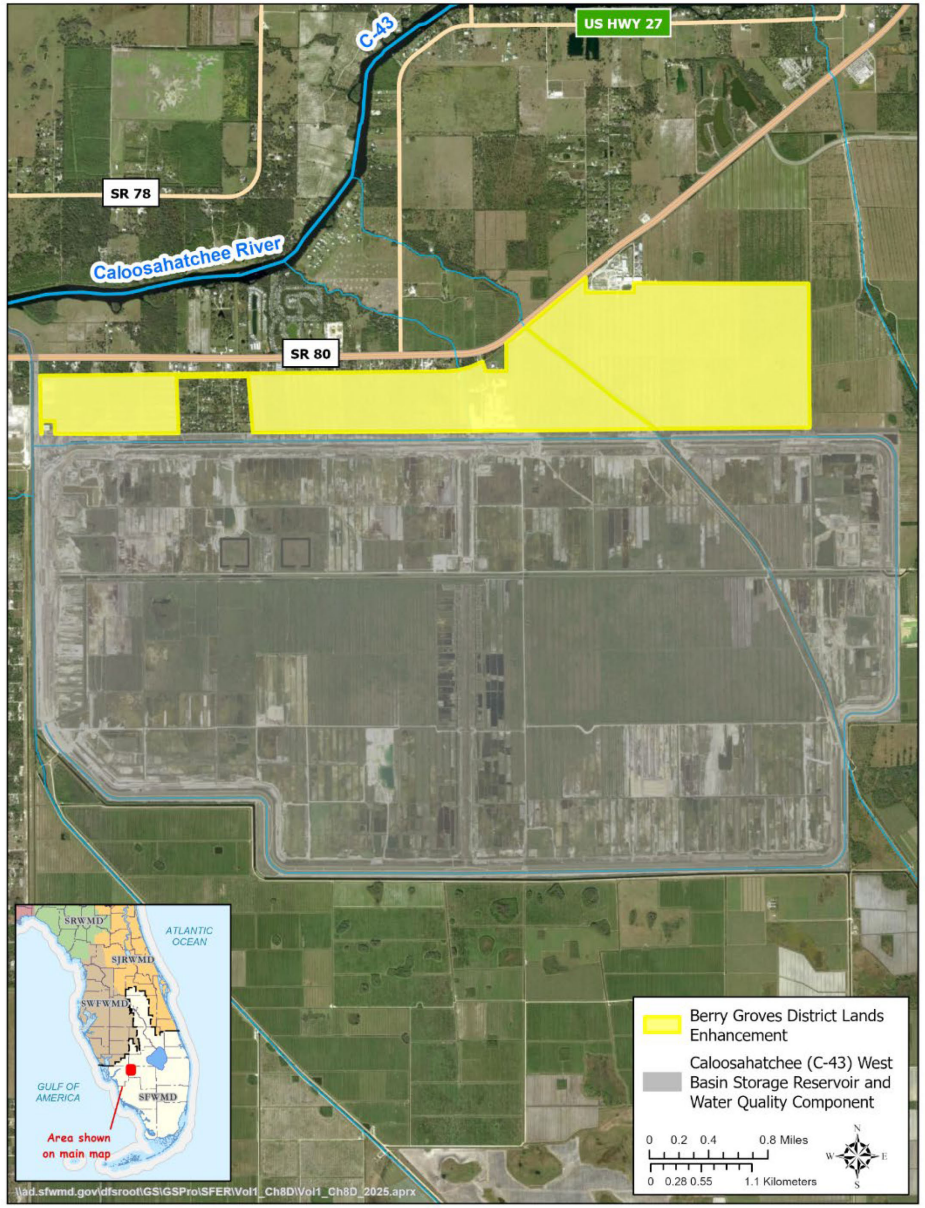
# C-43 West Basin Storage Reservoir

*Aerial view of C-43 Reservoir (March 2026)*

# C-43 Reservoir Water Quality Component

# Berry Groves
# District Lands Enhancement

*Berry Groves Project Area, Hendry County*



# Four Corners Rapid Infiltration

*Four Corners Ribbon Cutting (May 2023)*

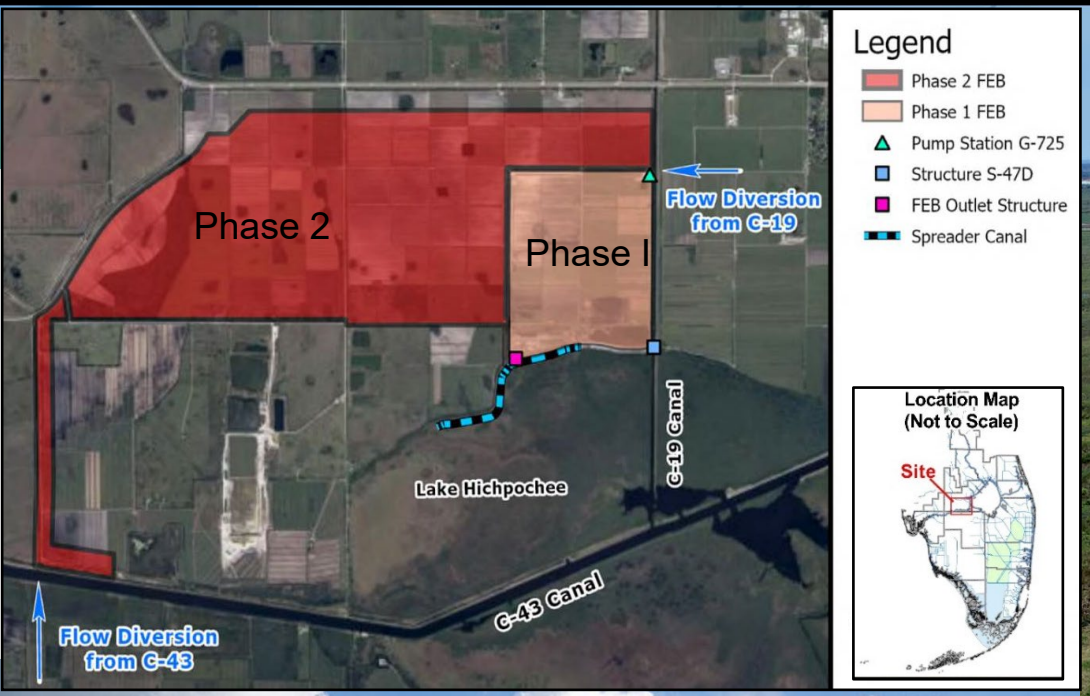
*Project Inflow Pumps*

# Boma Flow Equalization Basin & C-43 Water Quality Treatment & Testing Facility

*Test Cell Facility at Boma Property*

*Wetland plants in Test Cells*

# Lake Hicpochee Hydrologic Enhancement




*Phase II Groundbreaking (October 2025)*

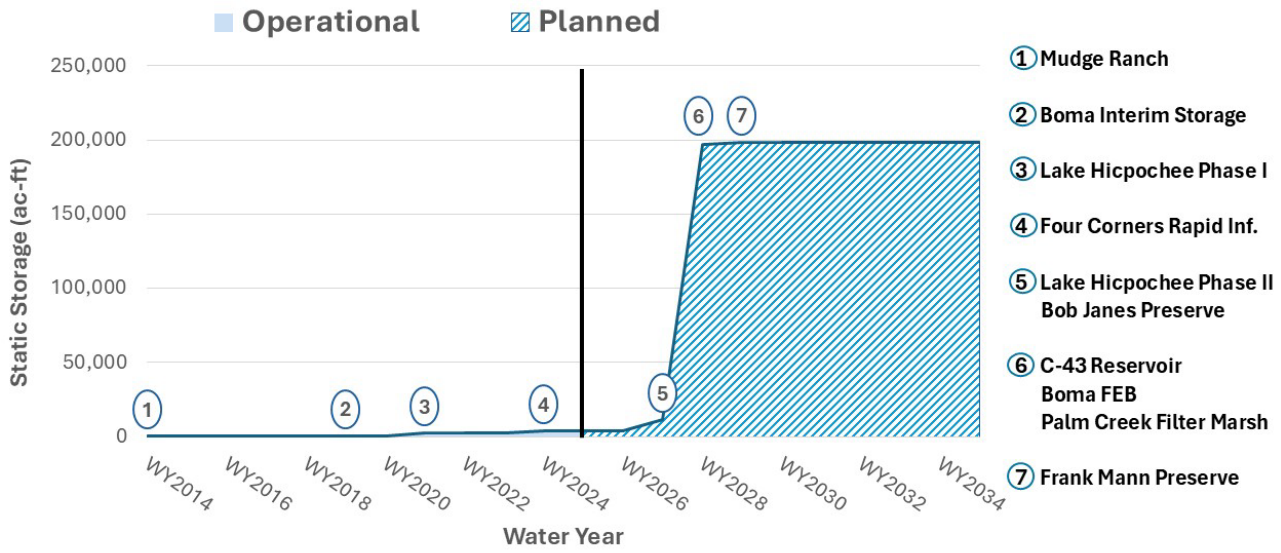
*G-725 Pump Station*

# Project Benefits

## Progress Toward Water Quality and Storage Goals

- During 2025, operational projects provided over:
  - 53 metric tons of total nitrogen retention
  - 7 metric tons of total phosphorus retention
  - 26,000 acre-feet of dynamic storage
- Projects in the works to add even more storage capacity—totaling over half of the storage goal for the watershed

## Increasing Storage Capacity In the Caloosahatchee River Watershed




### Dynamic Storage

The total volume of water held over a specific period of time.
In the 2026 SFER, project performance was assessed during the WY2025 period.

### Static Storage

The volume of water retained at maximum capacity, usually up to the point of discharge.
The static storage target for the Caloosahatchee River Watershed is 400,000 acre-feet.

# Watershed Protection Plan Reporting

For more information, visit:

**SFWMD.gov/WPPs**

and

**SFWMD.gov/SFER**

(Final 2026 SFER –
Volume I, Chapter 8D)

# Contact Information


**Stacey Ollis, PMP**

Principal State Policy Analyst

Everglades & Estuaries Protection Bureau

South Florida Water Management District

sollis@sfwmd.gov; 561-682-2039


sfwmd.gov

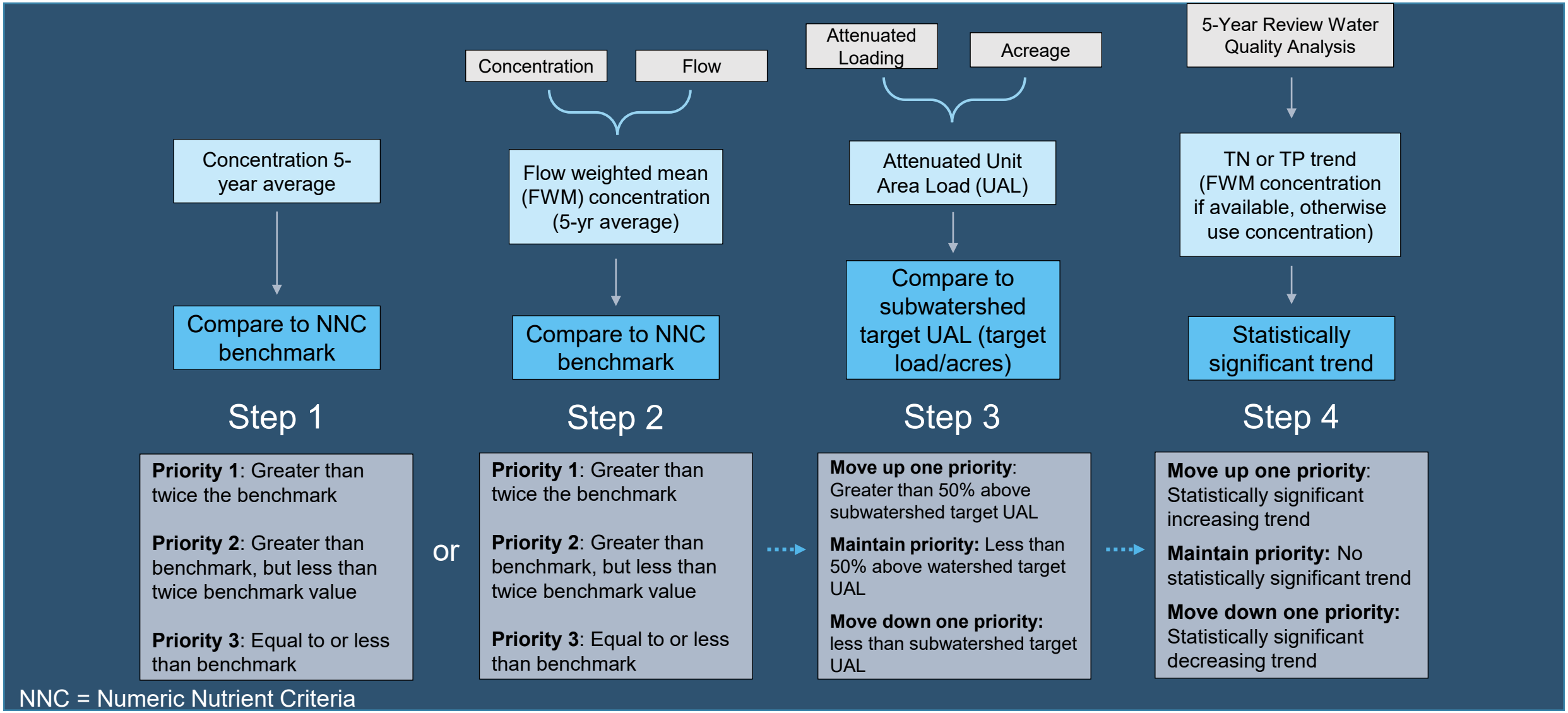
# QUESTION BREAK

## Questions

Please use the Questions panel to submit questions for Coordinating Agencies.

# TARGETED RESTORATION AREA (TRA) EVALUATION

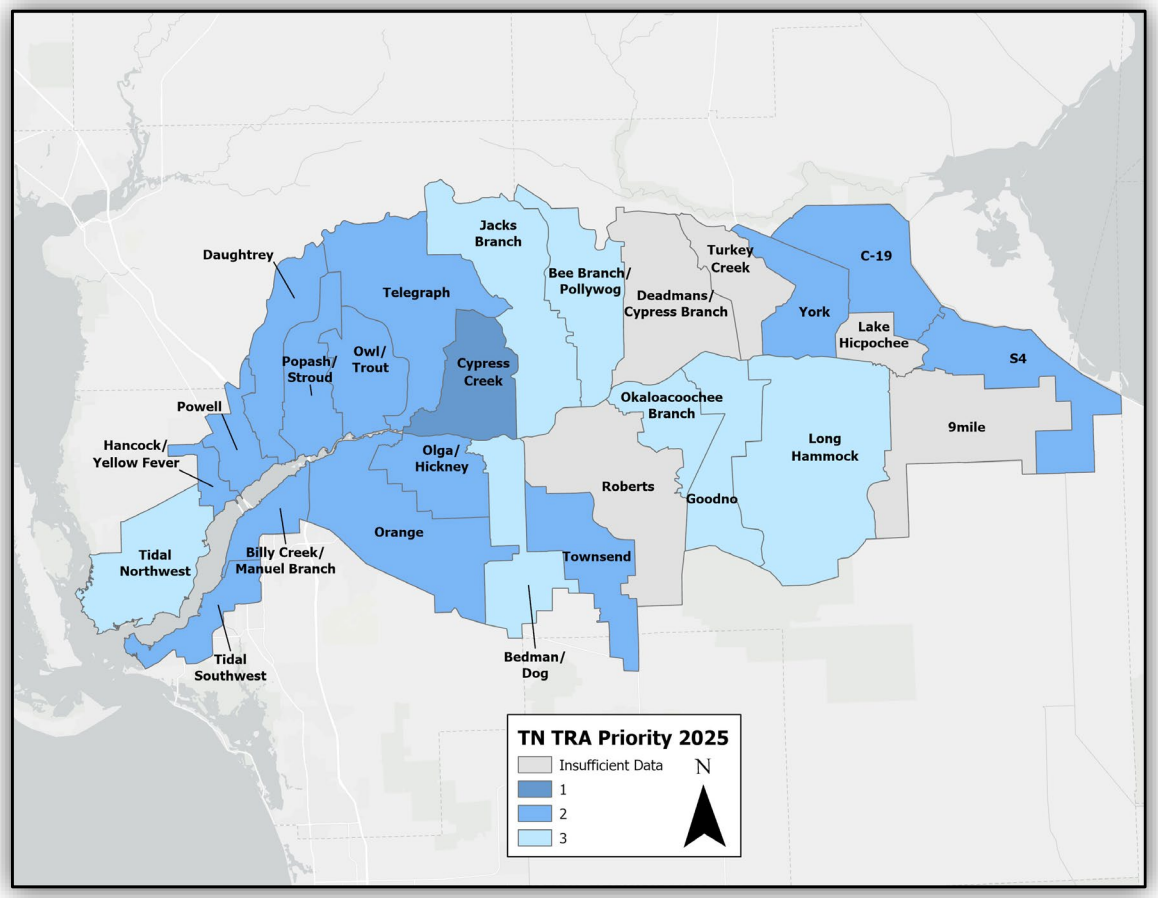
## APPROACH

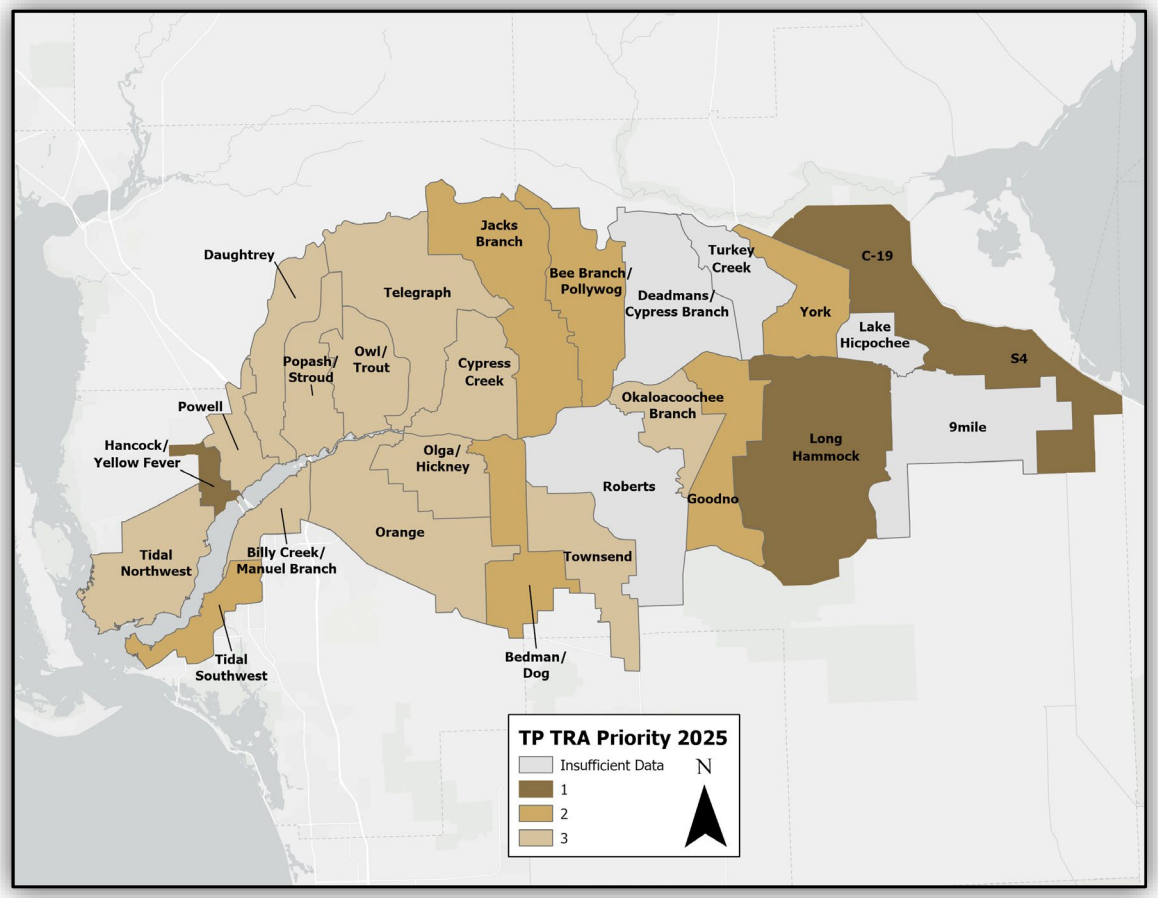



NNC = Numeric Nutrient Criteria

# TRA EVALUATION

## 2025 EVALUATION RESULTS



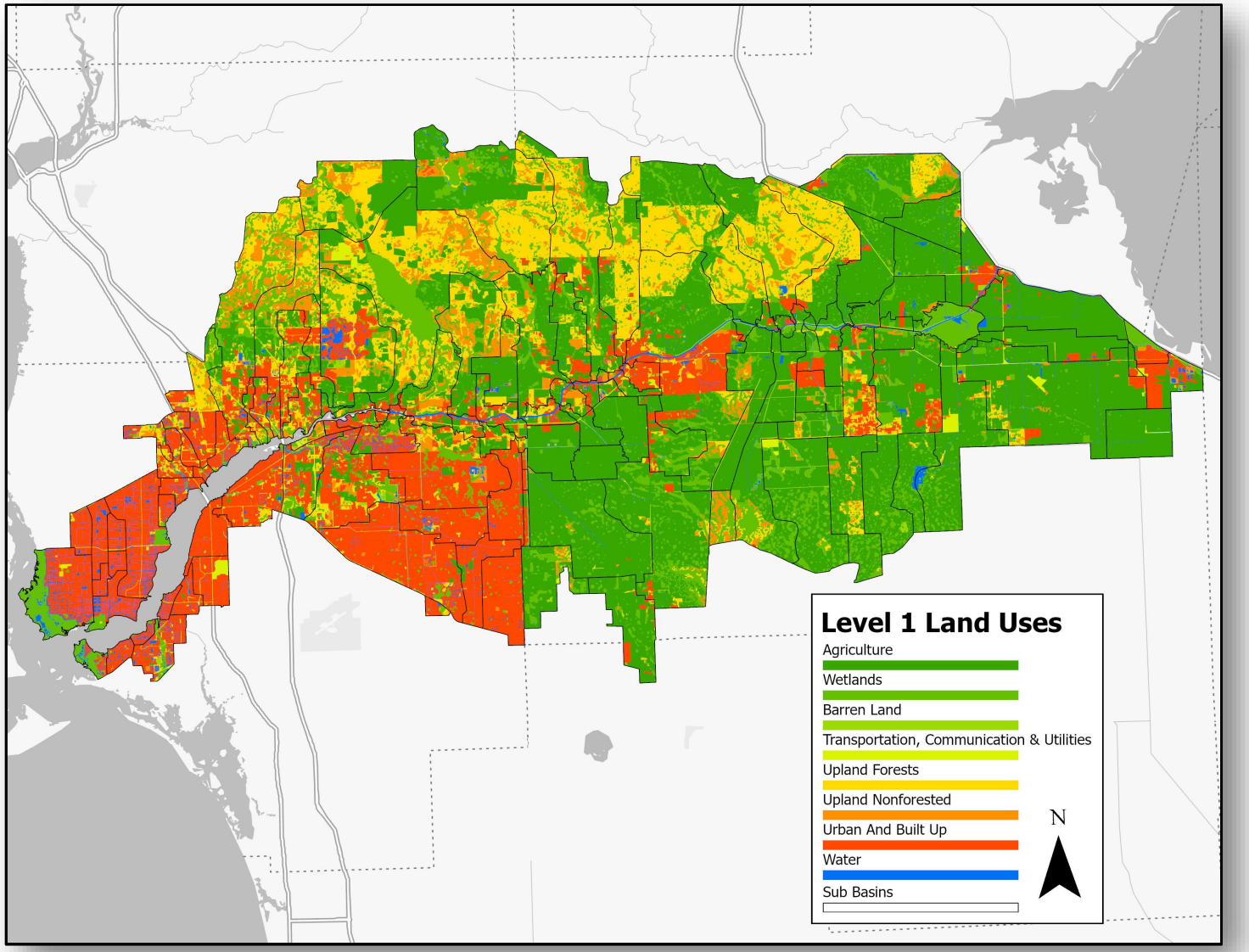



# CALOOSAHATCHEE MODEL UPDATE

## GENERAL OVERVIEW

### Updates Completed!

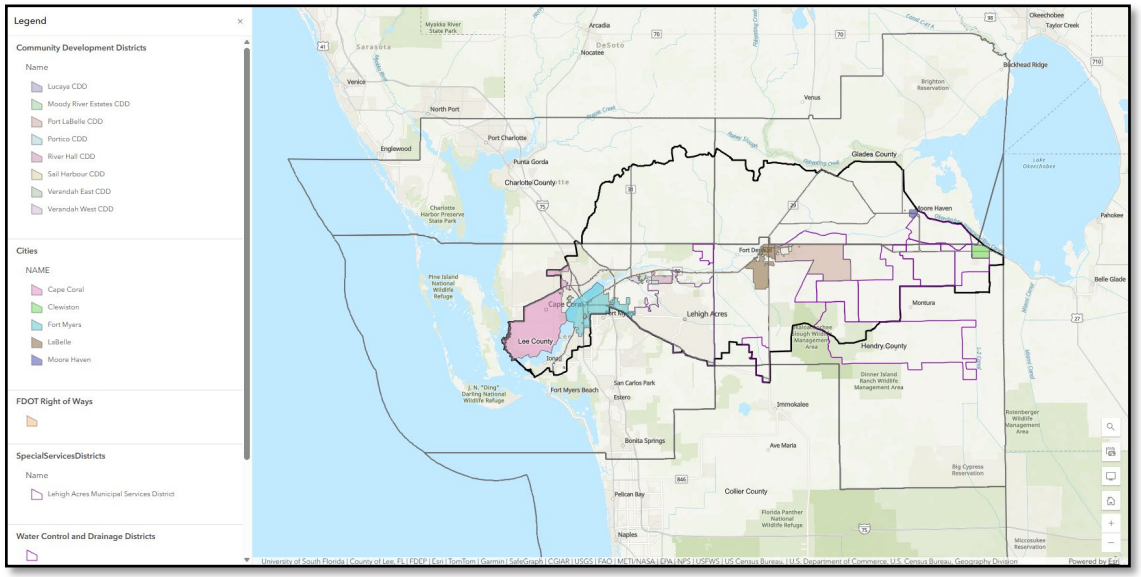
- Updated data used in model:
  - Flow.
  - Water Quality.
  - Wastewater Facility and Onsite sewage treatment and disposal systems (OSTDS).
  - Land Use.
  - Project Data.
- Updating allocations in the coming months.
- Meeting with stakeholders to discuss next steps.



# Allocation Approach

## Allocations will be calculated in the following steps:

1. Calculate average annual TN and TP loads from model outputs to obtain stakeholder existing loads.
2. Sequentially clip out the following areas from the Load Estimation Tool (LET):
    1. Water management areas.
    2. FDOT roads and rights-of-way (ROW).
    3. Water control district canals and ROWs.
    4. Natural lands.
    5. Agricultural lands.
    6. CDDs.
    7. Cities.
    8. Remaining land to be split by county boundaries.
3. Sum attenuated TN and TP load for starting loads.
4. Calculate required reductions.
    1. Total reduction = TN load for the entire watershed minus the allowable load of 3,048,783 lbs/yr.
    2. Required reduction is assigned to stakeholders based on the percentage of each stakeholder's starting load.



# Allocation Approach

## Allocations will be calculated in the following steps:

5. For tributaries calculate average annual TN and TP loads from model outputs to obtain stakeholder existing loads by tributary.

6. Calculate load reductions for tributaries by subtracting the allowable load from the starting loads:

- C-19 Canal — 31,327 lbs/yr of TN and 1,579 lbs/yr of TP.

- Lake Hicpochee — of 24,929 lbs/yr of TN and 1,348 lbs/yr of TP.

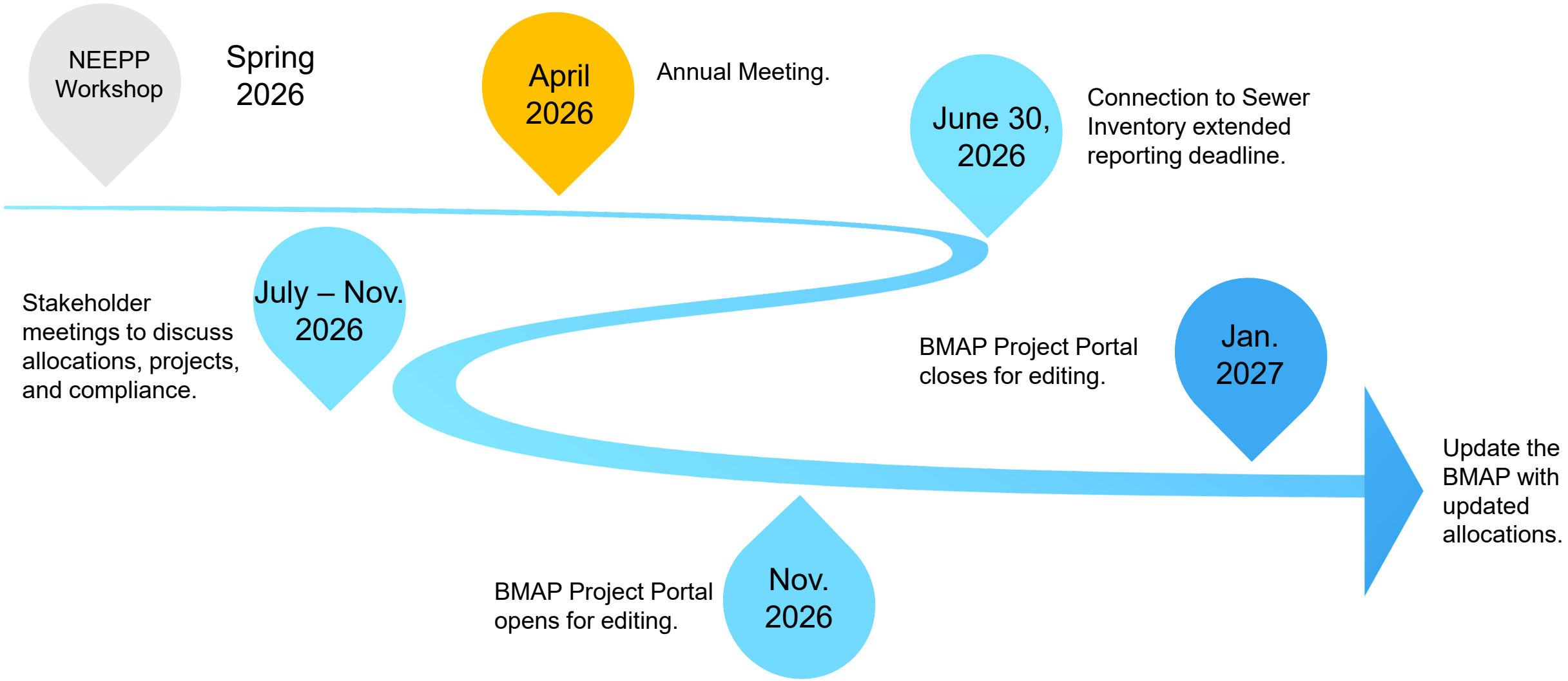
- Long Hammock — of 253,673 lbs/yr of TN and 16,295 lbs/yr of TP.

- S-4 — 111,935 lbs/yr of TN and 7,555 lbs/yr of TP.

- Townsend Canal — 160,314 lbs/yr of TN and 14,300 lbs/yr of TP.

7. The higher of the TN reductions for the estuary and tributaries will be assigned as the final TN required reduction.

# LOOKING AHEAD




NEEPP = Northern Everglades and Estuaries Protection Program

# FUNDING OPPORTUNITIES

Florida Department of Environmental Protection
Funding Opportunities

**FloridaDEP.gov/Funding**

# RESOURCES

## Basin Management Action Plans (BMAPs)

Home » Divisions » Division of Environmental Assessment and Restoration » Water Quality Restoration Program » Basin Management Action Plans (BMAPs)

**Water Quality Restoration Program Quick Links**

- Basin Management Action Plans (BMAPs)
- Statewide Annual Report
- Water Quality Grant Opportunities 2024-25
- BMAP Public Meetings
- Impaired Waters, TMDLs and Basin Management Action Plans Interactive Map
- Tools and Guidance for Calculating Total Nitrogen (TN) and Total Phosphorus (TP) Reductions
- Florida Water Quality Credit Trading

### What is a Basin Management Action Plan?

A BMAP is a framework for water quality restoration that contains a comprehensive set of solutions to achieve the pollutant reductions established by a TMDL. Examples include permit limits on regulated facilities, urban and agricultural best management practices, wastewater and stormwater infrastructure, regional projects and conservation programs designed to achieve pollutant reductions established by a TMDL. A BMAP is developed with local stakeholders and relies on local input and commitment for successful implementation. BMAPs are adopted by Secretarial Order and are legally enforceable. BMAPs use an adaptive management approach that allows for incremental load reductions through the implementation of projects and management strategies, while simultaneously monitoring and conducting studies to better understand the water quality and hydrologic dynamics. Progress is tracked by assessing project implementation and water quality analyses. DEP continues to work with local and regional partners to identify additional projects necessary to meet reduction milestones to achieve the TMDLs and inform funding priorities.

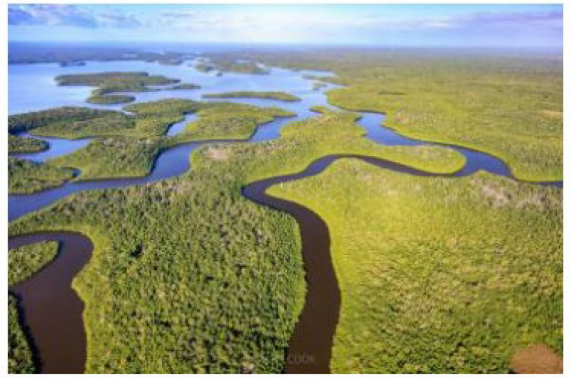
### What's New: Upcoming Meetings and BMAP Progress

**July 1, 2025 BMAP Update Progress**

As required by the Clean Waterways Act, DEP must prepare updates to its nutrient BMAPs by July 1, 2025. The **July 1, 2025 BMAP Update Progress** dashboard provides a visual representation of progress towards the completion of each of the required tasks and related sub-tasks leading up to the July 1, 2025 updates. Please visit the **BMAP Public Meeting Calendar** to find out about upcoming meetings and subscribe to meeting notices.

[Basin Management Action Plans (BMAPs) | Florida Department of Environmental Protection]

## NEEPP BMAPs



**The Northern Everglades watersheds include the Lake Okeechobee watershed and the Caloosahatchee and St. Lucie River watersheds and estuaries.**

# SUBSCRIBER PAGE

## HOW TO CONTACT US

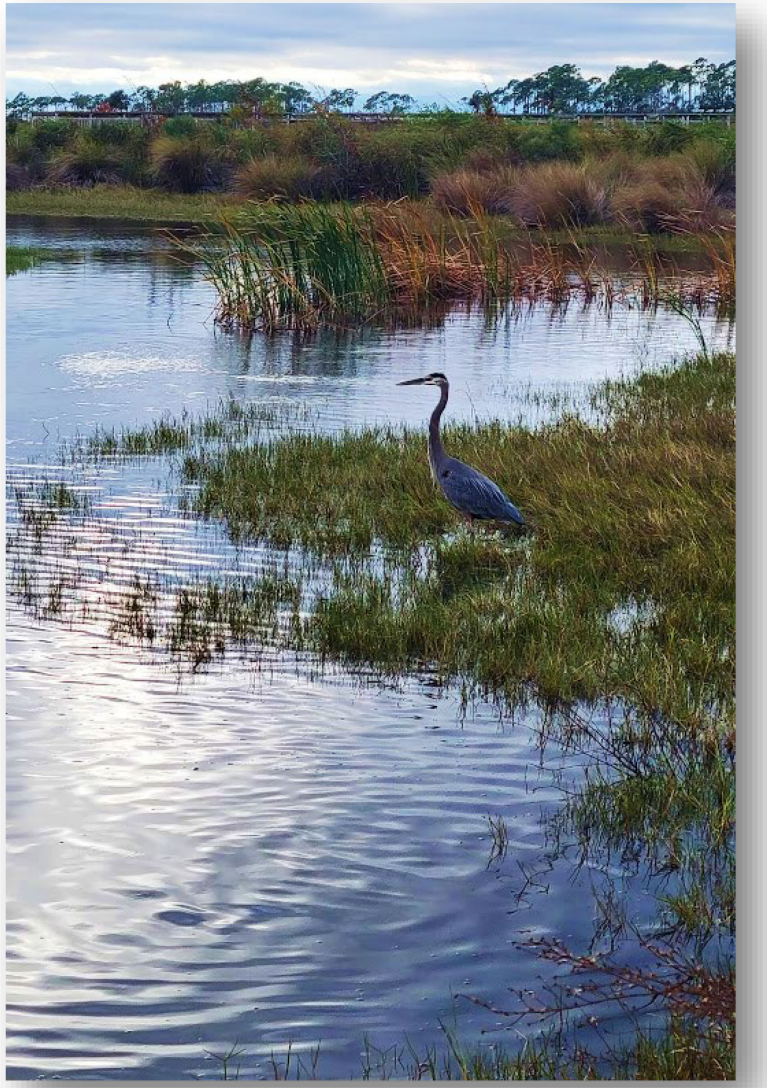
BMAPProgram@FloridaDEP.gov

# QUESTION BREAK

## Questions

Please use the Question panel to submit questions.

Submit written comments concerning today's meeting to: **Anthony.Tomalewski@floridaDEP.gov.**



# THANK YOU

**Tony Tomalewski**

Contact Information:
Phone: 850-245-8683
Email: Anthony.Tomalewski@FloridaDEP.gov

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Photo Credit: SFWMD

**Caloosahatchee River and Estuary Basin Management Action Plan (BMAP) Annual Meeting**
**Webinar Summary**
*Tuesday, April 28, 2026*
*1:00 pm – 1:50 pm*

**Participants**

Santiago Acevedo, SFWMD
Miranda Anderson, DEP
Cora Aossey, DEP
Tammy Ash, Conservancy of SW FL
Christian Avila, SFWMD
Taufiqul Aziz, DEP
Bill Baker, MacVicar Consulting
Lisa Bally, Geosyntec
Ernie Barnett, FL Water & Land
Terrie Bates, Citizen
Nathan Beals, Lee County
Evelyn Becerra, DEP
Tom Bishop, Citizen
Karen Bliss, Charlotte County
Amanda Boone, Woodard & Curran
Maxwell Boone, Palmetto Pine
Jennifer Briggs, Kimley Horn
Felicia Burks, EPA
Joseph Caruso, FGUA
John Cassani, Citizen
Sarah Catala, Immokalee Water & Sewer
Carolin Ciarlariello, DEP
Susan Cooper, Citizen
Kevin Coyne, AMP
Veronica Dau, Lake County
Letuzia De Oliveira, FDACS
Dana Dettmar, Sanibel
Fernando Diaz, Gunster
Don Duke, FGCU
R. M. Edenfield, RMEC
Kelli Edson, DEP
Bill Eggers, Evans
Kate English, Pavese Law Firm
Melissa Espinosa, Lee County
Marissa Figueroa, Audubon
Michael Filian, Wind River Environmental
Phil Flood, SFWMD
Jake Fojtik, FFBF
Marcy Frick, Tetra Tech
Aubrey Frye, SFWMD
Stan Ganthier, DEP
McKee Gray, Audubon
Kathy Greenberg, Citizen
Roxanne Groover, FOWA
Sharon Guaderrama, SJRWMD
Jewelene Harris, SFWMD
Maddy Hart, FDACS
Bob Himschoot, Crews Environmental
Moira Homann, DEP
Danielle Ivey, Audubon
Hanna Joergens, Lee County
Christopher Johns, LLW Law
Paul Julian, Everglades Foundation
Chandler Keenan, DEP
Sean Kelleher, Wells Street Partners
Steven Kelly, FDOT
Brianne Kenney, Troon
Travis Kirk, Seminole Tribe
Scott Knight, Wetlands Solutions
Brandon Koester, Troon
Natalie Kraft, FPL
Lisa Kreiger, Lee County
Garrett Kusienski, Lee County
Sarah Laboda, Apex
Mitchell Latzman, Everglades Foundation
Joseph Lineberry, Citizen
Celeste Lyon, RES
Sherry McCorkle, SFWMD
Jessica McPherson, Apex
Sarah Menz, DEP
James Moir, Citizen
Charles Murphy, Glades Media
Caitlin Newcamp, Audubon
Alejandra Nirenberg, CRI
Justin Nolte, SFWMD
Kevin O'Donnell, DEP
Stacey Ollis, SFWMD
Steffany Olson, SFWMD
Roland Ottolini, Lee County
Sara Ouly, SFWMD

Debra Paxton, Lee County
Allie Pecenka, SCCF
Mark Perry, Florida Oceanographic
Libby Pigman, SFWMD
Jason Pim, Sharkinetics
Nicolas Pisarello, ATM
Irene Quincey, Pavese Law
Maxwell Redan, DEP
Avery Renshaw, FWS
Rhonda Roff, Citizen
Mikayala Rogers, FFVA
Maria Romero, Lee County
Larry Scrabis, Citizen
Matthew Scripter, Ecological Associates
Shimelis Setegn, SFWMD
Audrey Sferra, Applied Ecology
Lily Silva, Apex
Mailin Sotolongo- Lopez, DEP
Anthony St. Germain, Manatee County
Leyna Stemle, FDOT
The Florida Channel
Jennifer Thera, FDACS
Todd Thurlow, Thurlow & Thurlow
Tony Tomalewski, DEP
Kevin Tyre, Geosyntec
Jordan Varble, Apex
Jonathan Wadas, SFWMD
Youchao Wang, SFWMD
Rhonda Watkins, Collier County
Ken Weaver, DEP
Lori Wenkert-Lane, SFWMD
Amanda Zirzow, Citizen

The webinar recording and supporting materials are posted to the Florida Department of Environmental Protection (DEP) website at https://floridadep.gov/dear/water-quality-restoration/content/bmap-documents-meeting-materials-and-recordings.

**Questions and Answers**

**Question:** Has DEP conducted a 401 certification for the operational phase of the C-43 reservoir?
**Answer (DEP):** The C-43 Water Quality Component (Inline Alum Injection System) permit is expected to be issued by the end of May.

**Question:** Are there efforts underway in identifying the remaining 400,000 acre-feet of storage needed in the Caloosahatchee watershed?
**Answer (South Florida Water Management District [SFWMD]):** Slide 14 of the SFWMD presentation (slide 46 of the overall presentation) shows the storage capacity we have now and what is also in planning will attain a storage capacity of over 200,000 acre-feet per year, which is about half of the overall target. Other opportunities are being planned to help attain the goals for the additional storage. Interested stakeholders are welcome to stay tuned on our procurement website for more opportunities to come (SFWMD.gov/Procurement).

**Question:** How are all these SFWMD land uses reflected in the Caloosahatchee BMAP? Are they assigned a load/reduction target?
**Answer (DEP):** Last year DEP updated the model for the Caloosahatchee BMAP to include the latest land use coverage. We used literature values for calibration targets for the loading expected from different land use types as well as measured monitoring data. All of that information was used to update the estimated loading from the watershed using the latest available land uses.

**Question:** Are there any plans to change the "presumption of compliance" component for verification of compliance?
**Answer (DEP):** That would require a statutory change.

**Question:** How are stakeholder project achievements included in the model?
**Answer (DEP):** A lot of the local government projects are not explicitly included in the model. We are calibrating to the latest water quality data that would show the benefits of those projects. We did include the larger regional-scale projects that SFWMD and the Florida Department of Agriculture and Consumer Services have implemented. There are more details about which of those projects were explicitly modeled as part of the model report.

**Question:** Are these reservoirs dual purpose (for example, Headwaters Reservoir in Indian River County), which could serve as a fishing resource and economic boon to the region?
**Answer (SFWMD):** Many recreational features are planned at the Caloosahatchee (C-43) Reservoir site, including public boat ramps, a kayak and canoe launching area, an equestrian area, hiking, cycling and equestrian trails, informational kiosks, shelters and restrooms. As these areas are developed, information and maps will be placed on the SFWMD website on the recreation webpage here: SFWMD.gov/Recreation.

**Question:** Are the models taking into account for land use change not just urbanization but row crops and citrus acres?
**Answer (DEP):** The models use the 2023 land use coverage, which was the latest available. That coverage reflects all the land uses (urban, agricultural, and natural) at that time. For more information about land uses for agricultural commodities, please refer to the Florida Statewide Agricultural Irrigation Demand Geodatabase (FSAID): https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Water-Supply-Planning.

**Question:** Will you update the watershed nutrient budget, last analysis in 2010 estimated a net total phosphorus (TP) addition of about 4,500 metric tons (mt) to the watershed a year?
**Answer (DEP):** Both DEP and SFWMD have conduced various evaluations of the Caloosahatchee River and Estuary Watershed nutrient budget since 2010.