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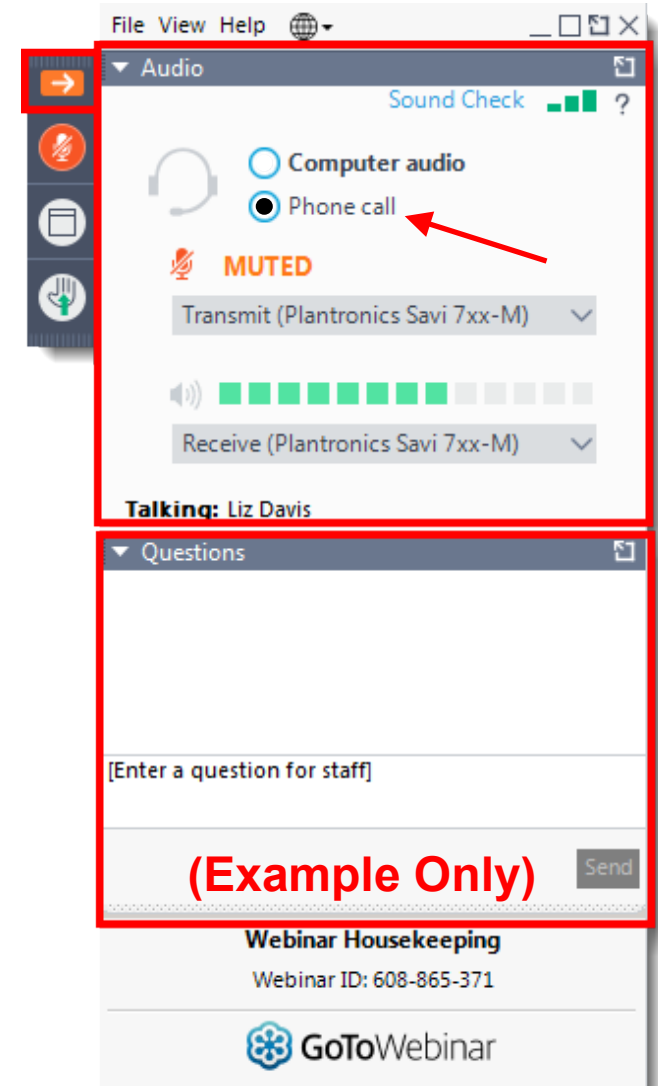
- Choose Computer Audio or
- Choose Phone Call and dial using the information provided with your registration

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.





EVERGLADES WEST COAST AND CALOOSAHAATCHEE BASIN MANAGEMENT ACTION PLANS (BMAP) ANNUAL MEETING

Diana Turner

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

GoToWebinar | April 2, 2024



ANNUAL MEETING AGENDA

Agenda:

- South Florida Water Management District (SFWMD) Updates.
- Statewide Annual Report (STAR).
- Everglades West Coast Background and Progress.
- Caloosahatchee Background and Progress.
- Upcoming BMAP Updates.
- Florida Department of Agriculture and Consumer Services (FDACS) Updates.



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 2, 2024

Agenda

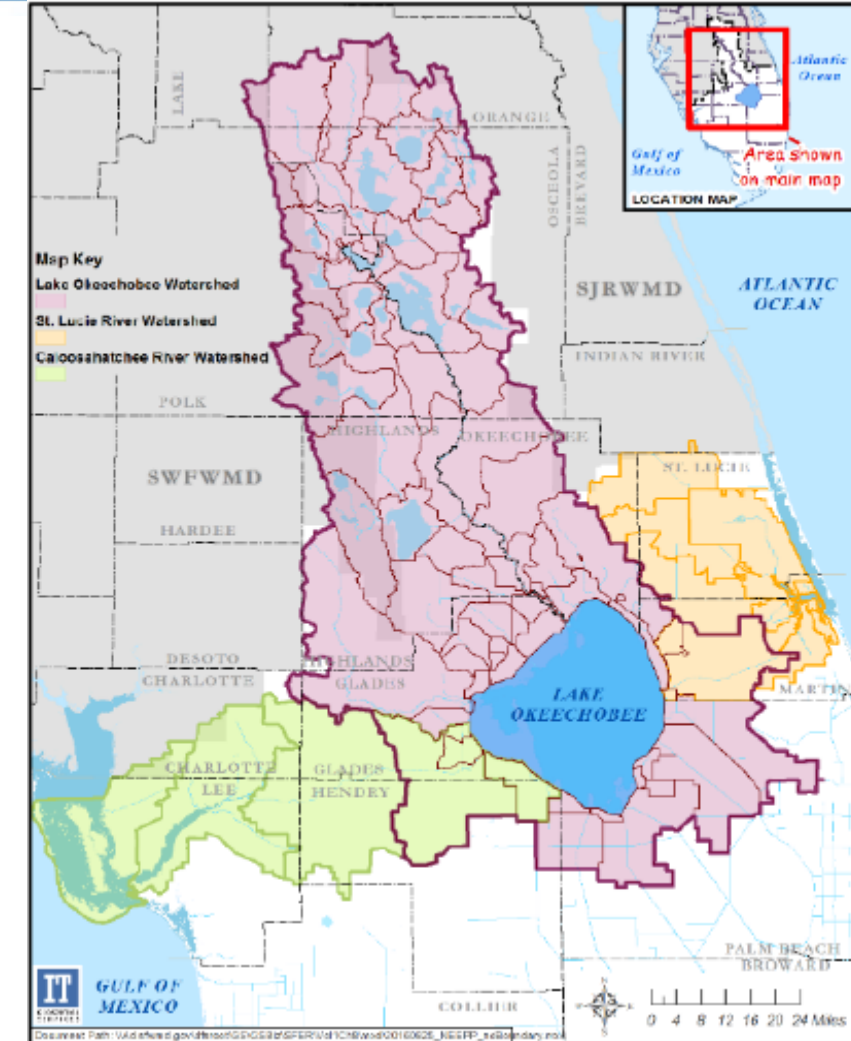


Caloosahatchee Estuary
Oyster Reef

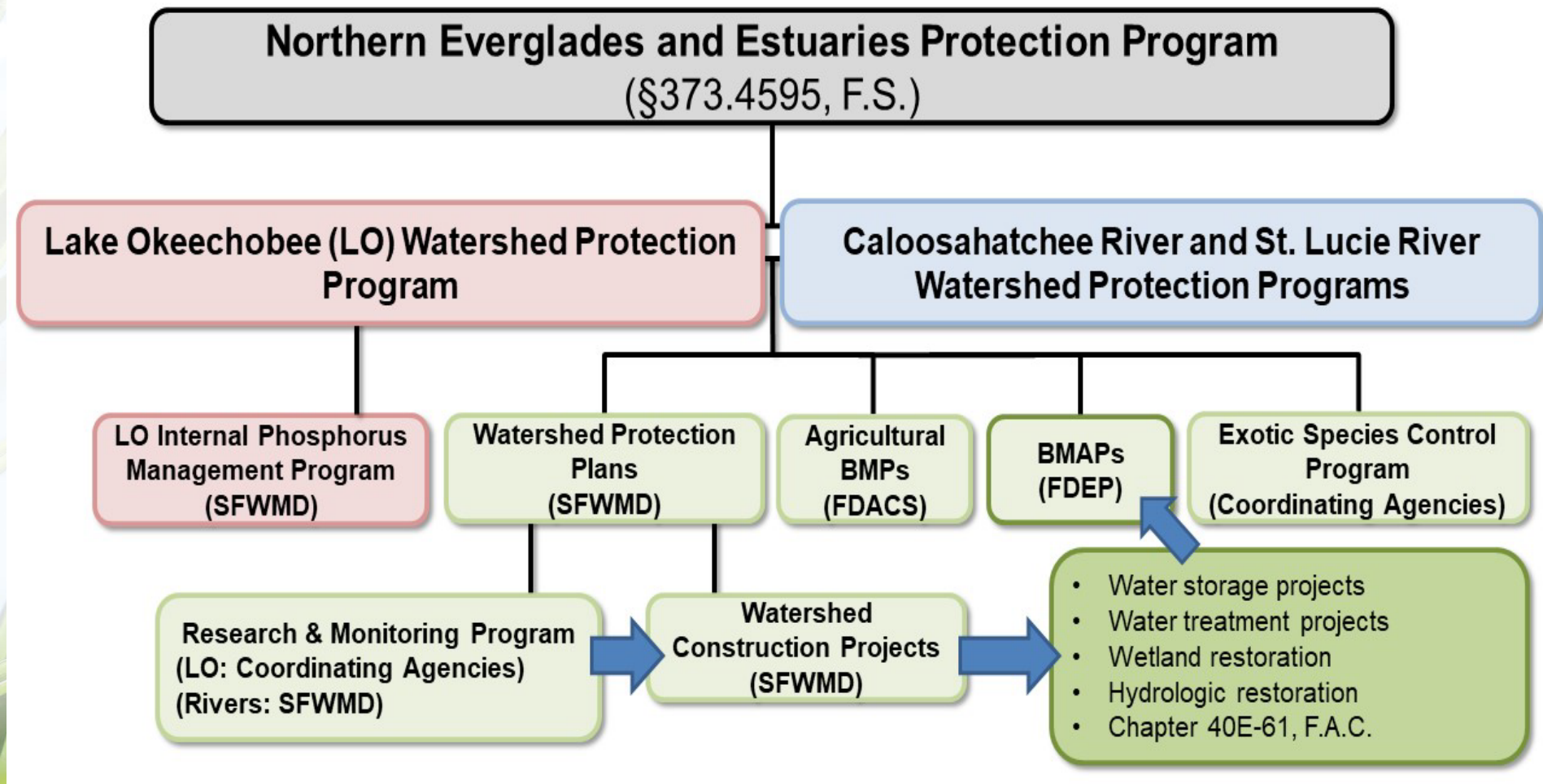
- Northern Everglades Program Overview
- 2023 Caloosahatchee River Watershed Construction Project Review
 - Project Spotlights
 - Water Storage Benefits
- Watershed Protection Plan Reporting

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



Caloosahatchee River Watershed Construction Project Review

- In 2020, SFWMD initiated 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
 - Develop and update WPPs required every five years
 - Consolidate into NEEPP annual progress reporting (South Florida Environmental Report, or SFER) per §373.4595(6), F.S.
- Focus: 2023 CRWCP Review
 - Key accomplishments during Fiscal Year (FY) 2023 (Oct. 1, 2022–Sept. 30, 2023)
 - Final 2024 SFER – Volume I, Chapter 8D (March 1, 2024) at [SFWMD.gov/SFER](https://www.sfwmd.gov/SFER)

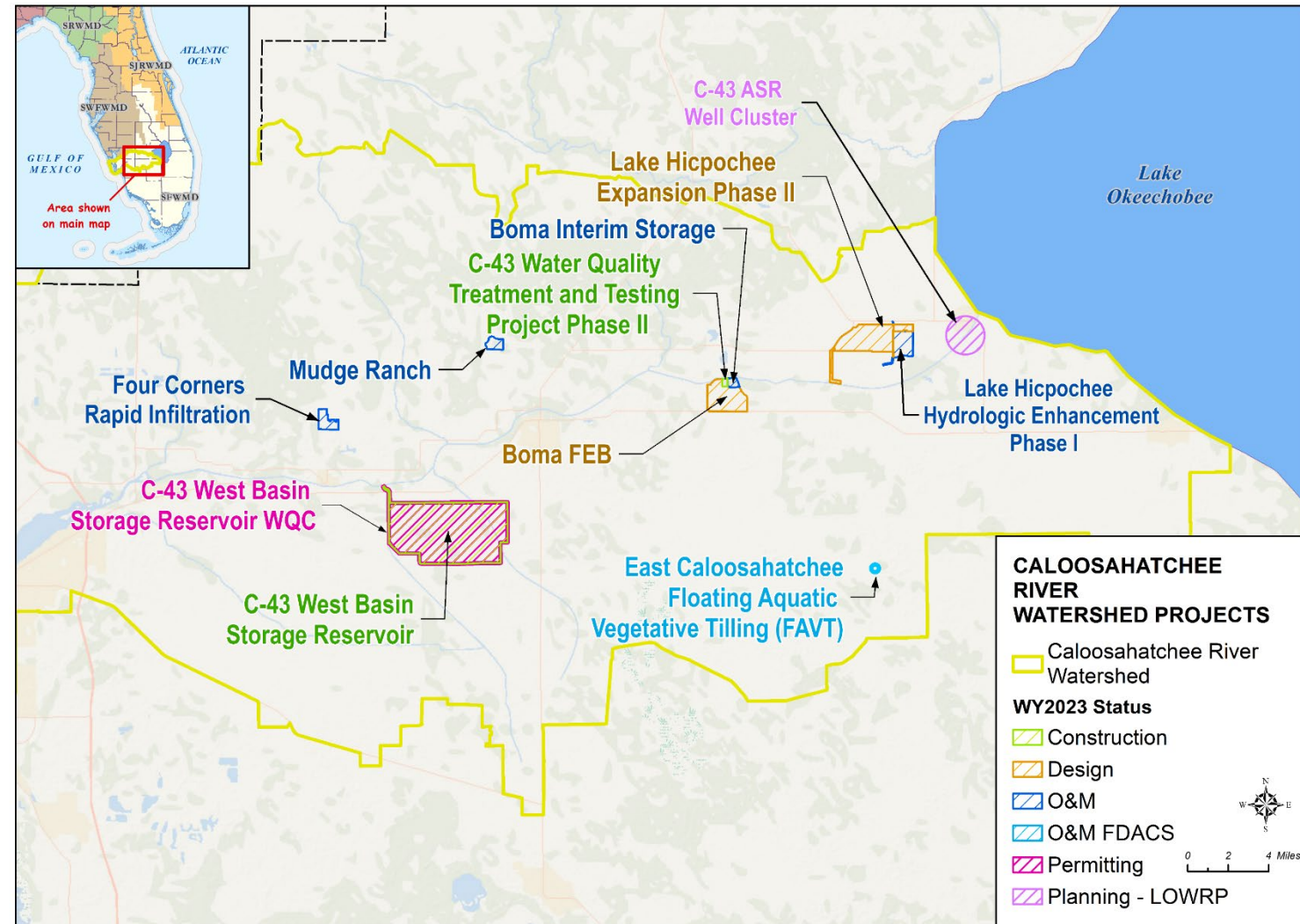
SFWMD Projects

➤ FY2023 CRWCP Status:

- 1 project – planning
- 3 projects – design/permitting
- 2 projects – construction
- 4 projects – operations



Mudge Ranch DWM,
Hendry County



Project Spotlights

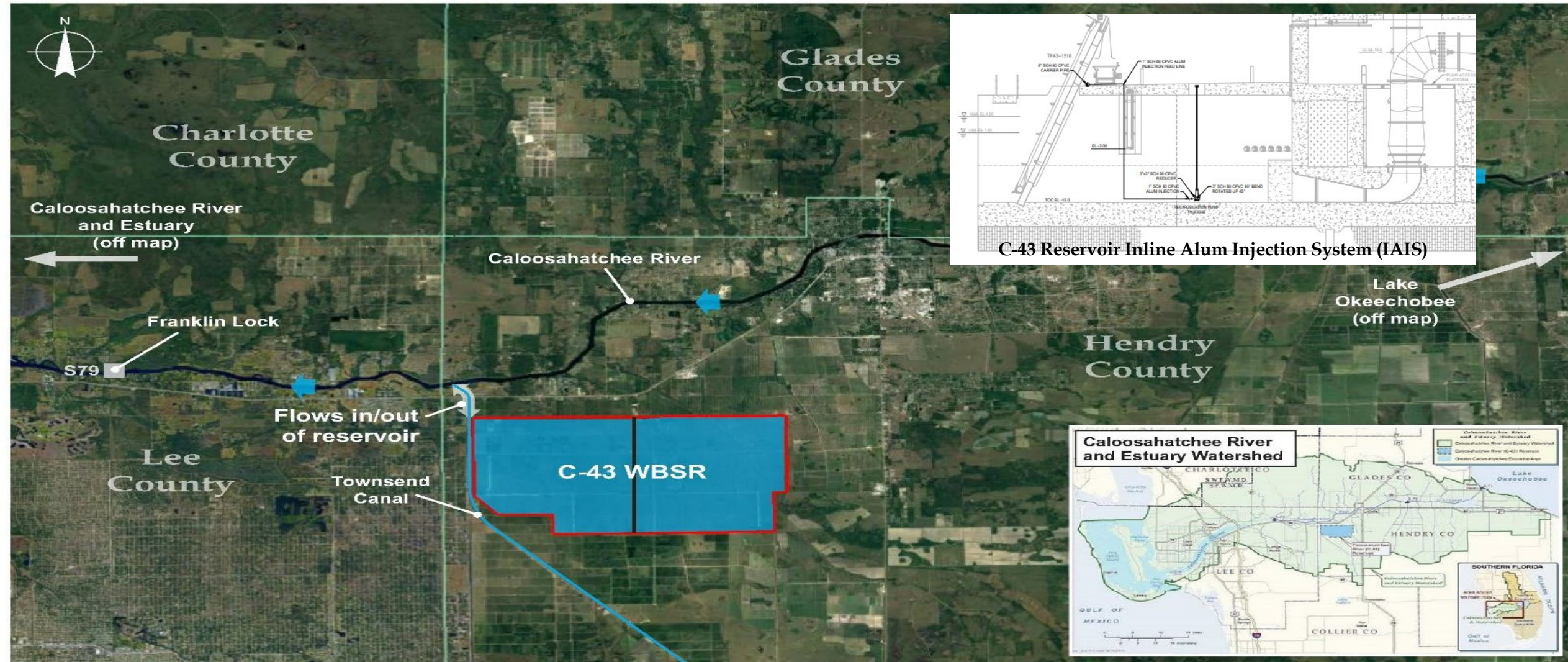
- C-43 West Basin Storage Reservoir and Water Quality Component
- Four Corners Rapid Infiltration
- Boma Flow Equalization Basin (FEB)
- C-43 Water Quality Treatment & Testing Facility – Phase II, Test Cells
- Lake Hicpochee Hydrologic Enhancement – Phase II Expansion



C-43 West Basin Storage Reservoir



C-43 Reservoir Water Quality Component



Four Corners Rapid Infiltration



Four Corners Ribbon Cutting (May 2023)



Project Inflow Pumps

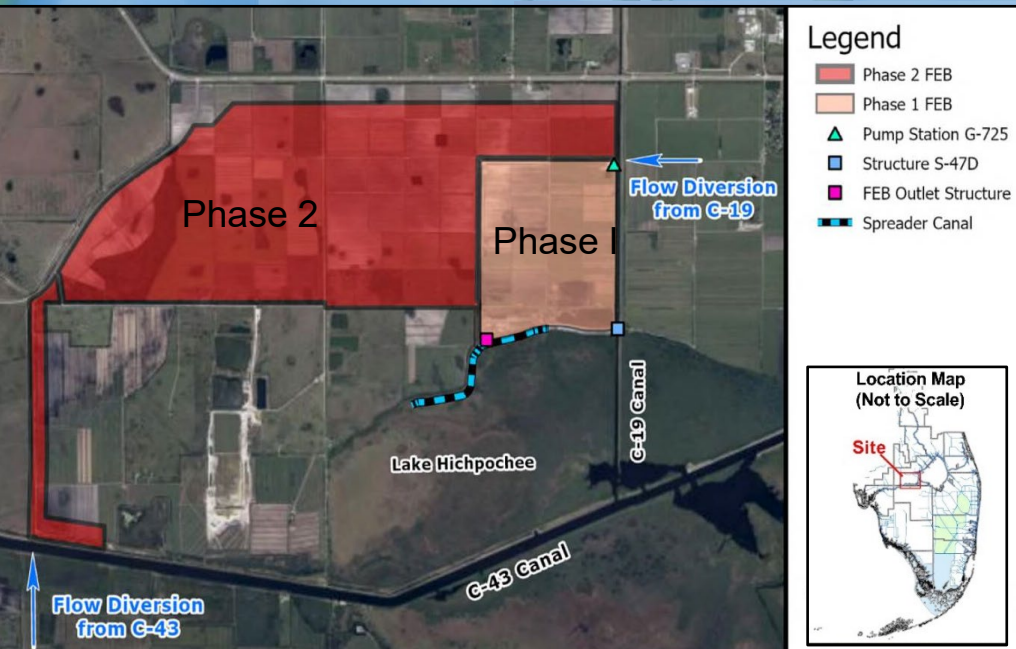
Boma Flow Equalization Basin & C-43 Water Quality Treatment & Testing Facility

Test Cell Facility construction
at Boma property



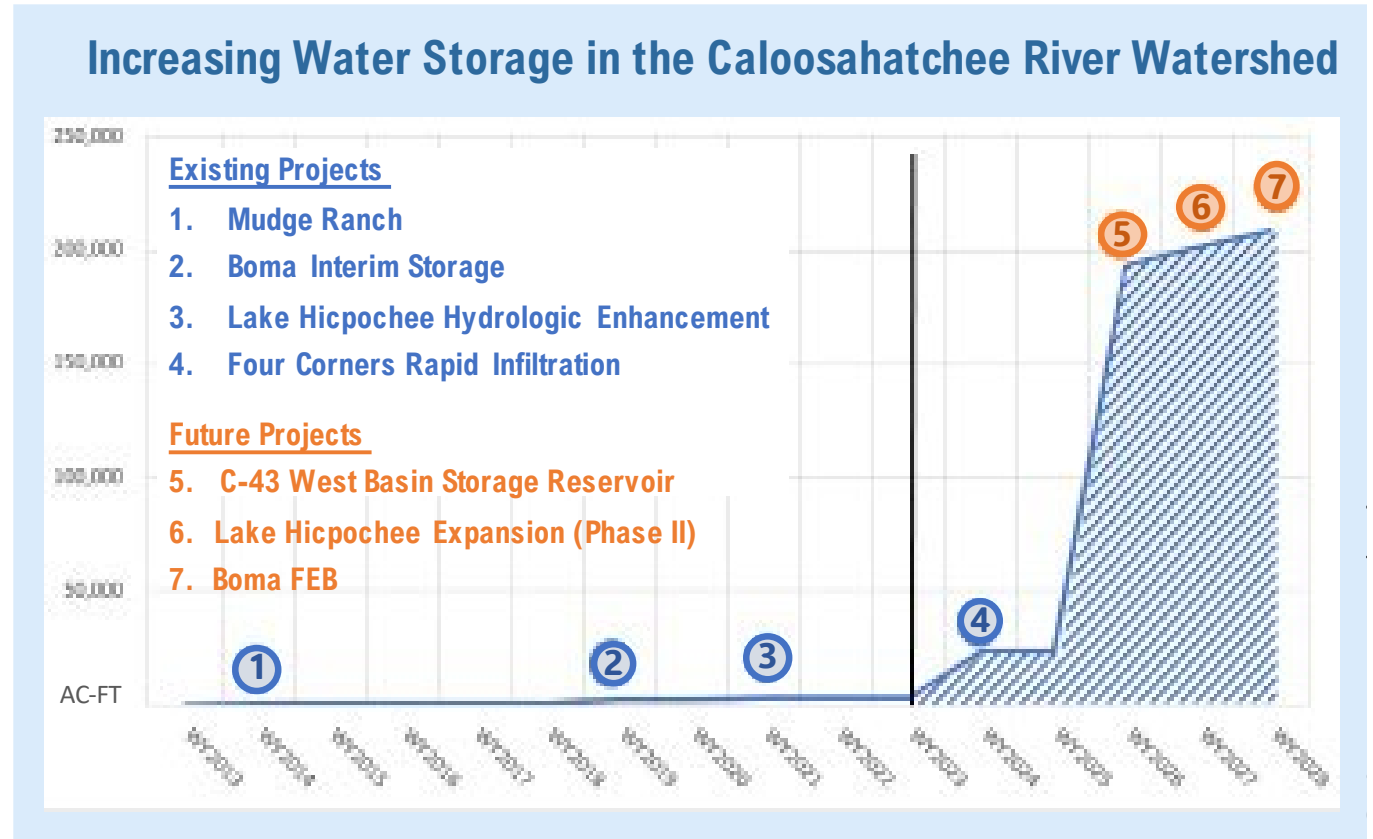
Test cells construction site

Lake Hicpochee Hydrologic Enhancement



Water Storage Benefits

- Key DWM program benefits:
 - Reduces runoff/discharge to and stores/treats water in regional system
 - Promotes hydrologic enhancement, groundwater recharge, improves habitat
 - Avoids high cost of land purchase and keeps private lands on local tax rolls
 - Storage and/or treatment provided typically exceeds permit requirements
- During WY2023, 3 SFWMD projects provided 4,989 ac-ft of storage (3,767 ac-ft, 2 DWM; 1,222 ac-ft, 1 regional)
- Future projects are planned to add storage capacity of more than 185,000 ac-ft over the next five years



Watershed Protection Plan Reporting

For more information, visit:

[SFWMD.gov/WPPs](https://www.sfwmd.gov/WPPs)

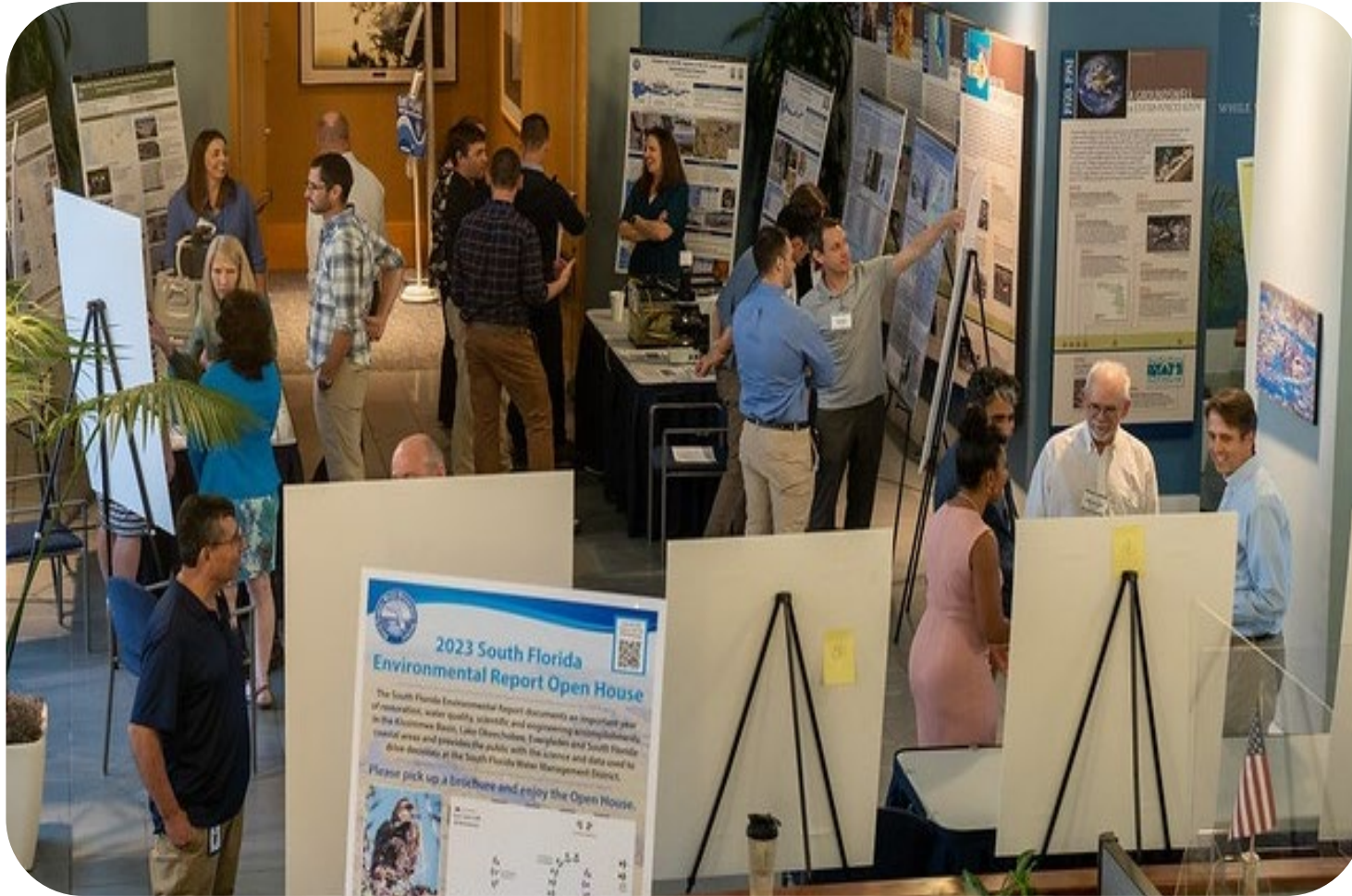
and

[SFWMD.gov/SFER](https://www.sfwmd.gov/SFER)

(Final 2024 SFER –
Volume I, Chapter 8D)



Mark Your Calendars



2024 SFER Open House Poster Sessions

April 10 & 11, 2024 at 1 pm

SFWMD Headquarters

B-1 Auditorium & Lobby

3301 Gun Club Road

West Palm Beach, FL

For more information, visit:

[SFWMD.gov/news-events/meetings](https://www.sfwmd.gov/news-events/meetings)

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

sfwmd.gov



STAR

STATEWIDE ANNUAL REPORT

The Statewide Annual Report 2022

The state of Florida is prioritizing the protection and restoration of our waterways by implementing sound, science-based solutions to current and future environmental challenges. Under the leadership of Governor Ron DeSantis, the Florida Department of Environmental Protection (DEP) is working with local, state and federal partners on short- and long-term strategies to protect water quality and quantity, including investment in long-term restoration projects. DEP has prepared the 2022 Statewide Annual Report (STAR) to detail the status of many of these strategies in an interactive application format, which is best viewed on a desktop computer screen using Google Chrome or Microsoft Edge.

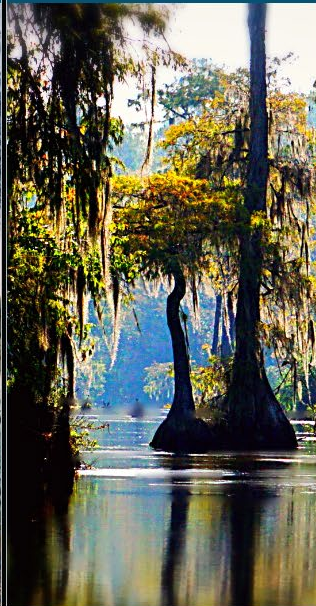
As required by section 403.0675, Florida Statutes, and to report on additional restoration efforts, this report updates the status of protection and restoration actions through total



Total Maximum Daily Loads



Basin Management Action Plans



Alternative Restoration Plans



Minimum Flows and Water Levels



Recovery and Prevention Strategies



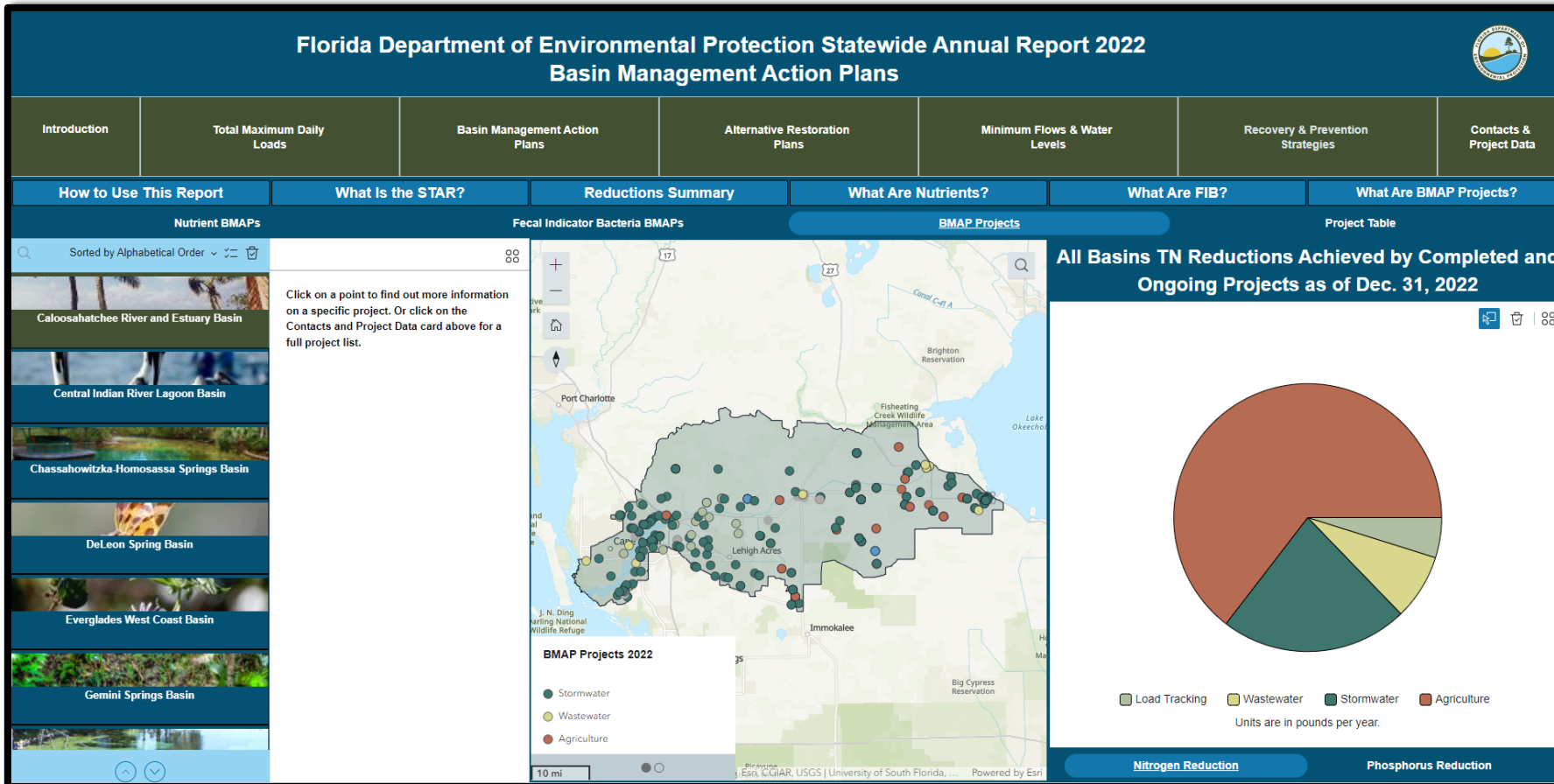
Contacts and Project Data





STAR

STATEWIDE ANNUAL REPORT



- Report will be published by July 1, 2024, with reporting through Dec. 31, 2023.
- Summarizes accomplishments in the BMAPs statewide.
- Reports on restoration projects and management strategies.
- Data download available.

<https://floridadep.gov/STAR>



STAR BMAP PORTAL FOR PROJECT COLLECTION

- Be sure to let your BMAP coordinator know if changes in access to your projects in the portal are needed.

 **DEP BUSINESS PORTAL**

DEAR RESTORATION PROJECT COLLECTION PORTAL
Division of Environmental Assessment and Restoration

Welcome, **Alex Smith** [Roles : Entity]
Your Session will time out in **060** minutes. [Sign Out](#)

Workflow ▾

Project Workbook Home > Workflow > Project Workbook

Search Criteria +

Updates Complete? ⓘ -

Lead Entity: Please select ▾

BMAP ID: None selected ▾

Notify Coordinator

Clicking this button certifies by the entity that ALL project updates through this reporting period (ending December 31st) are complete. This means: all updates to be processed for this reporting period have been submitted for coordinator review; the entity has reviewed ongoing status projects; and/or the entity assures that no changes are necessary to existing projects which are not submitted for coordinator review.

Exports +

Search Results

[Move to Next Review Stage](#) [Create New Project](#) [Create Duplicate Project](#)

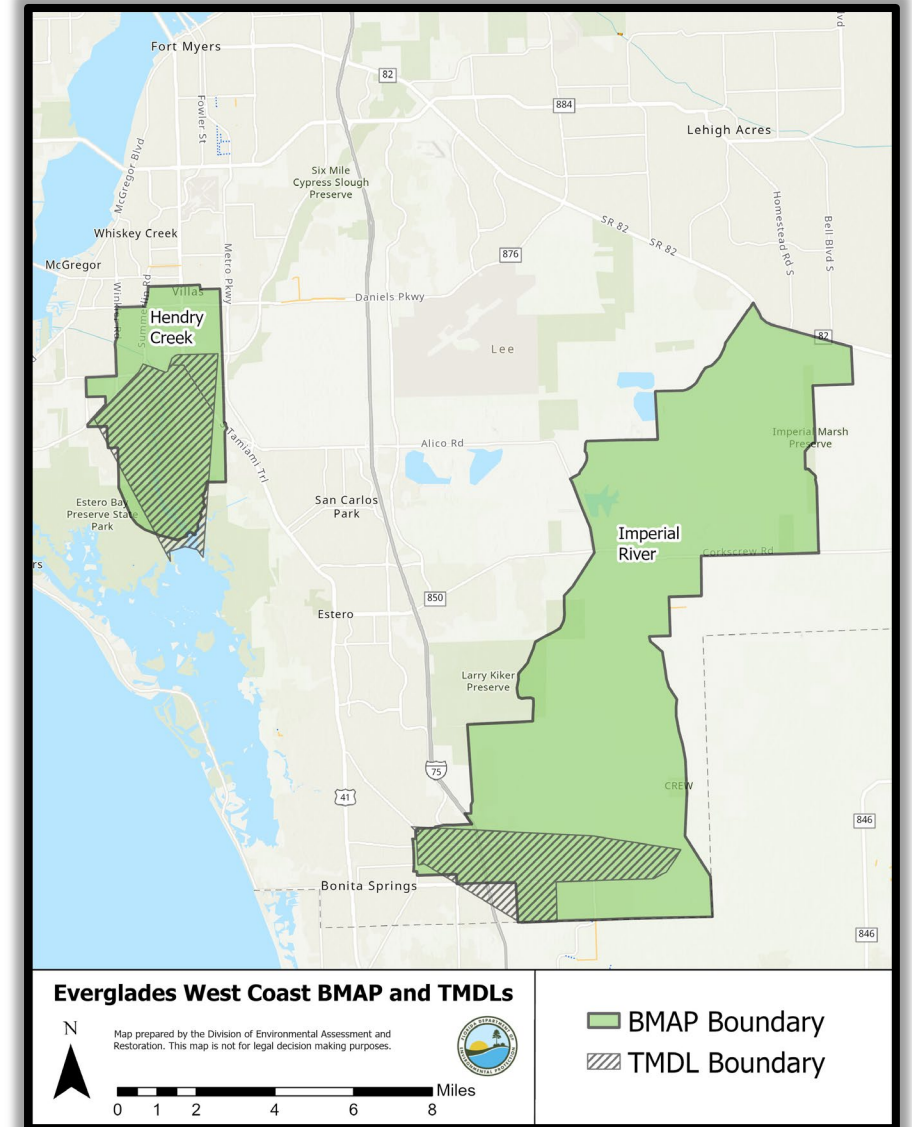
Column width can be adjusted with a tool that will appear if you hover over a column line in the table heading. Sorting arrows will appear in most columns if the column width is expanded.

Project Workbooks List

☐	User Action Icons	Review Stage ▾	STAR Year ▾	Saved But Not Submitted ▾	BMAP ID ▾	Project ID ▾	Lead Entity ▾	Project Number ▾	Project Name ▾	Project Type Category	Project Type ▾	Project Status ▾	Estimate Complete Date ▾
☐		Coordinator Verification /Validation Approved	2023		OKEE	3654	SFWM	SFWM-04	Otter Slough Restoration	Stormwater	Hydrologic Restoration	Completed	2009
☐		Coordinator Verification /Validation Approved	2023		OKEE	3630	SFWM	SFWM-10	West Waterhole	Stormwater	Dispersed Water Management (DWM)	Completed	2009
☐		Coordinator	2023		OKEE	3655	SFWM	SFWM-05	Otter Slough Restoration	Stormwater	Hydrologic Restoration	Completed	2009



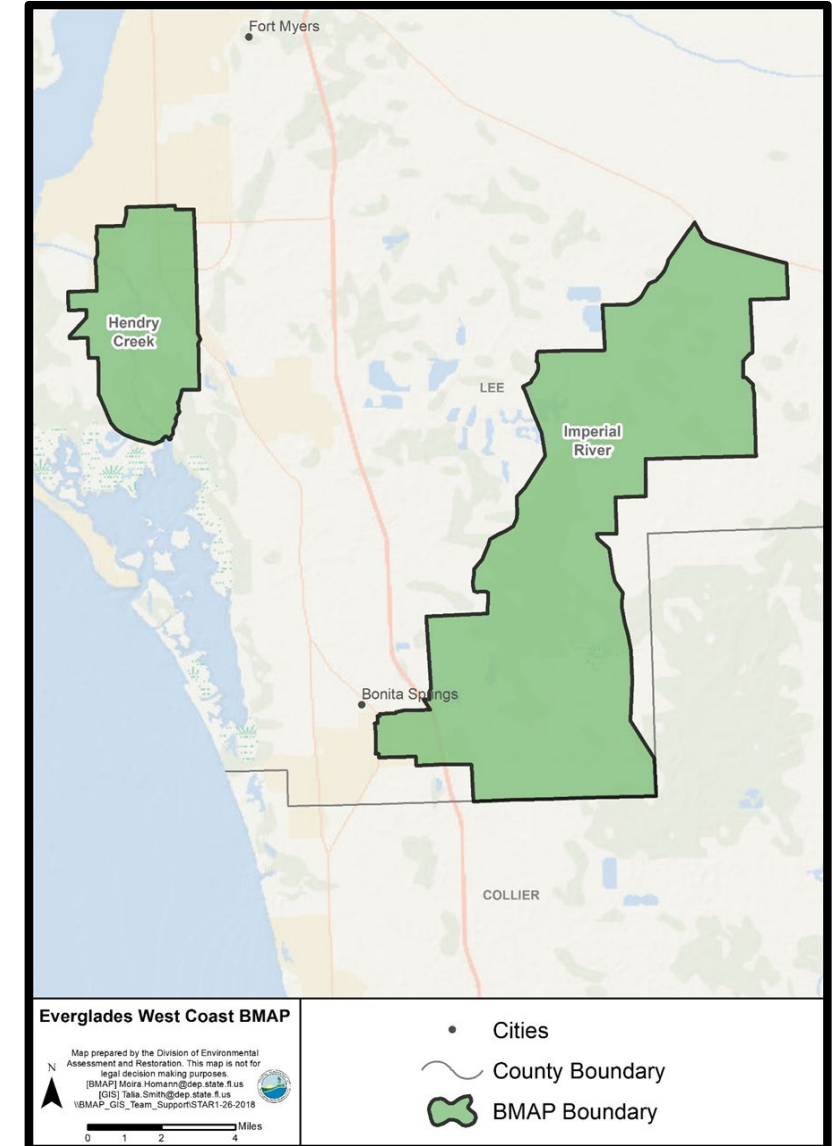
Target concentration 0.74 milligrams per liter (mg/L) TN.





EVERGLADES WEST COAST BMAP BACKGROUND

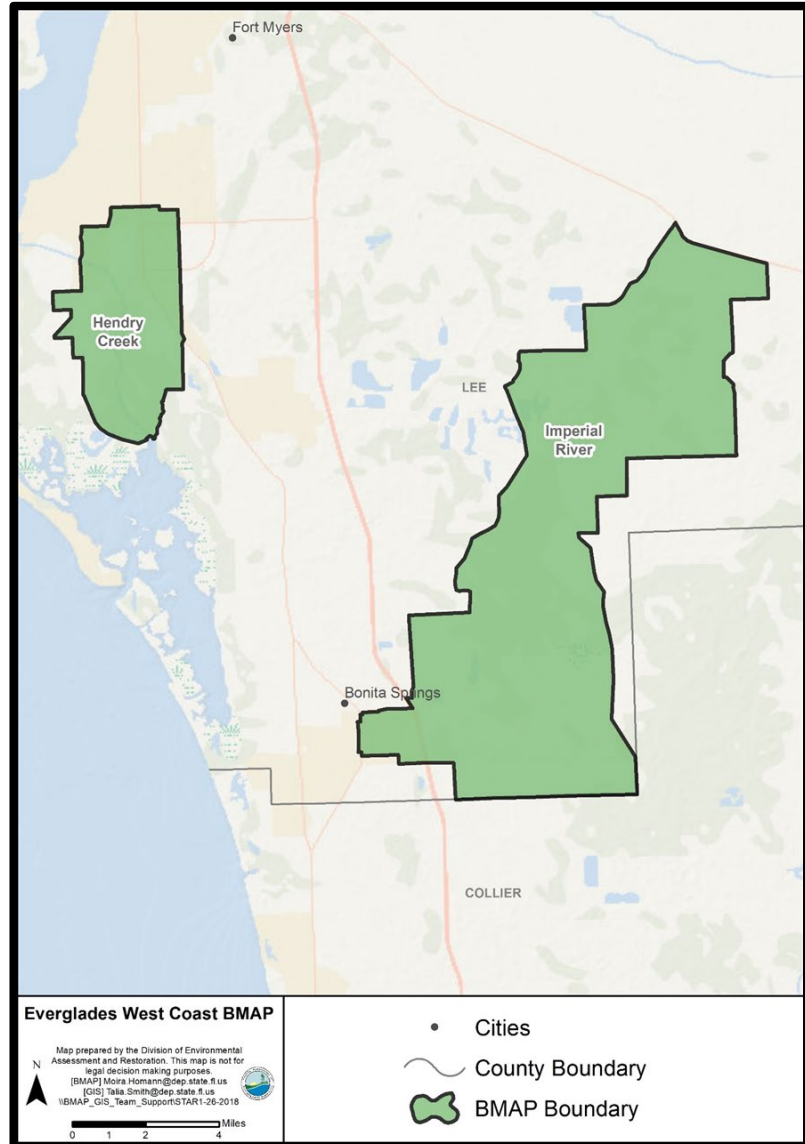
- Initially adopted November 2012.
- Total required reductions:
 - Hendry Creek: 10,320 lbs/yr TN.
 - Imperial River: 60,125 lbs/yr TN.





EVERGLADES WEST COAST BMAP

STAKEHOLDERS



Stakeholders	BMAP Basin
City of Bonita Springs	Imperial River
Lee County	Hendry Creek, Imperial River
DACS	Hendry Creek, Imperial River
Florida Department of Transportation (FDOT)	Hendry Creek, Imperial River



EVERGLADES WEST COAST BMAP

***PRELIMINARY** 2023 STAR UPDATES

Projects Through Dec. 31, 2023.

Lead Entity	Completed	Ongoing	Planned	Underway	Total
City of Bonita Springs	8	3	2	2	15
DACS	0	2	0	0	2
FDOT District 1	8	4	0	0	12
Lee County	11	4	0	1	16
Total	27	13	2	6	45

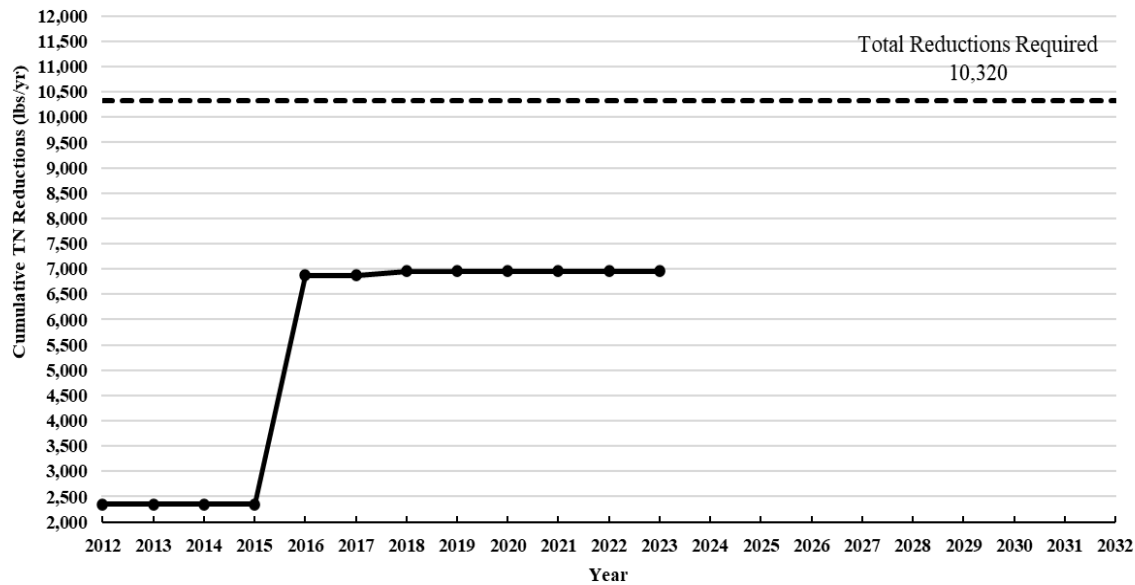


EVERGLADES WEST COAST BMAP

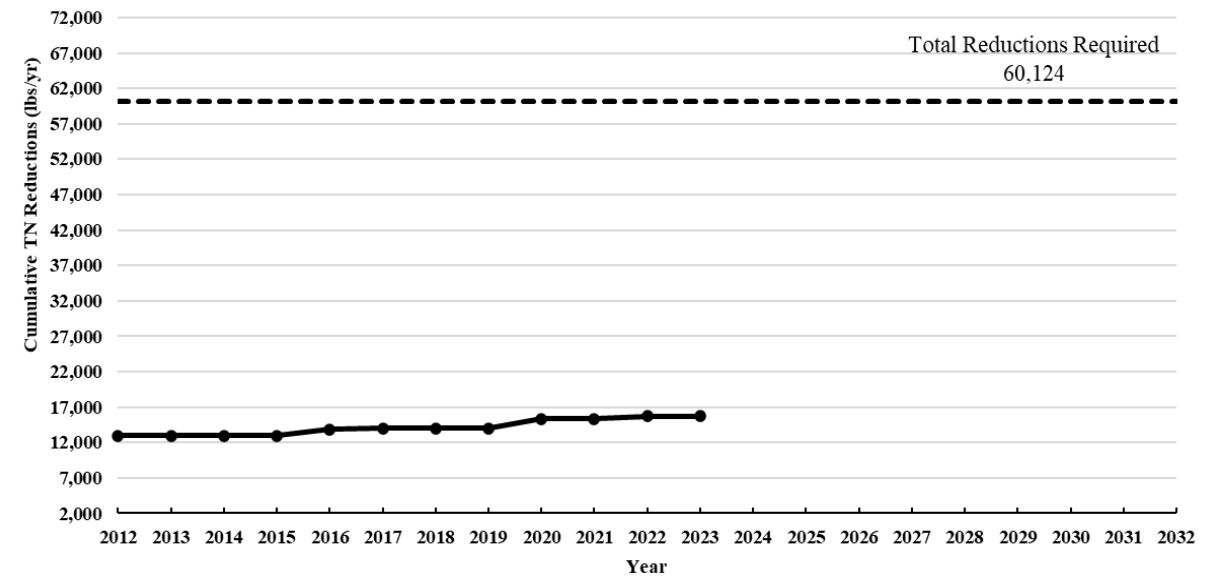
*PRELIMINARY 2023 STAR UPDATES

Progress through Dec. 31, 2023.

Everglades West Coast TN Project Reductions (Hendry Creek)



Everglades West Coast TN Project Reductions (Imperial River)

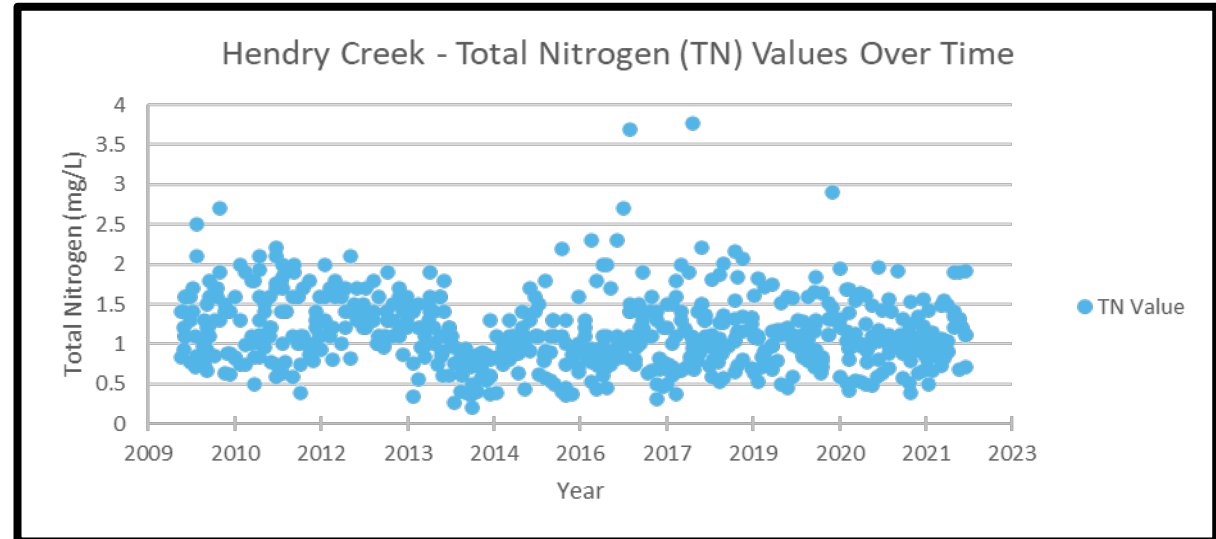
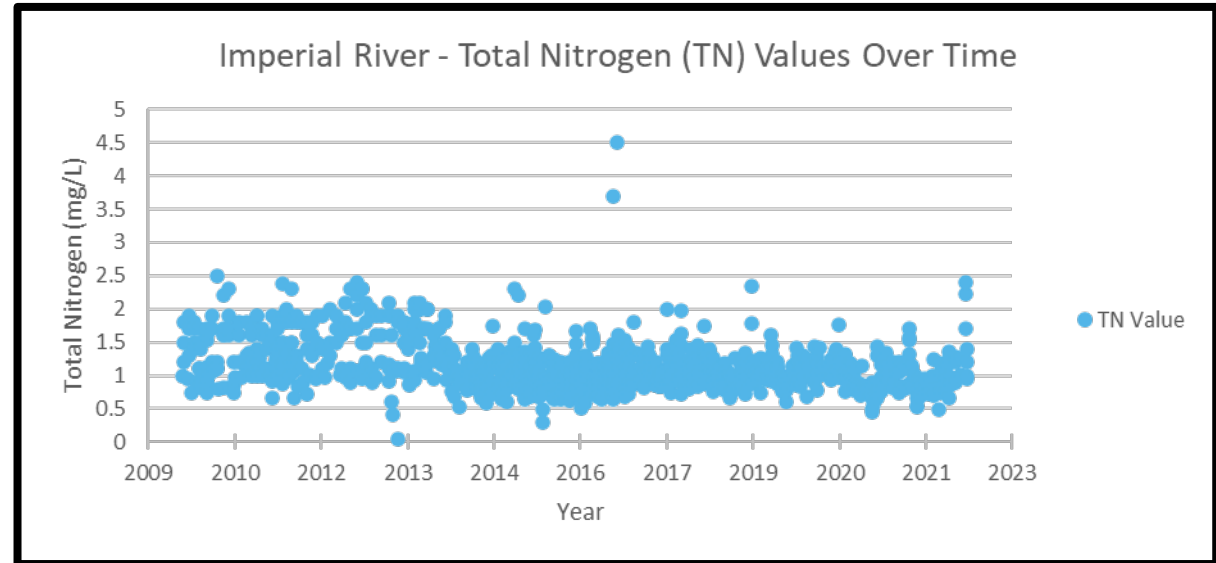
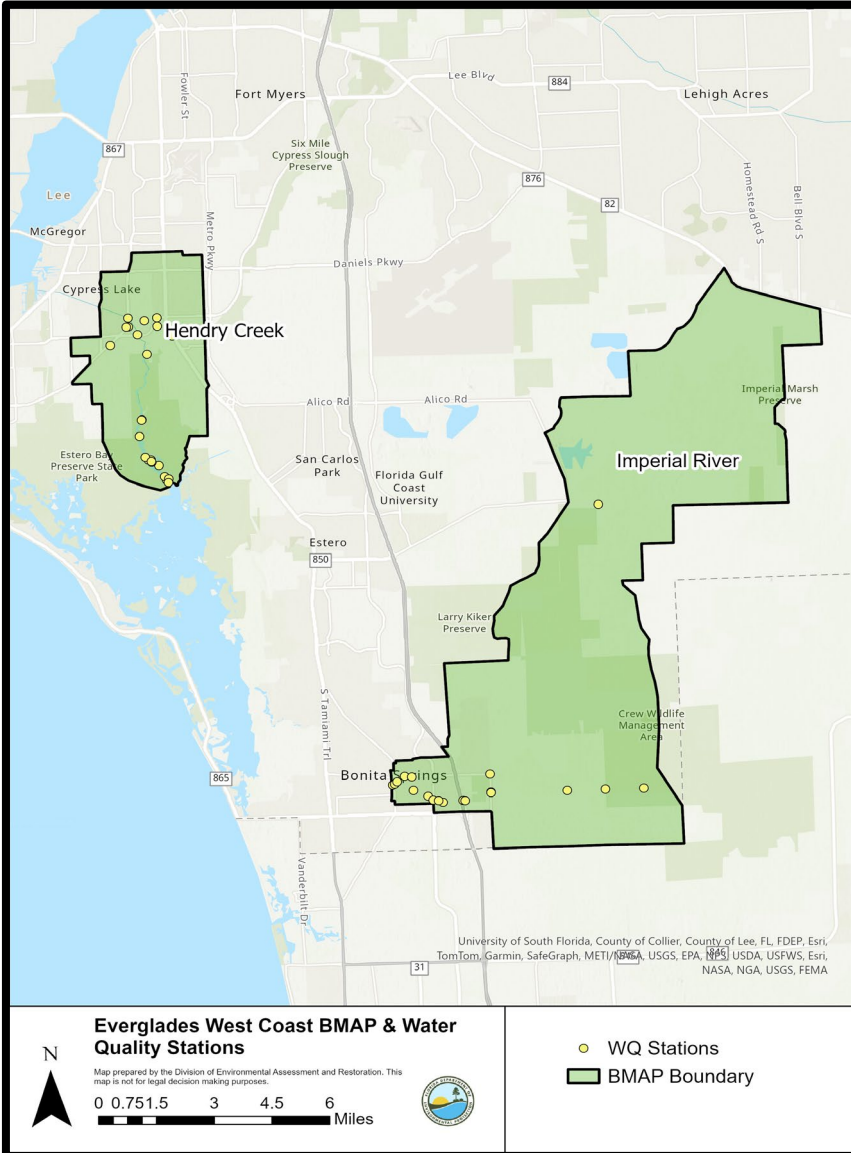


Completed and ongoing projects only.



EVERGLADES WEST COAST BMAP

WATER QUALITY





EVERGLADES WEST COAST BMAP STORYMAP

[Introduction](#)[Overview](#)[Location](#)[Water Quality](#)[Projects](#)[Progress](#)[Contacts & More Informatio...](#)

Introduction

Welcome to the Everglades West Coast Basin Management Action Plan 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 reductions 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 most recently published in the Statewide Annual Report (STAR). Please use the tabs above to navigate through this Story Map and learn more about the Everglades West Coast BMAP. Last updated June 2023.

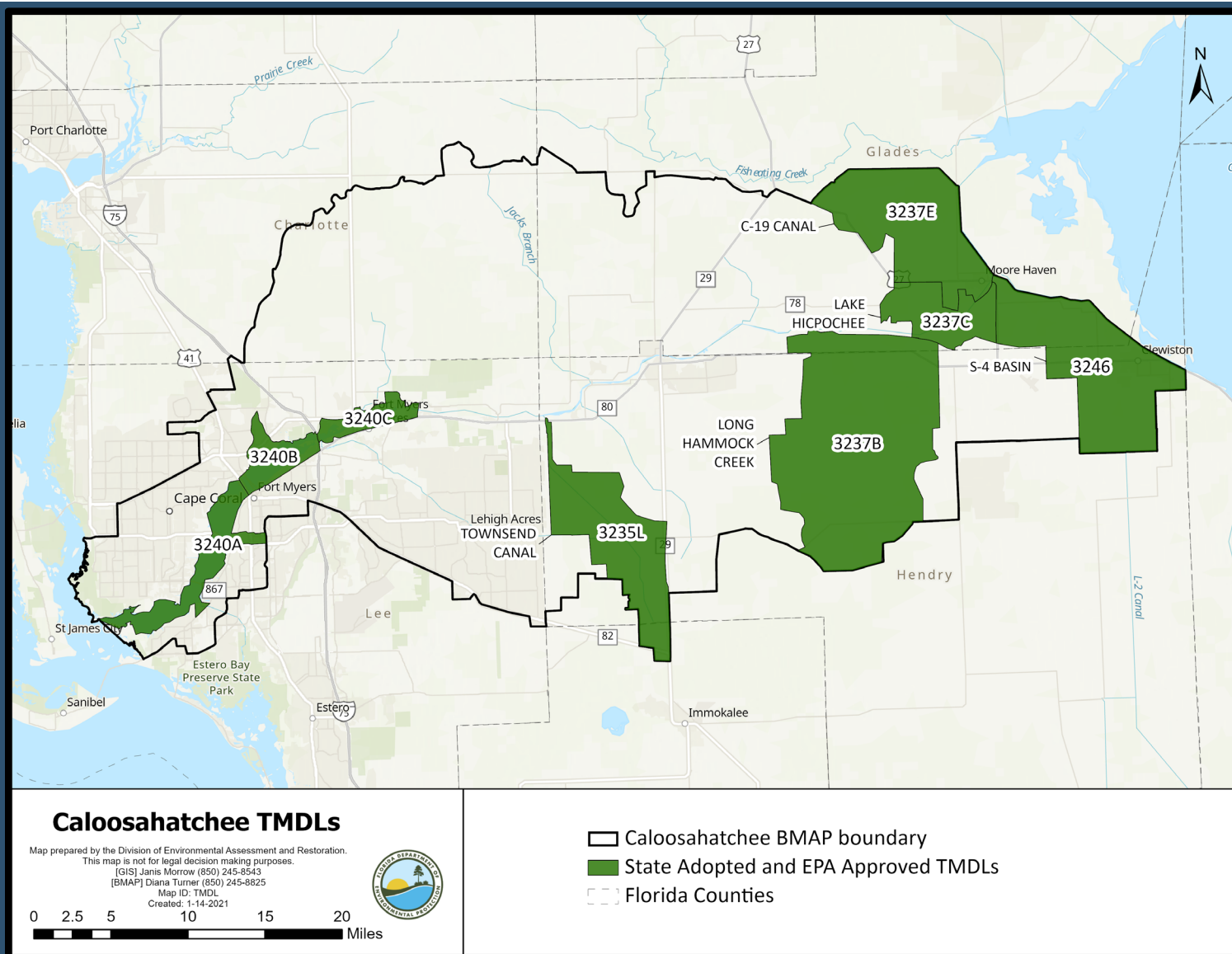
** The story map will display differently depending on the screen size and resolution being used. Story map best viewed in Chrome or Firefox.*





CALOOSAHATCHEE RIVER & ESTUARY BMAP

BACKGROUND



Tidal BMAP:

- Developed in 2012 to address TN in the estuary.

Current BMAP:

- Developed in 2020 to encompass complete watershed and include new tributary TMDLs.



CALOOSA HATCHEE RIVER & ESTUARY BMAP

STAKEHOLDERS

Local Governments:

- Charlotte County.
- Collier County.
- Glades County.
- Hendry County.
- Lee County.
- City of Cape Coral.
- City of Clewiston.
- City of Fort Myers.
- City of LaBelle.
- City of Moore Haven.

Community Development Districts (CDDs):

- | | |
|------------------------|------------------|
| • Lucaya. | • River Hall. |
| • Mirada. | • Sail Harbour. |
| • Moody River Estates. | • Sugarland. |
| • Port LaBelle. | • Verandah East. |
| • Portico. | • Verandah West. |

Special Districts:

- Barron Water Control District (WCD).
 - Clewiston WCD.
 - Collins Slough WCD.
- County Line Drainage District.
 - Cow Slough WCD.
 - Devil's Garden WCD.
- Disston Island Conservancy District.
 - Flaghole Drainage District.
 - Gerber Groves WCD.
 - Hendry-Hilliard WCD.
- Lehigh Acres Municipal Services District.
 - Sugarland Drainage District.

Agencies:

- FDACS.
- Florida Department of Environmental Protection.
 - (FDOT) District 1.
 - SFWMD.



CALOOSAHATCHEE RIVER & ESTUARY BMAP

*PRELIMINARY 2023 STAR UPDATE – ESTUARY

LeadEntity	Completed	Ongoing	Underway	Planned	Total
Barron WCD	1	1	3	0	5
Charlotte County	0	1	0	0	1
City of Cape Coral	14	3	1	1	19
City of Clewiston	3	3	0	0	6
City of Fort Myers	11	2	3	1	17
City of LaBelle	0	0	0	5	5
City of Moore Haven	1	0	1	0	2
Clewiston Drainage District	1	1	3	0	5
Collins Slough WCD	1	1	3		5
County Line Drainage District	1	1	0	3	5
Cow Slough WCD	1	1	3	0	5
Devil's Garden WCD	1	1	3	0	5
Disston Island Conservancy District	1	1	3	0	5
FDACS	0	6	0	0	6
FDOT District 1	29	2	0	0	31
Flaghole Drainage District	1	1	3	0	5
Gerber Groves WCD	1	1	3	0	5
Glades County	2	0	0	2	4
Hendry County	1	0	4	3	8
Hendry-Hilliard WCD	1	1	3	0	5
LA-MSID (formerly ECWCD)	15	1	1	1	18
Lee County	44	2	4	1	51
Lucaya CDD	0	2	0	0	2
Mirada CDD	0	2	0	0	2
Port LaBelle CDD	0	0	1	0	1
Portico CDD	3	1	0	0	4
SFWMD - Coordinating Agency	3	0	3	2	8
Sugarland Drainage District	1	1	3	0	5
Verandah East CDD	0	1	0	0	1
Verandah West CDD	0	1	0	0	1
Total	137	38	48	19	242

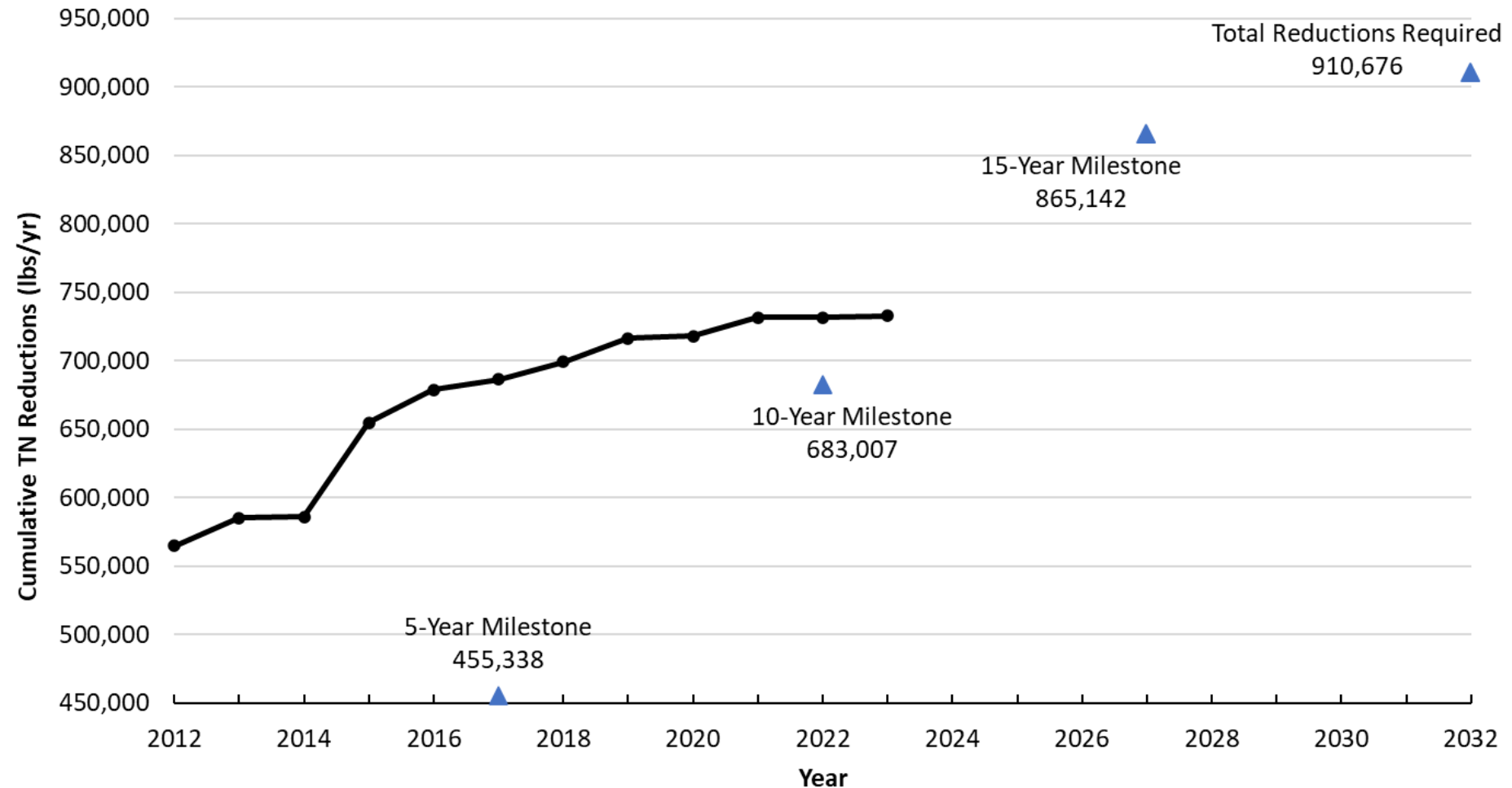


CALOOSAHATCHEE RIVER & ESTUARY BMAP

***PRELIMINARY** 2023 STAR UPDATE – ESTUARY

*Completed and Ongoing Projects.

Caloosahatchee Estuary TN Project Reductions





CALOOSAHATCHEE RIVER & ESTUARY BMAP

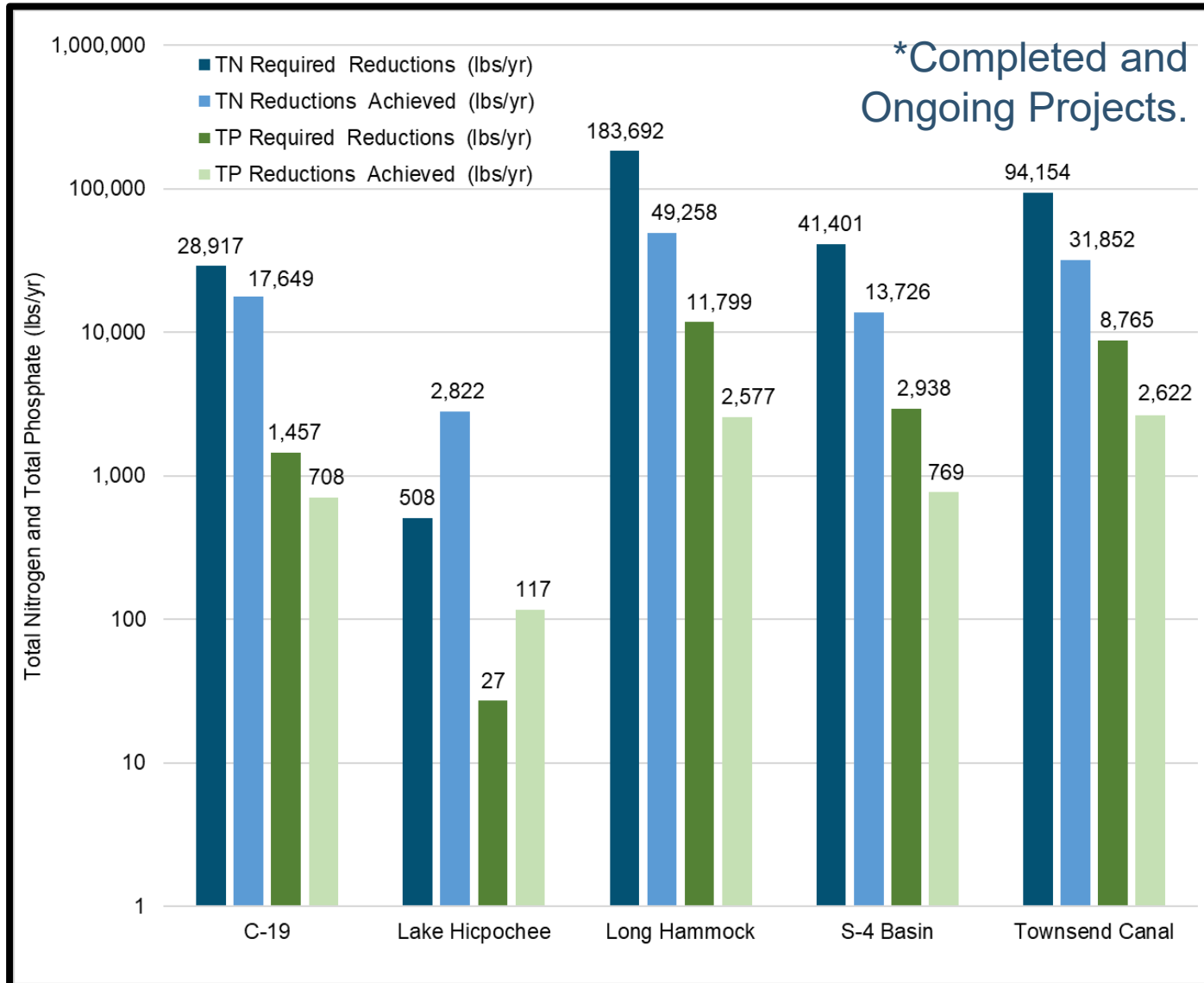
***PRELIMINARY** 2023 STAR UPDATE – TRIBUTARIES

Lead Entity	Completed	Ongoing	Underway	Planned	Total
Barron WCD	1	1	3	0	5
City of Clewiston	3	3	0	0	6
City of Moore Haven	1	0	1	0	2
Clewiston Drainage District	1	1	3	0	5
Collier County	0	1	0	0	1
Collins Slough WCD	1	1	3	0	5
Cow Slough WCD	1	1	3	0	5
Devil's Garden WCD	1	1	3	0	5
Disston Island Conservancy District	1	1	3	0	5
FDACS	0	10	0	0	10
FDOT District 1	2	0	0	0	2
Flaghole Drainage District	1	1	3	0	5
Glades County	5	0	0	2	7
Hendry-Hilliard WCD	1	1	3	0	5
Port LaBelle CDD	0	0	1	0	1
SFWMD - Coordinating Agency	1	0	3	1	5
Sugarland Drainage District	1	1	3	0	5
Total	21	23	32	3	79



CALOOSAHATCHEE RIVER & ESTUARY BMAP

*PRELIMINARY 2023 STAR UPDATE – TRIBUTARIES





CALOOSAHATCHEE RIVER & ESTUARY BMAP STORYMAP

[Introduction](#)[Overview](#)[Location](#)[Water Quality](#)[Projects](#)[Progress](#)[TN Trend Results](#)[TP Trend Results](#)[Contacts & More Information...](#)

Introduction

Welcome to the Caloosahatchee Basin Management Action Plan Story Map

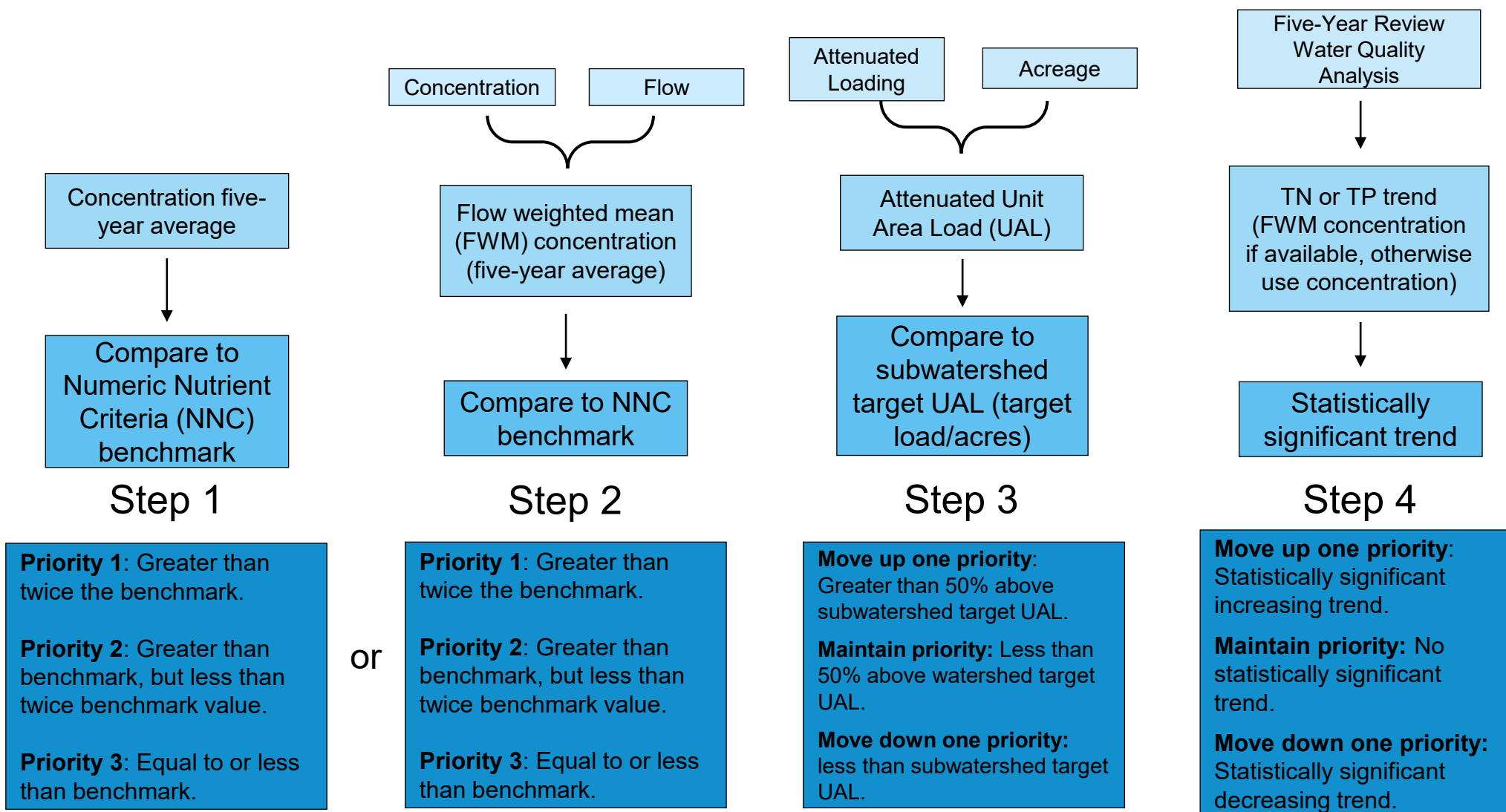
A Basin Management Action Plan (BMAP) is a framework for water quality restoration, containing local and state commitments to reduce pollutant loading through current and future projects and strategies. BMAPs contain a comprehensive set of solutions, such as permit limits on wastewater facilities, urban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





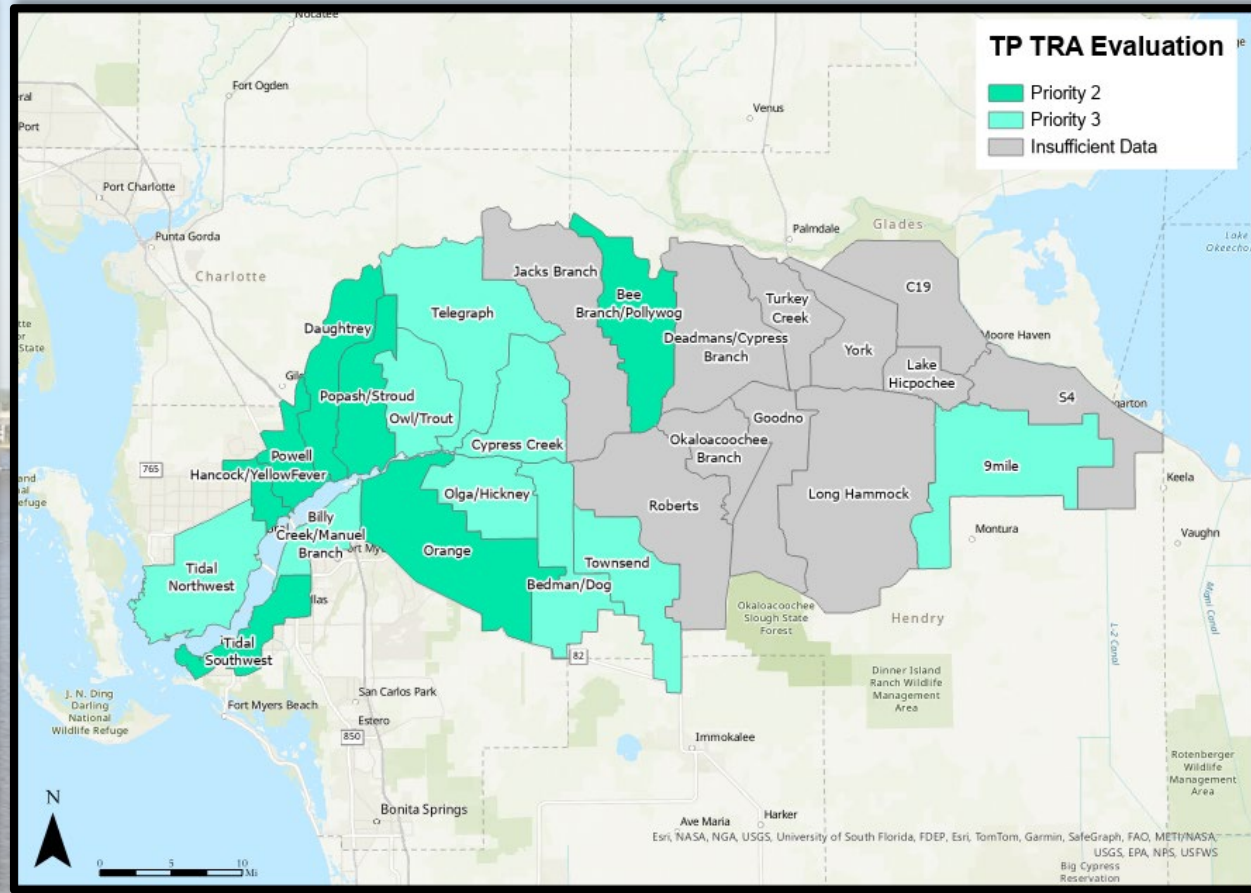
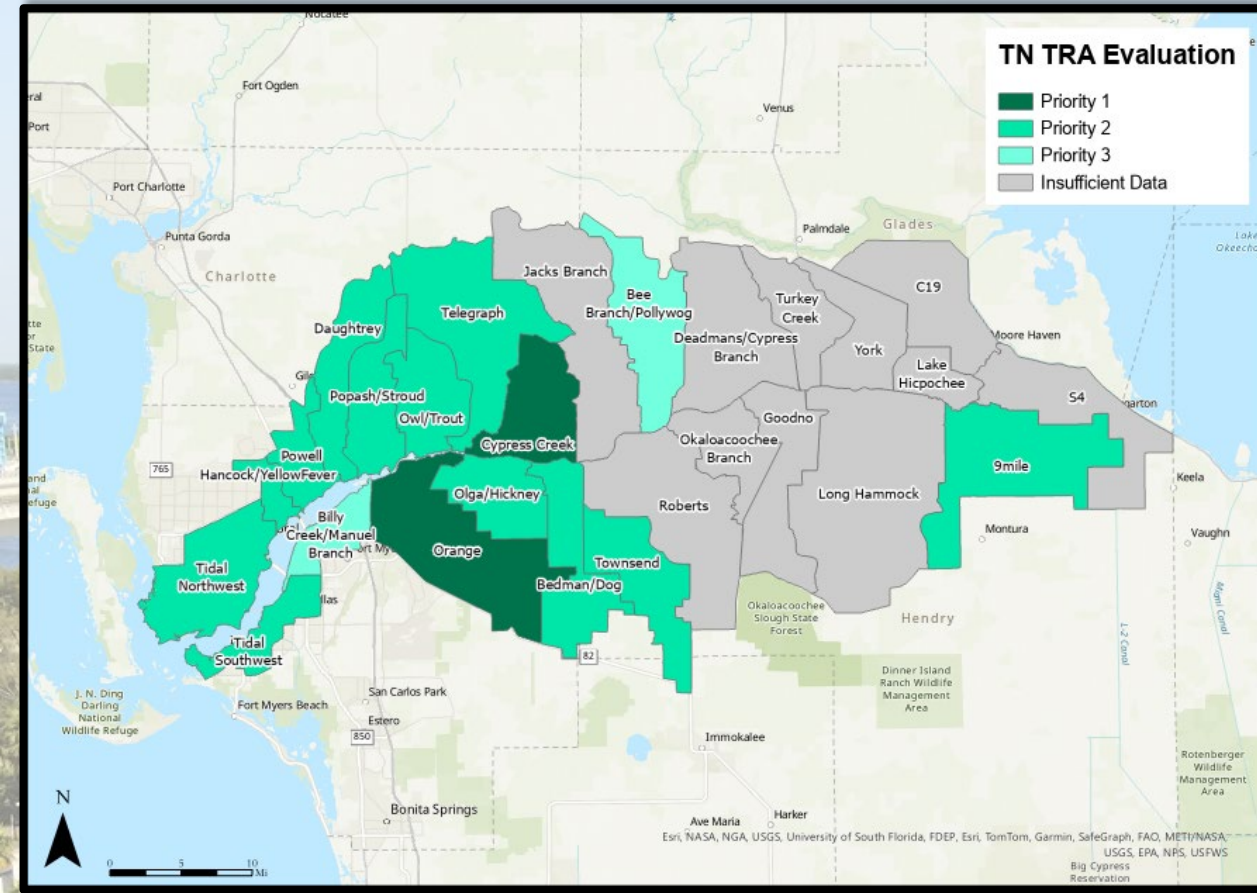
TARGETED RESTORATION AREA (TRA) EVALUATION UPDATE APPROACH





TRA EVALUATION UPDATE

2023 EVALUATION RESULTS





UPCOMING BMAP UPDATES

UPDATE BY JULY 1, 2025

Everglades West Coast:

- Wastewater effluent limits based on size of facility and effluent disposal method utilized.
- Onsite sewage treatment and disposal system (OSTDS) requirements for new systems on lots one acre or less.
- Development of a hot spot analysis.
- Evaluation of the monitoring network.
- Update to land use and allocations.
- Inclusion of entity milestones.
- Inclusion of the Clean Waterways Act requirements.

Caloosahatchee River and Estuary:

- Evaluation of wastewater effluent limits.
- OSTDS requirements for new systems on lots one acre or less.
- Inclusion of regional projects.
- Development of a hot spot analysis.
- Evaluation of the monitoring network.
- Update to allocations.
- Inclusion of entity milestones.
- Inclusion of the Clean Waterways Act requirements.



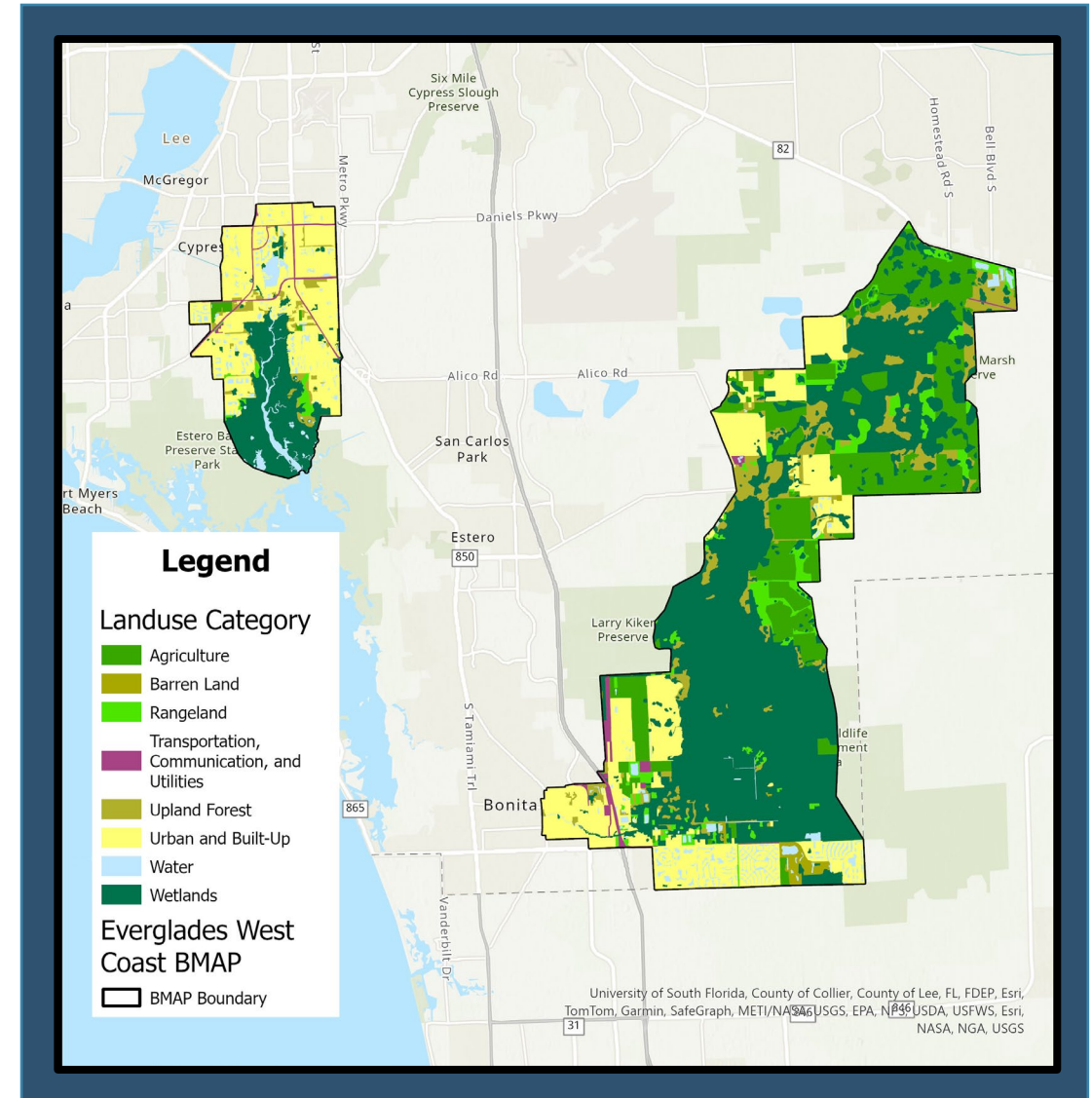
EVERGLADES WEST COAST LAND USE UPDATE

Hendry Creek

Land Use Category	Acres in Current BMAP	Acres Updated with SFWMD 2017-19 Land Use
Urban	5,184	5,905
Agriculture	98	219
Natural Lands	5,182	4,369

Imperial River

Land Use Category	Acres in Current BMAP	Acres Updated with SFWMD 2017-19 Land Use
Urban	6,160	8,857
Agriculture	11,597	8,821
Natural Lands	27,203	27,270





CALOOSAHATCHEE REQUIRED REDUCTIONS UPDATE

- Recent monitoring data from the South Florida Environmental Report (SFER) reported a much **higher loading of TN** to the Caloosahatchee Estuary than had been determined by the BMAP model using data through 2015.
- The 2022 Five-Year Review made recommendations to **update the loading** in the BMAP to better match measured data and to then also **update required reductions**.



CALOOSA HATCHEE REQUIRED REDUCTIONS UPDATE

10-year average
of SFWMD
loading data by
subwatersheds.

Is load higher
than modeled
value?

No

Tidal watershed
stakeholder allocations
remain unchanged.

Yes

Calculate percent
difference of
modeled load and
measured load for
east and west.

Apply this factor to
previously clipped
load estimation tool
(LET) stakeholder
allocations.

Compare tributary
required reductions and
new estuary required
reductions and assign
higher value.



CALOOSAHATCHEE REQUIRED REDUCTIONS UPDATE

Subwatershed	BMAP TN Start Load (lbs./yr.)	TN Required Reduction (lbs./yr.)	10-Year Average Water Year 2013–22 (lbs./yr.)	Percent Increase
East Caloosahatchee	1,008,818	232,028	1,329,467	31.78%
Tidal Caloosahatchee	1,200,195	276,045	1,137,632	▼5.21%
West Caloosahatchee	1,750,448	402,603	2,457,362	40.38%
Total	3,959,461	910,676	4,924,461	24.37%

Allowable Load = 3,048,785 lbs/yr
New required reductions: ~1,938,241 lbs/yr



HOTSPOT ANALYSIS DEVELOPMENT

OVERVIEW

Purpose:

- To find more specific areas to focus restoration activities.
- To highlight areas where projects might have stronger results.
- To highlight areas where more investigation is needed.

Analysis is NOT to determine BMAP or TMDL compliance.

Compliment to the TRA Evaluation:

- Analysis uses stations with two to five years of data, allowing more monitoring stations to be used.
- Can help narrow down more specific areas in need of attention within the TRA basins.
- Components are independent, rather than sequential.



HOTSPOT ANALYSIS DEVELOPMENT

COMPONENTS OF THE HOTSPOT INDEX

These four statistics calculated for the BMAP overall and used to compare against each station average:

- TN or TP concentration average.
- TN or TP 90th percentile.
- TN or TP Standard Deviation (SD).
- TN or TP Percent Frequency of Samples over BMAP Threshold.

BMAP Threshold:

- Caloosahatchee River and Estuary:
 - TN – Peninsular Numeric Nutrient Criteria (NNC) – 1.54 mg/L
 - TP – Peninsular NNC – 0.12 mg/L



HOTSPOT ANALYSIS DEVELOPMENT

INDEX RANKING APPROACH

Station Concentration Average Rank

Compare to BMAP Threshold and overall BMAP average.

Rank 0: Station average below BMAP threshold.

Rank 1: Station average above threshold but below BMAP average.

Rank 2: Station average 2x above BMAP average.

Percentiles Rank

Compare to BMAP Threshold and 90th percentile for the whole BMAP.

Rank 0: Station average below BMAP threshold.

Rank 1: Station average above threshold but below 90th percentile.

Rank 2: Station average above 90th percentile.

Standard Deviation (SD) Rank

Compare to overall BMAP SD.

Rank 0: Station average below BMAP average + 0.5 SD.

Rank 1: Station average at or above average + 0.5 SD but less than BMAP average + 1 SD.

Rank 2: Station average at or above BMAP average + 1 SD.

Frequency Rank

Compare to BMAP Threshold.

Rank 0: Station percent exceedance below 5% of samples.

Rank 1: Station exceedances between 5% and 49% of samples.

Rank 2: Station exceedances over 50% of samples.



HOTSPOT ANALYSIS DEVELOPMENT

FINAL OVERALL RANK

Average Rank
+
Percentile Rank
+
SD Rank
+
Frequency Rank

=

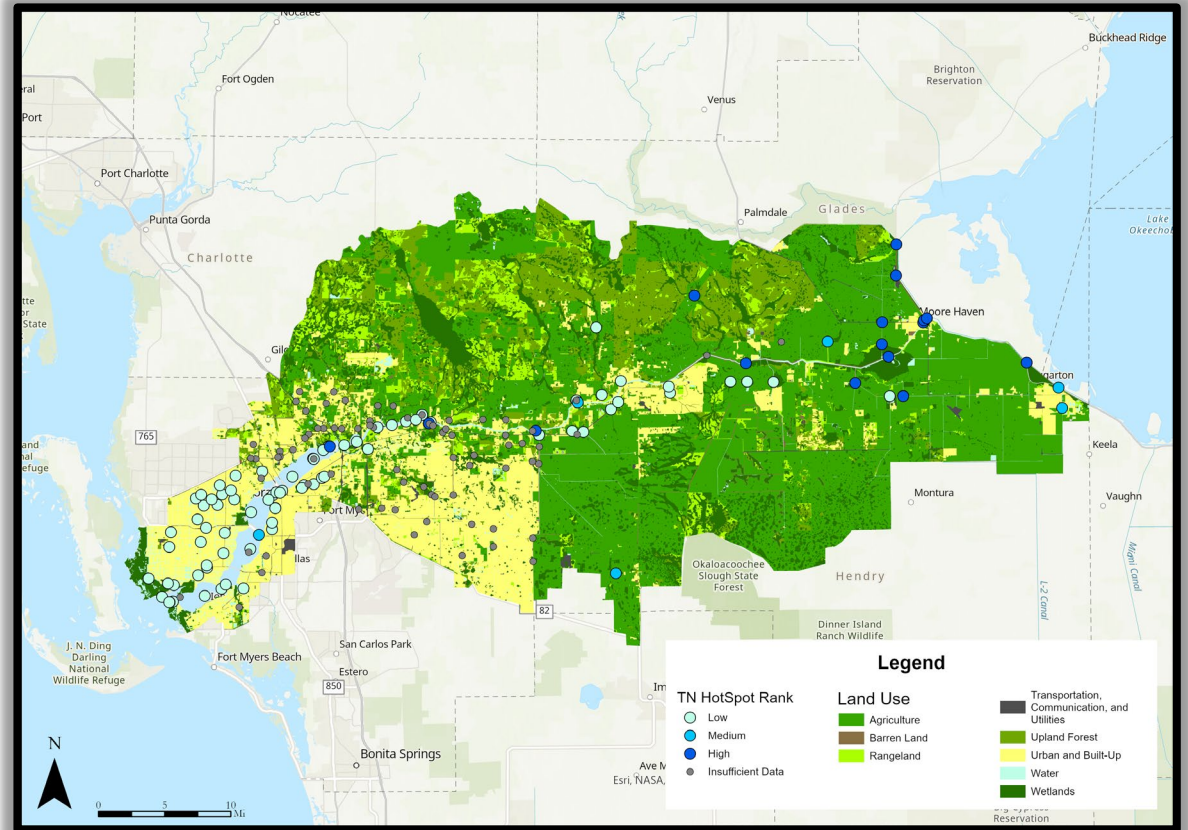
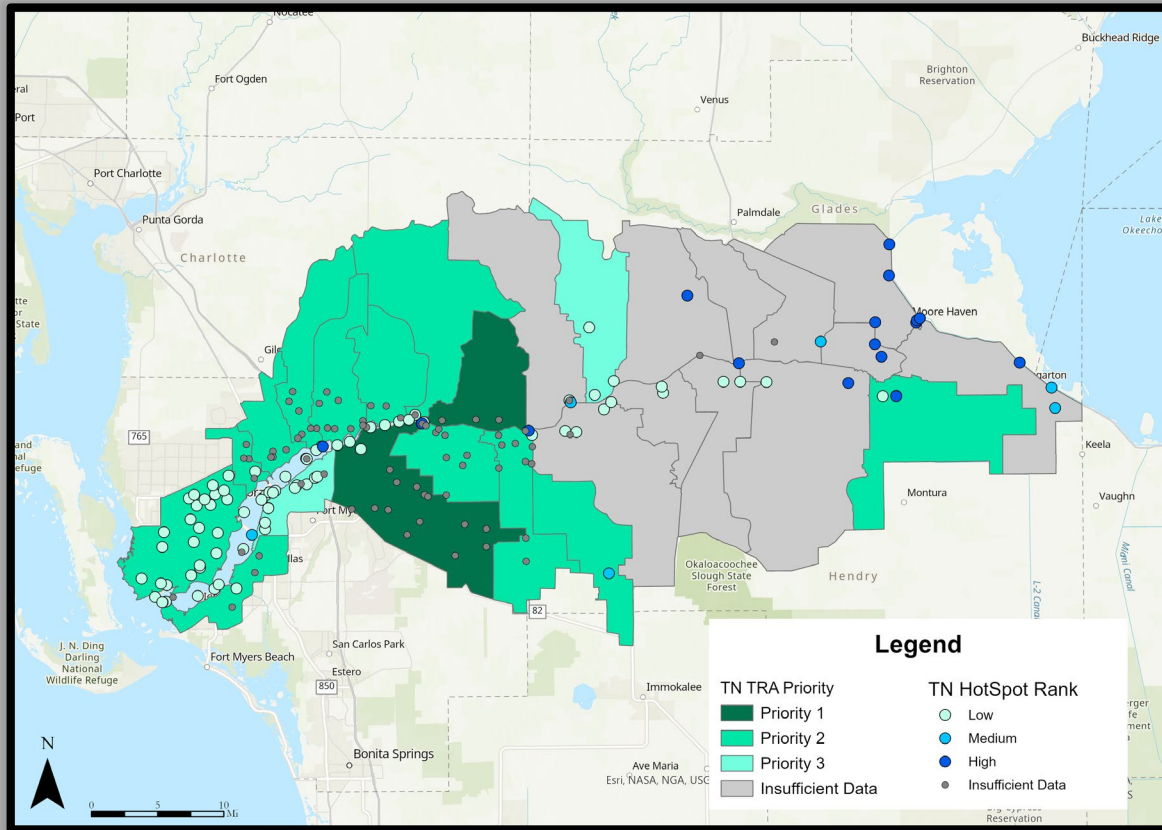
Total Index Rank

Rank 0 = Least Concern
Rank 8 = High Concern



HOTSPOT ANALYSIS RESULTS EXAMPLE

CALOOSA HATCHEE TN RESULTS





UPCOMING SCHEDULE

Feb.
2024

Draft wastewater and OSTDS plans due from stakeholders.

Feb.- Dec.
2024

Stakeholder meetings/technical analyses/draft document.

Aug.
1, 2024

Final wastewater and OSTDS plans due from stakeholders.

Dec.
2024

Final Draft BMAP documents.

Northern Everglades and Estuaries Protection Program (NEEPP) Workshop.

Fall
2024

Statutory deadline for updated nutrient BMAPs.

July 1,
2025



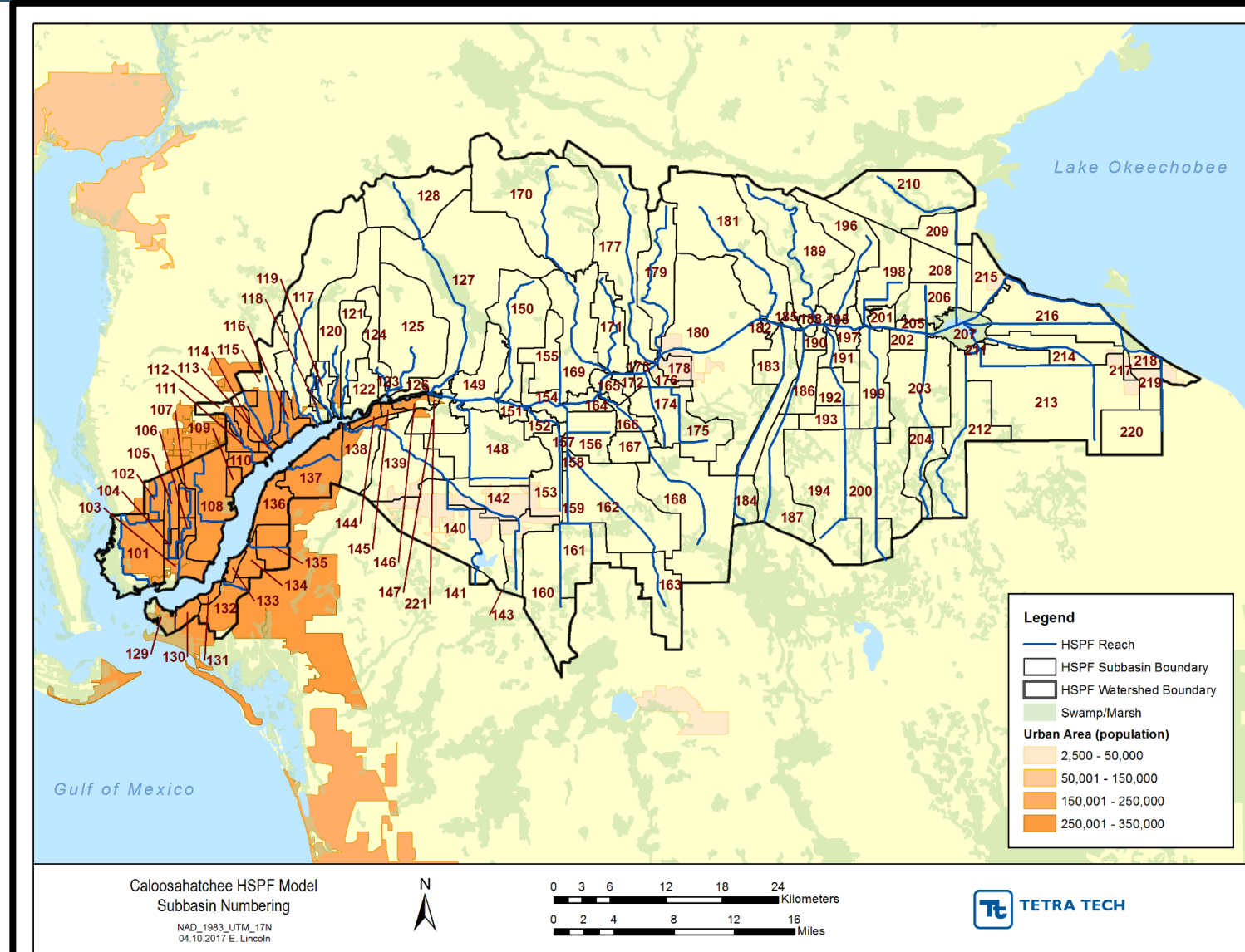


CALOOSAHATCHEE MODEL UPDATE

GENERAL OVERVIEW

To be completed after the 2025 Update and used in later BMAP update.

- Updating the current Hydrological Simulation Program – FORTAN (HSPF) model.
- Updating data used in model:
 - Flow.
 - Water quality.
 - Wastewater facility and OSTDS.
 - Land use.
- Updating allocations.
- Stay tuned for updates!



Caloosahatchee River & Estuary & Everglades West Coast BMAP Annual Meeting

April 2, 2024

Jennifer Thera

Florida Department of Agriculture and Consumer Services

Office of Agricultural Water Policy



Florida Department of Agriculture and Consumer Services

Overview

- Office of Agricultural Water Policy (OAWP) Staff and Responsibilities
- Agricultural Best Management Practices (BMP)
- BMP Manual Update
- Enrollment and Unenrolled Agricultural Lands Classification
 - Caloosahatchee River and Estuary Basin
 - Everglades West Coast Basin
- BMP Implementation Verification (IVs)
- BMP Enrollment Viewer Web App
- Legislative Report



Office of Agricultural Water Policy (OAWP)

- **West Gregory**; Director West.Gregory@FDACS.gov
- **J.P. Fraites**; Asst. Director John.Fraites@FDACS.gov
- **Bret Prater**; Asst. Director Bret.Prater@FDACS.gov
- **Angela Chelette**; Chief of Policy Planning and Coordination
Angela.Chelette@FDACS.gov
- **Steve Smith**; Chief of Field Services Steve.Smith@FDACS.gov



OAWP Staff

- **Yesenia Escribano;** Environmental Administrator-BMAPs
Yesenia.Escribano@fdacs.gov
- **Jennifer Thera;** Environmental Consultant-PPC Jennifer.Thera@fdacs.gov
- **Rebecca Elliott;** Environmental Consultant-PPC Rebecca.Elliott@fdacs.gov
- **Raulie Raulerson;** Environmental Administrator-Field Services
Raulie.Raulerson@fdacs.gov
- **Vacant;** Environmental Manager-Field Services
- **Sheila Kitaif;** Biological Administrator-Field Services Sheila.Kitaif@fdacs.gov



OAWP Responsibilities



Development and implementation of agricultural best management practices (BMPs)

Implementation of cost share programs

Water supply and water quality planning and coordination

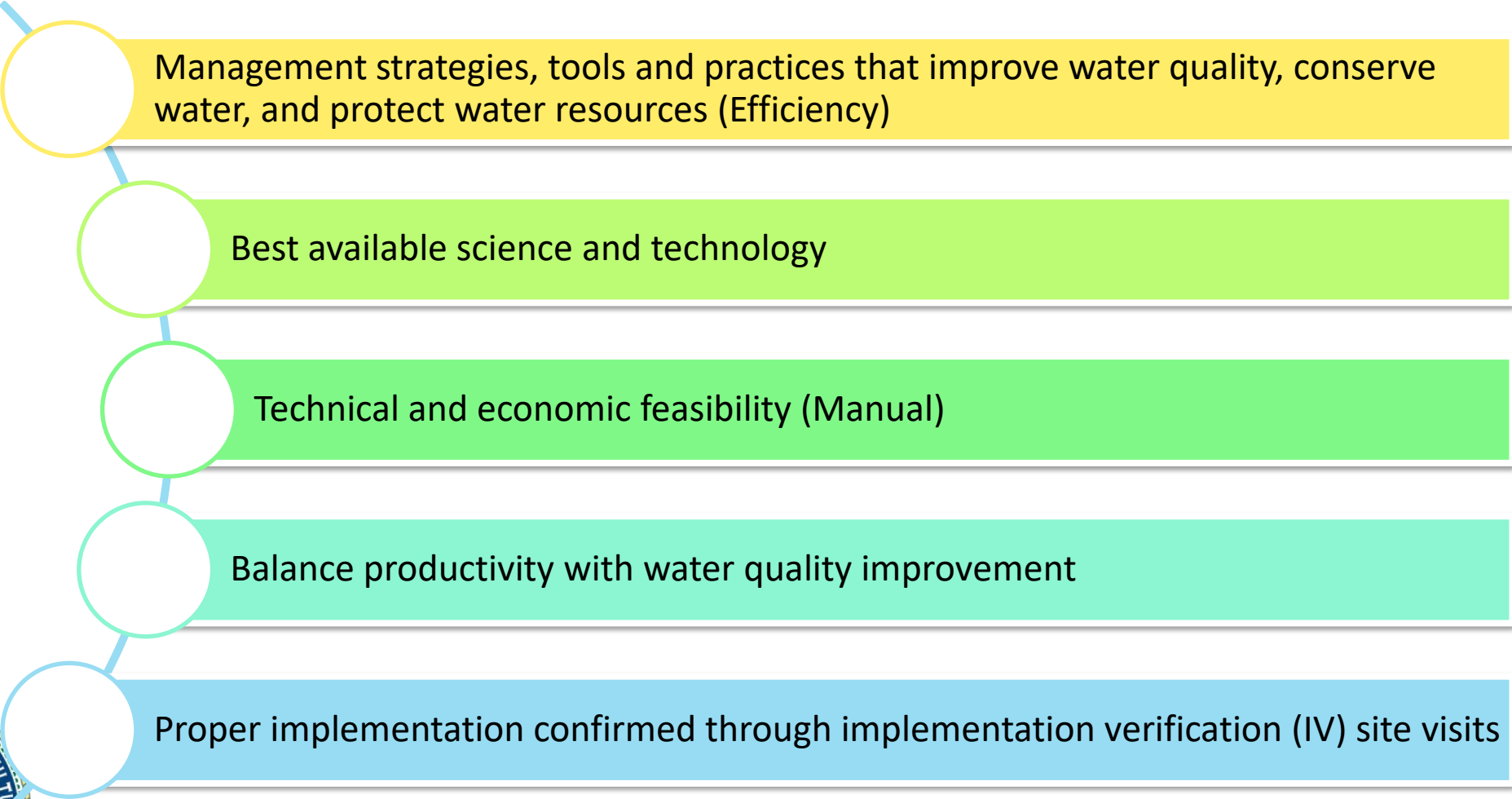
Scientific and technical research

Other policy development and statutory responsibilities

Binding determinations



Benefits of Agricultural Best Management Practices



Management strategies, tools and practices that improve water quality, conserve water, and protect water resources (Efficiency)

Best available science and technology

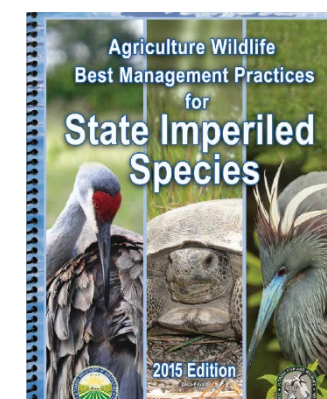
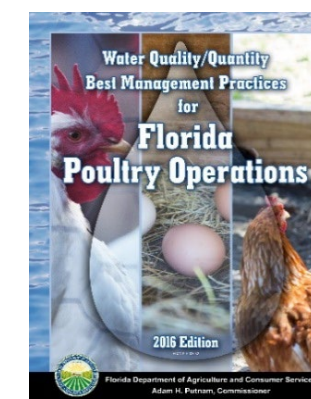
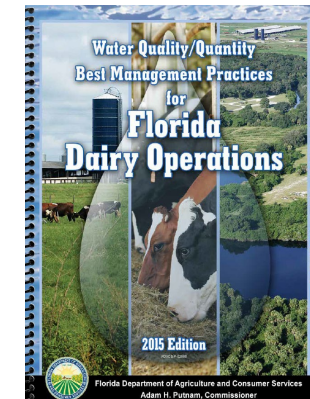
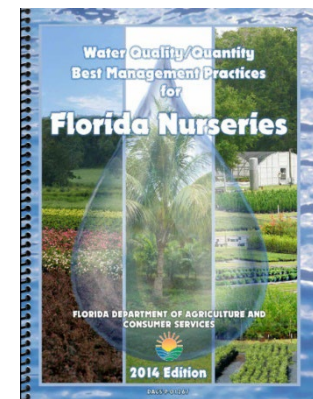
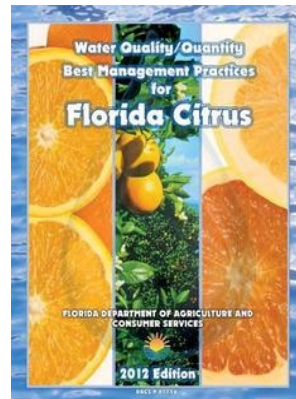
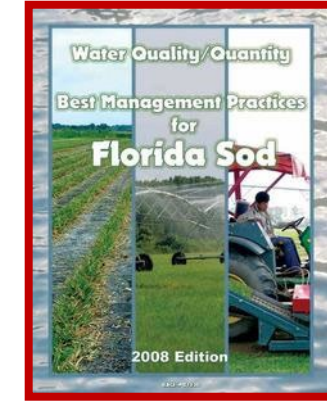
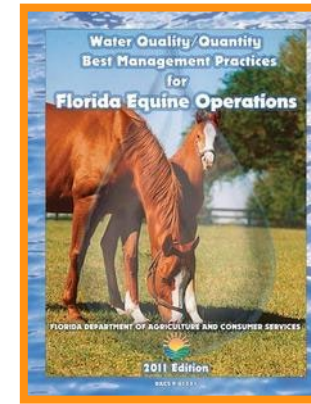
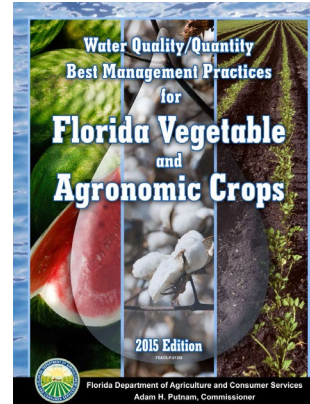
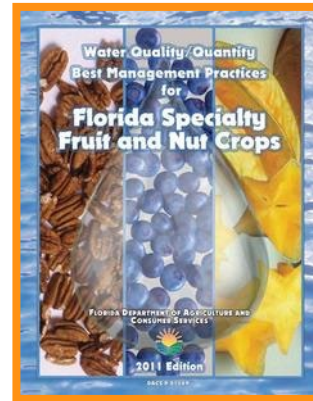
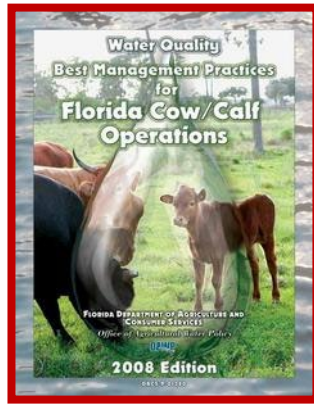
Technical and economic feasibility (Manual)

Balance productivity with water quality improvement

Proper implementation confirmed through implementation verification (IV) site visits



BMP Manuals



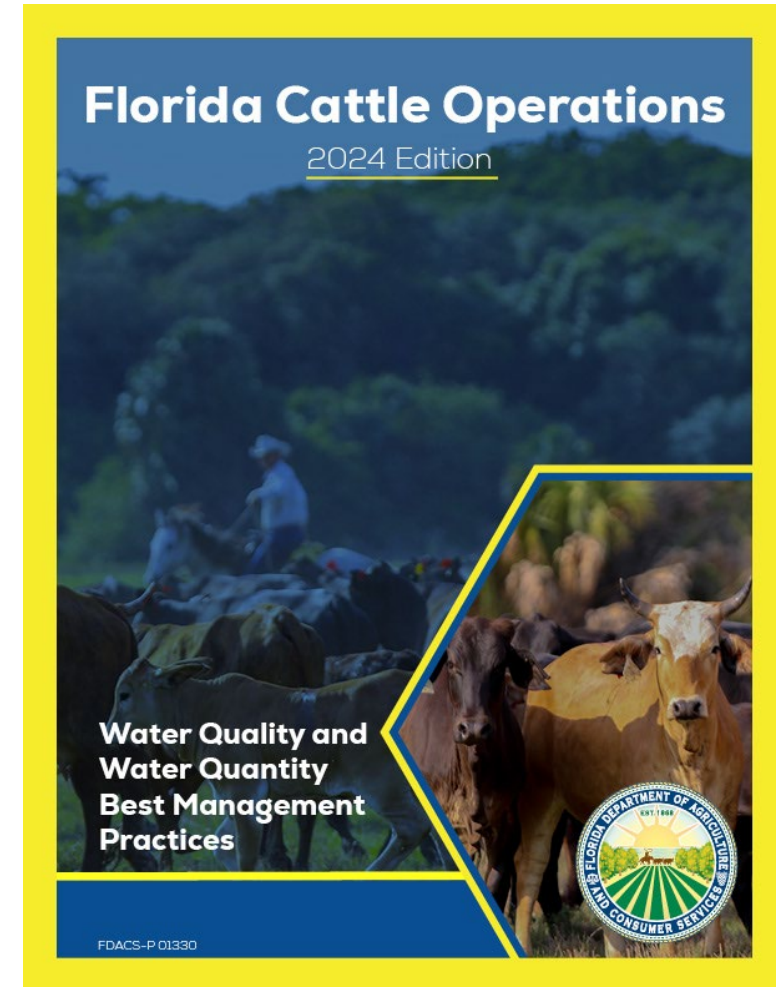
Florida Department of Agriculture and Consumer Services

Update BMP Manuals: Status

Best Management Practices (BMPs)

The producer agrees to perform the following items either checked as "In Use" or "Planned":

Nutrient Management					
Do you apply nutrients or plan to apply nutrients in any form on the operation associated with this NOI?			Yes	No	-
			In Use	Planned	N/A
1.1	Right Source				
	1	If using commercial fertilizer (including Class AA biosolids), identify and document the nitrogen (N), phosphorus (P), and potassium (K) concentrations using the guaranteed analysis or product label information prior to application.			
	2	If using manures, poultry litter, compost, or other sources, determine and document the N, P, and K concentrations of those materials prior to application. Acceptable alternatives to laboratory analysis include supplier analysis, NRCS guidelines or values established in scientific literature.			
	3	If using <u>Class A</u> or Class B biosolids, account for the nutrient concentrations and follow the requirements of the FDEP permit.			
1.2	Right Rate				
	Right Rate				
	3	If using <u>Class A</u> or Class B biosolids, account for the nutrient concentrations and follow the requirements of the FDEP permit.			



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 Caloosahatchee BMAP

Subwatershed	Total Ag Acres	Enrolled Ag Acres	% Enrolled	Irrigated Acres	Enrolled Irrigated Acres	% Enrolled
Tidal Caloosahatchee	58,932	46,358	79%	5,657	5,083	90%
West Caloosahatchee	180,837	153,794	85%	53,769	49,768	93%
East Caloosahatchee	194,532	176,131	91%	113,456	107,913	95%



BMP enrollment as of Dec 2023 and the 10th Florida Statewide Agricultural Irrigation Demand ([FSAID](#)) Geodatabase

Florida Department of Agriculture and Consumer Services

Enrollments within the Caloosahatchee Tributaries BMAP

Tributary	Total Ag Acres	Enrolled Ag Acres	% Enrolled	Irrigated Acres	Enrolled Irrigated Acres	% Enrolled
Townsend Canal	28,868	26,813	93%	19,349	19,281	100%
C-19	24,545	23,240	95%	13,480	12,595	93%
Lake Hicpochee	5,189	4,675	90%	3,299	3,291	100%
Long Hammock Creek	68,807	57,233	83%	33,846	31,832	94%
S-4	29,203	27,728	95%	27,476	26,531	97%



BMP enrollment as of Dec 2023 and the 10th Florida Statewide Agricultural Irrigation Demand ([FSAID](#)) Geodatabase

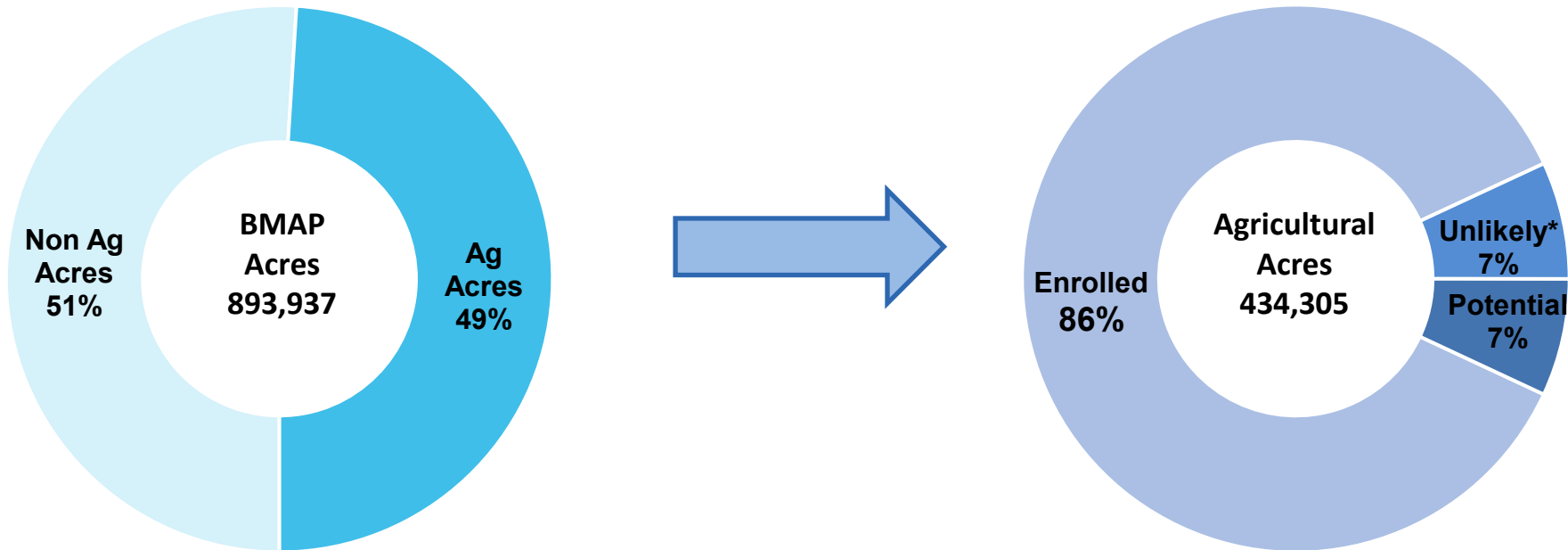
Agricultural Acres Enrolled within Caloosahatchee BMAP

BMP Manual	Acres
Citrus	38,572
Conservation Plan	43,840
Cow/Calf	99,553
Equine	43
Fruit & Nut	463
Multiple Commodities	104,174
Nursery	1,054
Poultry	56
Row/Field Crop	85,012
Sod	940
TOTAL	376,117



Agricultural Lands within Caloosahatchee BMAP

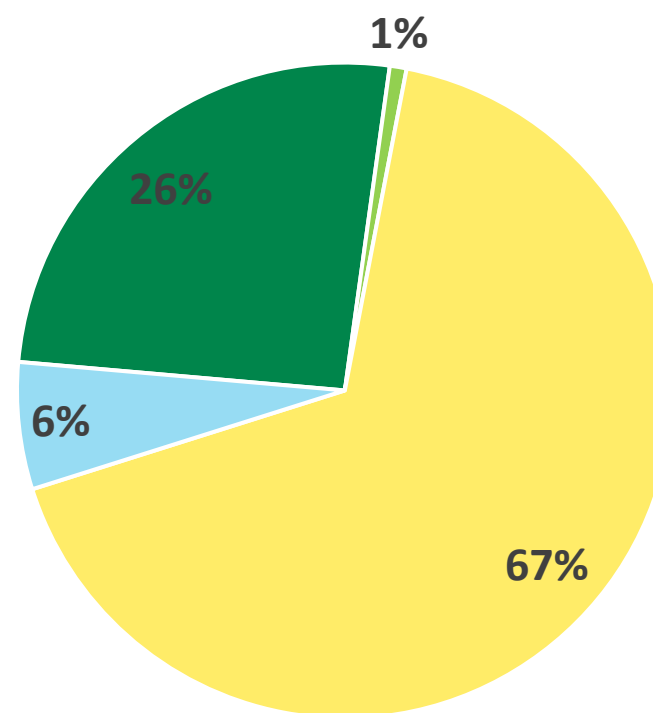
Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Unenrolled - Unlikely Enrollable Acres *	Unenrolled - Potentially Enrollable Acres
459,632	434,305	376,117	29,587	28,431



*This value includes acreages within state-owned properties and/or surface water project areas

Unenrolled - Unlikely Enrollable Acres within Caloosahatchee BMAP

Category	Acres
State Lands, Surface Water Projects	7,635
Timberland and Aquaculture**	245
Not Agriculture [e.g., DOR Use Code 70-99 (industrial or institutional use, acreage not zoned agricultural)]	19,854
Not Enrollable [e.g., missing parcel information, no overlap, conflicting parcel info, slivers]	1,852

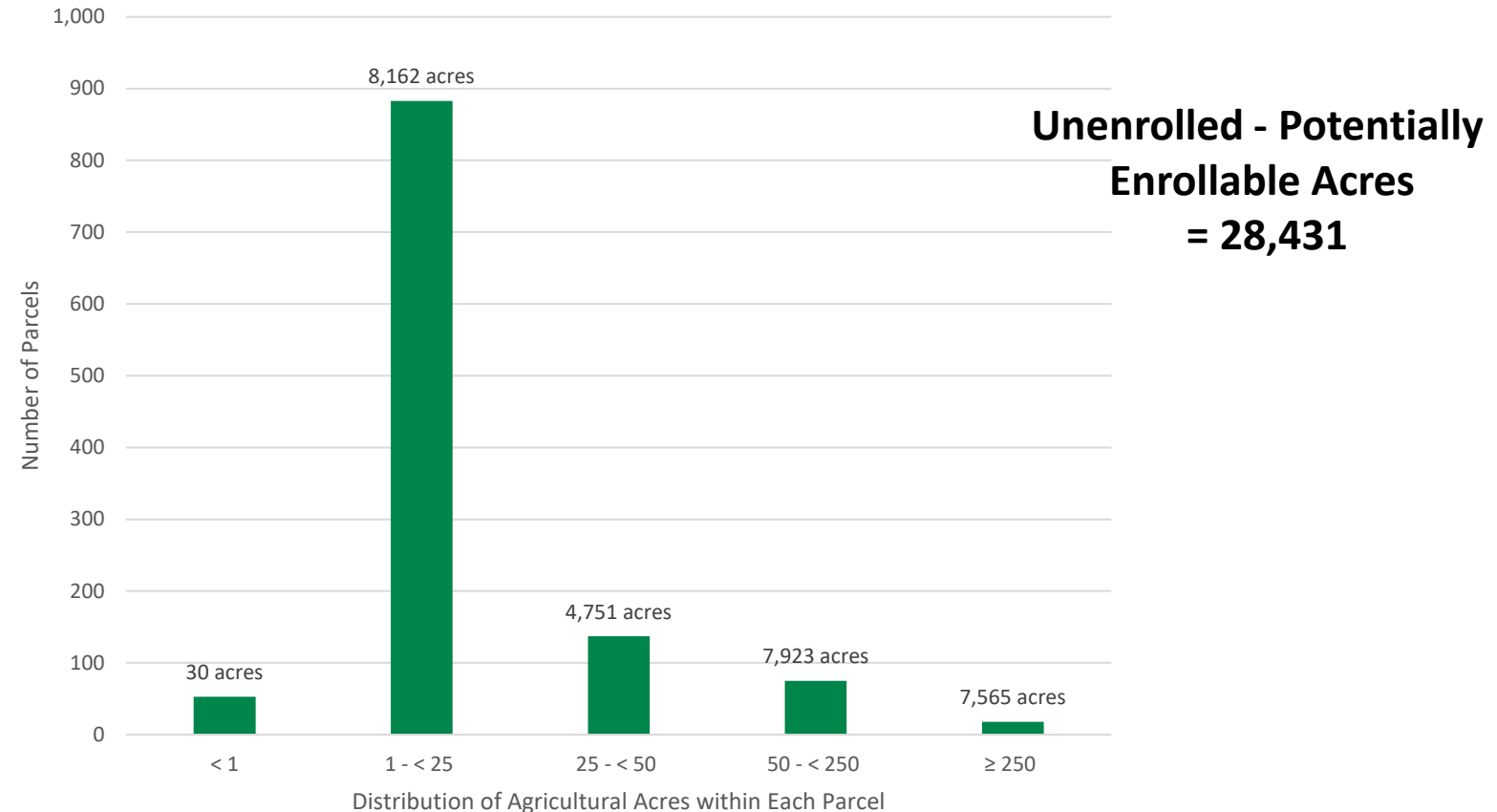


Unenrolled - Unlikely Enrollable Acres = 29,587

** 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 Parcels & Agricultural Acres within Caloosahatchee BMAP



Enrollments within the Everglades West Coast BMAP

Tributary	Total Ag Acres	Enrolled Ag Acres	% Enrolled	Irrigated Acres	Enrolled Irrigated Acres	% Enrolled
Hendry Creek	103	0	0%	75		0%
Imperial River	9,431	4,977	53%	3,137	3,101	99%



BMP enrollment as of Dec 2023 and the 10th Florida Statewide Agricultural Irrigation Demand ([FSAID](#)) Geodatabase

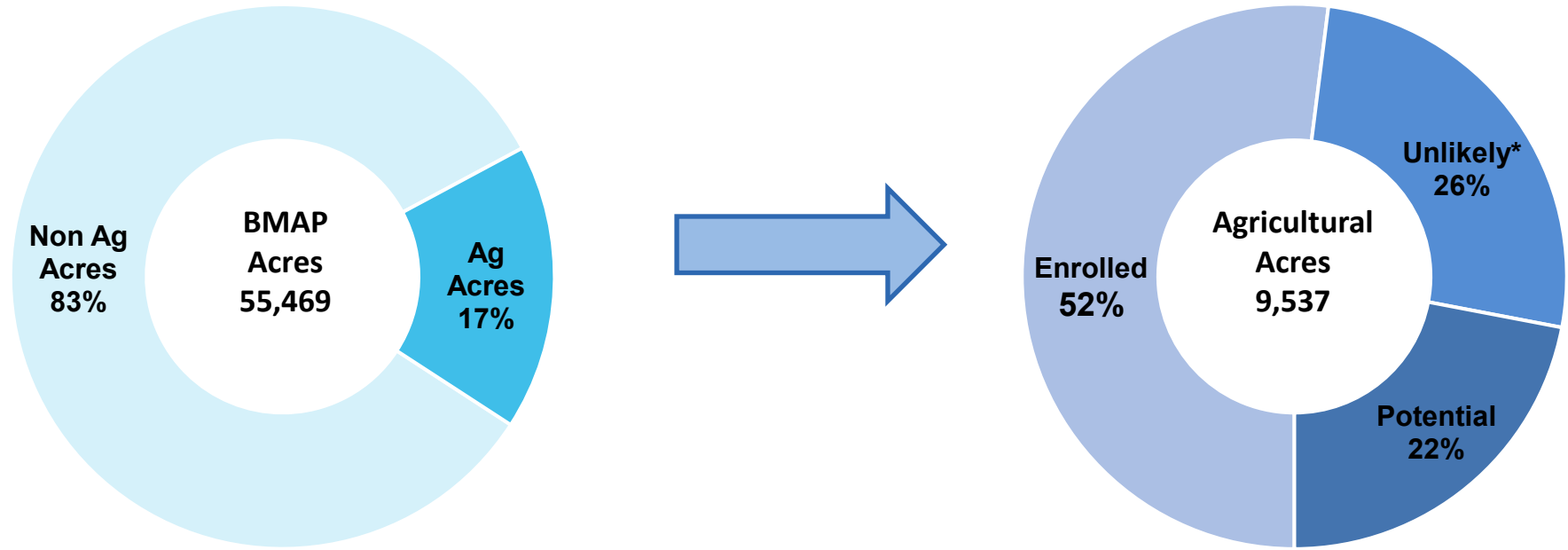
Agricultural Acres Enrolled within Everglades West Coast BMAP

BMP Manual	Acres
Citrus	630
Cow/Calf	444
Multiple Commodities	99
Nursery	22
Row/Field Crop	3,781
TOTAL	4,976



Agricultural Lands within Everglades West Coast BMAP

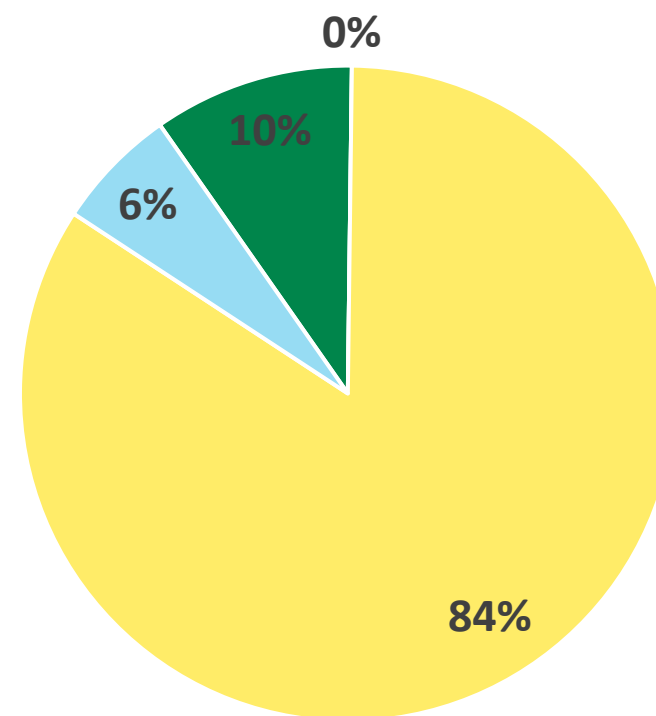
Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Unenrolled - Unlikely Enrollable Acres *	Unenrolled - Potentially Enrollable Acres
45,932	9,537	4,976	2,499	2,057



*This value includes acreages within state-owned properties and/or surface water project areas

Unenrolled - Unlikely Enrollable Acres within Everglades West Coast BMAP

Category	Acres
State Lands, Surface Water Projects	248
Timberland and Aquaculture**	0
Not Agriculture [e.g., DOR Use Code 70-99 (industrial or institutional use, acreage not zoned agricultural)]	2,101
Not Enrollable [e.g., missing parcel information, no overlap, conflicting parcel info, slivers]	151

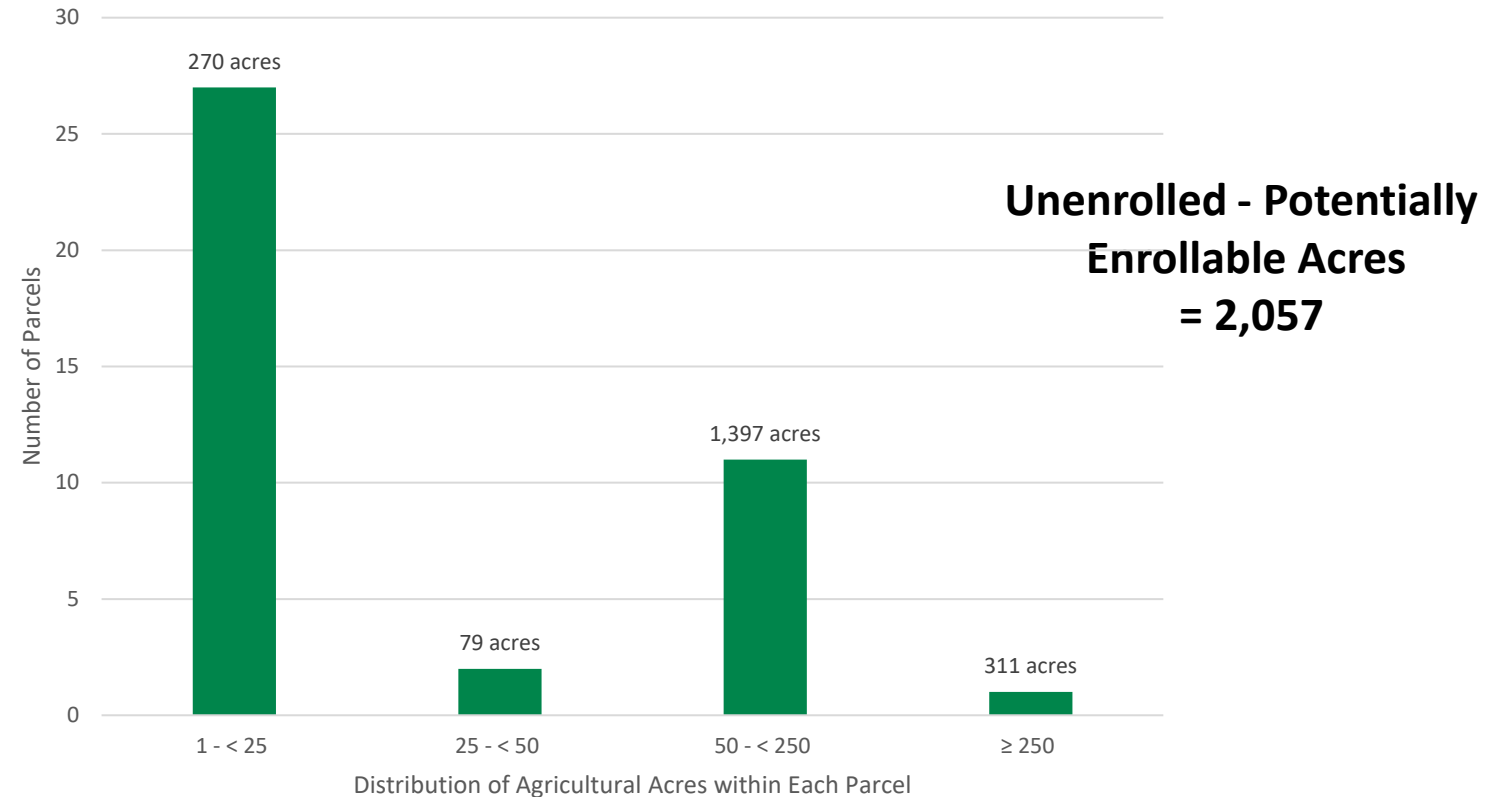


Unenrolled - Unlikely Enrollable Acres = 2,499

*** 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 Parcels & Agricultural Acres within Everglades West Coast BMAP



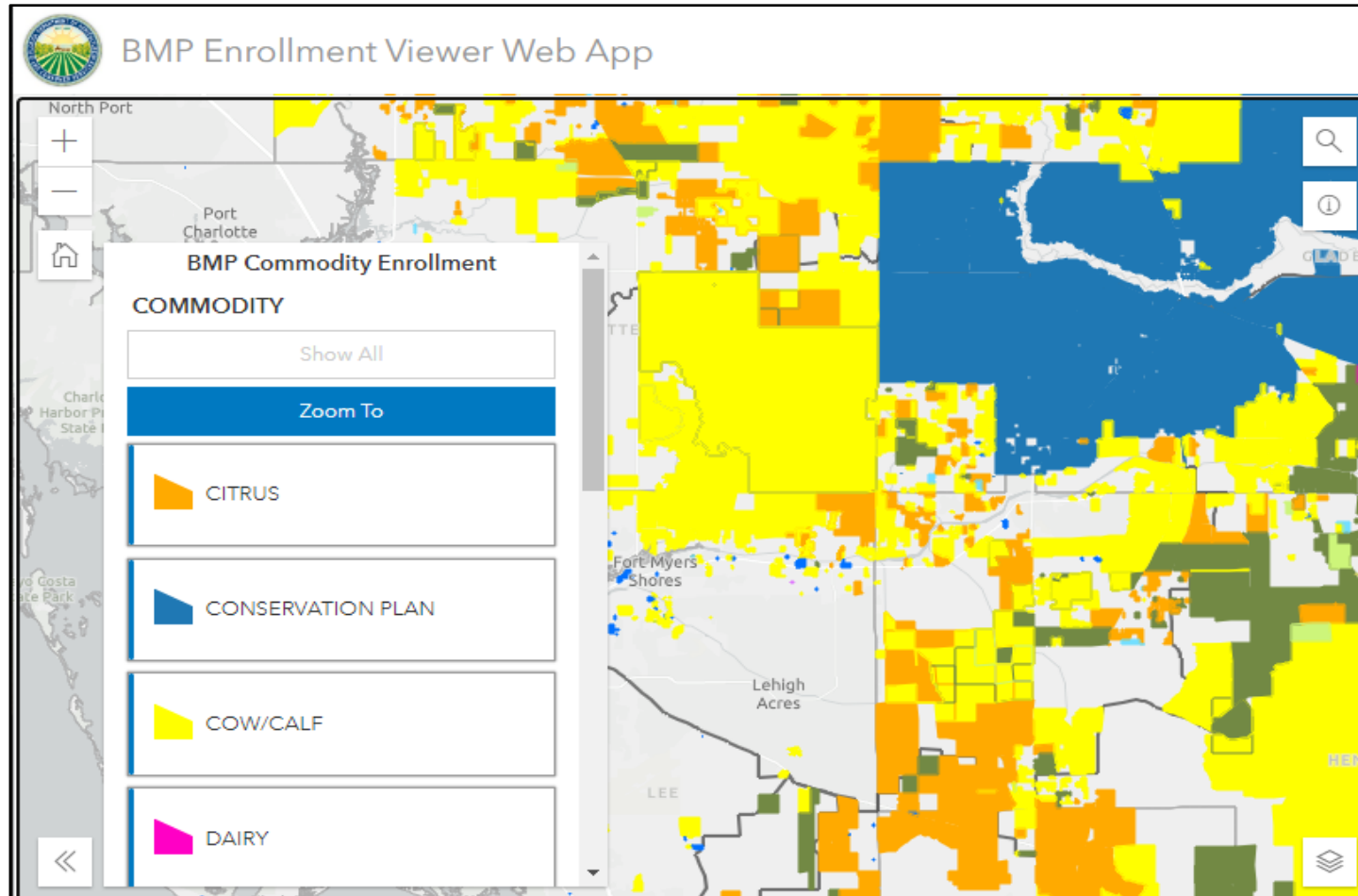
BMP Implementation Verification (IV)

- Process to verify the status of implementation of BMPs
- **Clean Waterways Act - SB 712 (July 2020)**
 - Requires IV site visits every 2 years
 - 93% completed* – Caloosahatchee
 - 83% completed* – Everglades West Coast
 - 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, 2023



BMP Enrollment Viewer Web App



[Office of Agricultural Water Policy: BMP Enrollment Map \(fdacs.gov\)](https://fdacs.gov)

Florida Department of Agriculture and Consumer Services

2024 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

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

Table 1

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Unenrolled - Unlikely Enrollable Acres *	Unenrolled - Potentially Enrollable Acres
34,544,629	7,539,880	4,571,656	858,331	1,883,959

*This value includes acreages within state-owned properties and/or surface water project areas

Figure 1

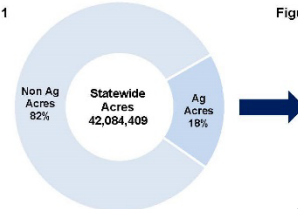


Figure 2

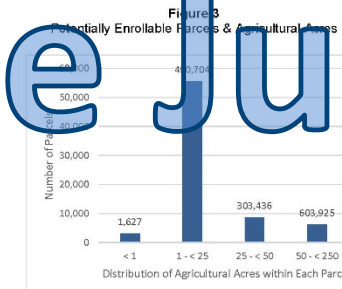
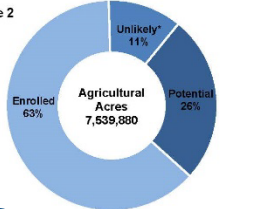


Table 2: Enrolled Agricultural Acres by Manual

BMP Manual	Acres
Citrus	284,539
Conservation Plan	26,836
Cow/Calf	71,781
Dairy	4,786
Equine	188
Fruit & Nut	8,204
Multiple Commodities	251,414
Nursery	22,363
Poultry	19
Row/Field Crop	727,756
Sod	16,640
Temporarily Inactive	2,119
Wildlife	10
Total	1,415,975

Figure 4



1

Status of Implementation of Agricultural Best Management Practices (BMPs) in the Caloosahatchee River and Estuary BMAP

Table 1

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Unenrolled - Unlikely Enrollable Acres *	Unenrolled - Potentially Enrollable Acres
459,632	434,305	376,117	29,587	28,431

*This value includes acreages within state-owned properties and/or surface water project areas

Figure 1

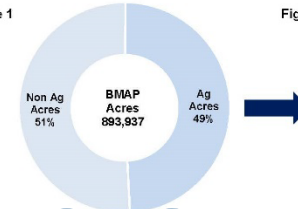


Figure 2

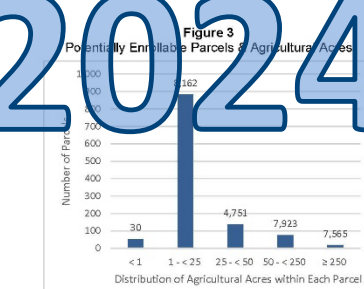
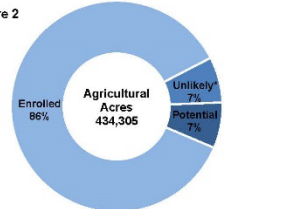


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Equine	43
Fruit & Nut	463
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Nursery	1,054
Poultry	56
Row/Field Crops	85,012
Sod	940
Total	376,117

Figure 4



1

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

Florida Department of Agriculture and Consumer Services

Thank You!

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

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



Florida Department of Agriculture and Consumer Services



THANK YOU

Diana Turner

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Contact Information:

850-245-8825

Diana.M.Turner@FloridaDEP.gov