



WEBINAR HOUSEKEEPING

Attendee Participation

Open your control panel

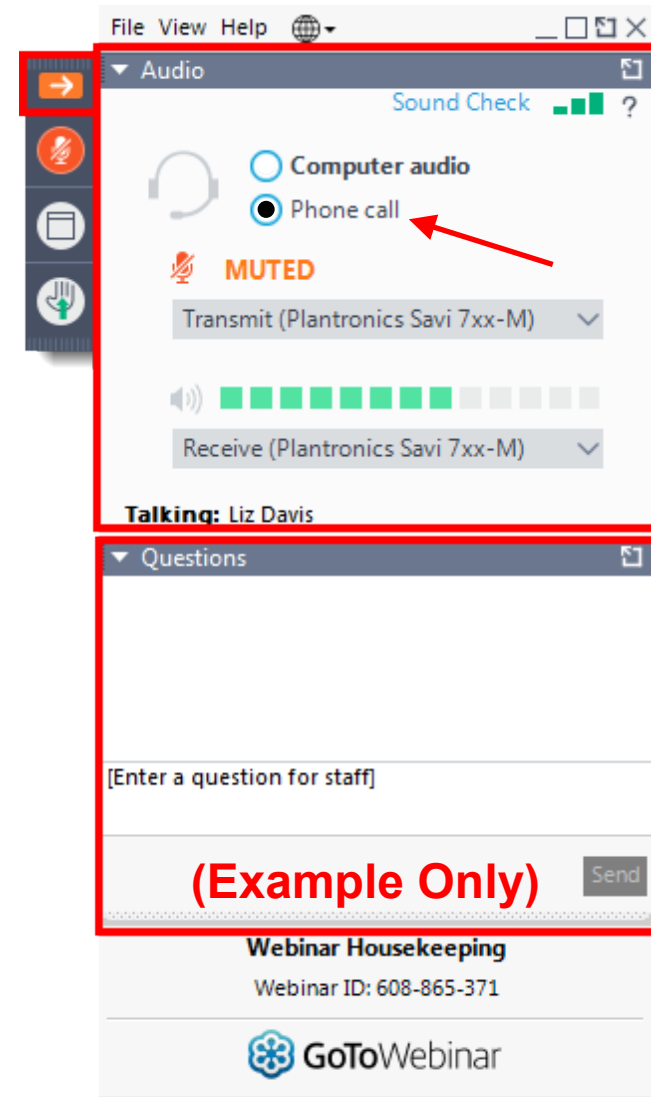
Join audio:

- 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.





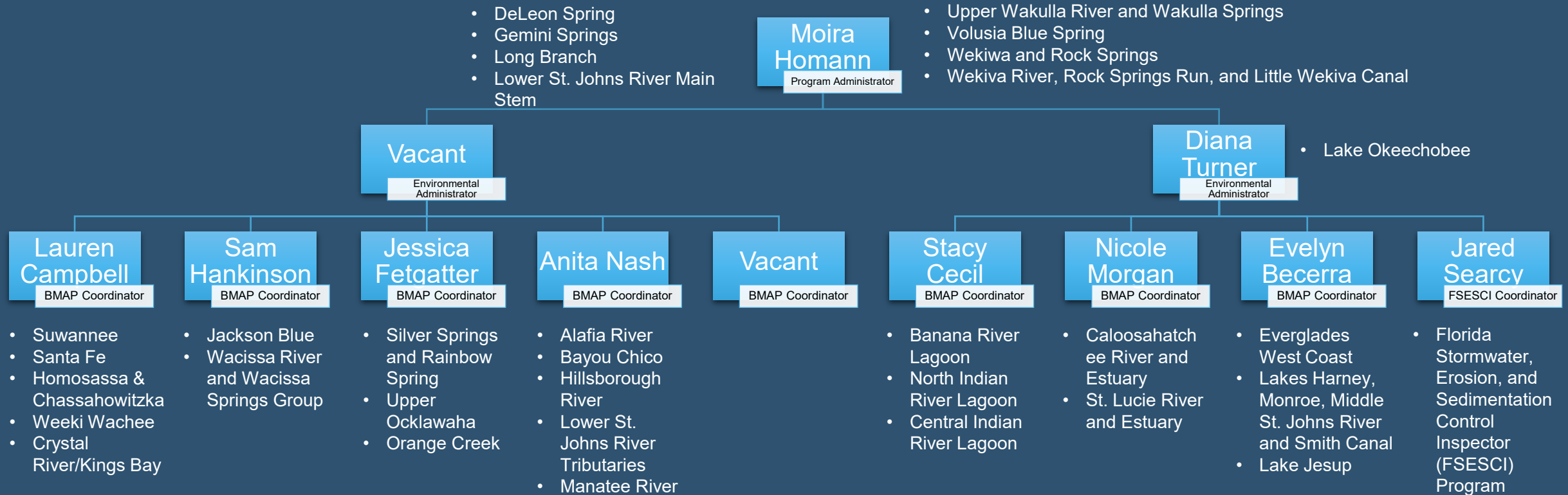
ANNUAL MEETING

FOR THE CALOOSAHATCHEE AND
EVERGLADES WEST COAST BASIN
MANAGEMENT ACTION PLANS (BMAPs)



BMAP PROGRAM STAFF UPDATE

<https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps>





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



ANNUAL MEETING AGENDA

Presentation Agenda

- South Florida Water Management District (SFWMD) Updates
- Statewide Annual Report
- Caloosahatchee Background and Progress
- Everglades West Coast Background and Progress
- Upcoming Updates for the BMAPs
- Florida Department of Agriculture and Consumer Services (FDACS) Updates
- Unenrolled Agricultural Producer Enforcement Update
- Caloosahatchee BMAP Allocations Update



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
March 17, 2023

Agenda

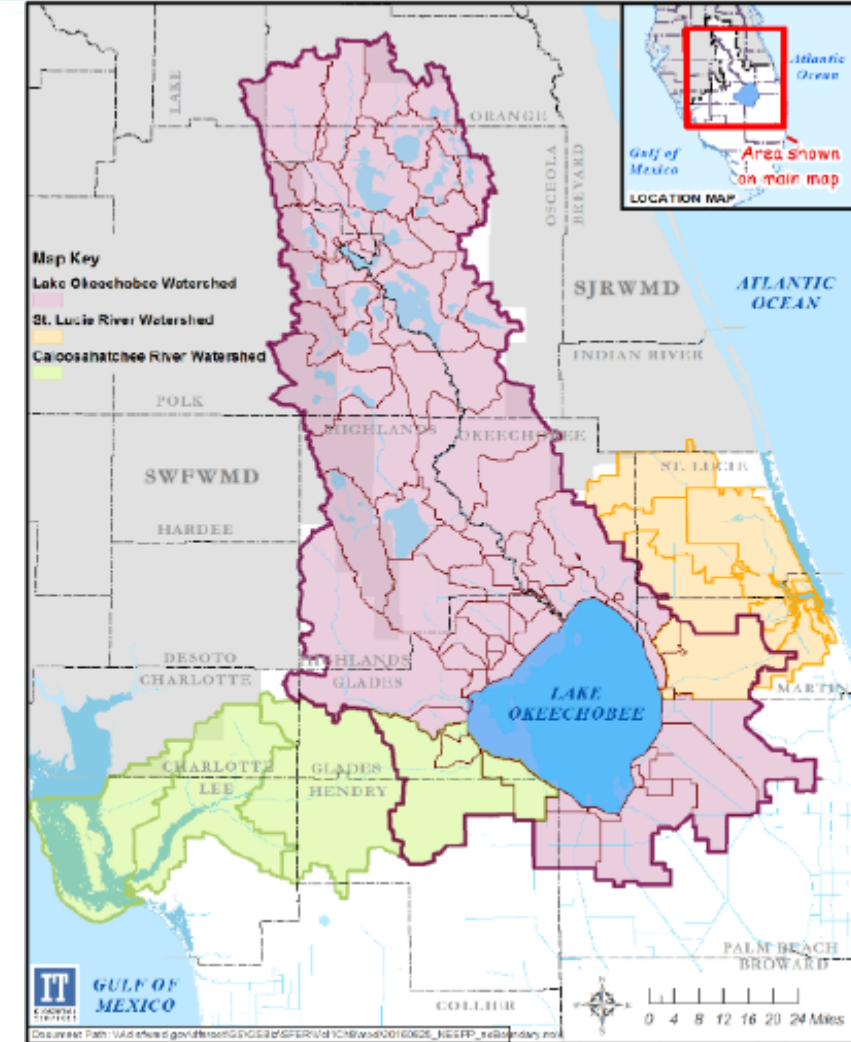
- Northern Everglades Program Overview
- 2022 Caloosahatchee River Watershed Construction Project Review
 - Project Spotlights
 - Water Storage Benefits
- What's New
- Watershed Protection Plan Reporting

Caloosahatchee River Estuary

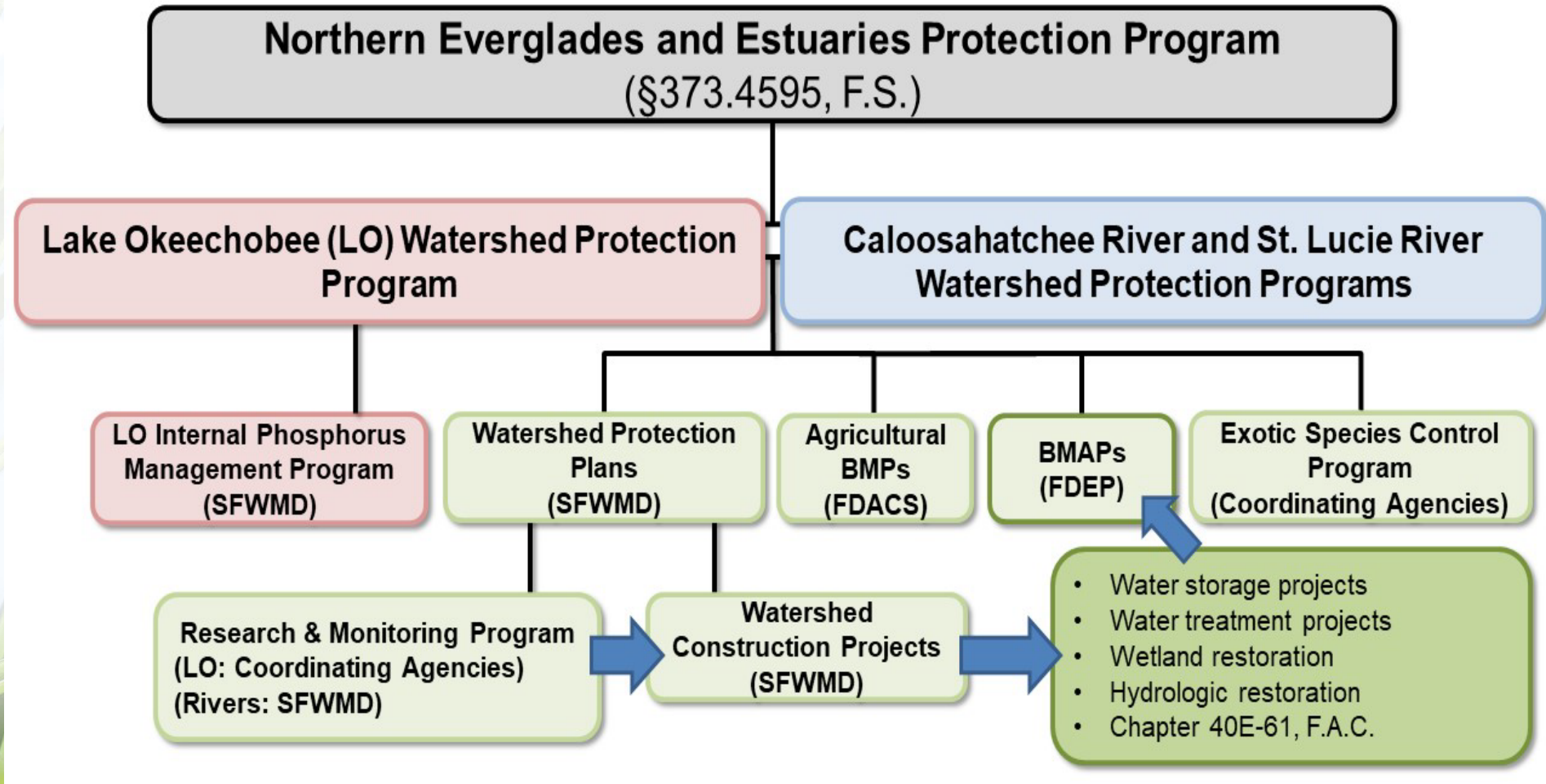


Northern Everglades and Estuaries Protection Program (NEEPP)

- 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



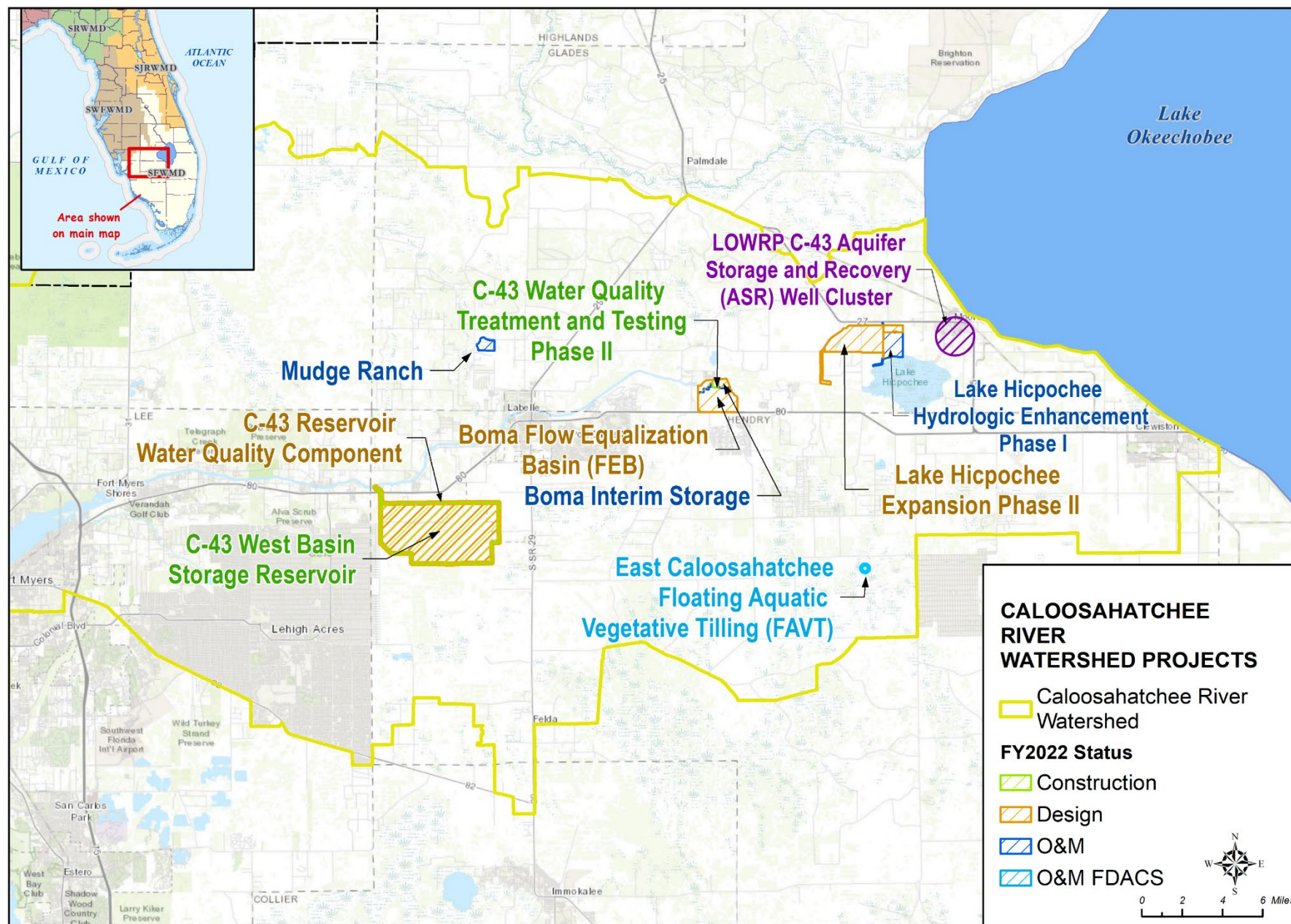
Caloosahatchee River Watershed Construction Project Review

- 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: 2022 CRWCP Review
 - Key accomplishments during Fiscal Year (FY) 2022 (Oct. 1, 2021–Sept. 30, 2022)
 - Final 2023 SFER – Volume I, Chapter 8D (March 1, 2023) at [SFWMD.gov/SFER](https://www.sfwmd.gov/SFER)

SFWMD Projects

➤ FY2021 CRWCP Status:

- 1 project – planning
- 3 projects – design
- 2 projects – construction
- 3 projects – operations



Project Spotlights

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



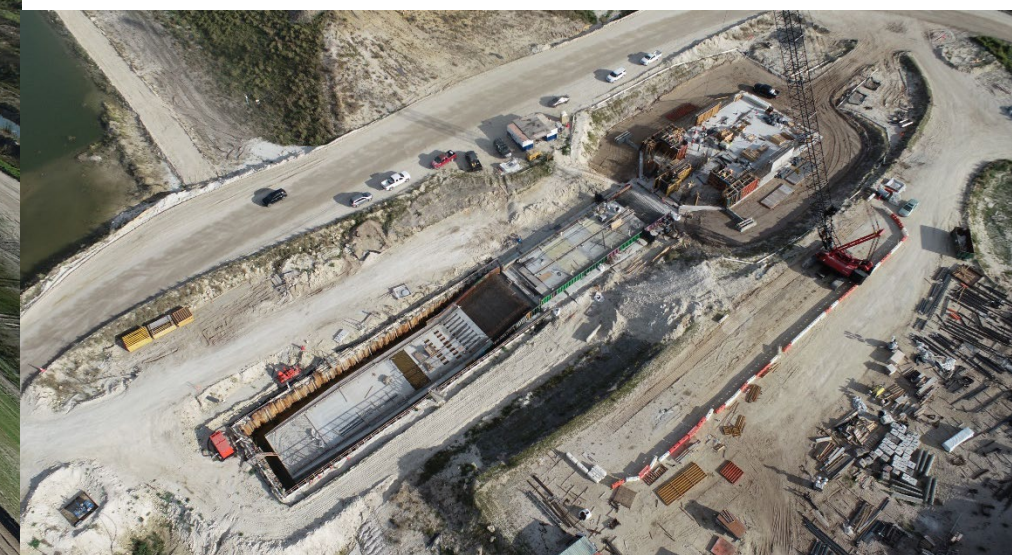
C-43 West Basin Storage Reservoir

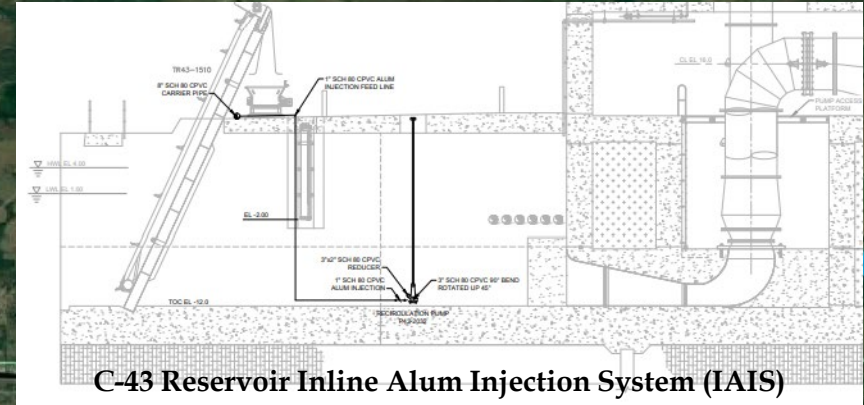


S-478 southward to S-477



S-473 (top) and S-474 (bottom)

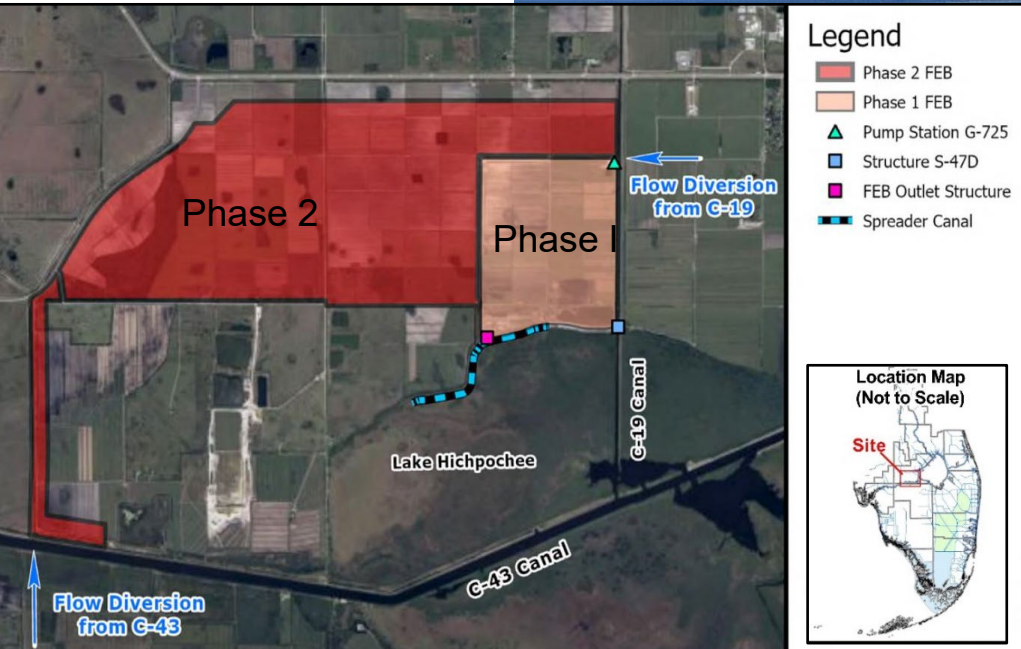




Boma Flow Equalization Basin & C-43 Water Quality Treatment & Testing Facility

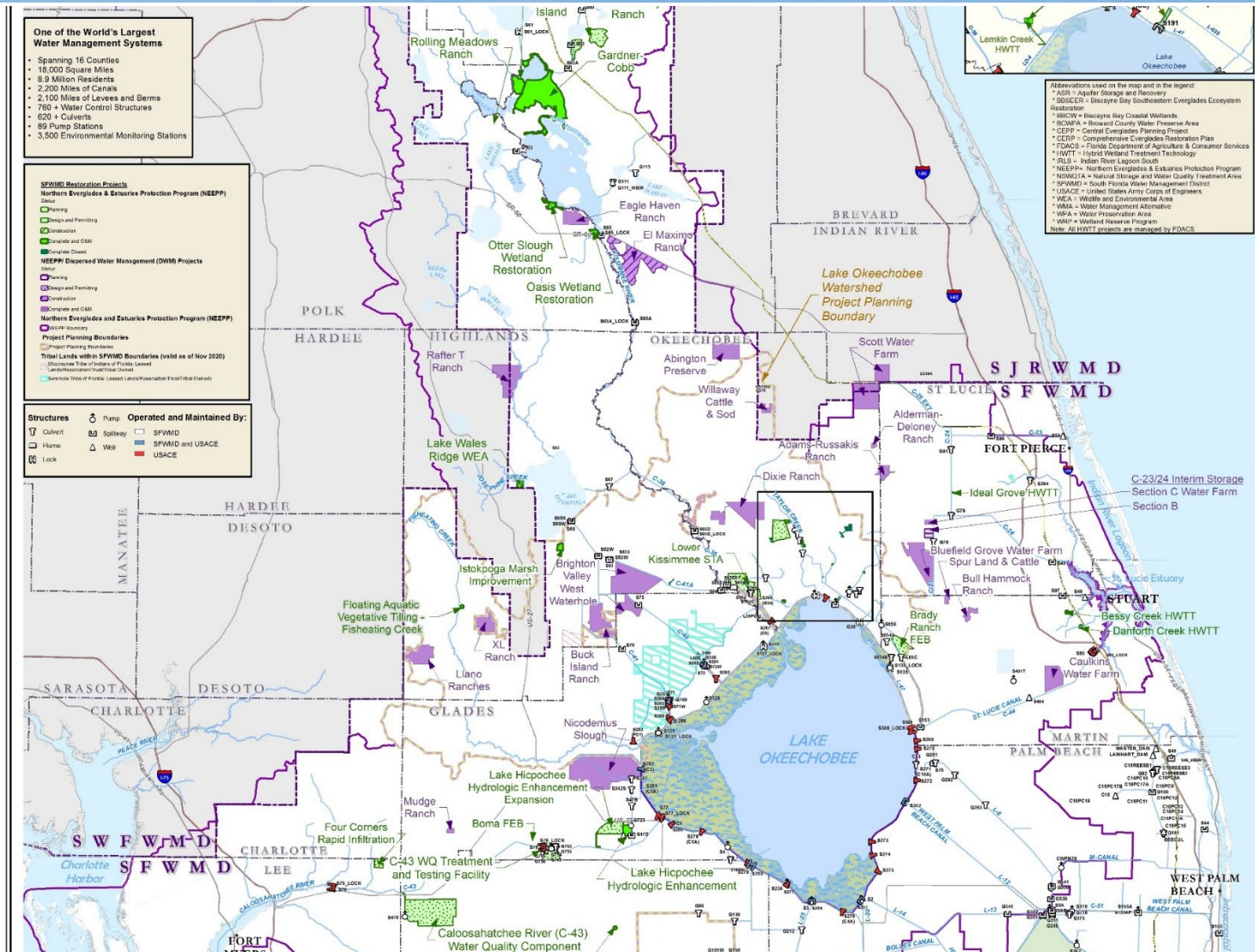


Lake Hitchpochee Hydrologic Enhancement



Water Storage Benefits

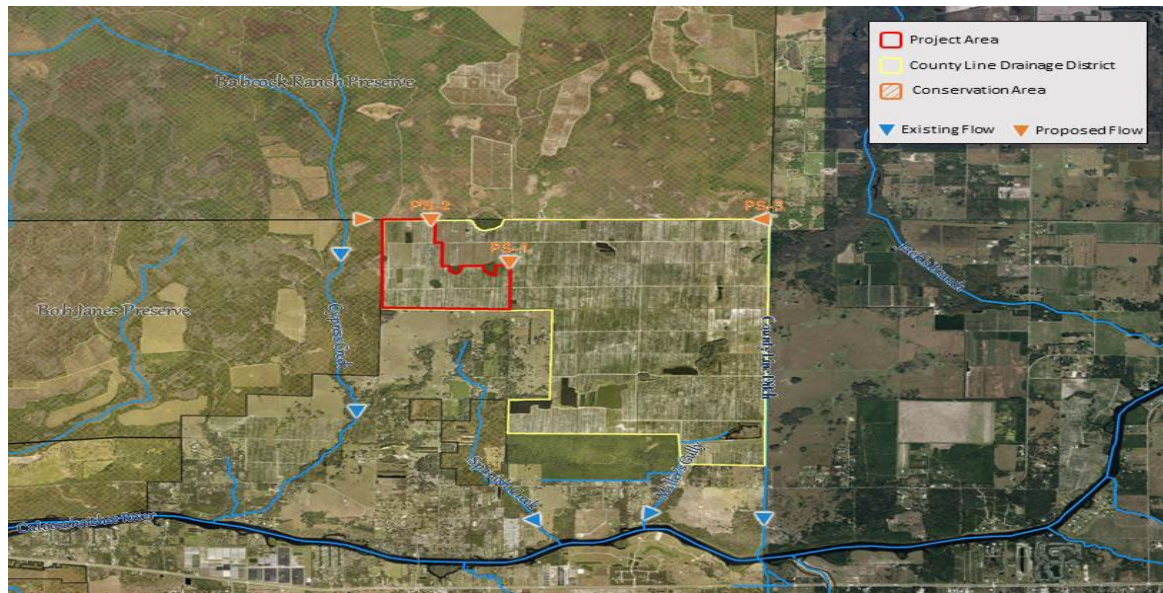
- Key DWM program benefits:
 - Reduces runoff/discharge to and stores/treats water in regional system
 - Promotes hydrologic enhancement, groundwater recharge, habitat improvements
 - Avoids high cost of land purchase and keeps private lands on local tax rolls
 - Storage and/or treatment provided typically exceeds permit requirements
- In Water Year 2022, 3 SFWMD projects provided ~8,860 ac-ft of storage (5,580 ac-ft, 2 DWM; 3,280 ac-ft, 1 regional)
- Once fully operational, C-43 Reservoir will add storage capacity of 170,000 ac-ft/year



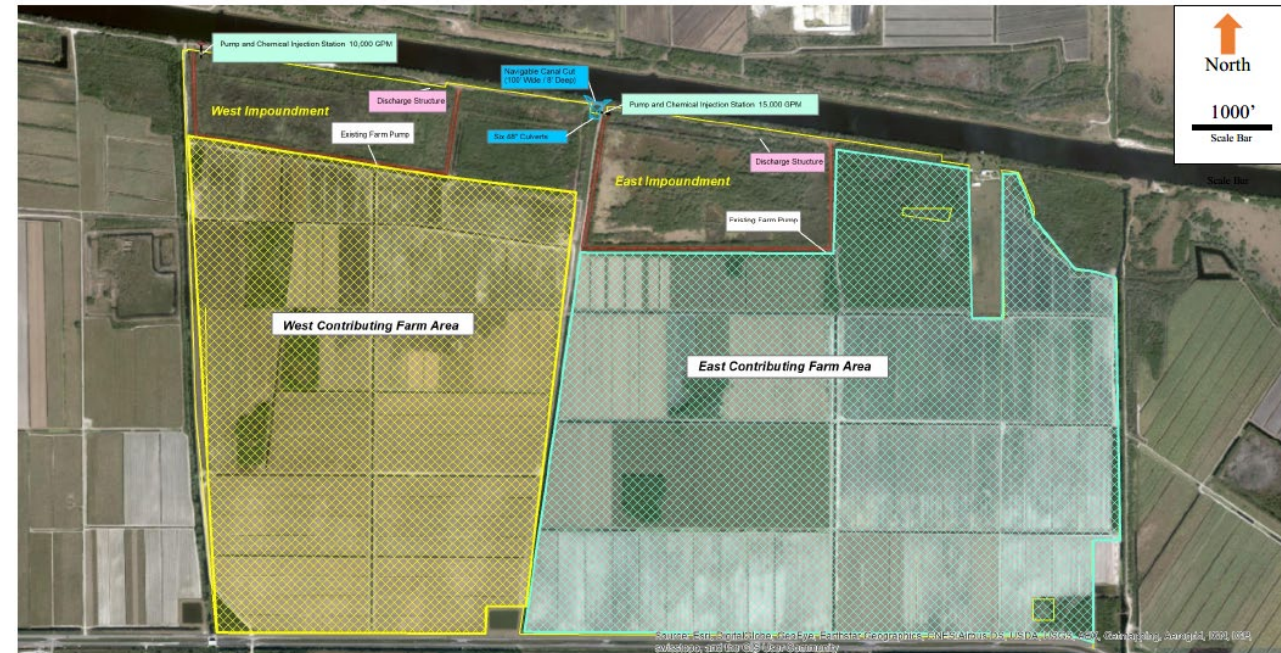
Northern Everglades Water Retention and Nutrient Load Reduction Projects

Four Corners Rapid Infiltration

- Water and nutrient retention project
 - 463 acres on private land in Lee County
- Estimated benefits (per year):
 - ~20,000 ac-ft storage
 - 1.2 mt TP removal
 - 39.3 mt TN removal



Roadrunner C-43 Nutrient Load Reduction



- Nutrient retention project
 - 150 acres on private land in Glades County
- Estimated benefits (per year):
 - 4.3 mt TP removal
 - 31.8 mt TN removal

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 2023 SFER –
Volume I, Chapter 8D)



Mark Your Calendars

April 2023 Governing Board Workshop

2023 SFER – Volume I

April 12, 2023 at 1 pm

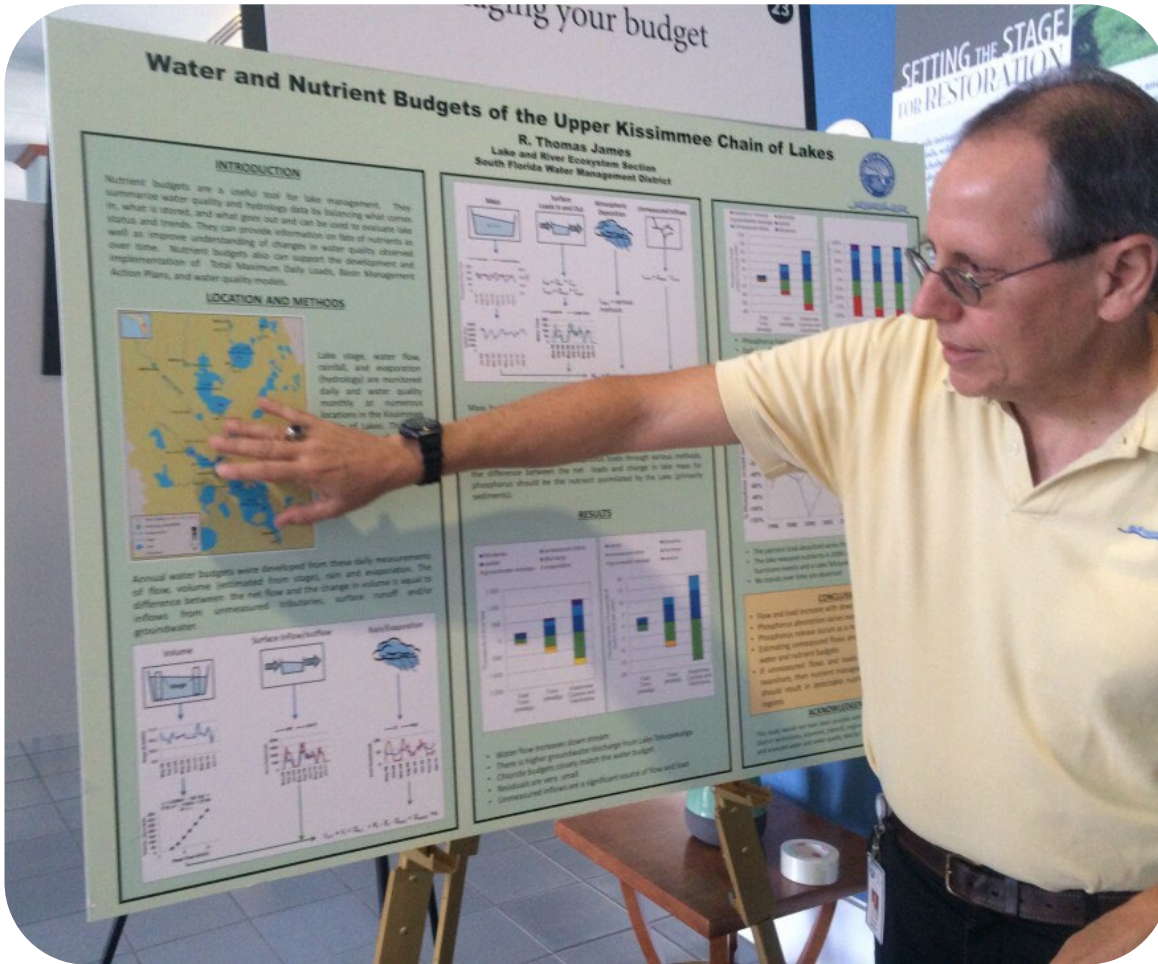
SFWMD Headquarters

B-1 Auditorium & Lobby

3301 Gun Club Road

West Palm Beach, FL

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



Contact Information

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Everglades & Estuaries Protection Bureau, State Policy Unit
South Florida Water Management District
sollis@sfwmd.gov; 561-682-2039





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STATEWIDE ANNUAL REPORT

What is it and where can you find it?

How was the data collected?

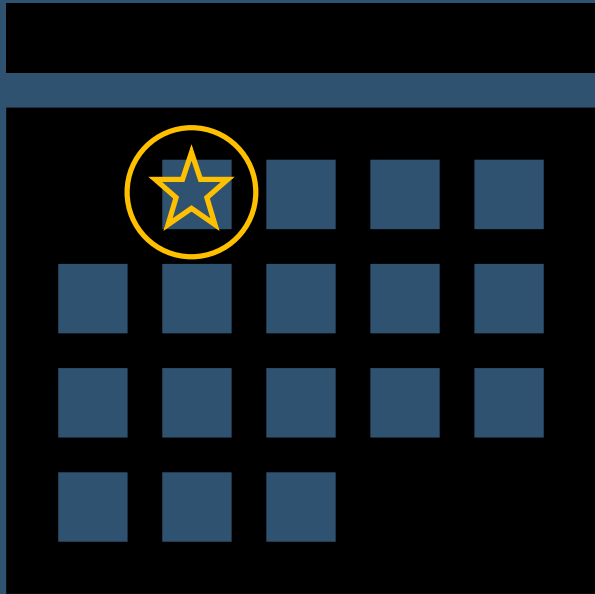
What does it report for the BMAPs?



STAR

STATEWIDE ANNUAL REPORT

**Report is submitted
by 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 is getting a digital makeover!
 - Moving to visual-driven experience.
 - Data download available.



STAR

CALOOSAATCHEE STORY MAP

Caloosahatchee Basin Management Action Plan

[Introduction](#)[Overview](#)[Location](#)[Monitoring](#)[Projects](#)[Progress](#)[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.

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 Caloosahatchee BMAP.

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

Image Jenni Konrad [CC BY-NC 2.0](#)

Story Map will also be updated with new information.

More specific details to Caloosahatchee can be seen in the BMAP Story Map.

[Caloosahatchee Basin Management Action Plan \(arcgis.com\)](#)





STAR

BMAP PROJECT 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.

**All reporting
stakeholders
used the
portal this
year.**



Program Debugging

Development errors took more time fixing than anticipated.

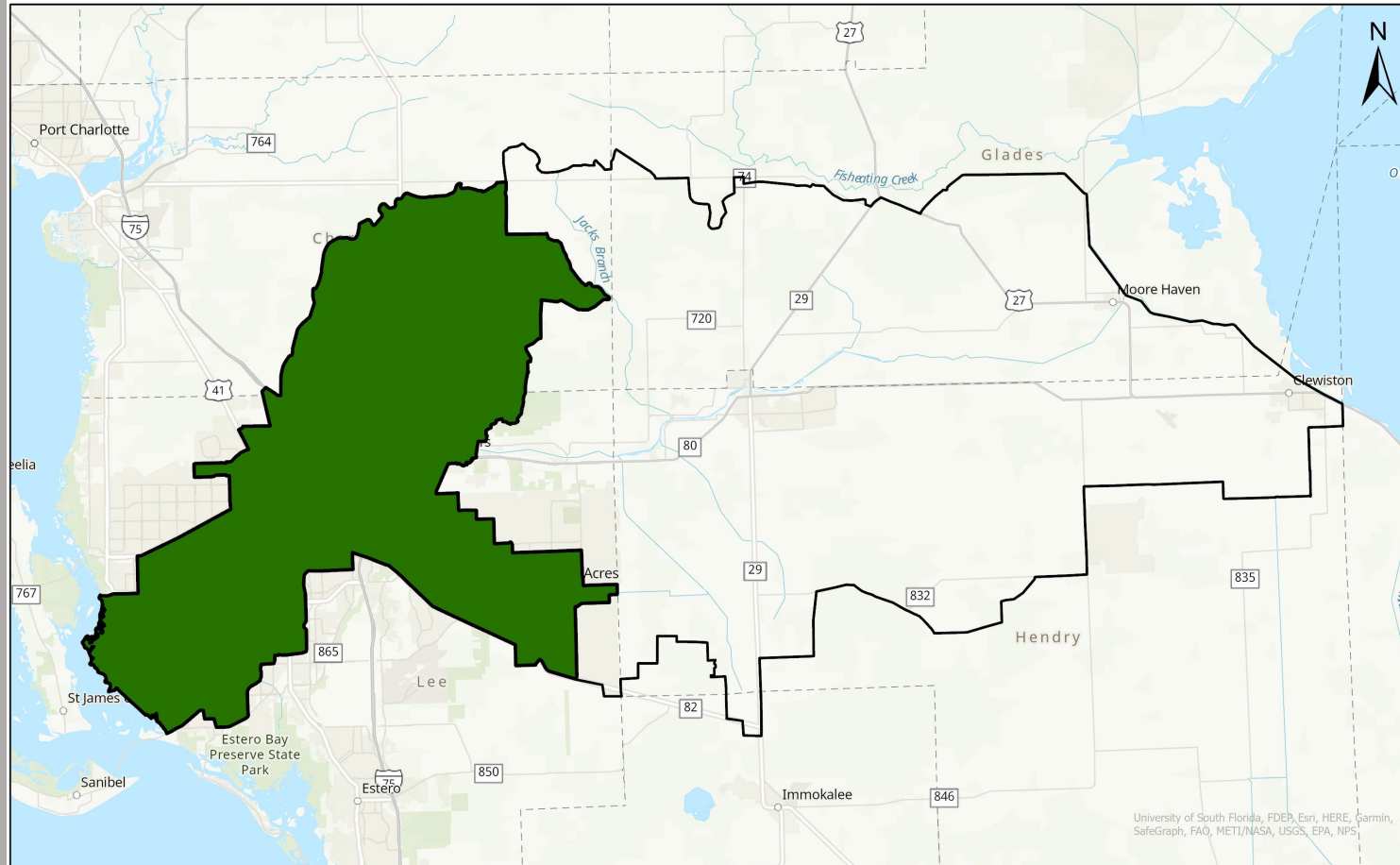
Communication

Coordinators needed to do more outreach to ensure stakeholder participation.



BACKGROUND

CALOOSA HATCHEE BMAP



Caloosahatchee BMAP

Map prepared by the Division of Environmental Assessment and Restoration.
This map is not for legal decision making purposes.
[GIS] Janis Morrow (850) 245-8543
[BMAP] Diana Turner (850) 245-8825
Map ID: Boundaries
Created: 3-29-2022



■ 2012 BMAP boundary
□ 2019 BMAP boundary

0 2.5 5 10 15 20
Miles

Tidal BMAP

Developed in 2012 to address total nitrogen (TN) in the estuary.

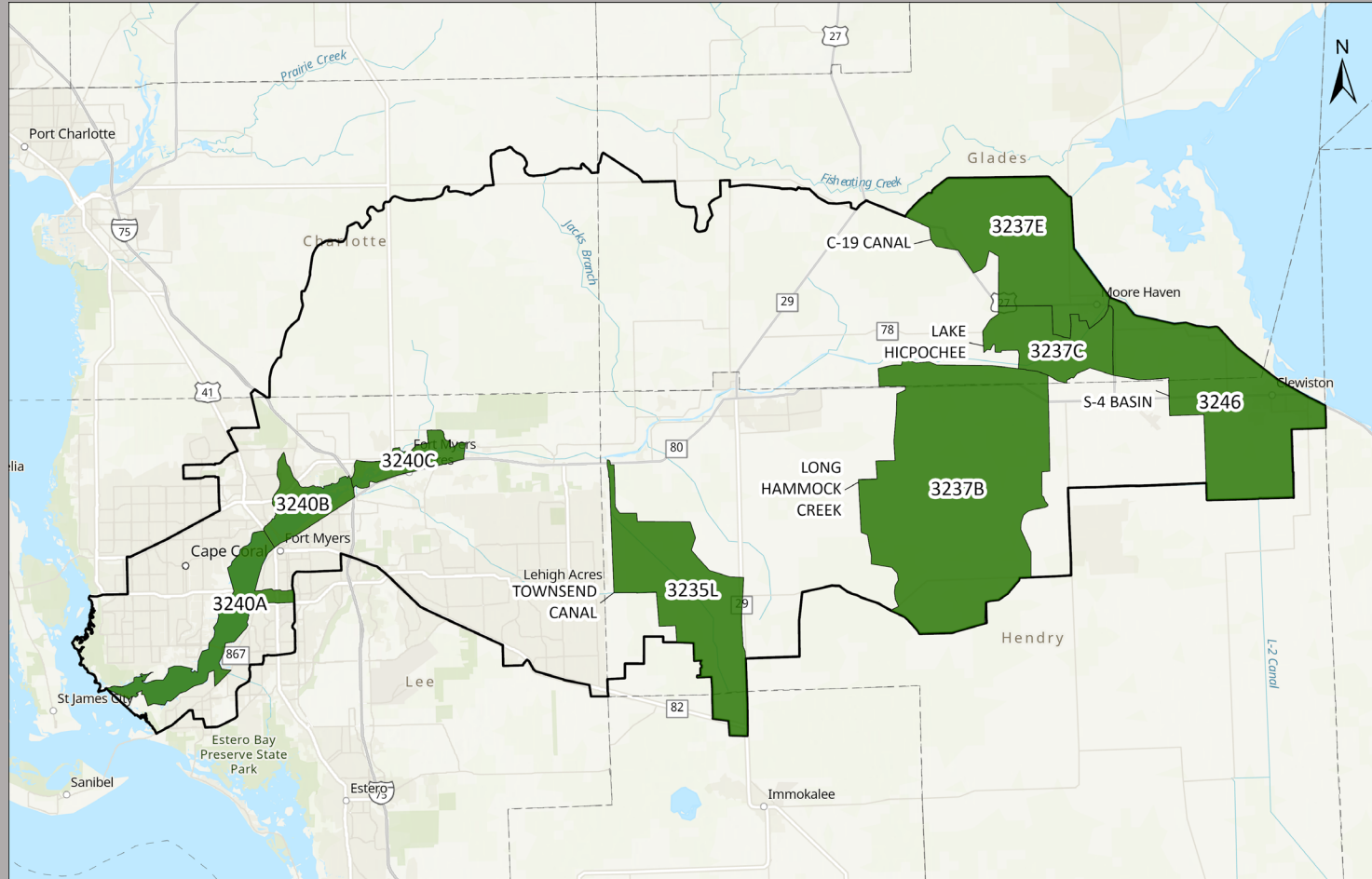
Current BMAP

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



BACKGROUND

CALOOSAHATCHEE BMAP



Caloosahatchee TMDLs

Map prepared by the Division of Environmental Assessment and Restoration.
This map is not for legal decision making purposes.
[GIS] Janis Morrow (850) 245-8543
[BMAP] Diana Turner (850) 245-8825
Map ID: TMDL
Created: 1-14-2021



0 2.5 5 10 15 20 Miles

- Caloosahatchee BMAP boundary
- State Adopted and EPA Approved TMDLs
- Florida Counties

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.



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
Florida Department of Transportation (FDOT) District 1
SFWMD



STAR

PRELIMINARY BMAP PROGRESS UPDATE – ESTUARY

Entity	Completed	Ongoing	Planned	Underway	Grand Total
Barron WCD	1	1	3		5
Charlotte County		1			1
City of Cape Coral	15	2	1	1	19
City of Clewiston	2	3		1	6
City of Fort Myers	10	2	3	1	16
City of LaBelle			2	3	5
City of Moore Haven	1		1		2
Clewiston Drainage District	1	1	3		5
Collins Slough WCD	1	1	3		5
County Line Drainage District	1	1		3	5
Cow Slough WCD	1	1	3		5
Devil's Garden WCD	1	1	3		5
Disston Island Conservancy District	1	1	3		5
Agriculture		6			6
FDOT District 1	29	2			31
Flaghole Drainage District	1	1	3		5
Gerber Groves WCD	1	1	3		5
Glades County	2			2	4
Hendry County			2	3	5
Hendry-Hilliard WCD	1	1	3		5
LA-MSID (formerly ECWCD)	15	1	1	1	18
Lee County	42	2	5	3	52
Lucaya CDD		2			2
Mirada CDD		2			2
Port LaBelle CDD			1		1
Portico CDD	3	1			4
Coordinating Agency	2		4	1	7
Sugarland Drainage District	1	1	3		5
Verandah East CDD		1			1
Verandah West CDD		1			1
Grand Total	132	37	50	19	238

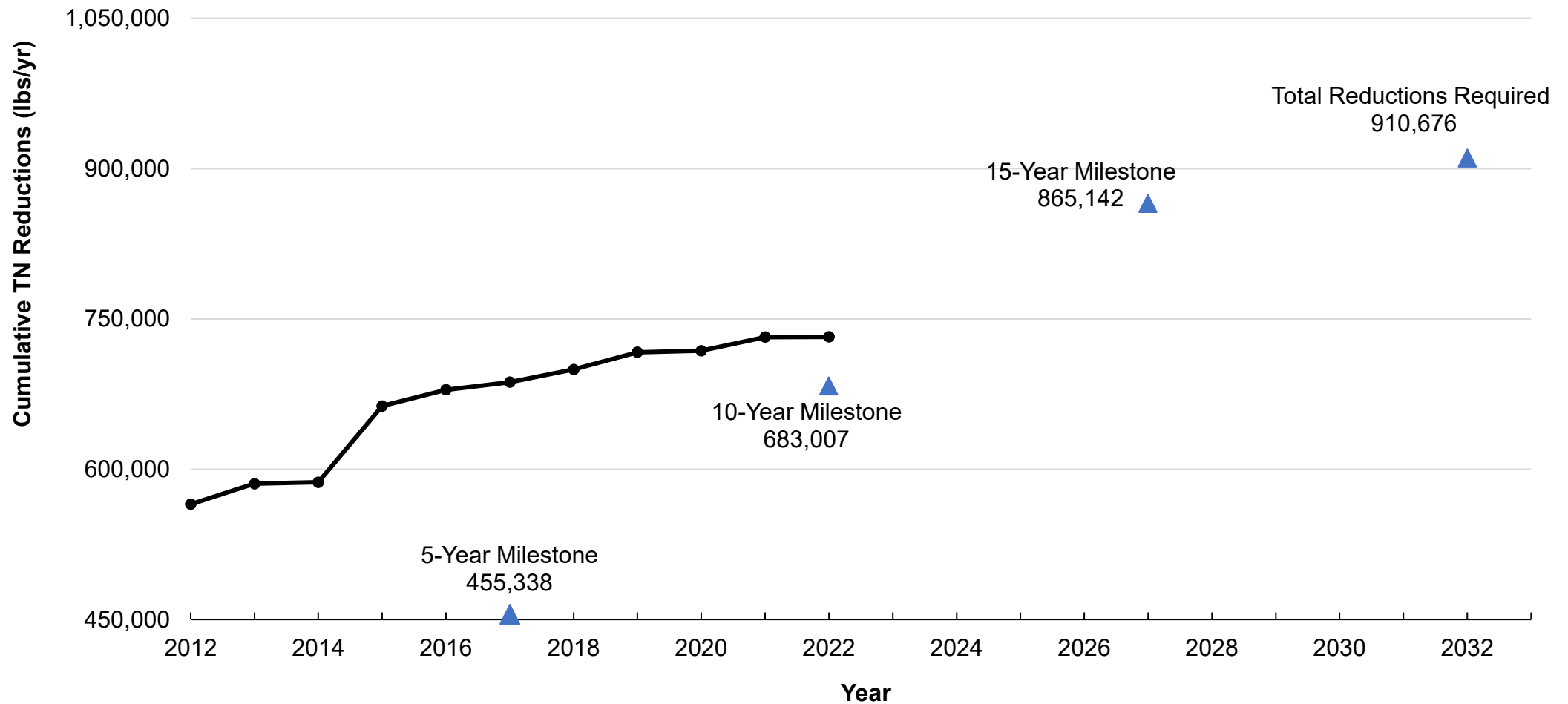


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PRELIMINARY BMAP PROGRESS UPDATE - ESTUARY

*Completed and
Ongoing Projects

Caloosahatchee Estuary TN Project Reductions





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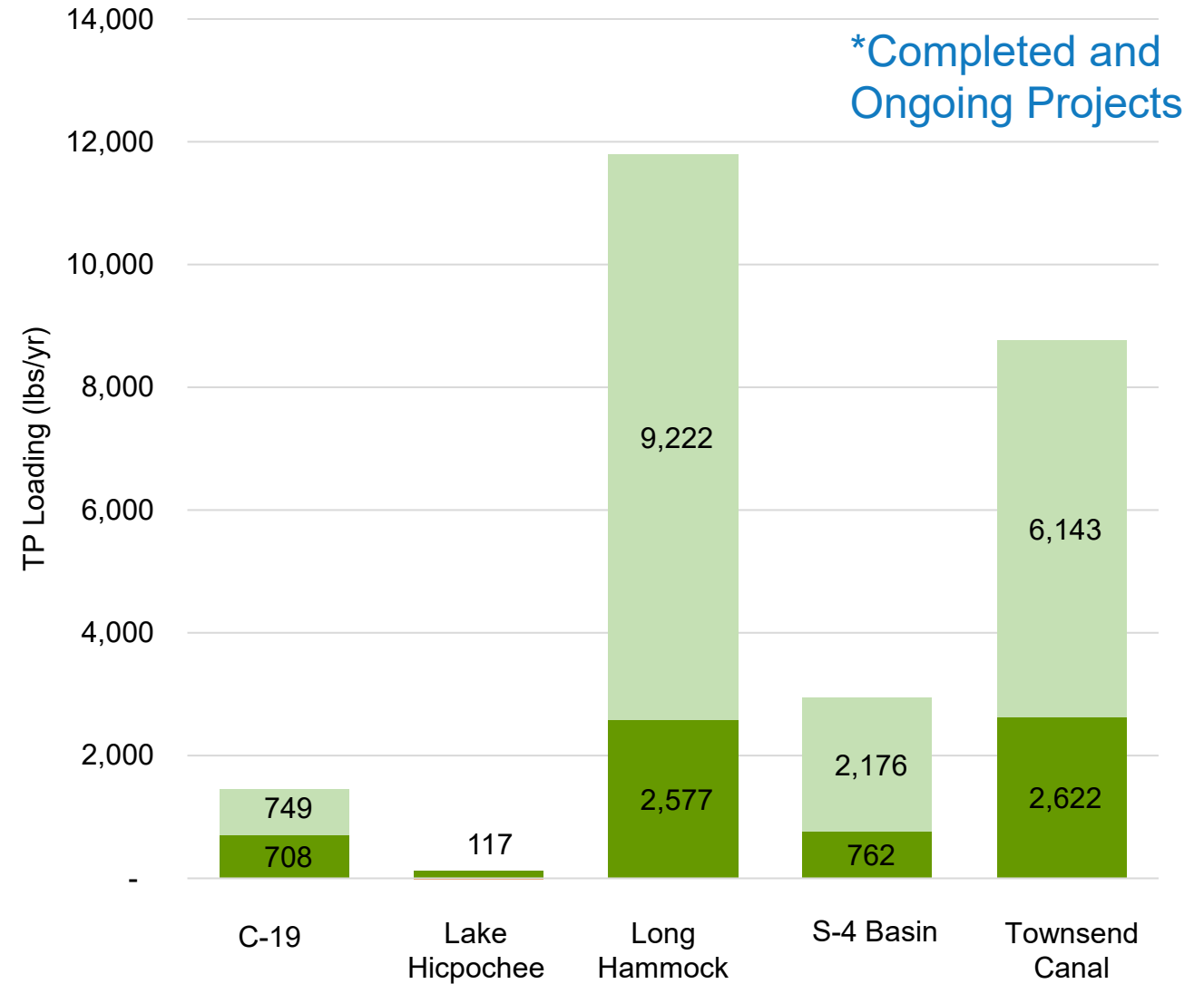
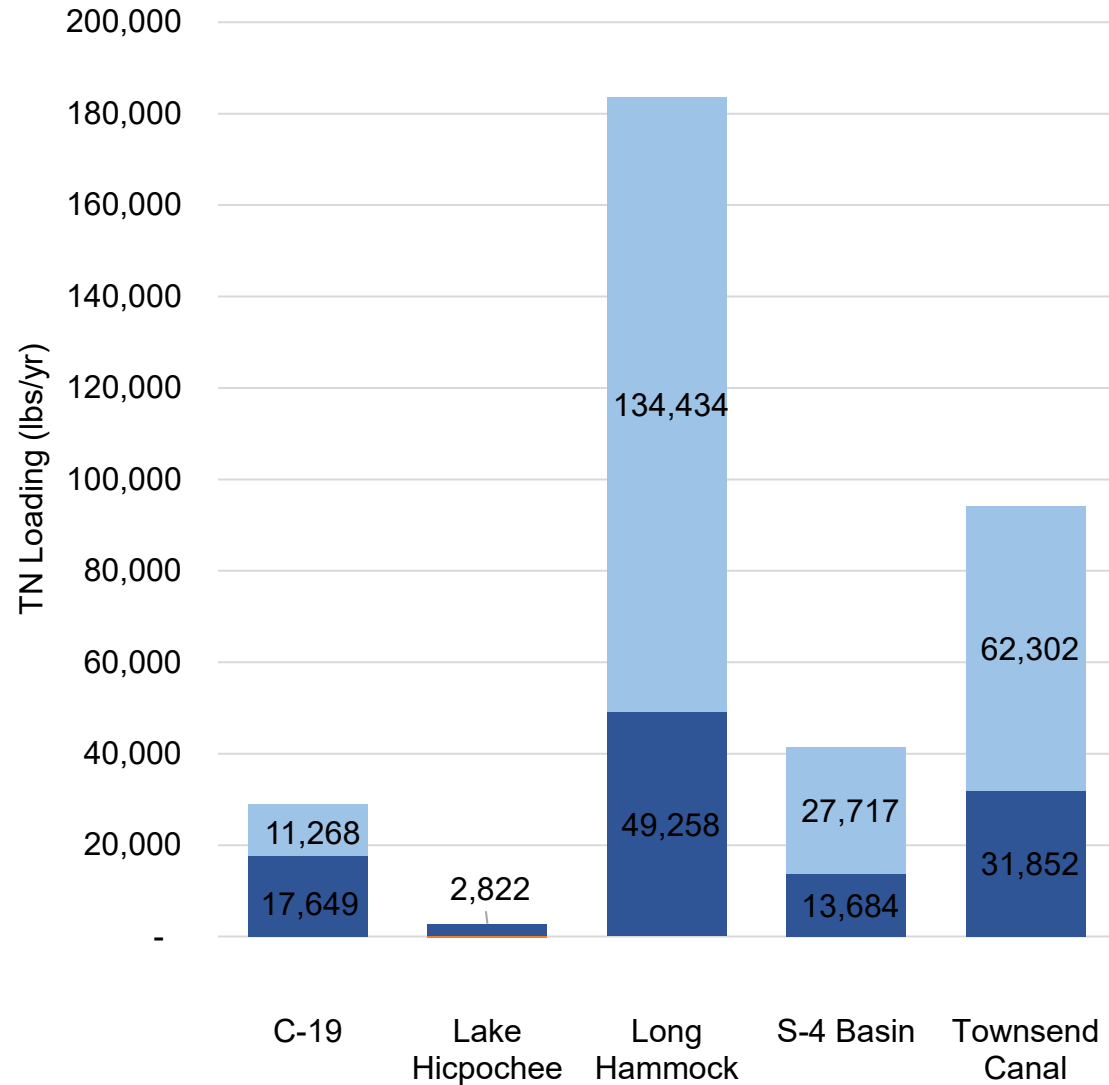
PRELIMINARY BMAP PROGRESS UPDATE – TRIBUTARIES

Lead Entity	Completed	Ongoing	Planned	Underway	Grand Total
Barron WCD	1	1	3	0	5
City of Clewiston	2	3	0	1	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
Agriculture	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	1	0	1
Coordinating Agency	1	0	3	1	5
Sugarland Drainage District	1	1	3	0	5
Grand Total	20	23	32	4	79



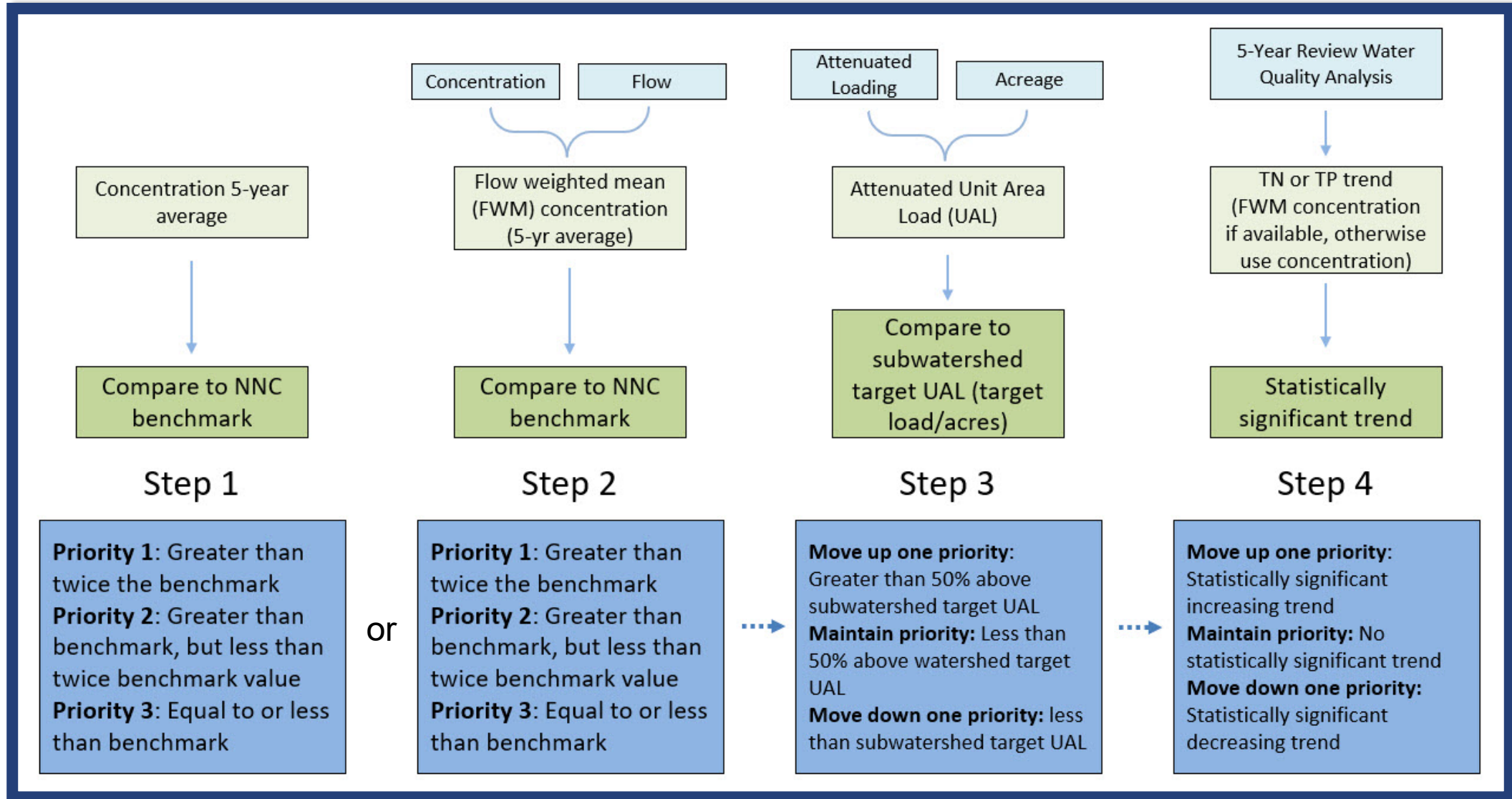
STAR

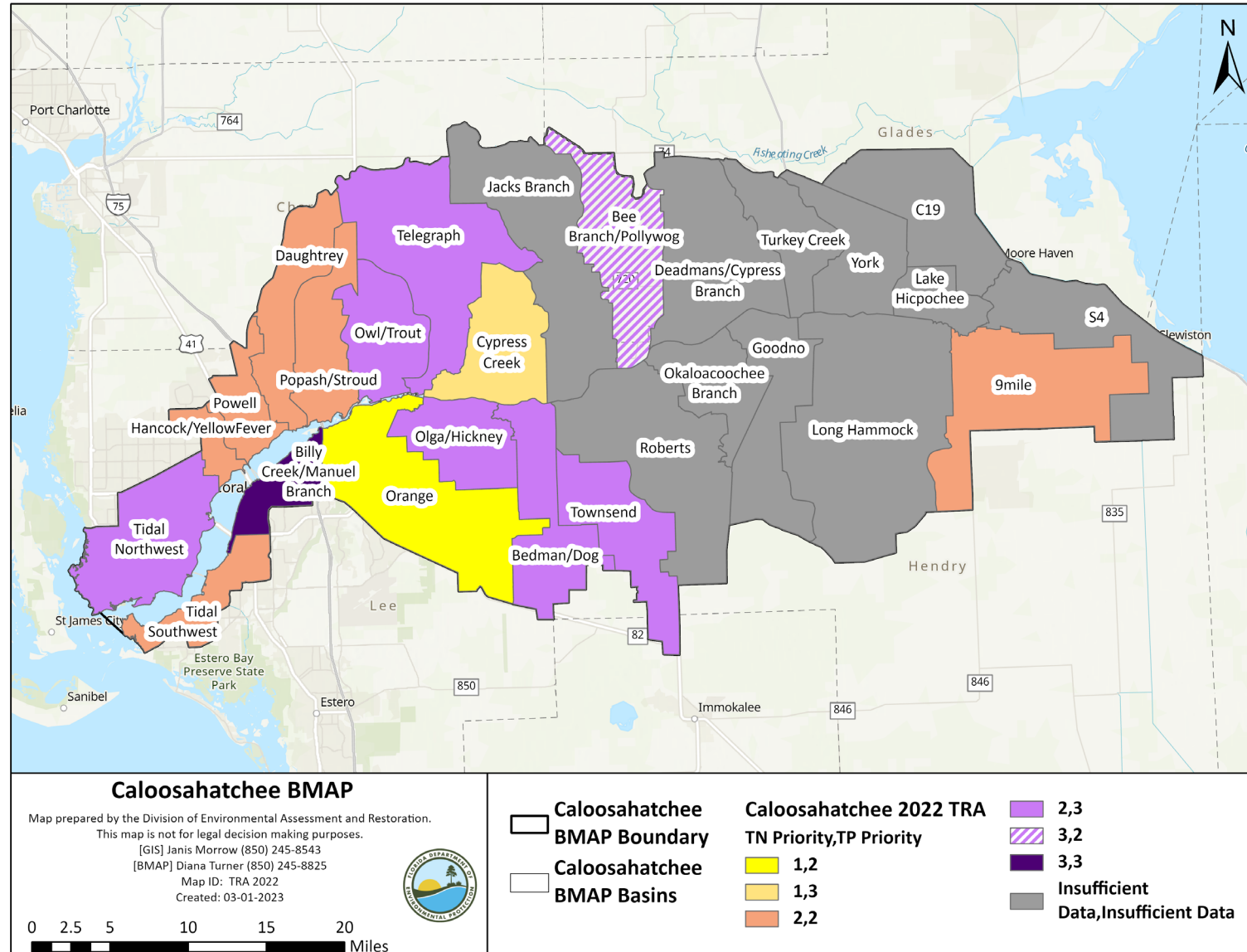
PRELIMINARY BMAP PROGRESS UPDATE - TRIBUTARIES





TARGETED RESTORATION AREA (TRA) PROCESS







BACKGROUND

Everglades West Coast BMAP

Everglades West Coast Total Maximum Daily Loads (TMDLs)

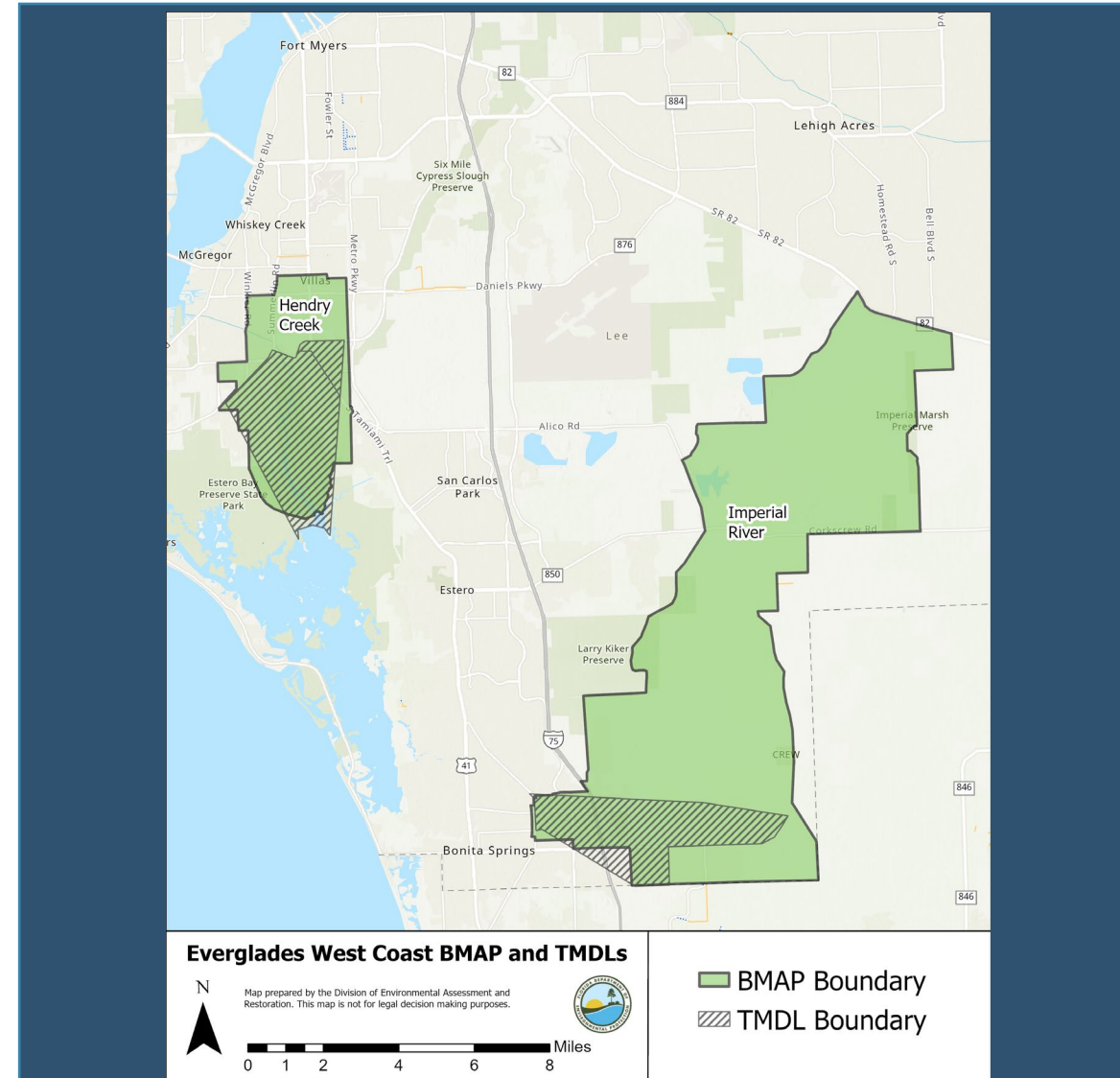
Hendry Creek and Imperial River

Adopted in 2008:

- Dissolved oxygen (DO) impairments.
- TN reductions.

Target concentration 0.74 milligrams per liter (mg/L) TN for Hendry Creek waterbody identification (WBID) number 3258B and Imperial River (WBID 3258E).

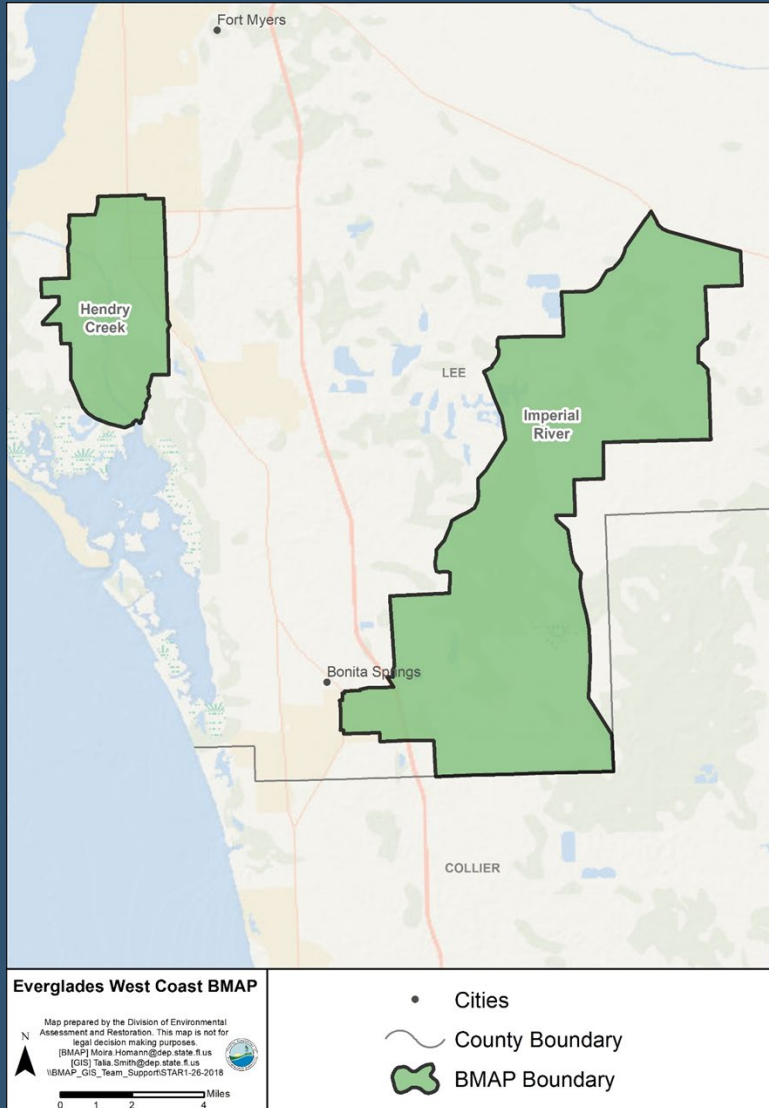
Target concentration 0.60 mg/L TN for Hendry Creek WBID 3258B1.





BACKGROUND

Everglades West Coast BMAP

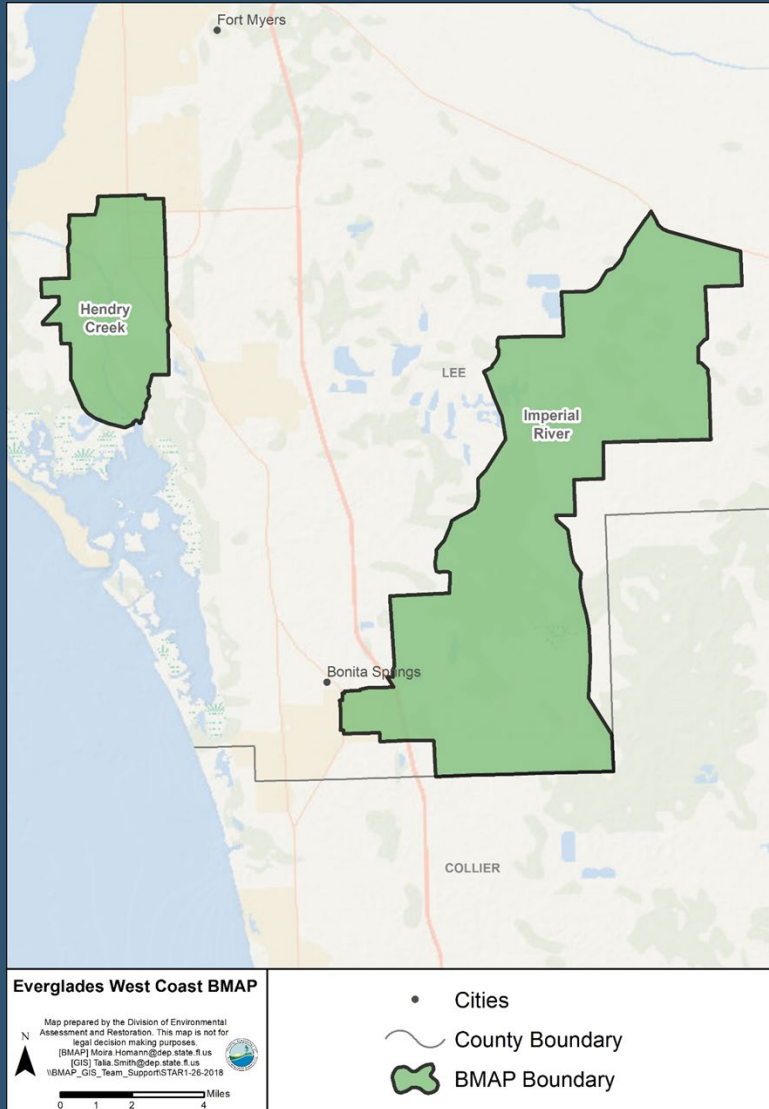


- Initially adopted November 2012.
- Total required reductions:
 - Hendry Creek: 44,414 lbs/yr TN.
 - Imperial River: 192,202 lbs/yr TN.



BACKGROUND

Everglades West Coast BMAP



Stakeholders	BMAP Basin
City of Bonita Springs	Imperial River
Lee County	Hendry Creek, Imperial River
FDACS	Hendry Creek, Imperial River
FDOT	Hendry Creek, Imperial River



STAR UPDATES

Everglades West Coast BMAP

Projects Through December 31, 2021

Lead Entity	Completed	Ongoing	Planned	Underway	Total
City of Bonita Springs	8	3	2	2	15
FDACS	0	2	0	0	2
FDOT District 1	8	4	0	0	12
Lee County	7	4	0	5	16
Total	23	13	2	7	45



STAR UPDATES

Everglades West Coast BMAP

Projects Through December 31, 2022 (Preliminary)

Lead Entity	Completed	Ongoing	Planned	Underway	Total
City of Bonita Springs	8	3	2	2	15
FDACS	0	2	0	0	2
FDOT District 1	8	4	0	0	12
Lee County	8	4	0	4	16
Total	24	13	2	6	45

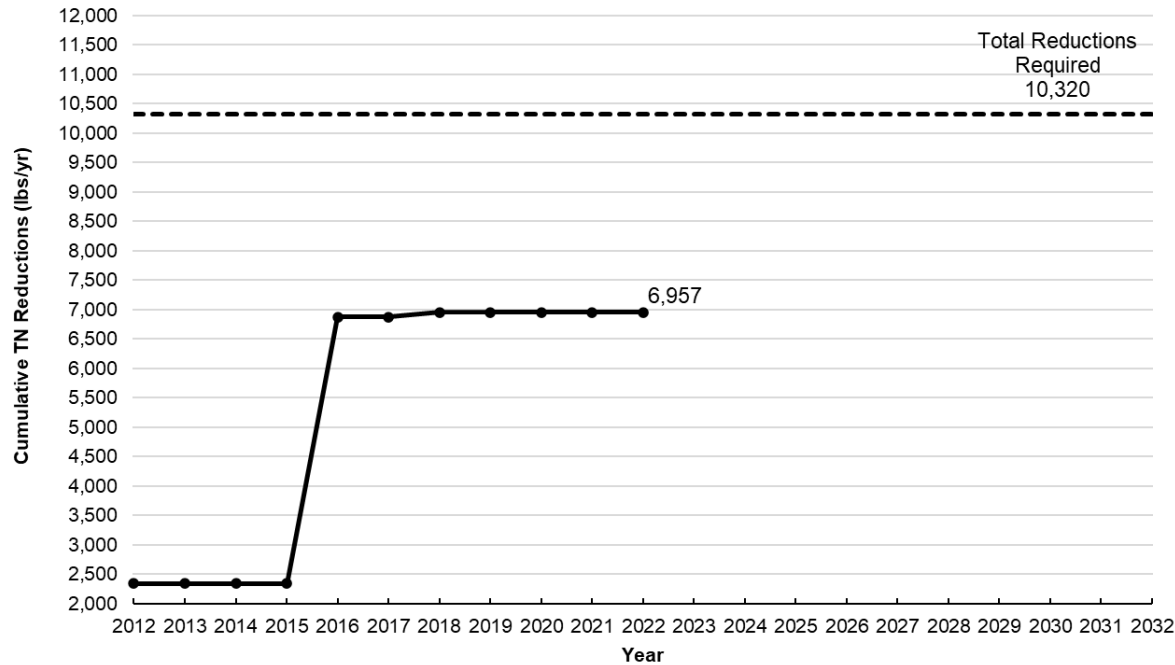


STAR UPDATES

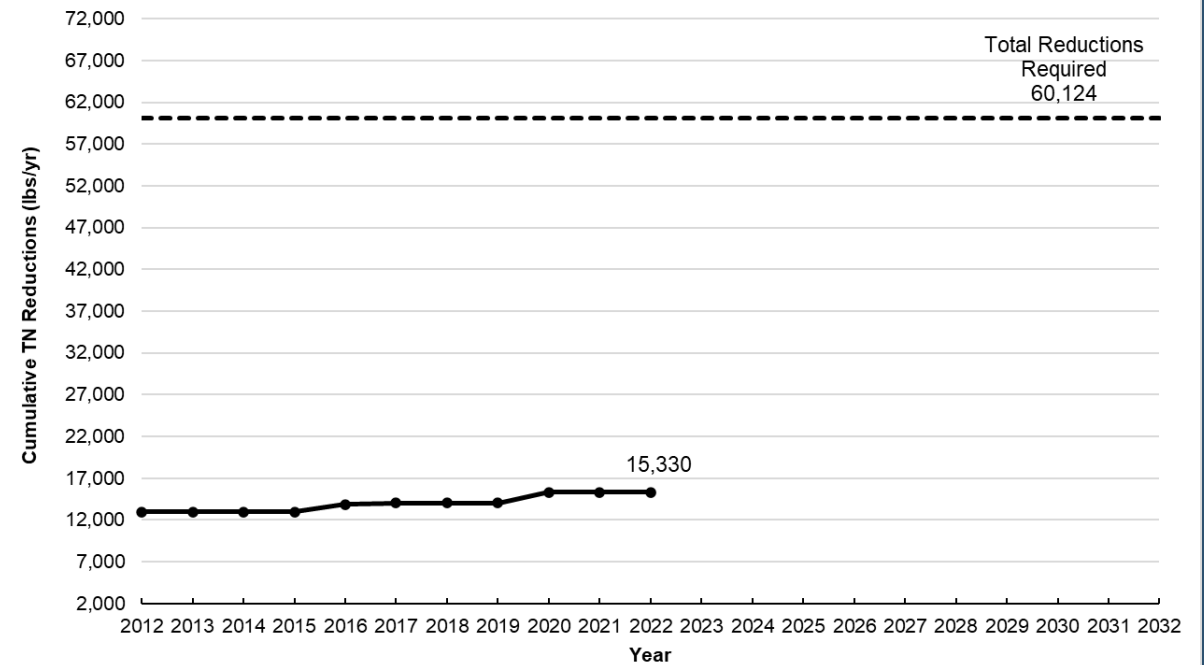
Everglades West Coast BMAP

Progress through December 31, 2022 (Preliminary)

Everglades West Coast TN Project Reductions (Hendry Creek)



Everglades West Coast TN Project Reductions (Imperial River)



Completed and ongoing projects only.



WBID	Waterbody Name	Parameters Assessed Using the Impaired Surface Waters Rule (IWR)	Previous Summary Assessment Category	Current Assessment Category	Integrated Report Category Summary Assessment	Summary Assessment Status
3258X	The Lakes Park	Dissolved Oxygen (Percent Saturation)	3c	3b	3c	Planning List
3258X	The Lakes Park	Nutrients (Total Nitrogen)	3b	3b	3b	Insufficient Data
3258X	The Lakes Park	Nutrients (Total Phosphorus)	3b	3b	3b	Insufficient Data
3258B2	Hendry Creek	Dissolved Oxygen (Percent Saturation)	4a	4a	4a	TMDL Complete
3258B2	Hendry Creek	Nutrients (Total Nitrogen)	3b	3c	3c	Planning List
3258B2	Hendry Creek	Nutrients (Total Phosphorus)	3b	3b	3b	Insufficient Data
3258EA	Imperial River	Dissolved Oxygen (Percent Saturation)	4a	4a	4a	TMDL Complete
3258EA	Imperial River	Nutrients (Total Nitrogen)	3b	3b	3b	Insufficient Data
3258EA	Imperial River	Nutrients (Total Phosphorus)	3b	3b	3b	Insufficient Data



STAR UPDATES

Everglades West Coast BMAP

Story Map

Everglades West Coast Basin Management Action Plan

Introduction Overview Location Monitoring **Projects** Progress Contacts & More Information

PROJECTS

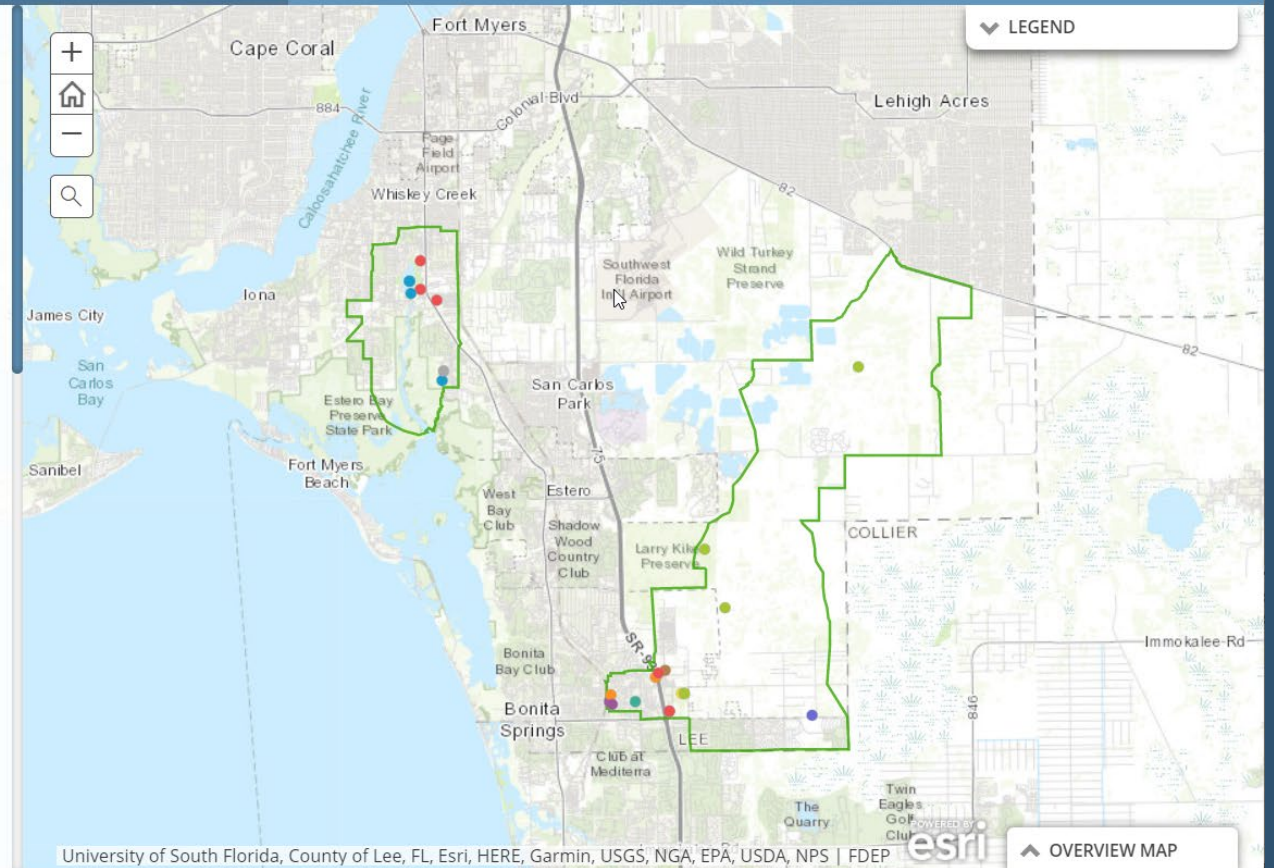
Actions to Achieve Nutrient Load Reductions

The Everglades West Coast BMAP is designed to be implemented in a phased approach to allow for adaptive management. The phased BMAP approach allows for the implementation of projects designed to achieve incremental reductions, while simultaneously monitoring and conducting studies to better understand the water quality dynamics (sources and response variables) in the watershed. Municipal, regional, state, and federal agencies, as well as agricultural producers, have responsibilities under the BMAP to implement structural and nonstructural activities to reduce TN in the watershed.

All agricultural nonpoint sources in the BMAP area are statutorily required either to implement appropriate best management practices or to conduct water quality monitoring that demonstrates compliance with state water quality standards. The Florida Department of Agriculture and Consumer Services' Office of Agricultural Water Policy, Florida Forest Service, and Division of Aquaculture develop and adopt best management practices in coordination with DEP, the University of Florida-Institute of Food and Agricultural Sciences, and applicable producer groups. Producers that choose to implement best management practices must file a signed Notice of Intent and best management practice checklist with the Florida Department of Agriculture and Consumer Services and properly implement the applicable best management practices.

Urban stormwater projects include BMPs such as stormwater ponds, baffle boxes that remove debris, swales, and street sweeping, as well as projects that reduce nutrient sources such as local ordinances (e.g., fertilizer and pet waste ordinances), public education, and Florida-friendly landscaping practices. These projects can occur at a variety of scales including county-wide, city-wide, and within the boundaries of special districts. Additionally, some areas may be covered by multiple programs or ordinances.

Wastewater projects include reduction of the nutrients discharged to the lake through



<https://fdep.maps.arcgis.com/apps/MapSeries/index.html?appid=d73c7004309f4dbf88237fbd244f1439>



WHAT'S NEXT FOR THE BMAPS?

Everglades West Coast

- Wastewater effluent limits based on size of facility and effluent disposal method utilized.
- Onsite sewage treatment and disposal system (OSTDS) provisions for new development on lots less than one acre.
- Development of a target restoration area analysis.
- Need for more projects.
- Evaluation of the monitoring network.
- Evaluation of BMAP model and updating land use.
- Clean Waterways Act requirements.

Caloosahatchee River and Estuary

- OSTDS provisions for new development on lots less than one acre.
- Regional projects.
- Update to allocations.
- Evaluation of the monitoring network.
- Clean Waterways Act requirements.



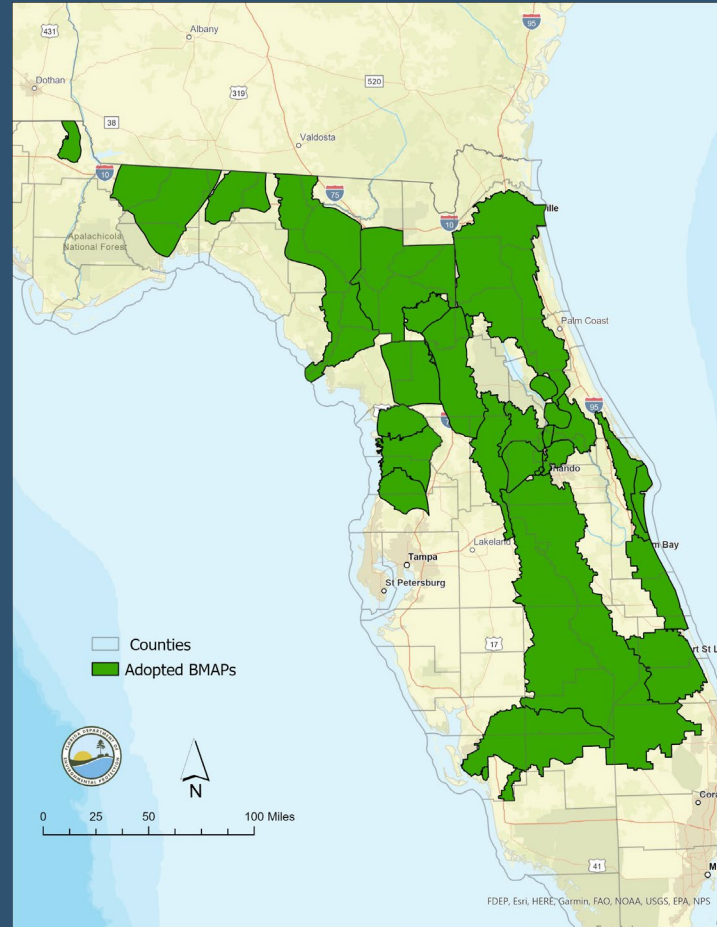
CLEAN WATERWAYS ACT REQUIREMENTS

[publicfiles.dep.state.fl.us - /DEAR/BMAP/2025 BMAP Updates/Meetings/2022/Clean Waterways Act WWTF and OSTDS Requirements March 31/](https://publicfiles.dep.state.fl.us/-/DEAR/BMAP/2025+BMAP+Updates/Meetings/2022/Clean+Waterways+Act+WWTF+and+OSTDS+Requirements+March+31/)

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.

Nutrient BMAPs



Update to BMAPs to be adopted by July 1, 2025.

OSTDS Remediation Plans

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

Caloosahatchee River & Estuary & Everglades West Coast BMAP Annual Meeting

March 17, 2023

Jennifer Thera

**Florida Department of Agriculture and Consumer Services
Office of Agricultural Water Policy**



Overview

- Agricultural Best Management Practices (BMP)
- FDACS Role in BMP Implementation
- Enrollment and Unenrolled Agricultural Lands Classification
 - Caloosahatchee River and Estuary Basin
 - Everglades West Coast Basin
- 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 Escibano**; Environmental Administrator-BMAPs Yesenia.Escibano@fdacs.gov
- **Jennifer Thera**; Environmental Consultant-NEEPP & Everglades West Coast BMAPS Jennifer.Thera@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

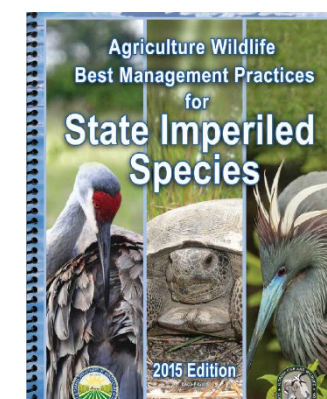
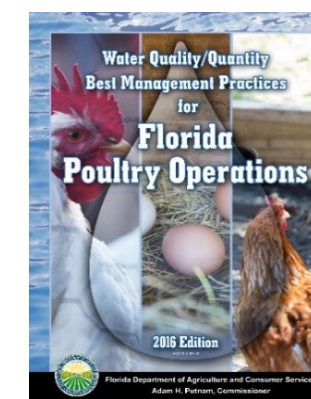
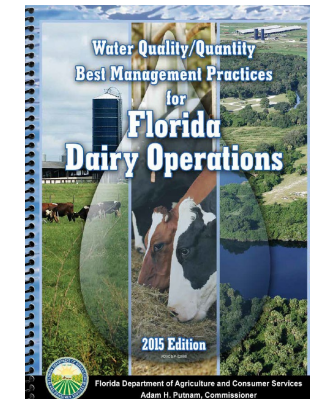
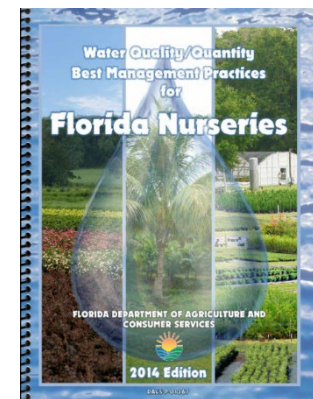
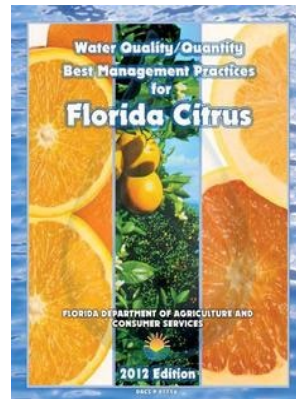
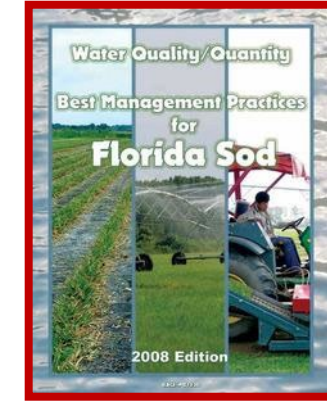
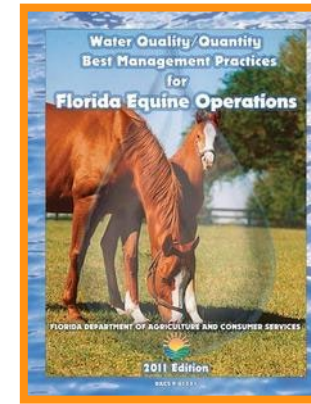
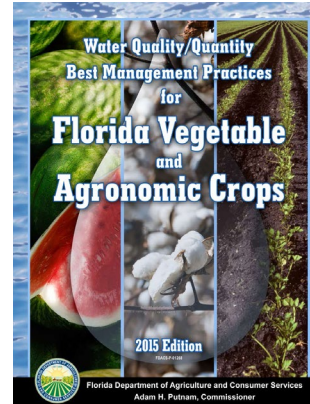
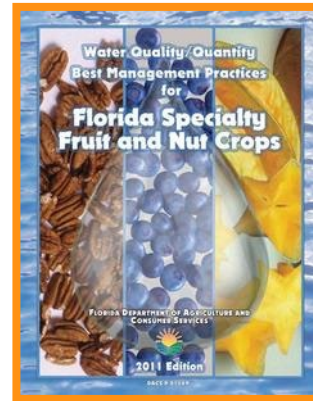
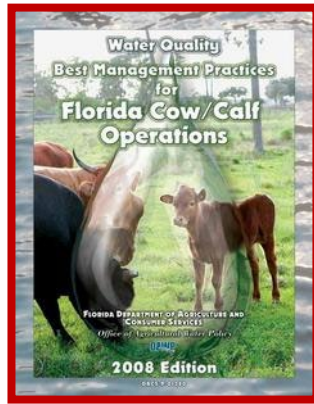


FDACS Role in BMP Implementation

- 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 Caloosahatchee BMAP

	Basin Total	Tidal Caloosahatchee	West Caloosahatchee	East Caloosahatchee
Total Ag Acres	444,226	58,320	191,341	194,566
Enrolled Ag Acres	377,744	49,640	151,643	176,453
Percent Enrolled	85%	85%	79%	91%
Total Irrigated Ag Acres	180,719	6,017	57,376	117,330
Enrolled Irrigated Ag Acres	169,208	5,679	53,892	109,631
Percent Enrolled	94%	94%	94%	93%



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

Enrollments within the Caloosahatchee Tributaries BMAP

Tributary	Total Ag Acres	Enrolled Ag Acres	% Enrolled	Irrigated Acres	Enrolled Irrigated Acres	% Enrolled
Townsend Canal	28,984	26,797	92%	20,171	19,953	99%
C-19	24,585	23,610	96%	13,484	12,906	96%
Lake Hicpochee	5,188	4,647	90%	3,299	3,290	100%
Long Hammock Creek	68,818	58,065	84%	34,681	30,460	88%
S-4	29,199	27,545	94%	27,480	26,434	96%



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

Agricultural Acres Enrolled within Caloosahatchee BMAP

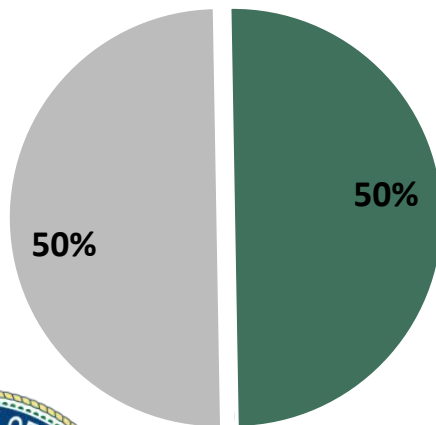
BMP Manual	Acres
Citrus	46,375
Conservation Plan	43,848
Cow/Calf	99,867
Equine	9
Fruit & Nut	480
Multiple Commodities	99,006
Nursery	977
Poultry	56
Row/Field Crop	86,186
Sod	940
TOTAL	377,744



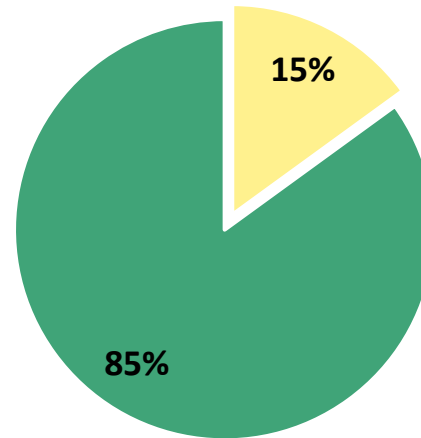
Agricultural Lands within Caloosahatchee BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres	Unlikely Enrollable Acres	Potentially Enrollable Acres
449,711	444,226	377,744	66,335*	16,850	33,964

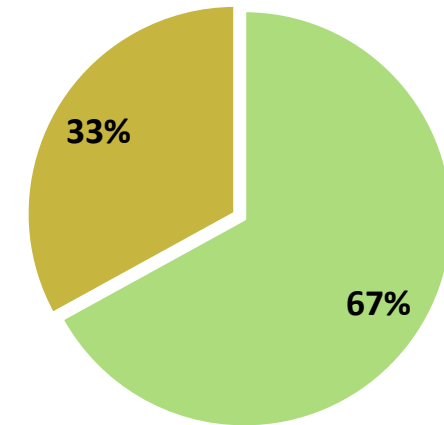
Non-Ag Acres vs.
Ag Acres



Enrolled Ag Acres vs.
Remaining Ag Acres



Unlikely Enrollable Acres
vs. Potentially Enrollable
Acres



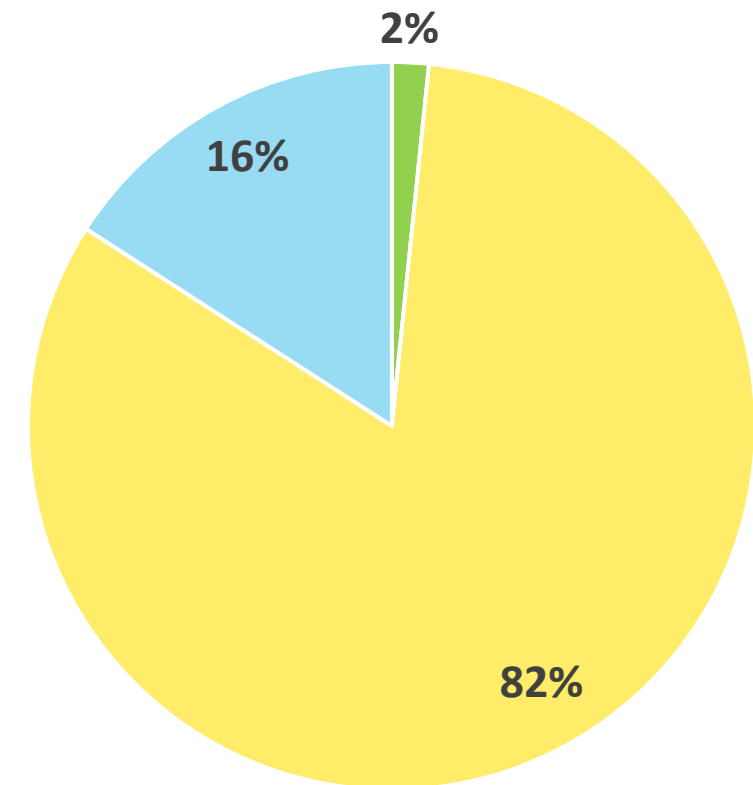
*This value includes ~15,000 acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Unlikely Enrollable Agricultural Lands within Caloosahatchee BMAP

Category	Acres
State Lands, Surface Water Projects	15,558
Timberland and Aquaculture	276
Not Agriculture [e.g., DOR Use Code 70-99 (industrial or institutional use, acreage not zoned agricultural), Non-Ag Entity]	13,896
Not Enrollable [e.g., Missing Parcel Information, Slivers, Tribal Lands]	2,677

Unlikely Enrollable Acres: 16,850

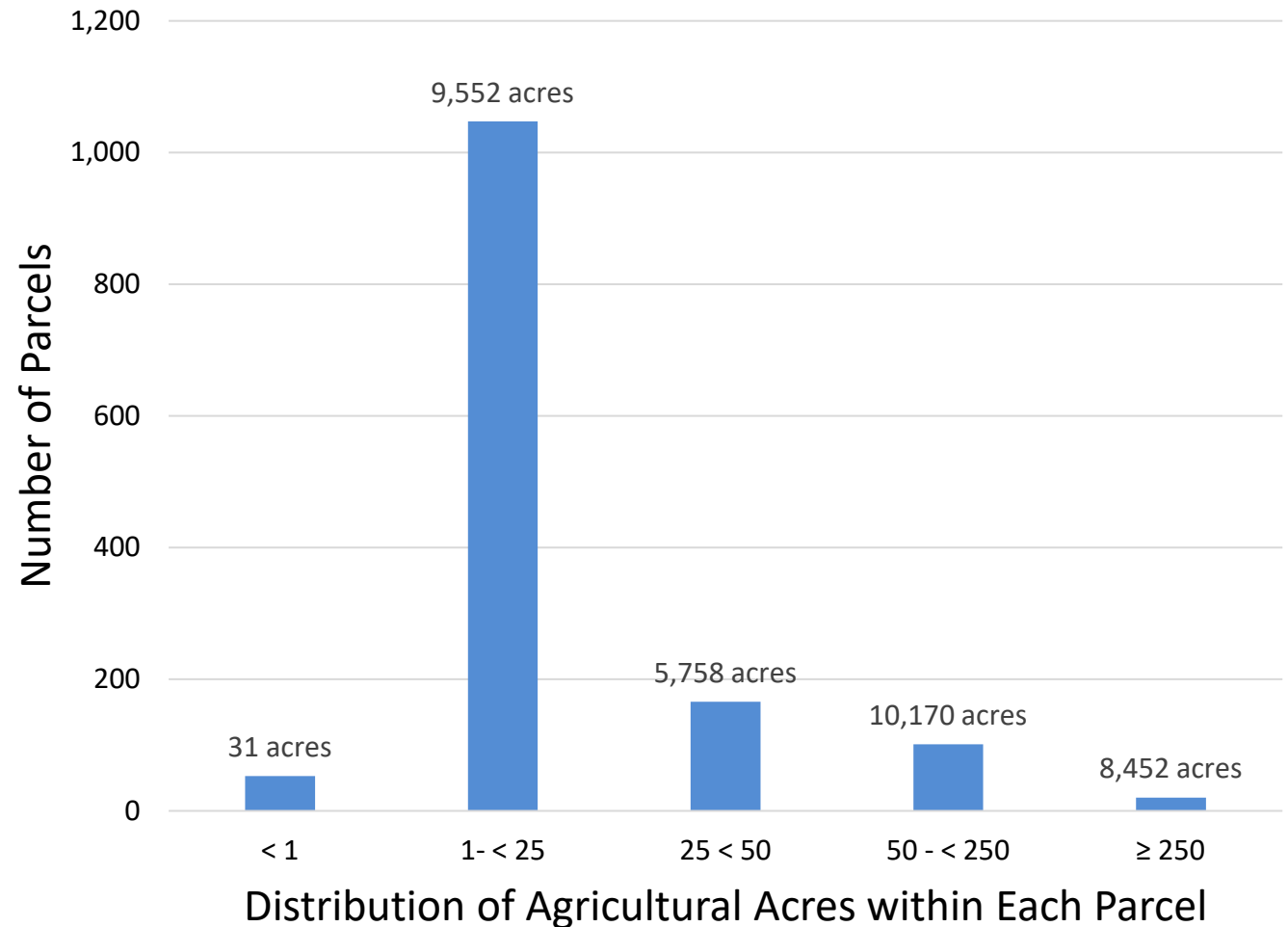
Remaining Acreage: Unlikely Ag Breakdown



Potentially Enrollable Agricultural Lands within Caloosahatchee BMAP

Ag Acres within Parcel	Parcel Count	Total Ag Acres
< 1	53	31
1 - < 25	1,047	9,552
25 - < 50	166	5,758
50 - < 250	101	10,170
≥ 250	20	8,452

Potentially Enrollable Acres: 33,964



Everglades West Coast BMAP



Enrollments within the Everglades West Coast BMAP

- 56% of all agricultural acres are enrolled in the BMP program
 - Total Ag Acres = 9,551
 - Enrolled Ag Acres = 5,304
- 97% of all irrigated agricultural acres are enrolled in the BMP program
 - Total Irrigated Ag Acres = 3,348
 - Enrolled Irrigated Ag Acres = 3,234

Tributary	Total Ag Acres	Enrolled Ag Acres	% Enrolled	Irrigated Acres	Enrolled Irrigated Acres	% Enrolled
Hendry Creek	103	0	0%	76	0	0%
Imperial River	9,448	5,304	56%	3,272	3,234	99%



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

Agricultural Acres Enrolled within Everglades West Coast BMAP

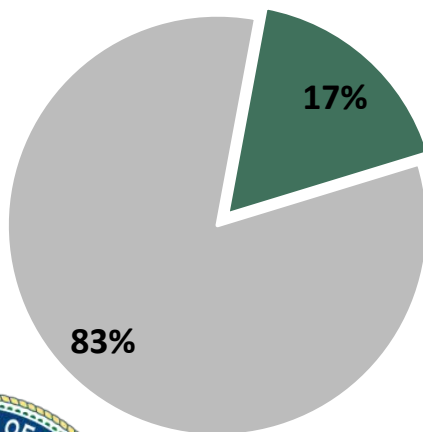
BMP Manual	Acres
Citrus	636
Cow/Calf	444
Multiple Commodities	97
Nursery	22
Row/Field Crop	4,105
TOTAL	5,304



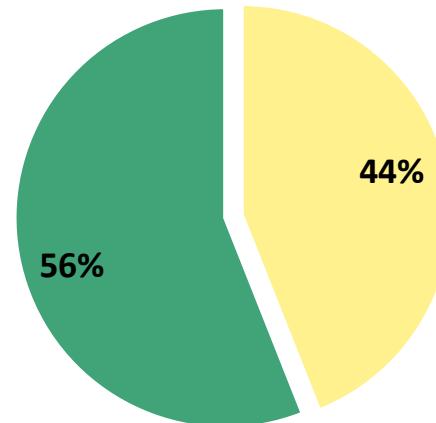
Agricultural Lands within Everglades West Coast BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres	Unlikely Enrollable Acres	Potentially Enrollable Acres
45,918	9,551	5,304	4,242*	2,339	1,655

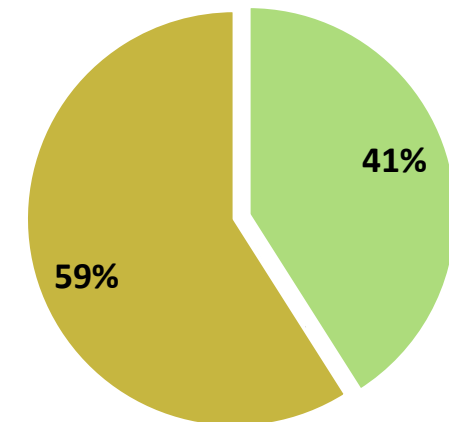
Non-Ag Acres vs.
Ag Acres



Enrolled Ag Acres vs.
Remaining Ag Acres



Unlikely Enrollable Acres
vs. Potentially Enrollable
Acres



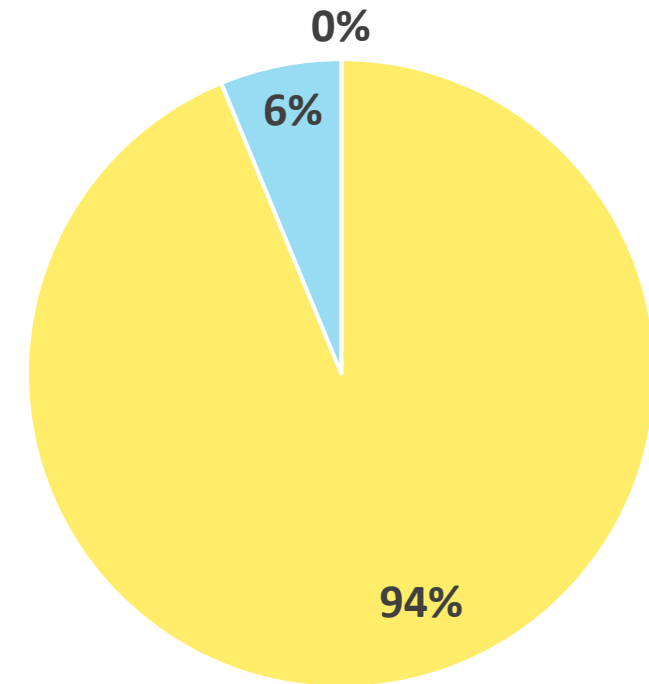
*This value includes ~500 acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Unlikely Enrollable Agricultural Lands within Everglades West Coast BMAP

Category	Acres
State Lands, Surface Water Projects	517
Timberland and Aquaculture	0
Not Agriculture [e.g., DOR Use Code 70-99 (industrial or institutional use, acreage not zoned agricultural), Non-Ag Entity]	2,194
Not Enrollable [e.g., Missing Parcel Information, Slivers, Tribal Lands]	146

Unlikely Enrollable Acres: 2,339

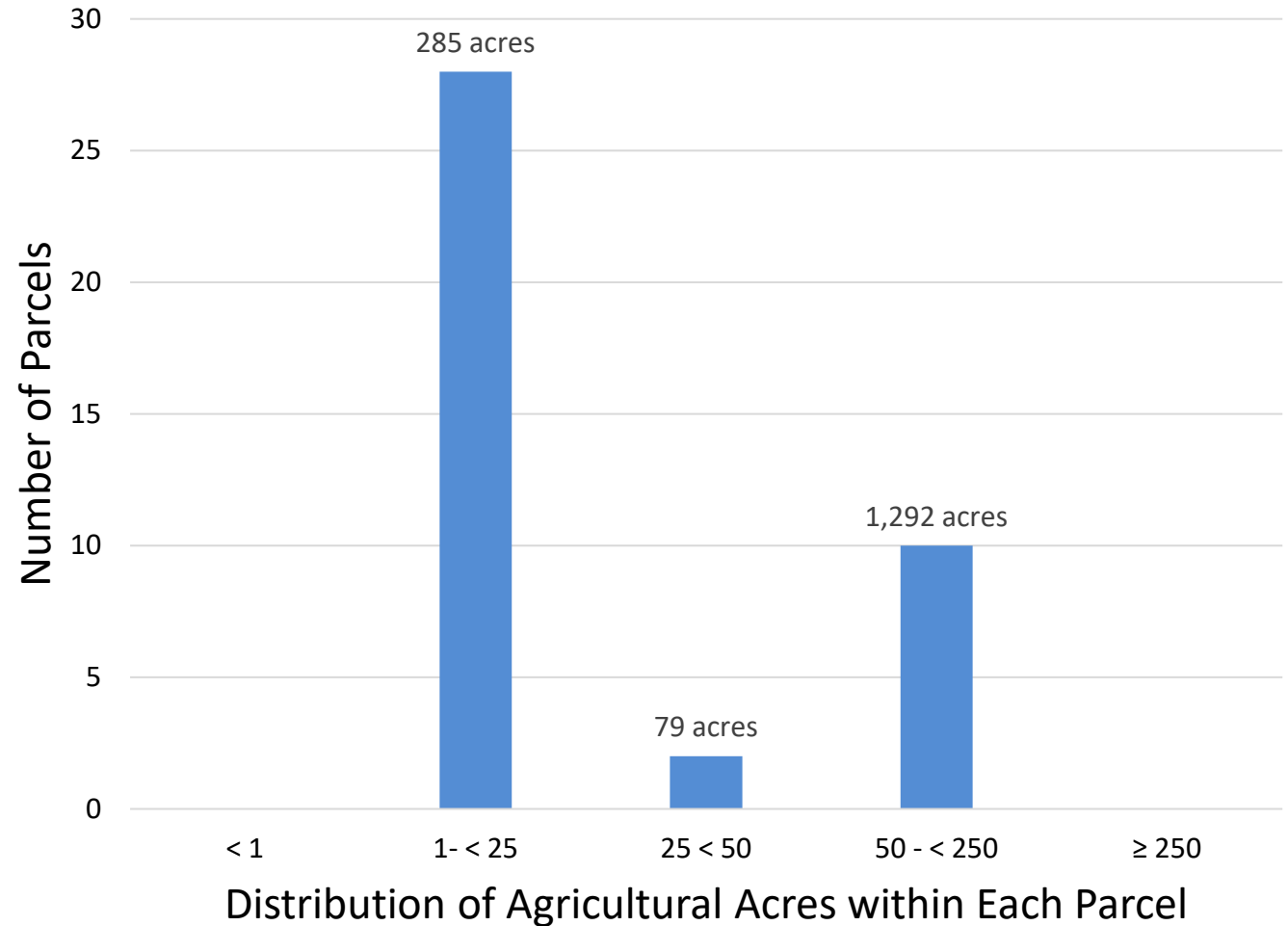
Remaining Acreage: Unlikely Ag Breakdown



Potentially Enrollable Agricultural Lands within Everglades West Coast BMAP

Ag Acres within Parcel	Parcel Count	Total Ag Acres
< 1	-	-
1 - < 25	28	285
25 - < 50	2	79
50 - < 250	10	1,292
≥ 250	-	-

Potentially Enrollable Acres: 1,655



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
 - 95% completed – Caloosahatchee
 - 100% 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, 2022



Producer Outreach: Coming Soon....

- BMP Program Videos

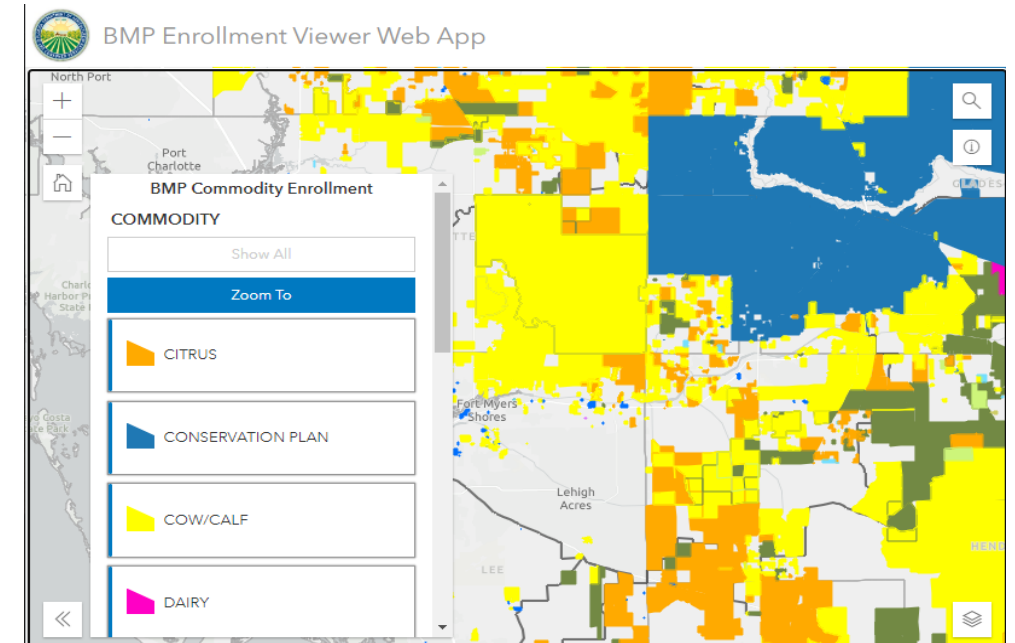
[Agricultural Water Policy - About BMPs – YouTube](#)



- 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 \(fdacs.gov\)](#)

2022 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

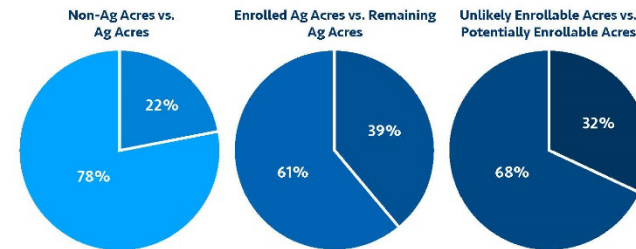
Report to the Governor, the President of the Senate, and the Speaker of the House
Pursuant to Section 403.0675(2), F.S.

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



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

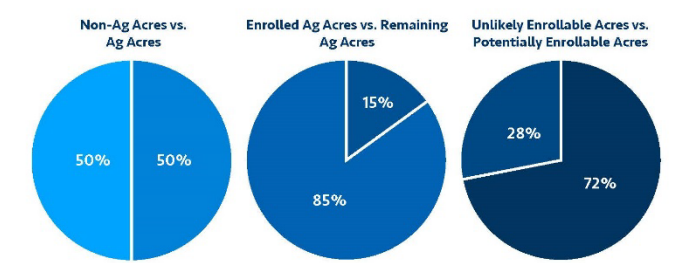
BMP Manuals	Acres
Citrus	445,006
Conservation Plan	132,280
Cow/Calf	1,684,597
Dairy	13,227
Equine	20,071
Fruit & Nut	16,615
Lake Okeechobee PP	2,476
Multiple Commodities	1,172,097
Nursery	32,246
Poultry	1,024
Row/Field Crops	1,010,521
Sod	26,321
Wildlife	13,346
TOTAL	4,628,627

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

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

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
449,306	444,635	377,358	67,277	13,966	36,603



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	444,635	85%
Total agricultural acres enrolled	377,358	
Total irrigated acres	188,050	93%
Total irrigated acres enrolled	174,329	
Number of NOIs within BMAP	497	
Completed IV site visits	207	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	51	29
1 - 25	1,115	10,186
25 - < 50	177	6,307
50 - < 250	115	12,111
≥ 250	19	7,696
TOTAL	1,477	36,603

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	52,678
Conservation Plan	43,353
Cow/Calf	98,537
Fruit & Nut	349
Multiple Commodities	99,932
Nursery	676
Poultry	56
Row/Field Crops	86,336
Sod	941
TOTAL	377,358

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

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

Thank You!

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

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





Unenrolled Agricultural Producer Enforcement

David Frady, Ph.D.
Program Administrator

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

March 17, 2023



Clean Waterways Act Requirements

- The Clean Waterways Act (Senate Bill 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 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.**



Enforcement Process

FDACS
Identifies non-
compliant
producers

- FDACS uses various database to identify parcels within a BMAP that may be agricultural operations.

FDACS refers
non-compliant
producers to
DEP for
enforcement

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

DEP conducts
outreach and
engagement to
bring producers
into 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.

DEP Initiates
enforcement
action

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



Success in Outreach and Engagement Efforts

- DEP takes immediate action when a producer is referred for enforcement.
 - More than **96%** of the unenrolled agricultural parcels identified by FDACS and referred to DEP have been brought into compliance.
- There are no parcels greater than 100 acres out of compliance and the majority are smaller than 10 acres.
- DEP 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

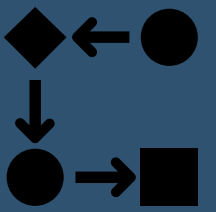
Contact Information:

Phone: (850) 245-8559

Email: David.Frady@FloridaDEP.gov



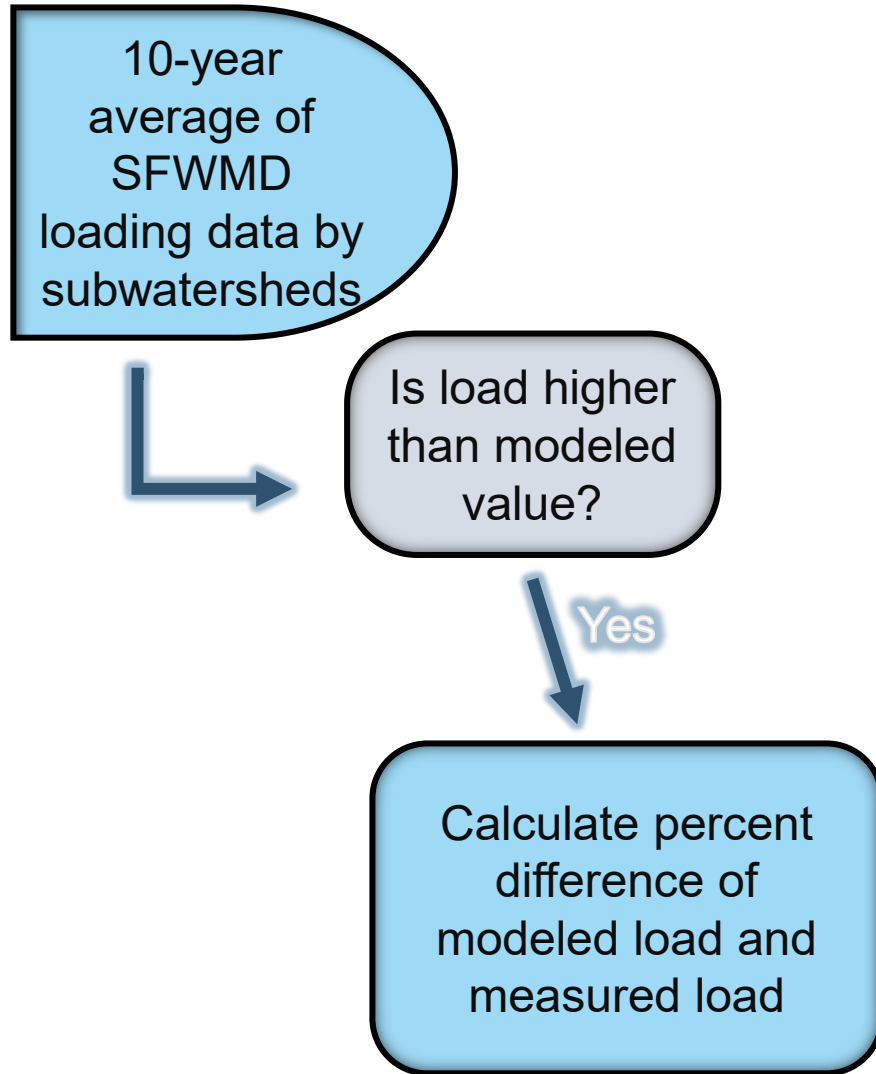
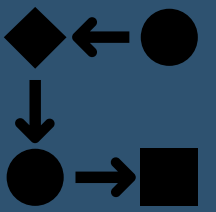
Calculating New Stakeholder Allocations



- Monitoring data from the SFER reported a much **higher loading of TN** to the Caloosahatchee Estuary than had been determined by the BMAP model.
- The 2022 5-Year Review made recommendations to **update the loading** in the BMAP to better match measured data and to then also **update required reductions**.
- This section seeks stakeholder **input on a proposed method** to modify BMAP allocations and required reductions in a way that will fit the July 1, 2025 timeline.



Calculating New Stakeholder Allocations





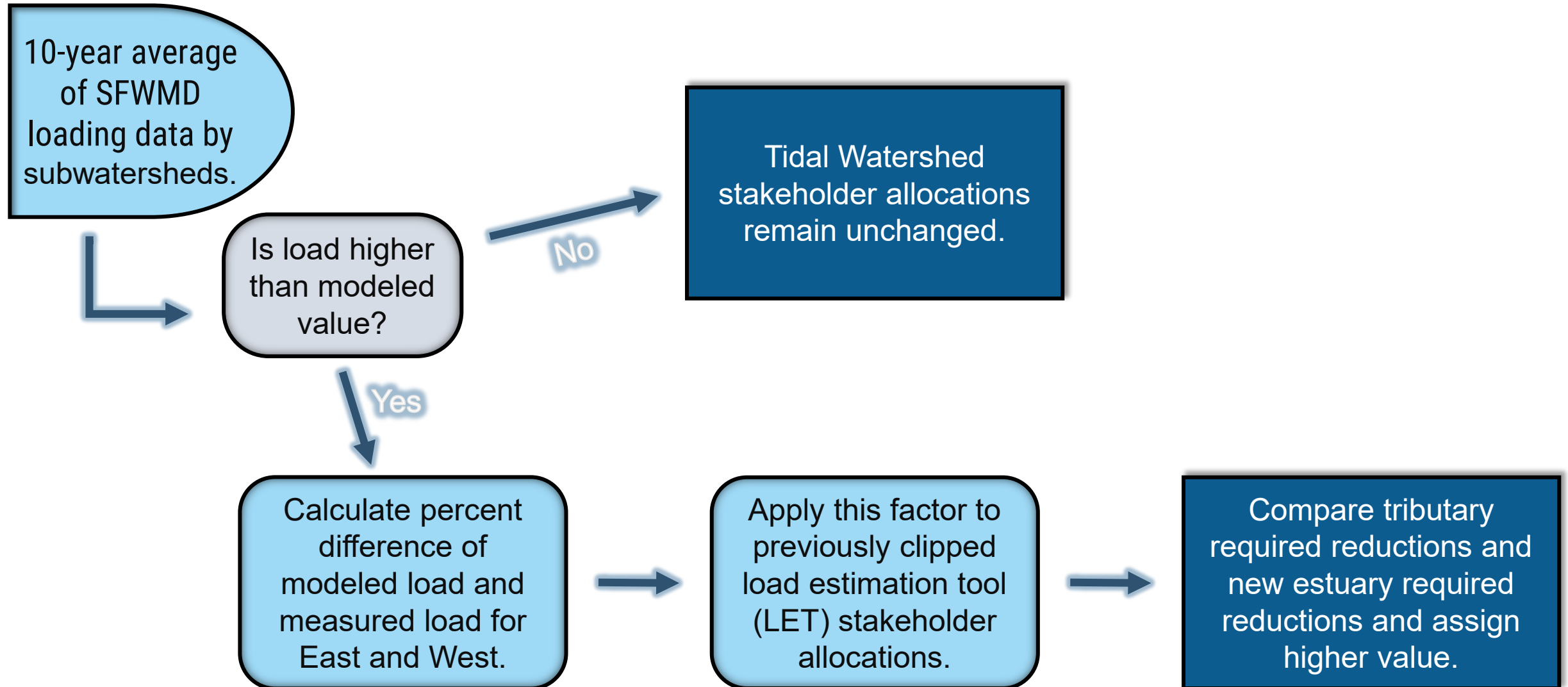
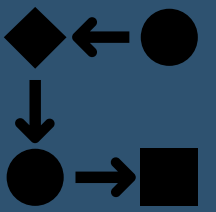
Calculating New Stakeholder Allocations

Subwatershed	BMAP TN Start Load (lbs/yr)	TN Required Reduction (lbs/yr)	10 Year Average Water Year 2013–2022 (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



Calculating New Stakeholder Allocations



THANK YOU



Nicole Morgan

Division of Environmental Assessment and
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Florida Department of Environmental
Protection

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Evelyn Becerra

Division of Environmental Assessment and
Restoration
Florida Department of Environmental
Protection

Contact Information:

Phone: (850) 245-8547

Email: Evelyn.Becerra@FloridaDEP.gov

Who are you representing today?



City/ Local Municipality



County Government



State Government



Non-Governmental Organization



Citizen



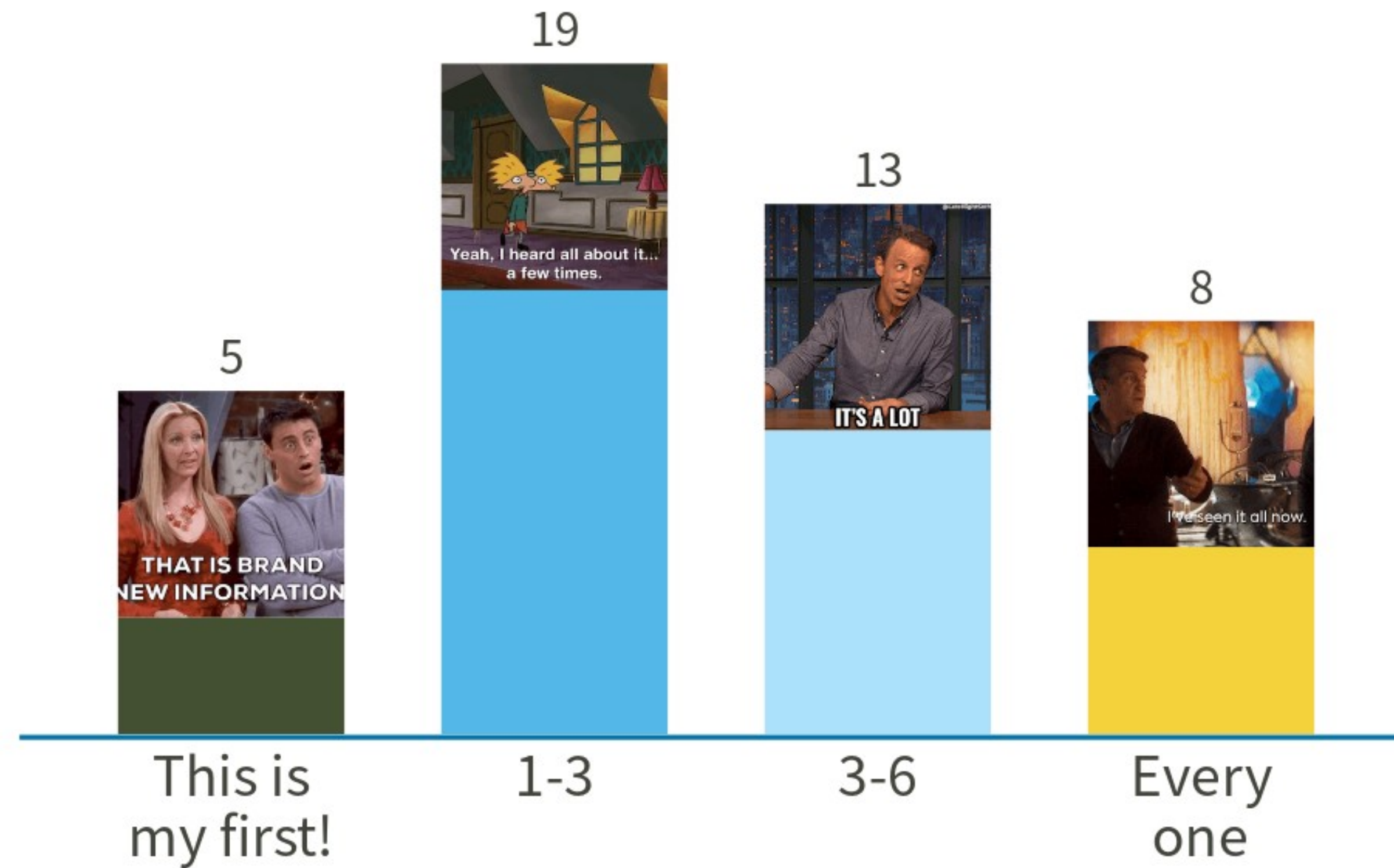
Federal Government

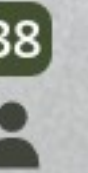


Other

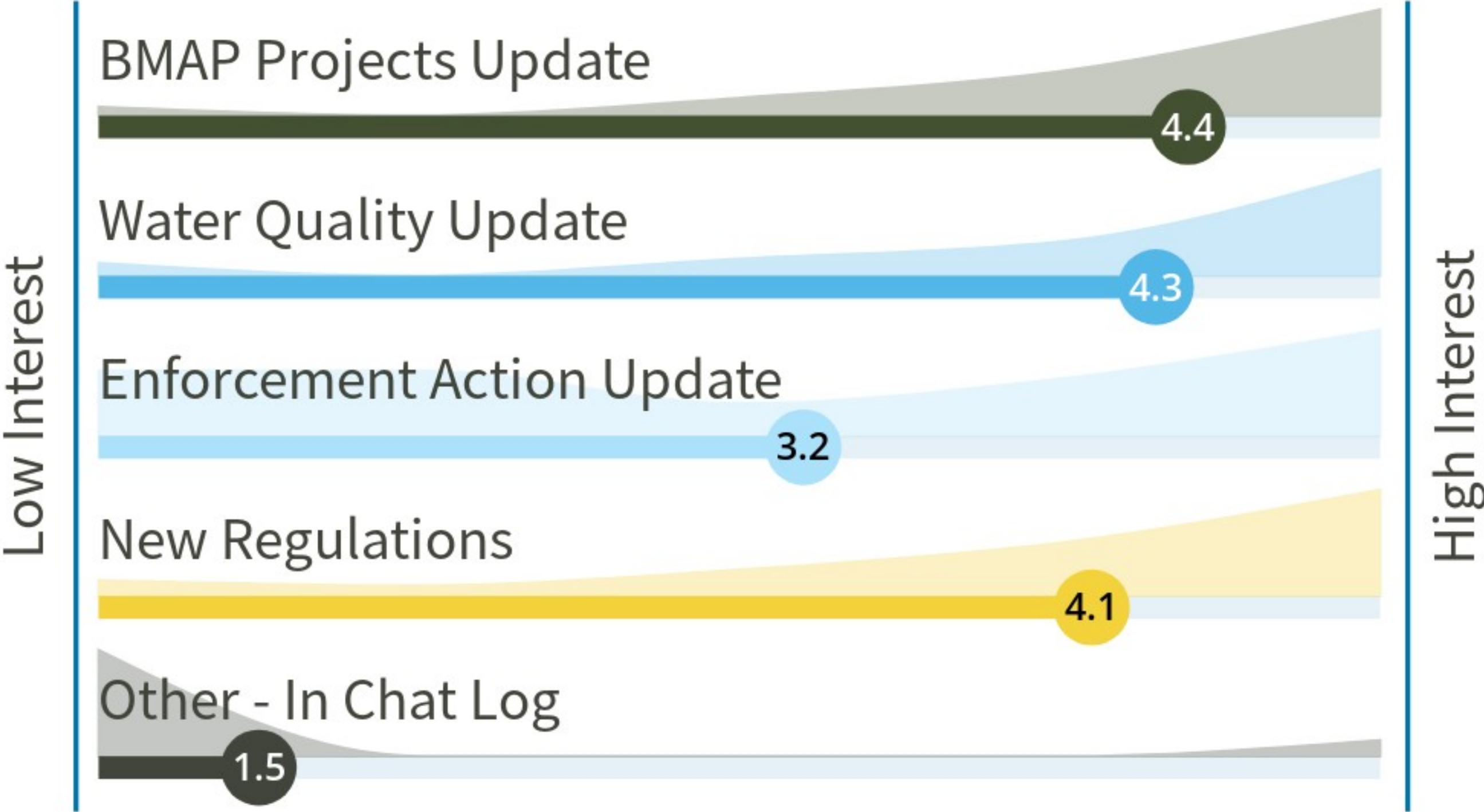


How many Annual Meetings have you attended?





What are you hoping to learn in this meeting?



Did you use the BMAP Portal?



Did you like using the portal?



0
No



Did you use the BMAP Portal?

- Yes
- No



How do you feel about new allocation method



I agree with the method

9



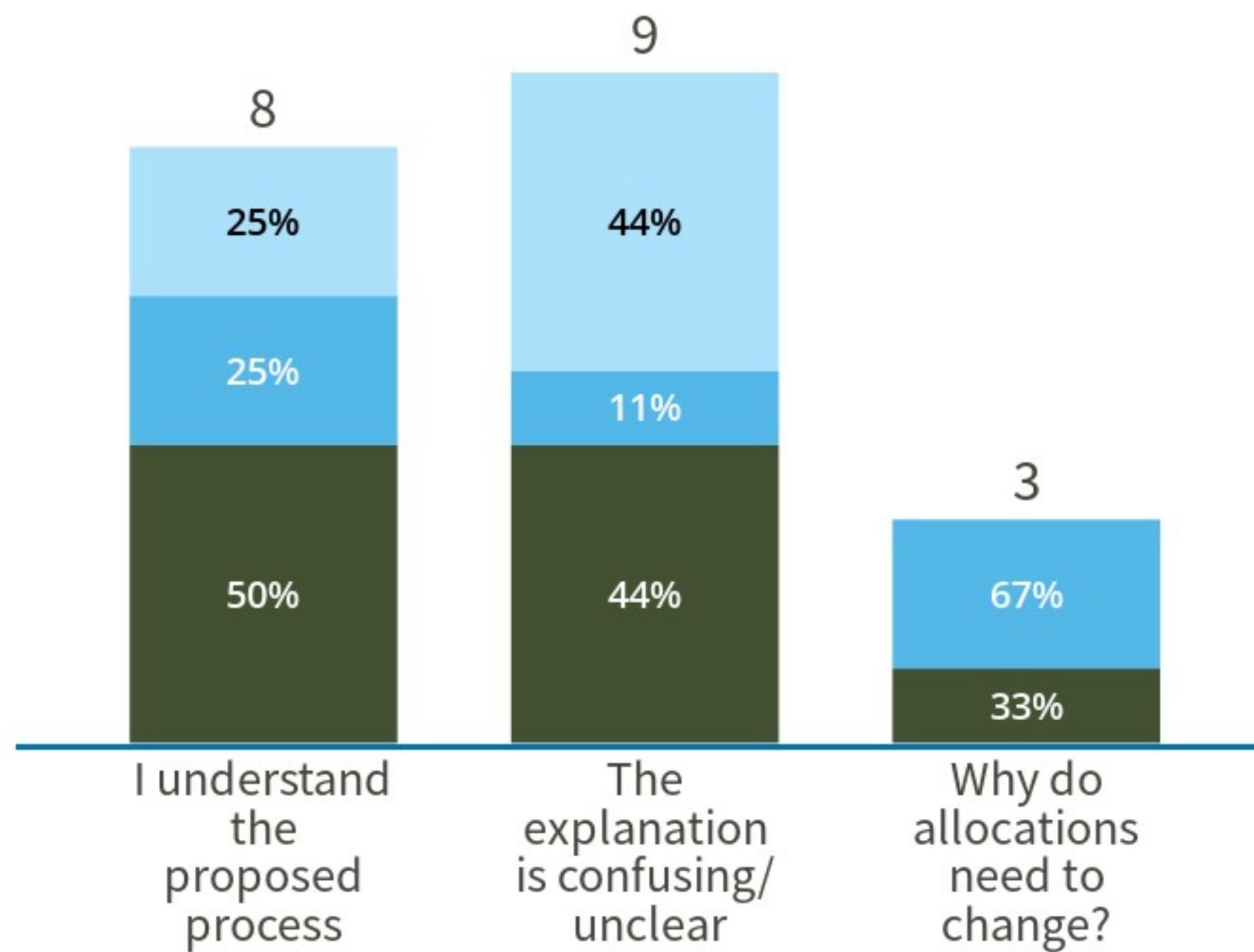
I don't like the method

5





Did the proposed method make sense?



How do you feel about new allocation method

- I agree with the method
- I don't like the method
- Unknown





What could we improve on?

I would like more visualizations.

A little long for what was covered, but good job.

Need to show the performance of the projects versus performance of BMPs. How much of the world reductions are being done by projects and versus how much reductions are being done by being piece.

Could you make slides available before presentation so we can take notes during the presentation?

The surveys were well done and engaging.

Slides available prior to the meeting would be helpful. I am not a fan of GoToWebinar in general.

I prefer on-line meetings.

I like online webinars. Show how the changes impact each stakeholder. That way we can make budget decisions based on our individual responsibility.

For projects, feature what's working and what's not, so people will know what projects they should be looking to implement in the future





What could we improve on?

There needs to be more discussion about increasing loads and how to address that problem.

Provide more detail on load calculations