

Northern Everglades and Estuaries Protection Program (NEEPP) Update

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Division Director

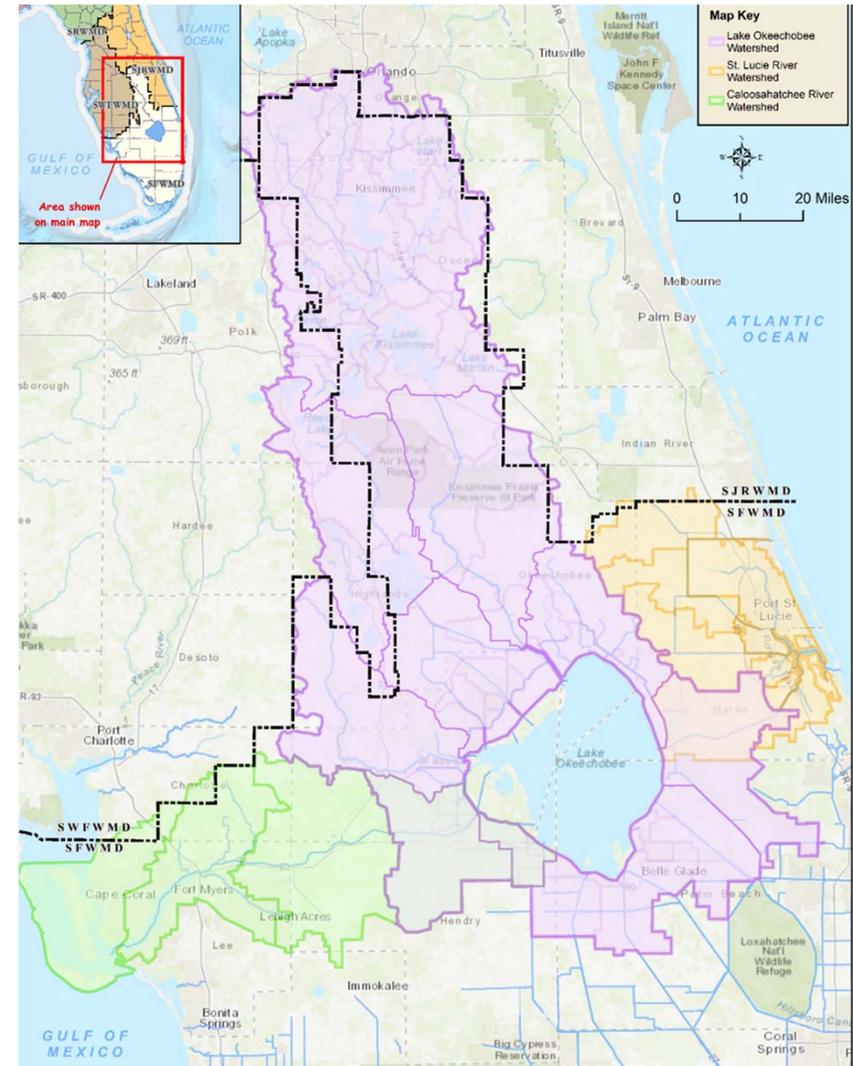
Ecosystem Restoration and Capital Projects Division

July 9, 2020

Sunrise over Lake Okeechobee near the City of Okeechobee

What is the purpose of the Northern Everglades & Estuaries Protection Program (NEEPP)?

- Goal: To improve water quality throughout the Northern Everglades to benefit Lake Okeechobee and the coastal estuaries.
- The Everglades & Estuaries Protection Bureau analyzes monitoring data within the Northern Everglades and provides technical support for future water quality improvement initiatives.



Purpose and Responsibility of NEEPP

➤ 2016 NEEPP Legislative Purpose

“... to improve the quality, quantity, timing, and distribution of water in the northern Everglades ecosystem ...” and “... provide a reasonable means of achieving the total maximum daily load requirements and achieving and maintaining compliance with state water quality standards.”

(373.4595(1)(h), F.S.)

➤ Shared Responsibility

The coordinating agencies shall be jointly responsible for implementing the River Watershed Protection Plans and the Lake Okeechobee Watershed Protection Program, consistent with the statutory authority and responsibility of each agency. (373.4595(3)(e) & (4)(e), F.S.)

Coordinating Agencies



NEEPP Strategy to Achieve Water Quality Standards

- Basin Management Action Plans (BMAPs) are the “watershed phosphorus control component for Lake Okeechobee” and the “pollutant control program” for the estuaries to achieve pollutant reduction goals based upon adopted Total Maximum Daily Loads (TMDLs) estimated in accordance with s. 403.067, Florida Statutes.
- Department of Environmental Protection “taking the lead on water quality protection measures through the Lake Okeechobee Basin Management Action Plan”
- SFWMD “taking the lead on hydrologic improvements pursuant to the [Lake Okeechobee Watershed Protection Plan]”
- “Department of Agriculture and Consumer Services taking the lead on agricultural interim measures, best management practices, and other measures adopted pursuant to s. 403.067.”

(373.4595(3)(b), F.S.)

NEEPP: Coordinating Agency Roles

Northern Everglades and Estuaries Protection Program (F.S. 373.4595)

Lake Okeechobee (LO) Watershed Protection Program

Caloosahatchee River Estuary and St. Lucie River Watershed Protection Programs

LO Internal Phosphorus Management Program (SFWMD)

Watershed Protection Plans (SFWMD)

Agricultural BMPs (FDACS)

BMAPS (FDEP)

Exotic Species Control Program (Coordinating Agencies)

Research & Monitoring Program (Primarily SFWMD)

Watershed Construction Projects & Programs (SFWMD)

- Water storage projects
- Water treatment projects
- Wetland restoration
- Hydrologic restoration
- Cost Share programs
- Chapter 40E-61, FAC

What is a TMDL and why do they exist?

- TMDLs are water quality goals for waterbodies with verified impairments. They establish the maximum amount of pollutant that a waterbody can assimilate without causing exceedances of water quality standards.
- The FDEP identified the Lake Okeechobee, the Caloosahatchee Estuary and its five tributaries, and the St. Lucie River as water bodies with excess nutrients for which TMDLs were set.
- FDEP adopted BMAPs to achieve TMDLs
 - 2012 – Caloosahatchee Estuary BMAP
 - 2013 – St. Lucie River and Estuary BMAP
 - 2014 – Lake Okeechobee BMAP
 - 2020 – FDEP updated all 3 BMAPs and expanded the Caloosahatchee BMAP boundary

How do BMAPs achieve TMDLs?

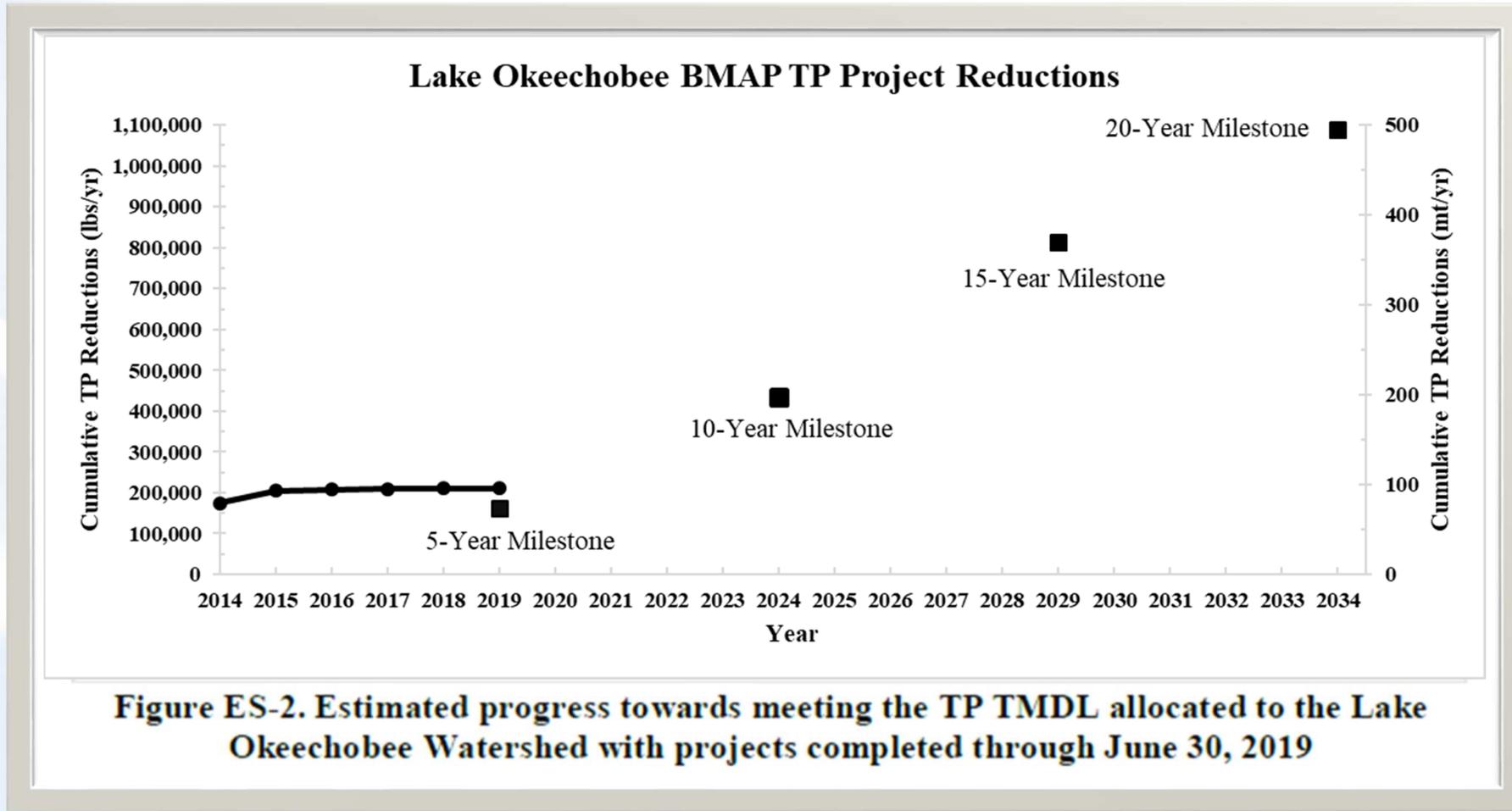
➤ Statewide Programs:

- FDACS Agriculture Nonpoint Programs (including Best Management Practices (BMPs))
- FDEP Municipal Separate Stormwater Sewer Systems
- FDEP Urban Nonpoint Programs
- FDEP Wastewater Treatment Facilities

➤ Regional, Subregional and Local Projects and Programs:

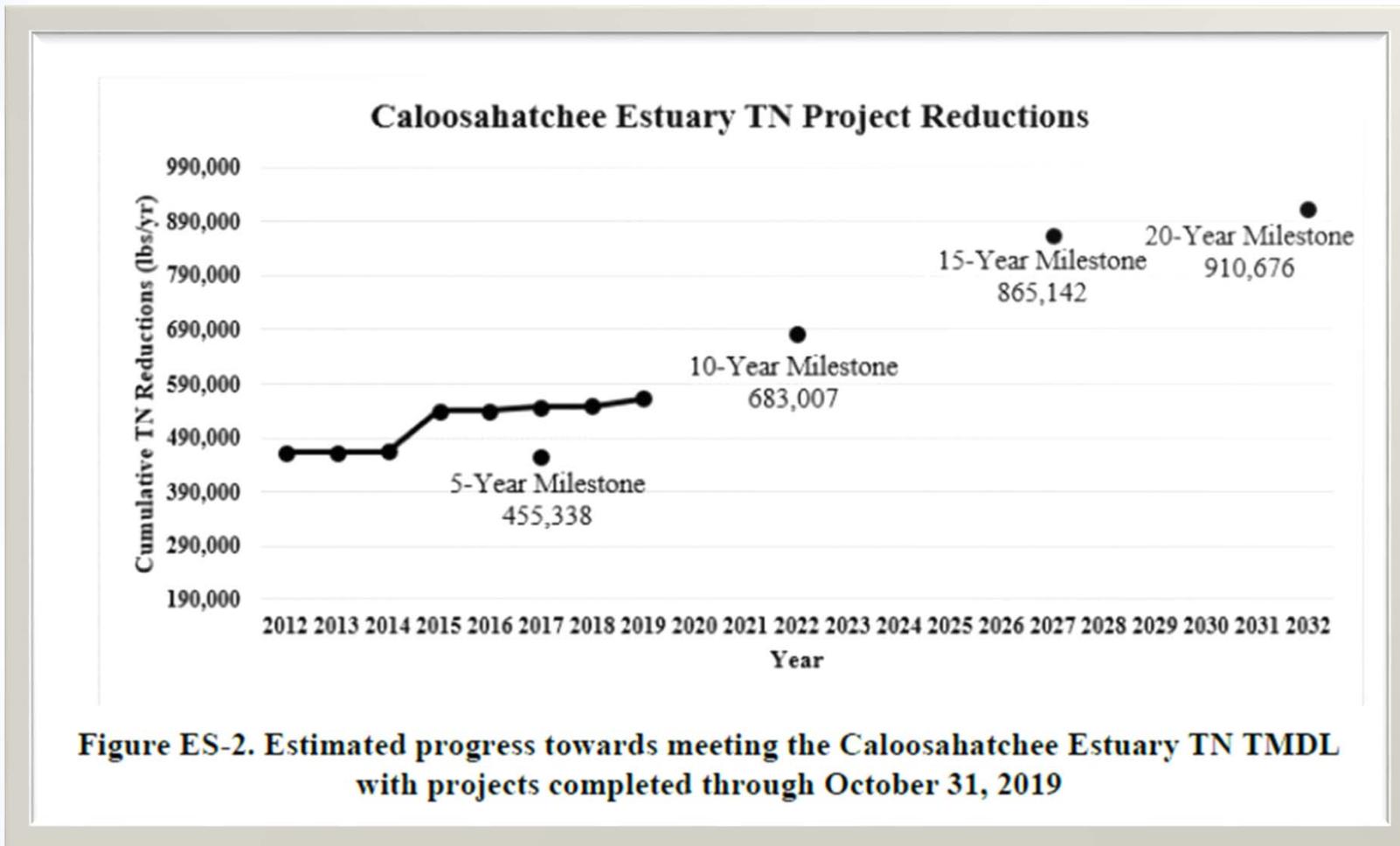
- Local Ordinances and Projects
- Comprehensive Everglades Restoration Plan (CERP) - Federal Projects considered in planning
- SFWMD Watershed Protection Plans – State Projects and Programs/Rules

LOW: 2019 Estimated Progress toward Achieving TMDL



Source – 2020 Lake Okeechobee BMAP

CRW: 2019 Estimated Progress toward Achieving TMDL



Source – 2020 Caloosahatchee River and Estuary BMAP

SLRW: 2019 Estimated Progress toward Achieving TMDL

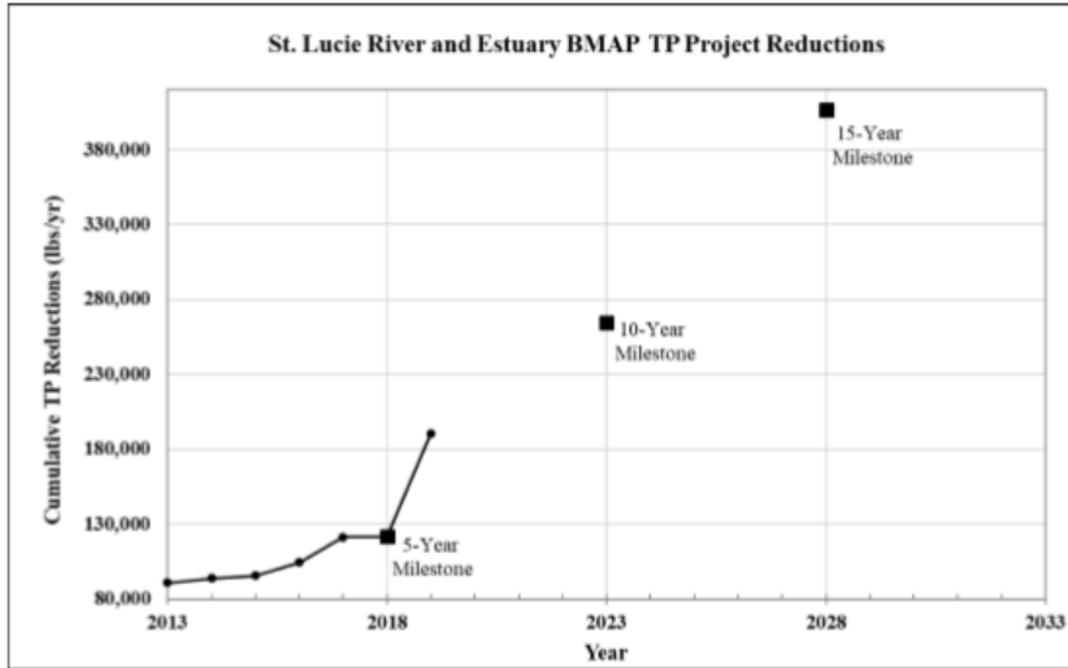


Figure ES-3. Estimated progress towards meeting the TP TMDL allocated to the St. Lucie River and Estuary Watershed with projects completed through June 30, 2019

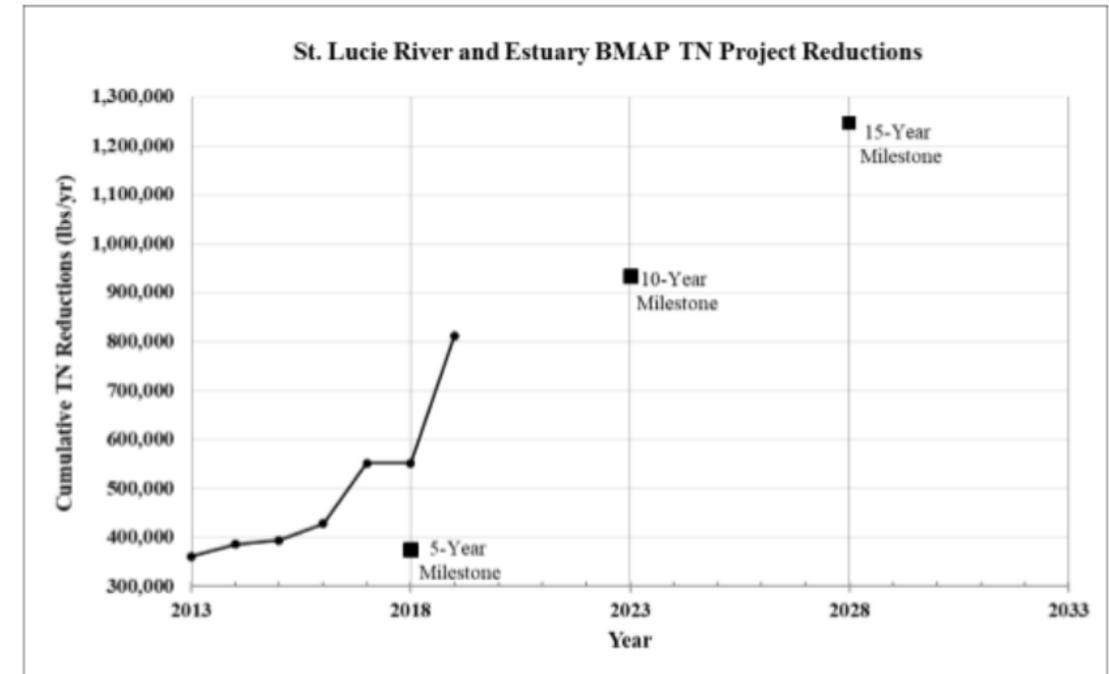
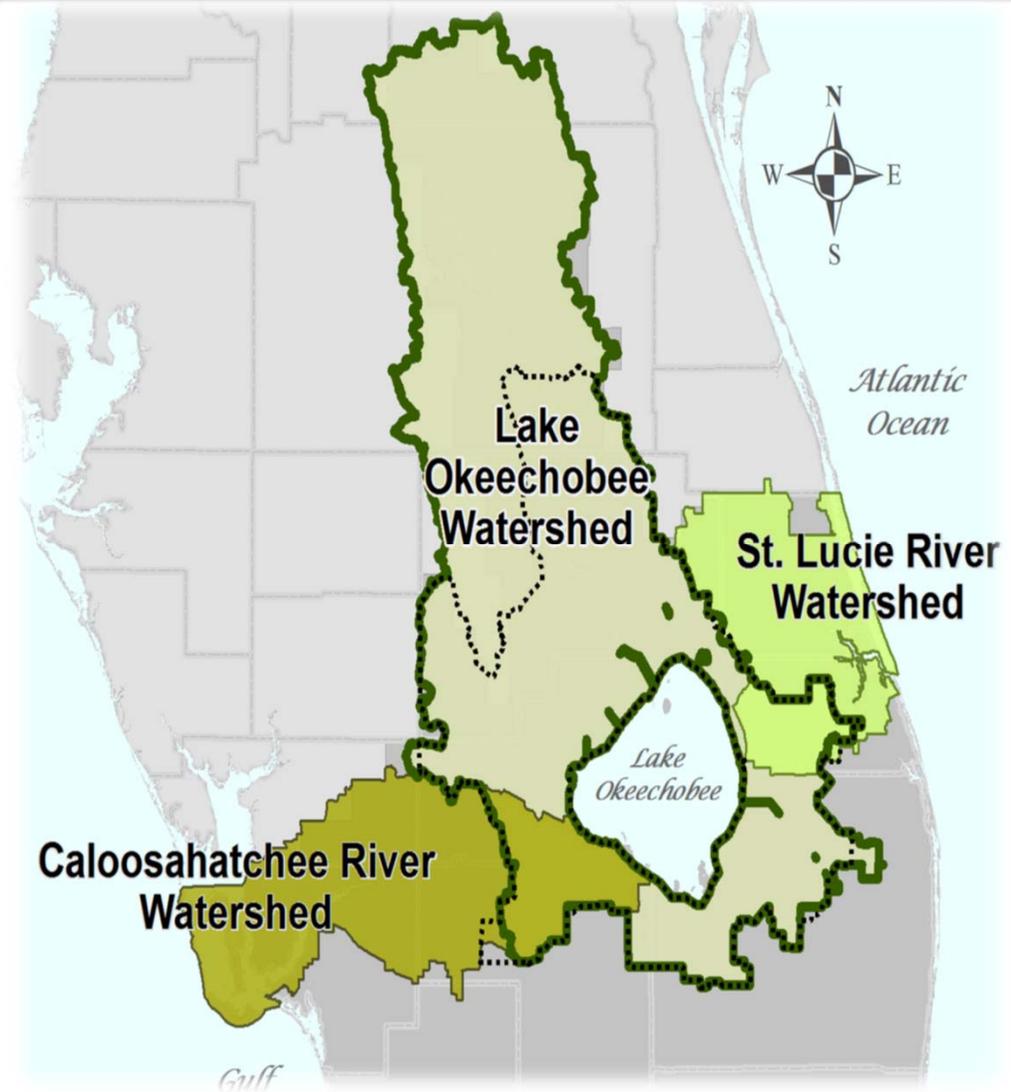


Figure ES-2. Estimated progress towards meeting the TN TMDL allocated to the St. Lucie River and Estuary Watershed with projects completed through June 30, 2019

Source – 2020 St. Lucie River and Estuary BMAP

SFWMD NEEPP Initiatives

- Chapter 40E-61 Lake Okeechobee Basin Rules
 - Amend existing rules for Lake Okeechobee Watershed
 - Develop new rules for Caloosahatchee and St. Lucie River Watersheds
 - Provide for a monitoring program for landowners not implementing BMPs
- Watershed Protection Plans
 - Nutrient reduction through projects and programs
 - Research and water quality monitoring
- Expanded Monitoring Network



Chapter 40E-61 Update - Draft Rules

- Part I: Assessments of Watersheds
 - Data collection
 - Evaluate/assess targeted areas
 - Identify areas requiring enhancement
 - Report annually
- Part II: Individual Landowner Requirements, if not Implementing BMPs
 - Apply for a permit/submit a monitoring plan
 - Report monitoring data
 - Take action based on data (if required)



Public Comments

- Sampling methodology, locations, nutrient levels
- Clarify terminology
- Legacy Phosphorus
- Nutrients in soils & canals
- Other contaminants like pesticides and herbicides
- Scope of proposed rules and authority
- Cost-share programs
- Coordinate rule timeline with FDEP Basin Management Action Plan Updates
- Integrate coordinating agencies' policies & Interagency Agreement

All submitted public comments and recordings of public workshops available at www.SFWMD.gov/Rules

Recent Legislative Changes

SECTION 85 of House Bill 5003. In order to implement Specific Appropriation 1620 of the 2020-2021 General Appropriations Act and to provide for a unified procedure to verify implementation of water quality monitoring pursuant to s. 403.067(7)(d)2.a, Florida Statutes, the rulemaking required by ss. 373.4595(3)(b)21, 373.4595(4)(b)8, and 373.4595(4)(d)8, Florida Statutes, shall be limited to procedures for implementation of water quality monitoring required in lieu of implementation of best management practices or other measures and shall replace the existing rule 40E-61, Florida Administrative Code. This section expires July 1, 2021.

Current Rulemaking Timeline

Governing Board presentation – Rule Amendment Process	Completed – August 2019
Governing Board approval of Notice of Rule Development	Completed – October 2019
Round 1 Public Workshops & Initiated Request for Public Comments (Stuart, Kissimmee, Ft. Myers, Okeechobee, West Palm Beach)	Completed – November 2019
Update to Governing Board	Completed – March 2020
Posted Draft Rule Text on website	Completed – April 2020
Round 2 Public Workshops (Zoom) with Draft Rule	Completed May 2020 – June 2020
Deadline for Public Comments on Draft Rule	July 3, 2020
Update to Governing Board	July 9, 2020
Revise Draft Rule and Complete Economic Analysis	July – October 2020
Governing Board Review of Proposed Rule Publish Statement of Economic Regulatory Costs if needed File Proposed Rule with Joint Administrative Procedures Committee	October 2020
Governing Board to Consider Final Adoption of Proposed Rule	December 2020
File with the Legislature for Ratification if needed	December 2020
2021 Regular Legislative Session	March 2021 – May 2021

Watershed Protection Plans

- The 2020 BMAPs recognize more reductions in nutrient pollution are needed
- “...stakeholders must identify and submit additional local projects and the Coordinating Agencies must identify additional regional projects as well as determine the significant funding that will be necessary.”
(Lake Okeechobee BMAP, January 2020)
- “Enhancements to programs addressing basin-wide sources will also be required” (Lake Okeechobee BMAP, January 2020)

Workshop Objectives

- Engage stakeholders and the public in a collaborative approach to meet water quality goals
- Identify projects, activities, and programs that can be implemented for additional water quality improvements, with an emphasis on meeting reduction goals in priority basins
- Consider workshop results to update the Watershed Protection Plans required under the NEEPP (Section 373.4595, Florida Statute)

Workshop Approach

- Summarize water quality data
- Account for existing projects and programs
- Define the gaps & remaining “problems”
- Facilitate discussions to solve the problems
- Identify potential solutions via projects and programs
- Report results annually in the South Florida Environmental Report (SFER)



Public Workshops



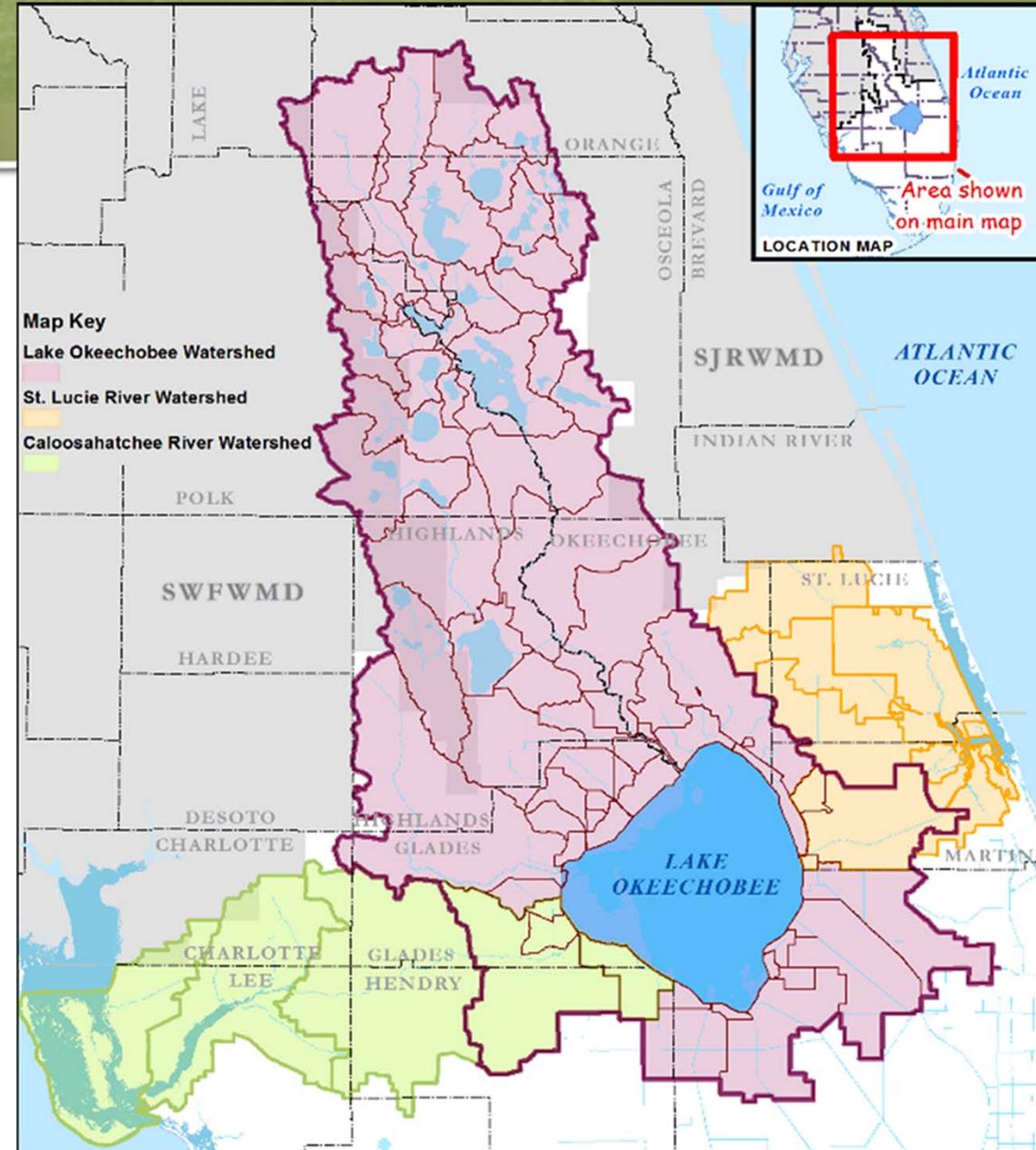
Fredy playing kickball

Public Workshops Schedule

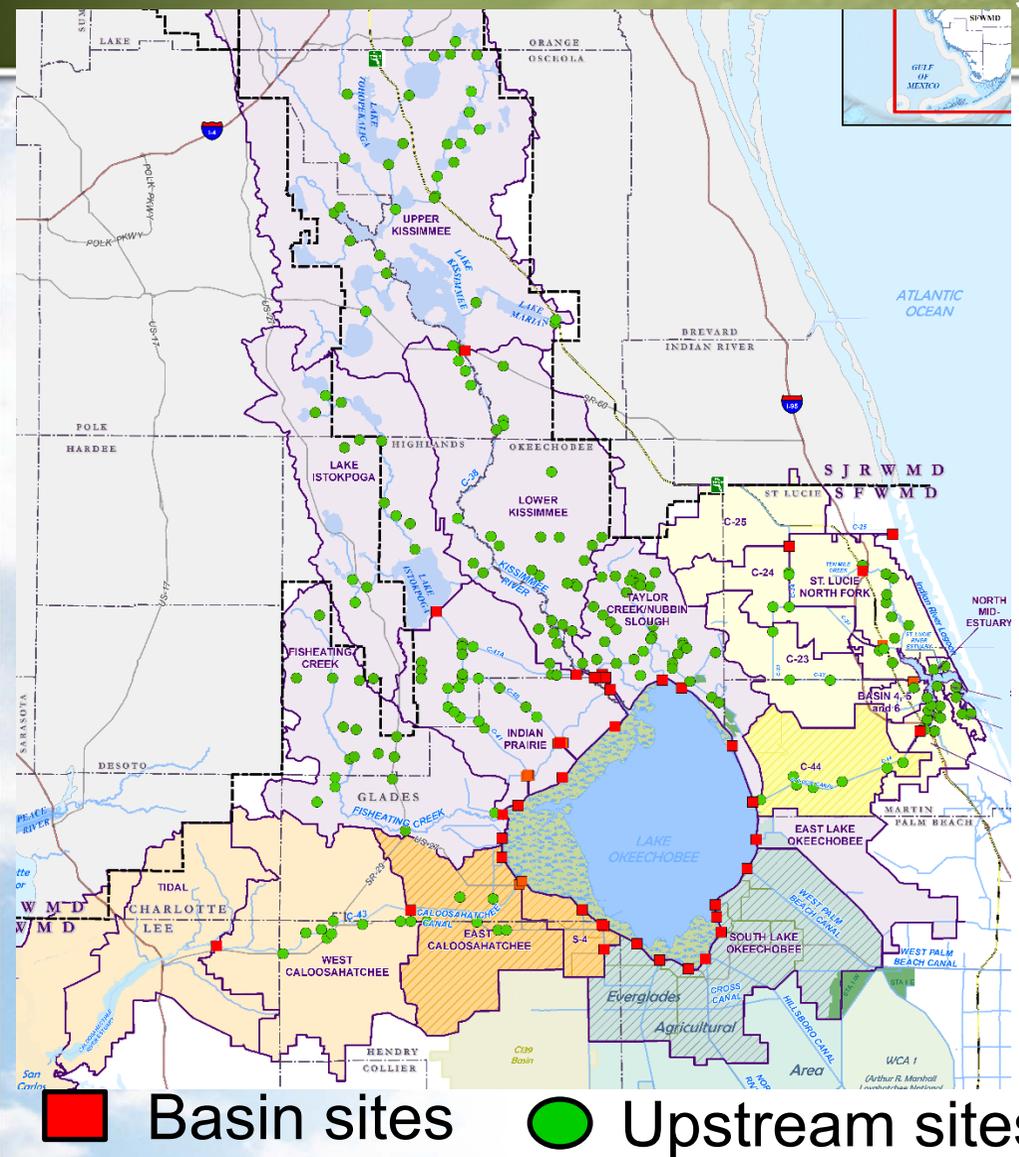
- June 26 – Kickoff: Overview & Objectives
- July 21 – Lake Okeechobee Watershed
- August 28 – St. Lucie River Watershed
- September 2 – Caloosahatchee River Watershed

Watershed Water Quality

- Lake Okeechobee
 - 3,450,475 acres
 - Phosphorus restoration goal
- St. Lucie
 - 537,600 acres
 - Nitrogen and phosphorus restoration goals
- Caloosahatchee
 - 1,090,560 acres
 - Nitrogen restoration goal (estuary & 5 tributaries)
 - Phosphorus restoration goal (5 tributaries)



Monitoring Network Overview

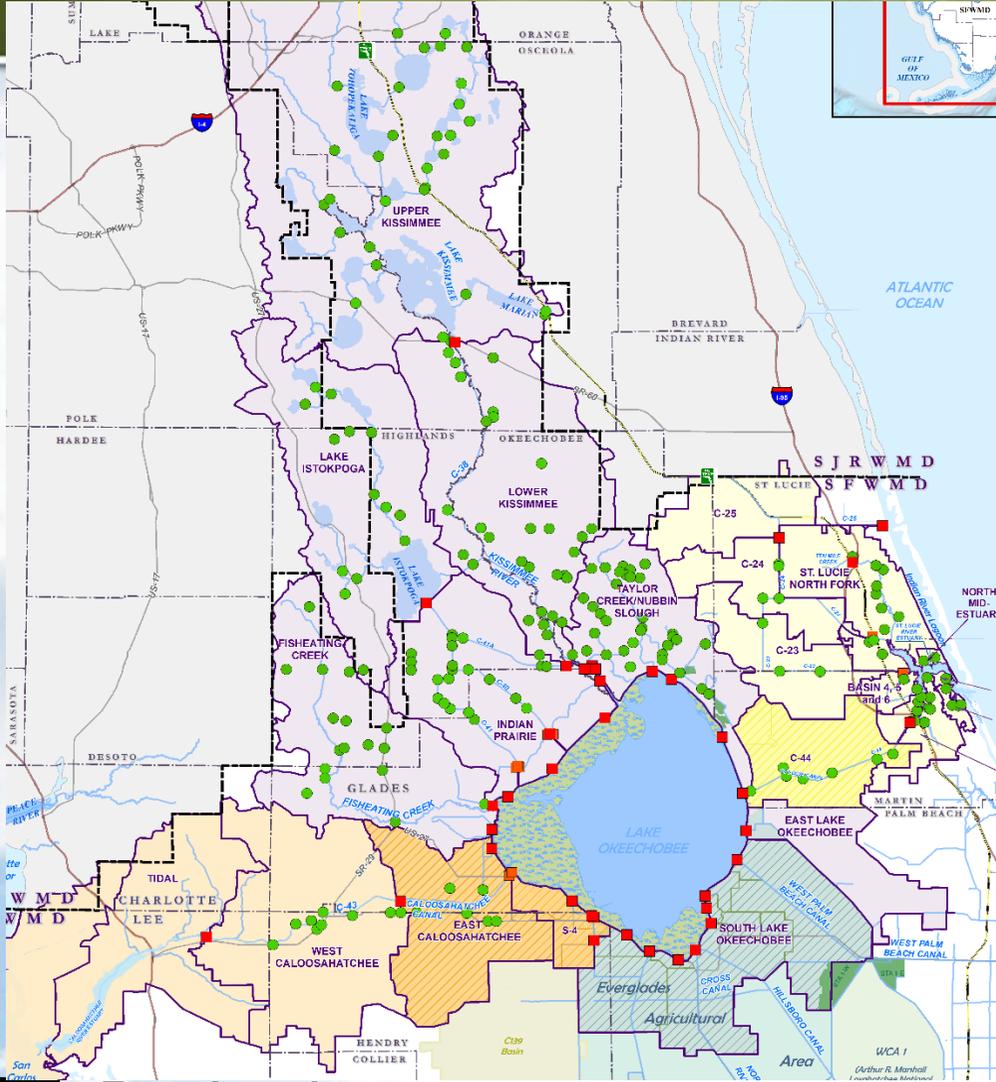


- Expanded Network per August 2019 Governing Board
- More than 60 new sites
- Increased collection frequency
- More parameters: TP, OPO4, TN, NH4, NOx, pH, temperature, dissolved oxygen, conductivity

Watershed	Monitoring	
	Basin	Upstream
Lake Okeechobee	36	150
St. Lucie	7	46
Caloosahatchee	7	15
Total	50	211

■ Basin sites
 ● Upstream sites

Watershed Monitoring Results



■ Basin sites
 ● Upstream sites

- Support Watershed Protection Plans and BMAPs
- Identify sources
- Determine relative contributions
- Calibrate & ground-truth models
- Inform identification of area-specific mechanisms affecting nutrient levels
- Measure progress of remedial activities

SFWMD Next Steps

- Update draft rule text for Chapter 40E-61
- Publish notice of proposed rule
- Governing Board consider adoption of rule
- Watershed Protection Planning Workshops for three watersheds
- Drafting the next update to the Watershed Protection Plans
- Continue use of expanded water quality monitoring network to support programs and projects for nutrient pollution reduction

Questions / Discussion