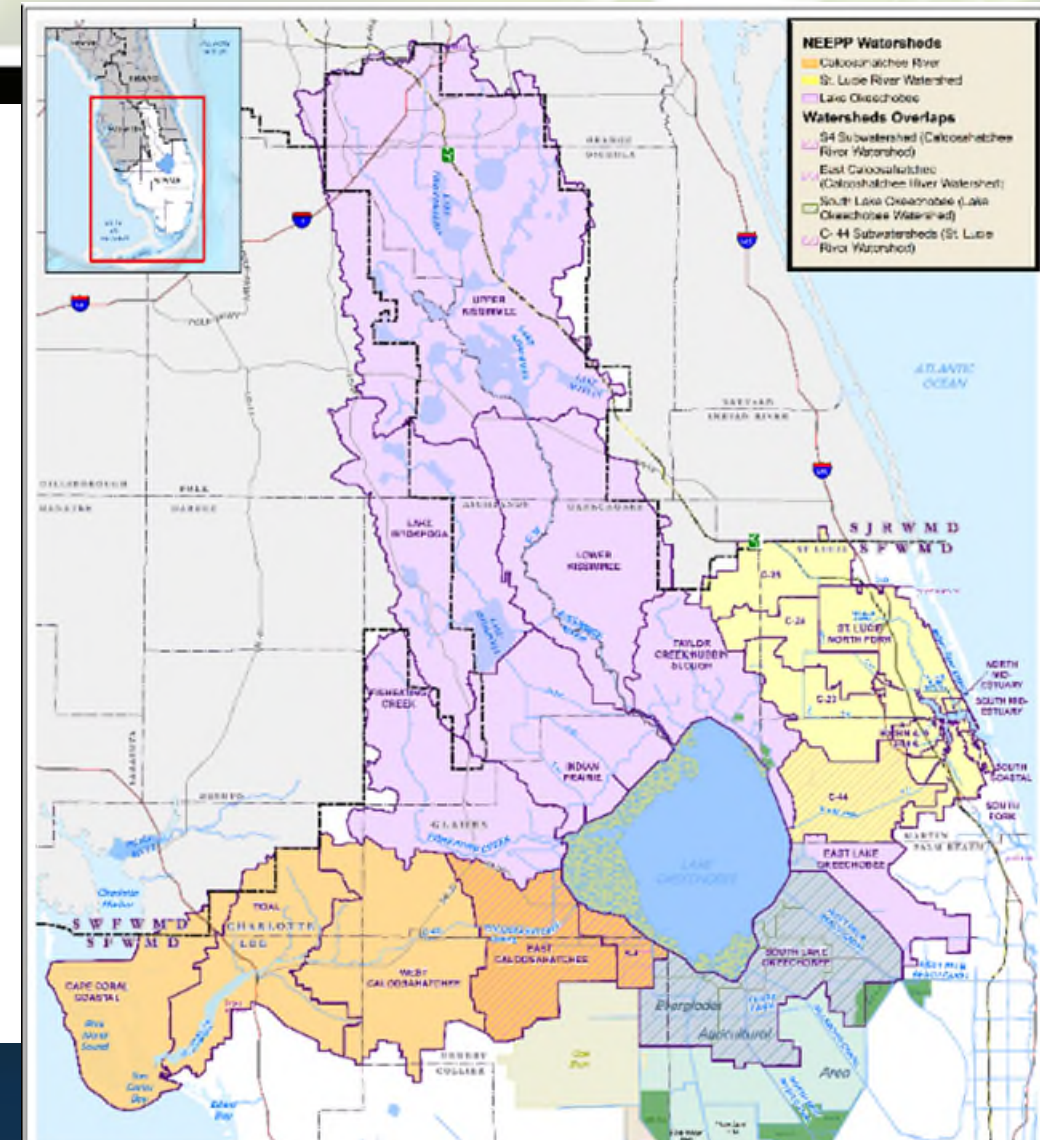


South Florida Water Management District Watershed Protection Plan Progress

**Elizabeth Caneja, Lead Project Manager
South Florida Water Management District
FDEP's February 2021 Basin Management Action Plan Meeting**

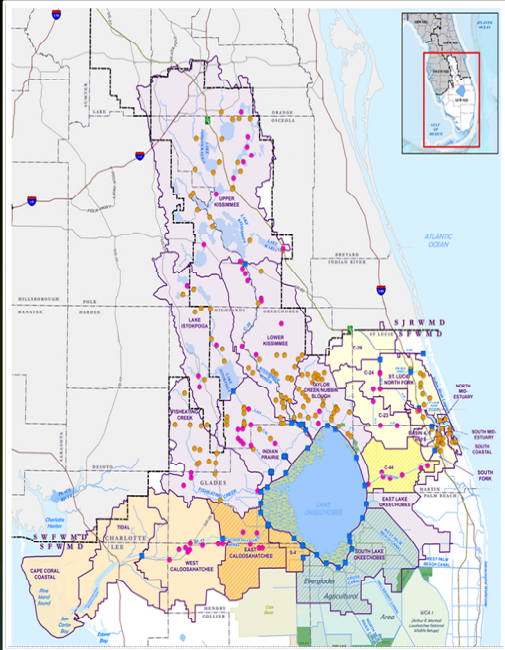
Overview of SFWMD Responsibilities

- **Watershed Protection Plans (WPPs)**
 - Lake Okeechobee Watershed
 - St. Lucie River Watershed
 - Caloosahatchee River Watershed
- **Research and Water Quality Monitoring**
- **Construction Projects and Programs**



Watershed Protection Plans

Monitoring



Projects



Programs



**BMAP
Progress
&
Updates**

Review Watershed Protection Plans (WPPs)

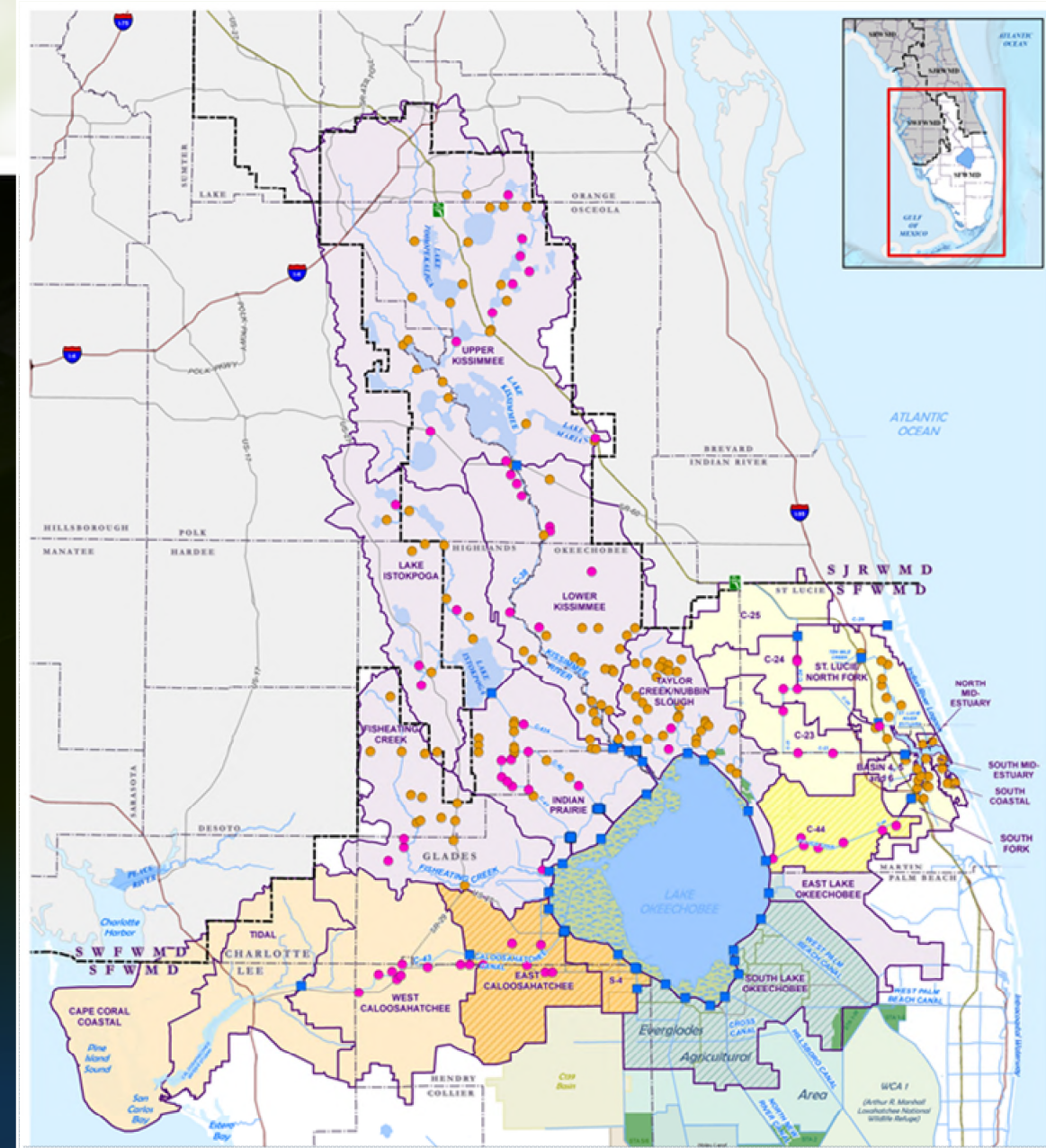
Expanded Monitoring Network

Elements	Basin Level	Upstream Level
# of sites	47	211
Frequency	Biweekly or Weekly	Biweekly
Monitored Parameters	TP, OPO4, TN, NH4, NOx, pH, Temperature, Dissolved Oxygen, Conductivity	

■ Basin sites

● New sites

● Existing sites



Selected Focus Areas

➤ Lake Okeechobee Watershed

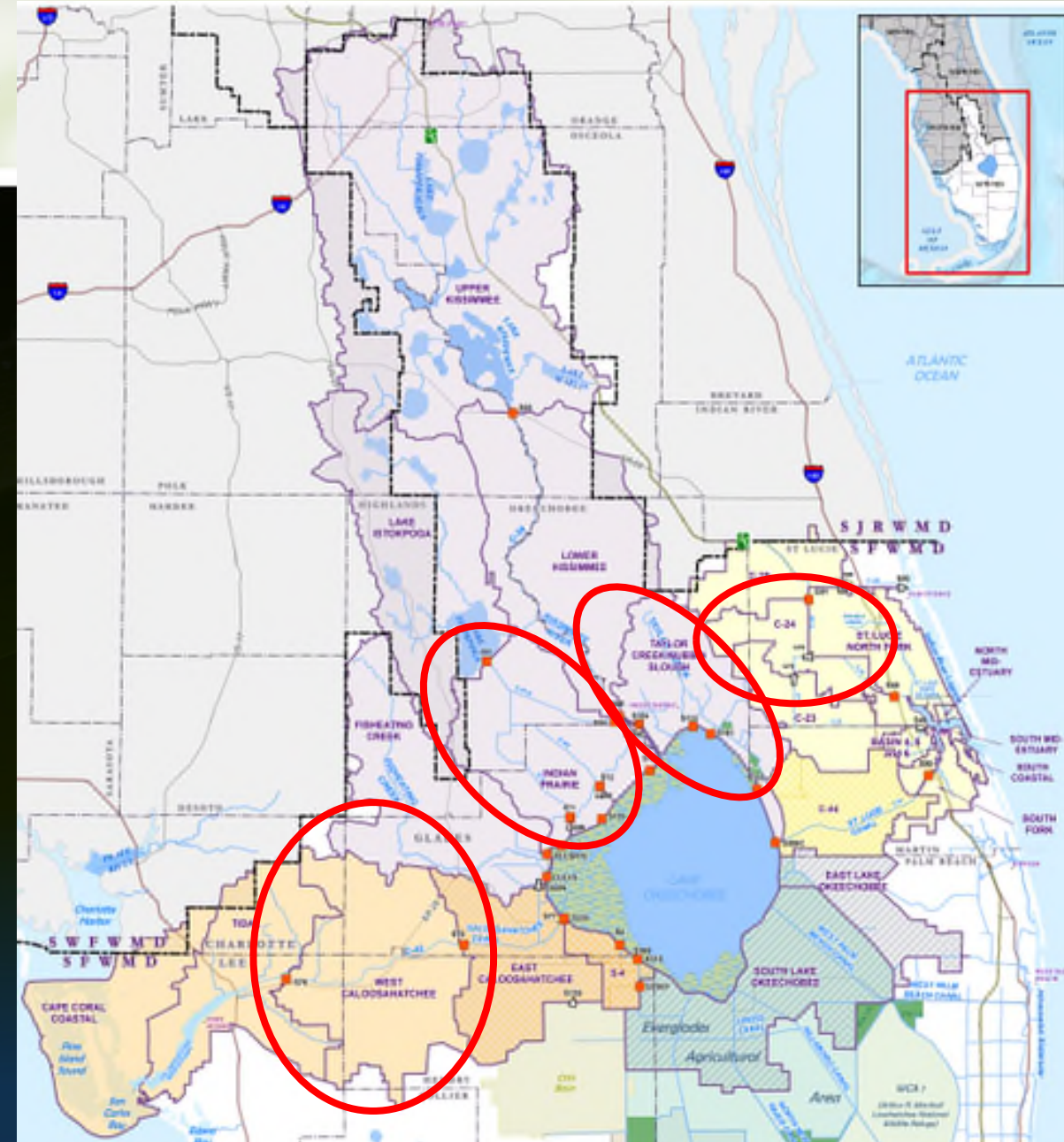
- Taylor Creek Nubbin Slough Subwatershed
 - S-191, S-154 and S-154C Basins
- Indian Prairie Subwatershed
 - C-41A, C-40, C-41 and L-59W Basins

➤ St. Lucie River Watershed

- C-24 and Ten Mile Creek Basins

➤ Caloosahatchee River Watershed

- West Caloosahatchee Basin



Focus Area Assessment Approach

- Account for existing programs and projects
- Define gaps
- Identify solutions

Table 8B-26. Project timeline for current SFWMD projects in the Taylor Creek/Nubbin Slough Subwatershed.

Project Name	Basin	Project Status FY2020	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Dixie Ranch	S-154	O&M															
Lakeside Ranch STA Phase I	S-135 S-191	O&M															
Lakeside Ranch STA Phase II	S-135 S-191	O&M															
Lakeside Ranch STA Phase III	S-135 S-191	Construction															
Nubbin Slough STA	S-191	O&M															
Taylor Creek STA	S-191	O&M															
Brady Ranch FEB and ASR	S-191	Design															
Grassy Island FEB and ASR	S-191	Design															

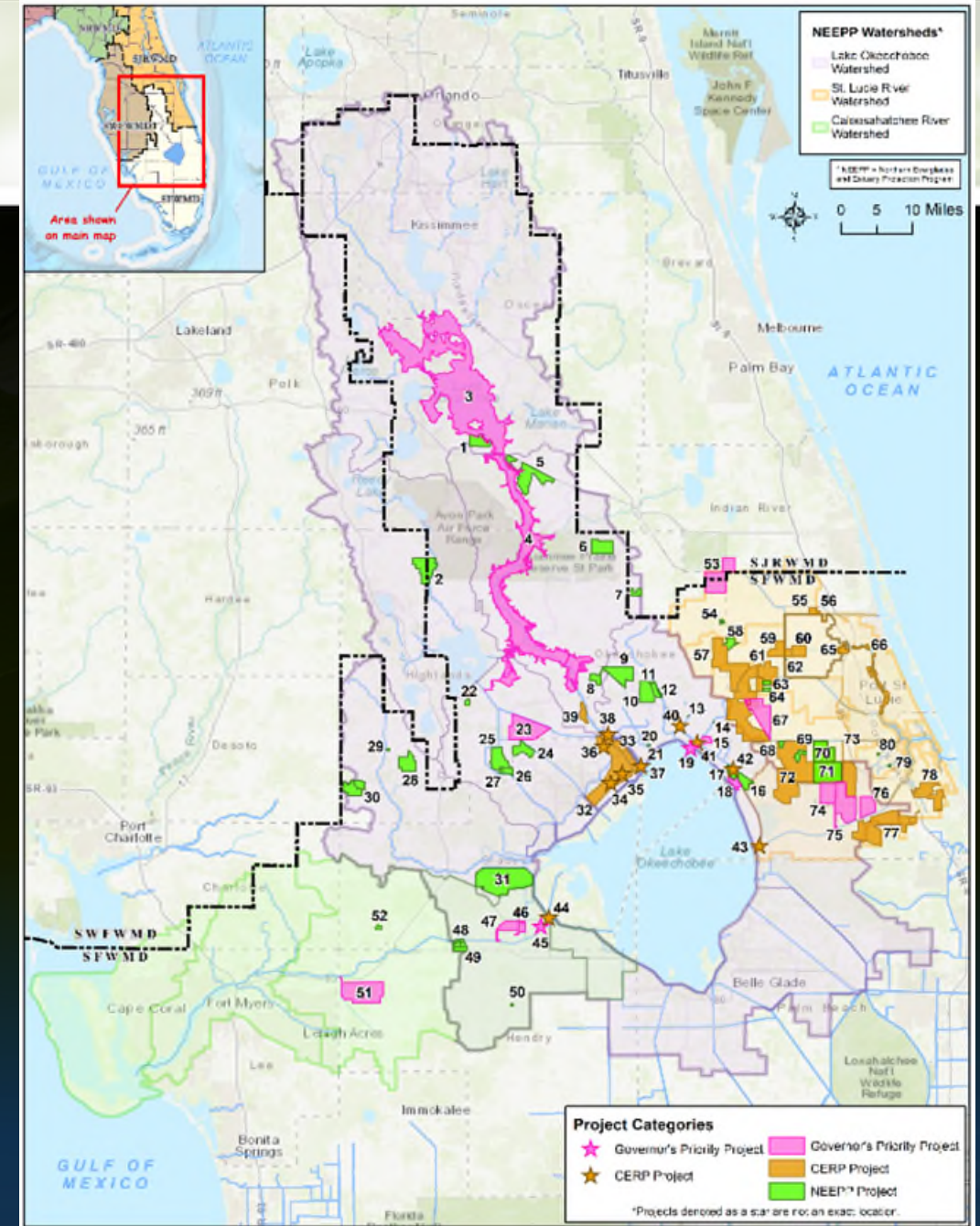
Table 8B-36. Project timeline for current SFWMD projects in the Indian Prairie Subwatershed.

Project Name	Basin	Project Status FY2020	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Lykes West Waterhole	C-40	O&M															
Buck Island Ranch	C-41	O&M															
Buck Island Ranch WMA Component 1	C-41	O&M															
Buck Island Ranch WMA Component 2	C-41	O&M															
IMWID Phase I	C-41	Construction															
Brighton Valley Dispersed Water Management	C-41 C-41A	O&M															

= Planned
 = Design
 = Construction
 = O&M

Overview of Projects and Programs

- District Restoration Projects
 - Stormwater Treatment Areas (STAs)
 - Flow Equalization Basins (FEBs)
 - Wetland Restoration Projects
- Public Private Partnerships
 - Dispersed Water Management (DWM)
- Programs
 - Regulatory and Non-Regulatory
 - Voluntary
 - Incentive-Based
 - Cost-Share Programs
 - Non-Structural Projects



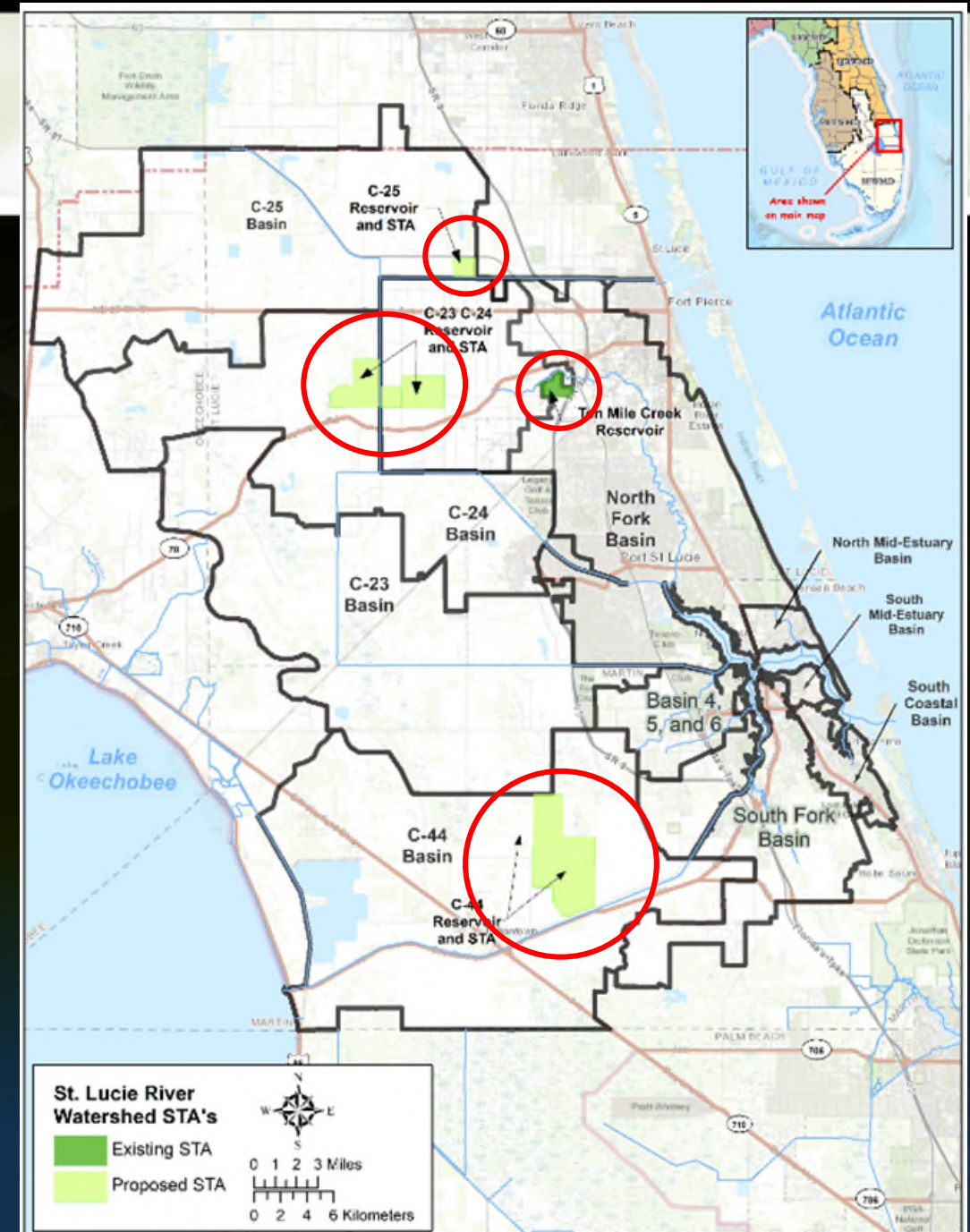
Stormwater Treatment Areas

- Details pertaining to STAs:
 - Constructed wetlands and actively managed vegetation
 - Shallow storage 18-24"
 - Remove excess nutrients
 - Create wildlife habitat
 - Provide recreational opportunities
- Four constructed STAs in the Northern Everglades
- One existing STA and three planned STAs in the St. Lucie River Watershed



Stormwater Treatment Areas

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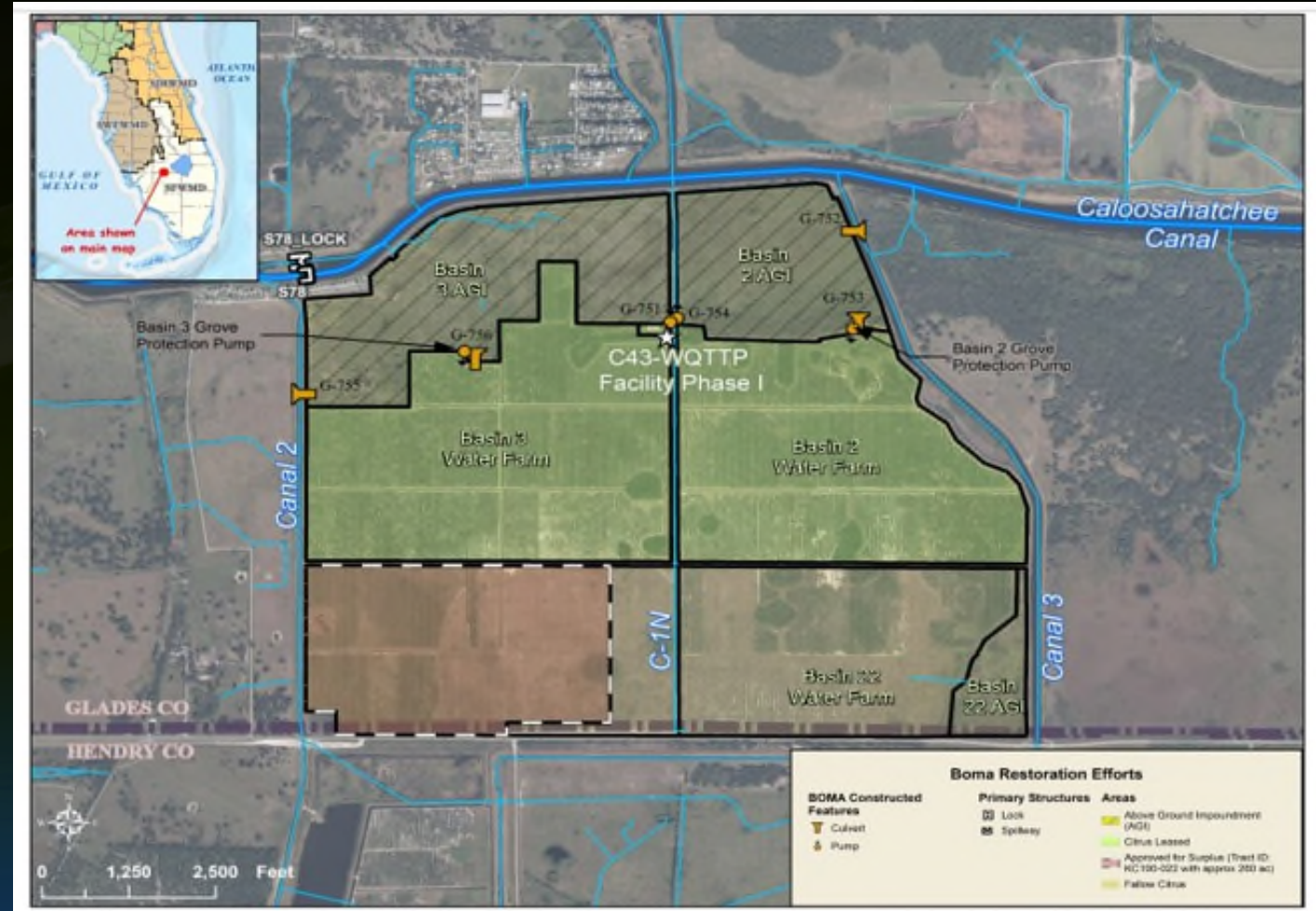
Flow Equalization Basins

- Details pertaining to FEBs:
 - Constructed storage feature
 - Capture and store peak stormwater flows
 - In some instances, provide more steady flow of water to STAs
 - Potential emergent vegetation and nutrient removal
- Three planned FEBs in the Northern Everglades are estimated to provide approximately 17,000 ac-ft of storage



Flow Equalization Basins

- Details pertaining to FEBs:
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Wetland Restoration

➤ Benefits of Wetland Restoration:

- Providing economic and environmental values
- Improving water quality
- Rehydrating drained systems
- Enhancing plant and wildlife habitat
- Reducing flood impacts in immediate area

➤ Several acres of drained lands have been restored in the watershed

➤ Additional projects are in the planning phase



Aerial Photo
from ~2009,
prior to
Restoration

Aerial Photo
from 2020,
Post-
Construction



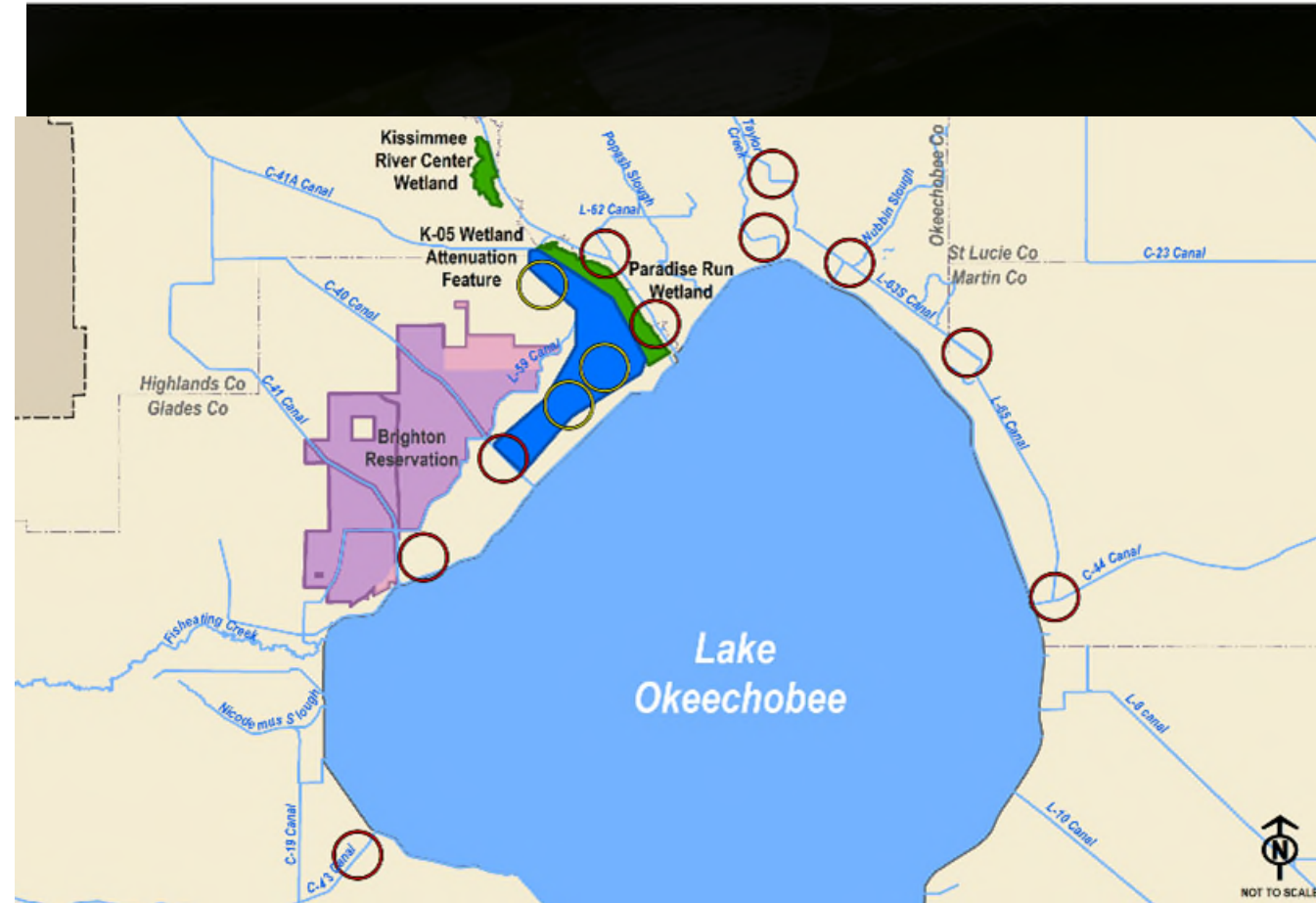
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- Reducing flood impacts in immediate area

➤ Several acres of drained lands have been restored in the watershed

➤ Additional projects are in the planning phase



Dispersed Water Management Program

➤ Benefits of the DWM Program:

- Providing valuable groundwater recharge for water supply
- Increasing regional storage
- Reducing discharges to the Estuaries
- Improving water quality
- Enhancing plant and wildlife habitat

➤ Over 20 DMW projects in the Northern Everglades and several additional projects are in the planning phase or underway

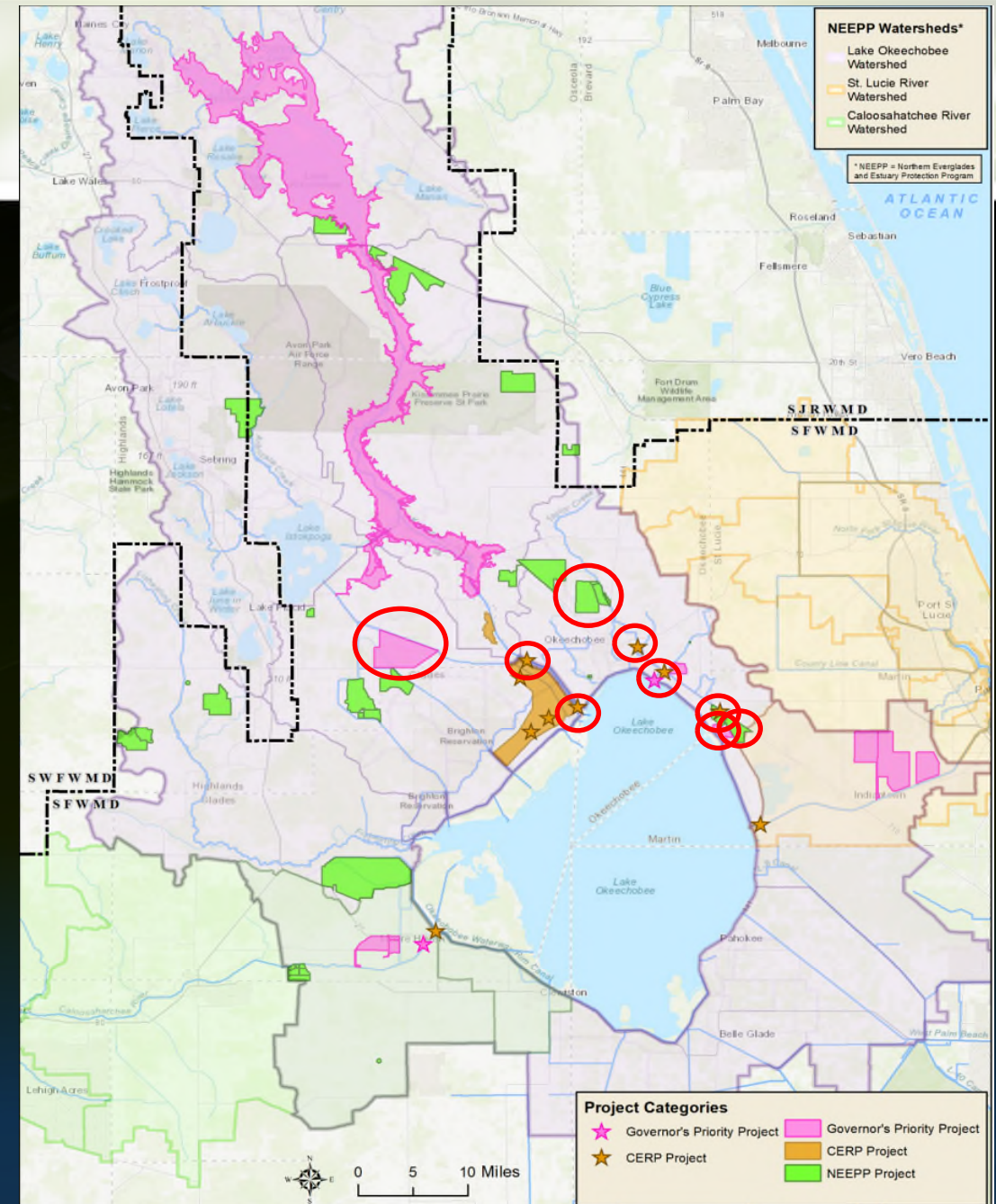


Brighton Valley DWM Project

Lake Okeechobee Watershed Highlights

- 24 planned or constructed projects in the Lake Okeechobee Watershed
- 18 operating projects
- Achievements in 2020:
 - \$50 Million to construct ASR Wells
 - Operating Brighton Valley DWM
 - Constructing of Lakeside Ranch STA Phase III
 - Feasibility study underway for Grassy Island FEB and ASR Well
 - Feasibility study underway for Brady Ranch FEB and ASR Well

<https://www.sfwmd.gov/sfer>



Summary of Overview

➤ Various types of Projects and Programs to assist in getting to the restoration goal

- Watershed Protection Plans (WPPs)
- Research and Water Quality Monitoring
- Construction Projects & Programs
- Assessments of Focus Areas

➤ <https://www.sfwmd.gov/sfer>



Questions

Presenter: Elizabeth Caneja

ecaneja@sfwmd.gov

