

2026 Upper East Coast Water Supply Plan Update



2026 UEC Stakeholder Meeting #2

June 18, 2026

Questions and public comment will occur after each presentation



Welcome and Introduction



Tom Colios

Section Administrator, Water Supply Planning and Implementation

2026 UEC Stakeholder Meeting #2

June 18, 2026



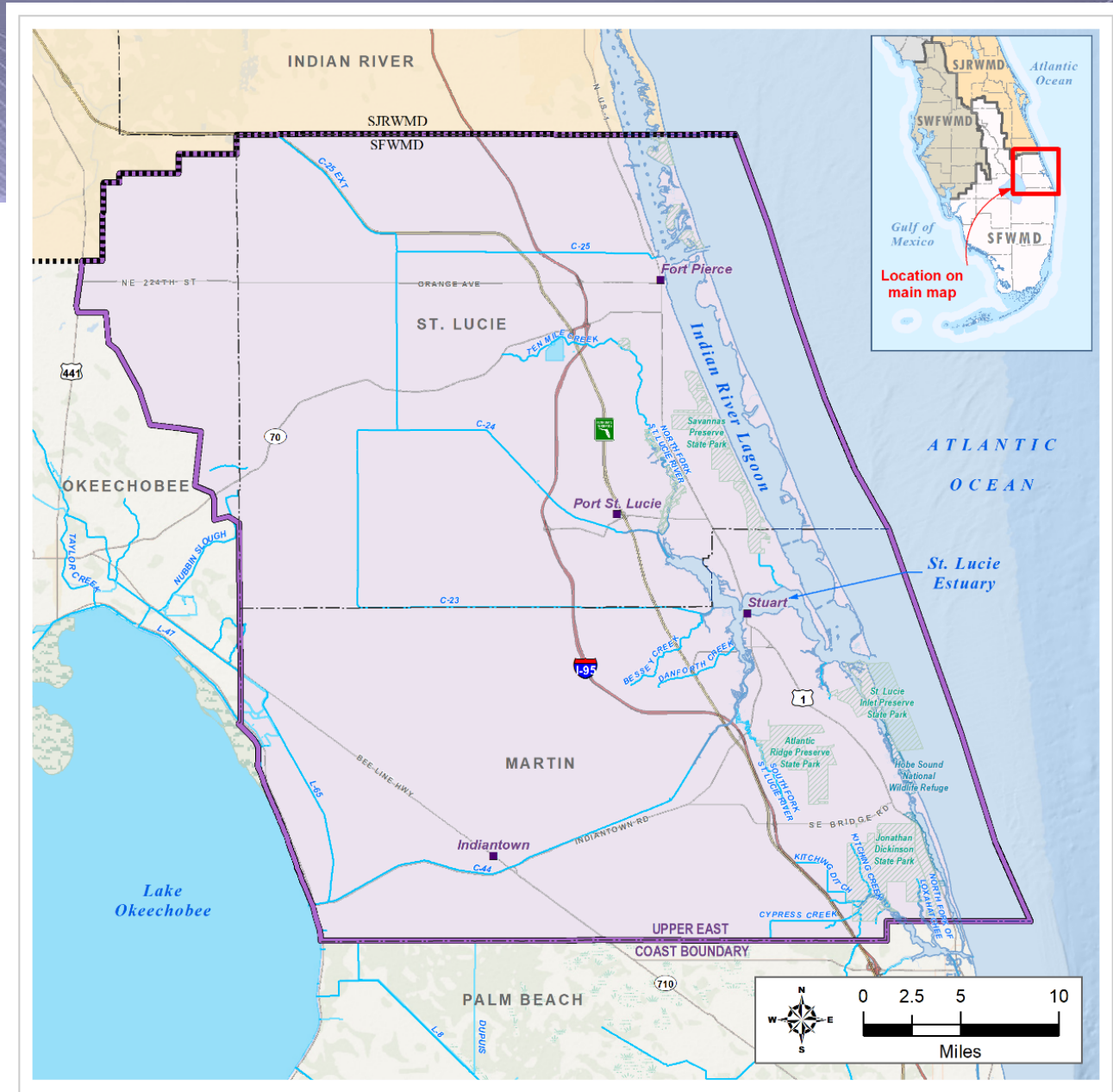
Agenda

- **Water Resource Protection Measures**
 - *Shimelis Setegn, Ph.D, Lead Scientist, SFWMD*
- **Update on Comprehensive Everglades Restoration Plan (CERP) Projects**
 - *Leslye Waugh, Section Administrator, SFWMD*
- **Saltwater Interface Mapping**
 - *Stacey Coonts, P.G., Lead Hydrogeologist, SFWMD*
- **Assessing Changing Conditions**
 - *Karin Smith, P.G., Resiliency Project Manager, SFWMD*
- **Next Steps**
 - *Chad Brcka, SFWMD*
- **Adjourn**

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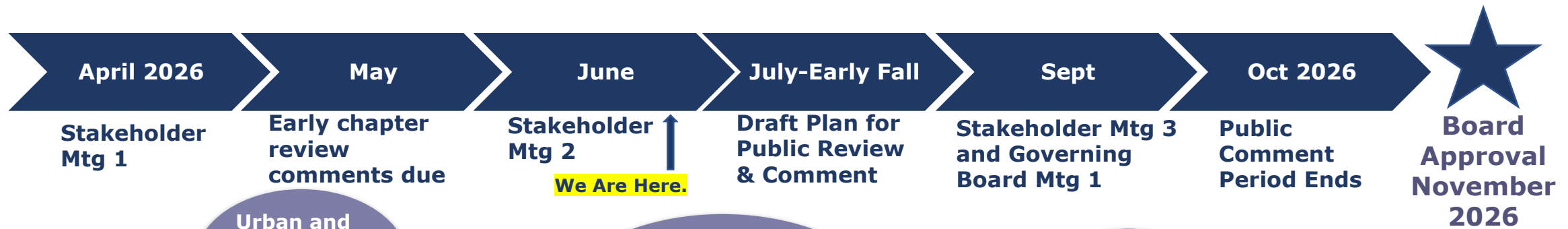
UEC Planning Area

- All of Martin and St. Lucie counties and the northeastern portion of Okeechobee County
- Population
 - 2024 546,710
 - 2050 742,217
- Major agricultural industry
- Important natural and water resources
 - C-44, C-23, C-24, and C-25 canals
 - St. Lucie River and Estuary
 - Indian River Lagoon
 - Northwest Fork - Loxahatchee River



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UEC Water Supply Plan Update Process



We Are Here.



Public Participation

➤ **Active participation to ensure plan reflects the needs of the planning area**

Agricultural interests

Public water suppliers

Environmental community

County commissions/city councils

County/city planning staff

Regional planning council

Governing Board member involvement

State agencies and special districts

➤ **Opportunities for public participation**

Stakeholder meetings

Governing Board meetings

One-on-one meetings

Draft document review and comment



Questions and Public Comment



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Water Resource Protection



Shimelis Setegn, PhD

Lead Scientist

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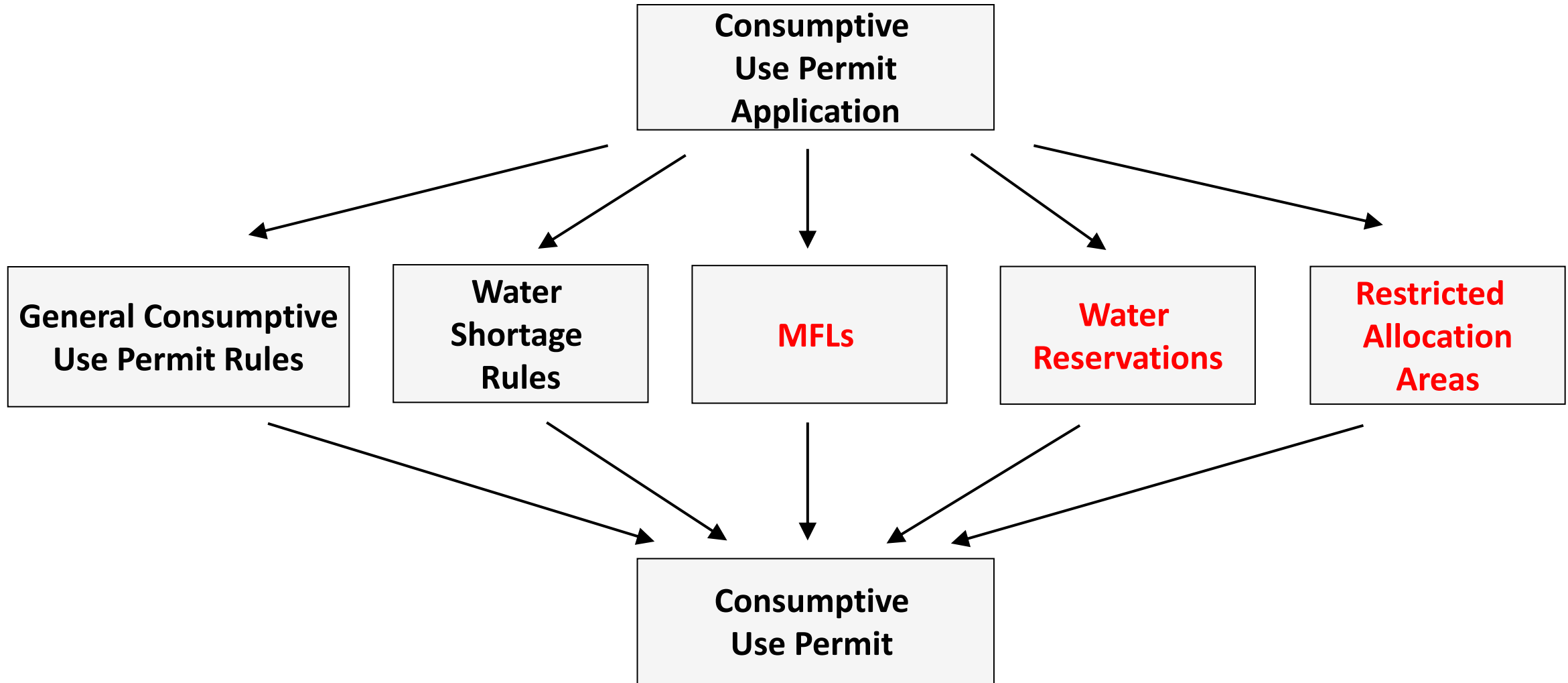
Water Resource Protection Tools

- Minimum flows and minimum water levels (MFLs)
- Water reservations
- Restricted allocation areas (RAAs)
- Consumptive Use Permitting
- All tools are adopted by rule in the Florida Administrative Code (F.A.C.)
- More than one tool can protect a waterbody



Loxahatchee National Wildlife Refuge

Factors Considered in Consumptive Use Permitting



Priority Water Body List and Schedule

South Florida Water Management District 2025 Priority Water Body List and Schedule

Minimum Flows and Minimum Levels:

2025 - 2028 – Florida Bay

- Reevaluate Minimum Flows and Levels Criteria for Florida Bay to include changing hydrological considerations including CERP and sea level rise over a 20-year planning horizon.

2025 - 2028 – Northwest Fork of the Loxahatchee River

- Reevaluate Minimum Flows and Levels Criteria for the Northwest Fork of the Loxahatchee River to include changing hydrological considerations including the Comprehensive Everglades Restoration Plan (CERP) and sea level rise over a 20-year planning horizon.

2026 - 2029 – Biscayne Aquifer

- Reevaluate Minimum Flows and Levels Criteria for the Biscayne Aquifer to include changing hydrological considerations including CERP and sea level rise over a 20-year planning horizon.

Water Reservations and Restricted Allocation Areas:

2025 – 2028 – Western Everglades Restoration Project (WERP)

- Establish a Water Reservation and/or a Restricted Allocation Area for the Western Everglades Restoration Project to protect the quantity, timing, and distribution of water identified in the WERP Final Integrated PIR/EIS (September 2024), ensuring flows are not available for consumptive use.

2025 – 2028 – Lake Okeechobee Component A Reservoir (LOCAR)

- Establish a Restricted Allocation Area (RAA) for the Lake Okeechobee Component A Reservoir as identified in the LOCAR Final Feasibility Study Report (June 2024), to protect the water within the project footprint from consumptive use.

2025 – 2026 – Mid-Hawthorn Aquifer (Cape Coral Area)

Establish a Restricted Allocation Area (RAA) for the Mid-Hawthorn Aquifer in the Cape Coral area. This action is designed to further implement the existing Maximum Developable Limit (MDL) rule by restricting future consumptive uses or issuance of well construction permits in specific areas where the MDL is being exceeded. The MDL rule is the regulatory component of the prevention strategy for the adopted aquifer MFL.

2025 – 2026 – Sandstone Aquifer (Lee County Area)

- Establish a Restricted Allocation Area (RAA) for the Sandstone Aquifer in the Lee County area. This action is designed to further implement the existing Maximum Developable Limit (MDL) rule by restricting future consumptive uses or issuance of well construction permits in specific areas where the MDL is being exceeded. The MDL rule is the regulatory component of the prevention strategy for the adopted aquifer MFL.

2025 – 2028 – Biscayne Bay Coastal Wetlands (BBCW)

- Amend the Water Reservation for BBCW to protect the quantity, timing, and distribution of freshwater now being redistributed from canal outfalls into marsh/creek flow-ways by restoration. This shift means that the traditional canal-gauge metrics no longer accurately represent the freshwater reaching the target ecosystems. Updated protection of restored flow is needed to maintain nearshore mesohaline conditions and ensure it's not compromised for consumptive use.

Minimum Flows and Minimum Water Levels

Recovery Waterbody

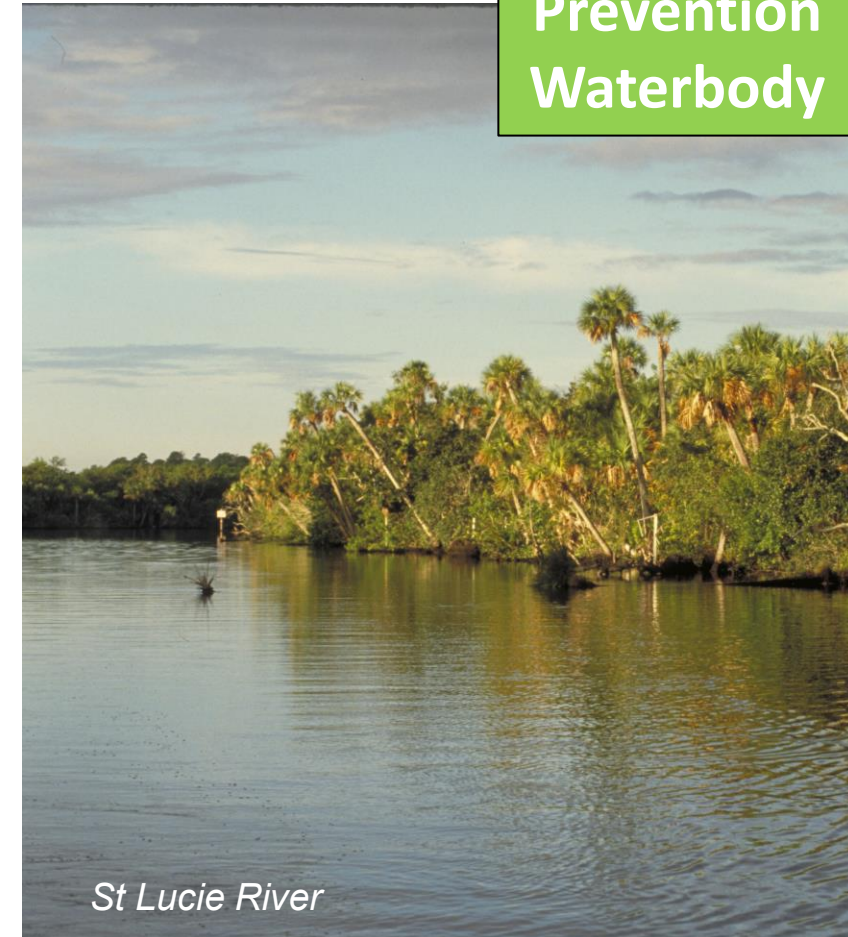


- Annual MFL Priority Waterbody List
- Identify the point at which *further withdrawals* cause significant harm to the water resources
- Recovery or Prevention Waterbodies
- Established using “*best available information*”
- Peer-reviewed science

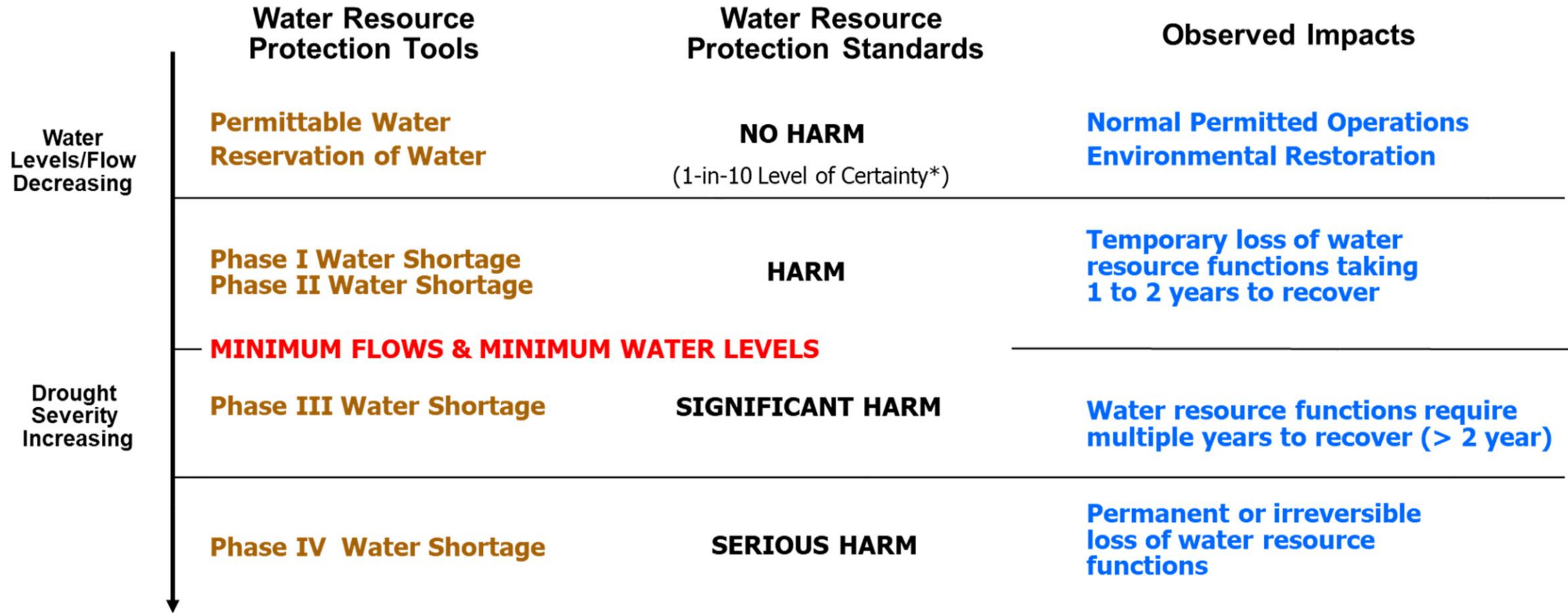
Significant harm: Temporary loss of water resource functions that takes more than 2 years to recover but is less severe than serious harm

May be adopted for surface waters or aquifers

Prevention Waterbody



Conceptual Model of Chapter 40E-8 FAC



* 1-in-10 Level of Certainty – Reasonable assurance that the proposed use will not harm water resources or interfere with existing legal water users up to a 1-in-10-year drought condition (a drought condition that occurs only once in 10 years).

MFL Recovery and Prevention Strategies

Section 373.0421(2), F.S.

Recovery Strategy

- For waterbodies not meeting the MFL at the time of adoption
- Achieve recovery to the established MFL as soon as “practicable”

Prevention Strategy

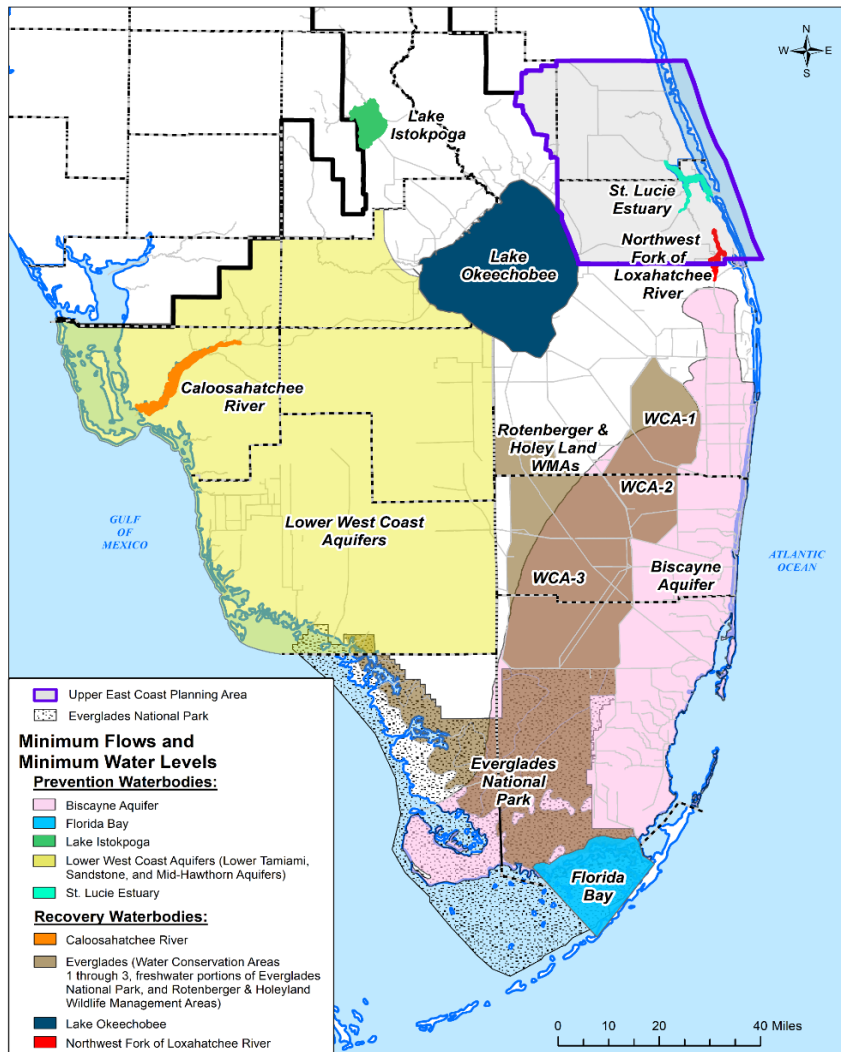
- For waterbodies that are meeting the MFL but are not expected to meet it in 20 years
- Prevent the existing flow or level from falling below the adopted MFL



Great Egret (*Ardea alba*) and American Alligator (*Alligator mississippiensis*)

Source: <https://naturetime.wordpress.com>

MFLs Adopted to Date in SFWMD



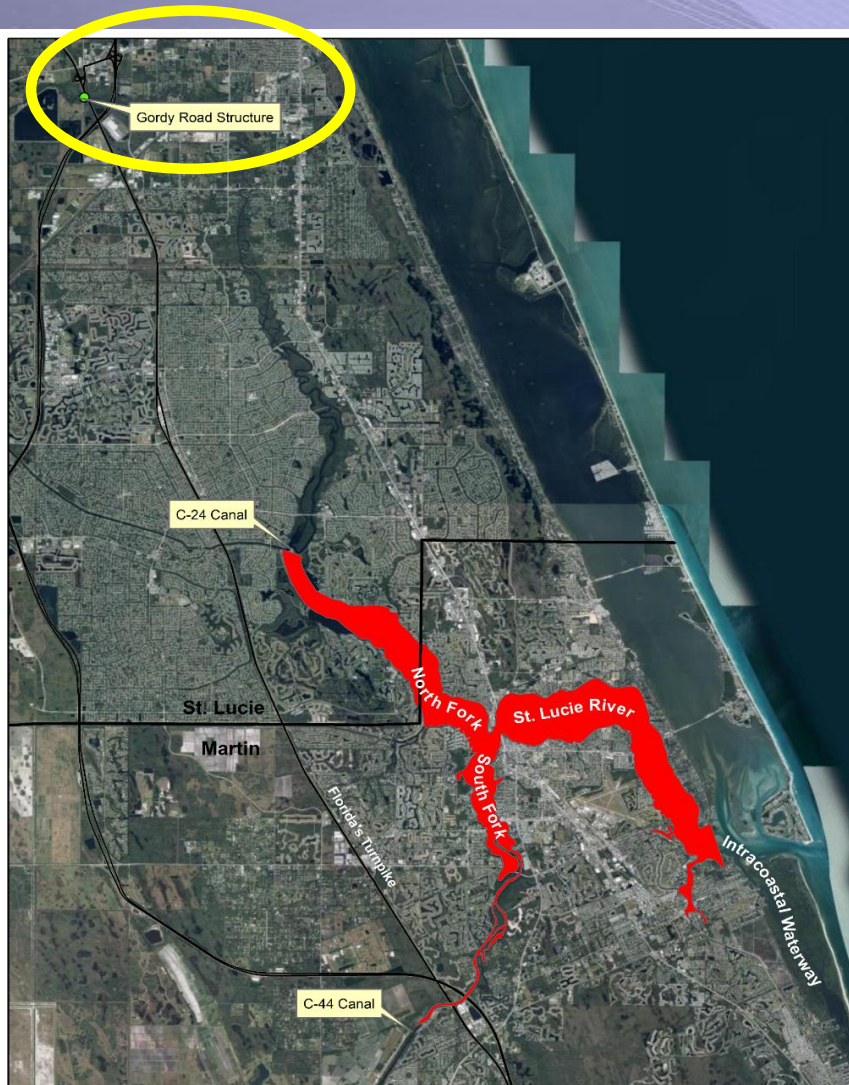
MFL with Prevention Waterbodies

- Biscayne aquifer (2001)
- Lower West Coast aquifers (2001)
- **St Lucie Estuary (2002)**
- Lake Istokpoga (2006)
- Florida Bay (2006)

MFL with Recovery Waterbodies

- Lake Okeechobee (2001), revised (2007)
- Everglades (2001)
- Caloosahatchee River (2001)
- Northwest Fork of Loxahatchee River (2003)

St. Lucie Estuary MFL



Rule 40E-8.341, F.A.C. (adopted 2002)

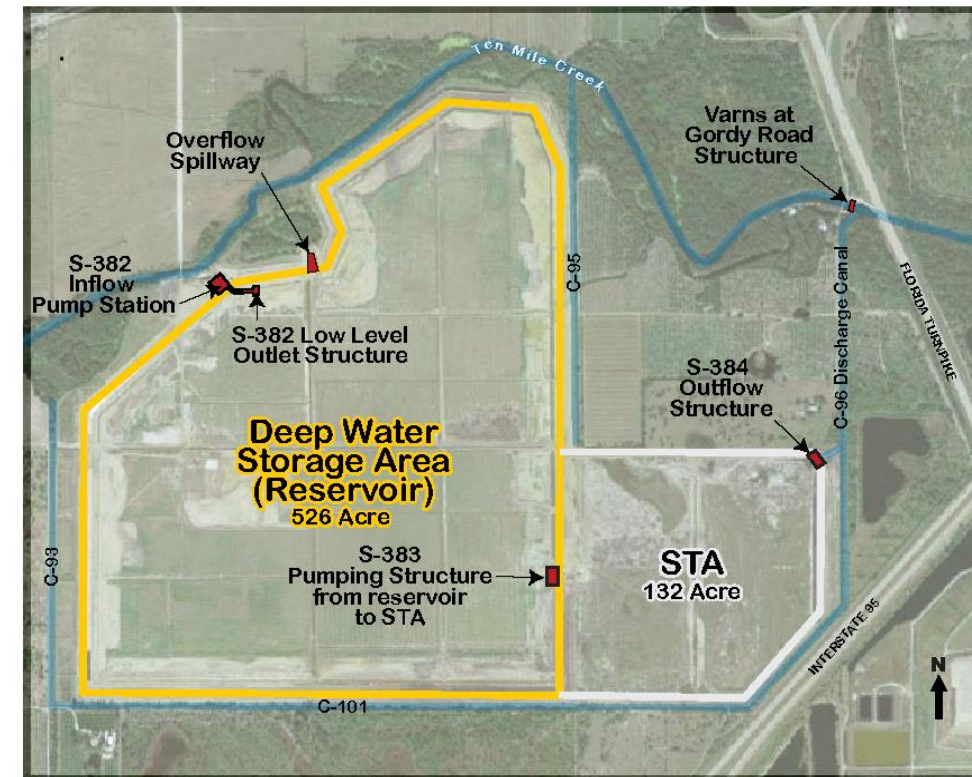
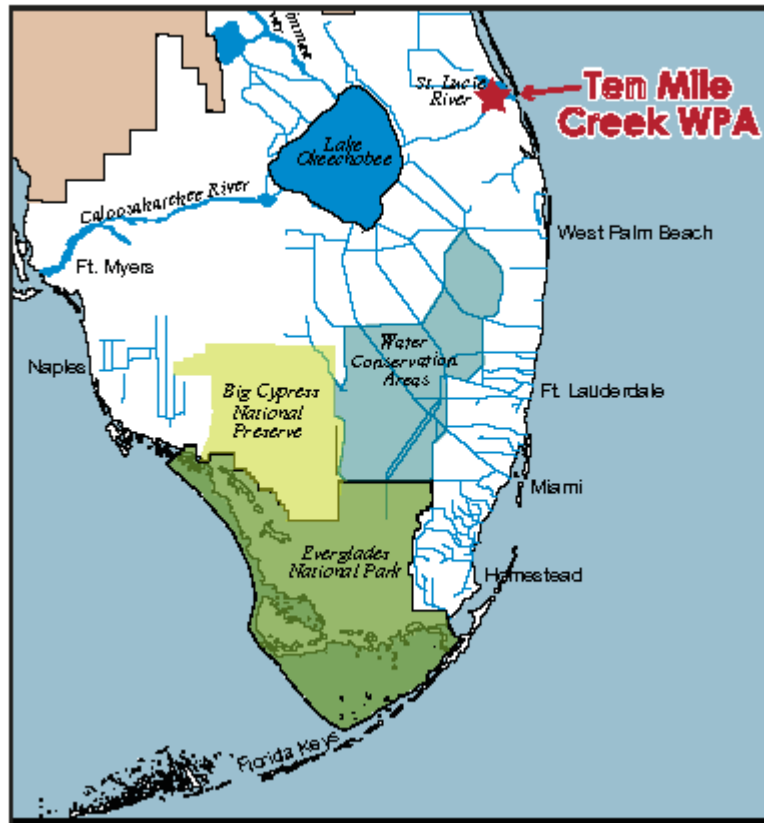
Defined in Subsection 40E-8.021(29), F.A.C, as... “the surface water body south of the confluence of the St. Lucie River North Fork and the C-24 Canal; north of the confluence of the St. Lucie River South Fork and the C-44 Canal; and west of the western boundary of the Intracoastal Waterway, exclusive of canals”

- Minimum mean monthly flow of 28 cubic feet per second (cfs) at the Gordy Road Structure
- An MFL violation occurs when:
 - Mean monthly flow at the Gordy Road Structure declines below 28 cfs, for two consecutive months, during a 365-day period, for two consecutive years

St. Lucie Estuary Prevention Strategy

Subsection 40E-8.421(5), F.A.C., and Upper East Coast Water Supply Plan

Discharges from the North Fork are managed within the operational protocols of the Ten Mile Creek Project



Ten Mile Creek Project components.

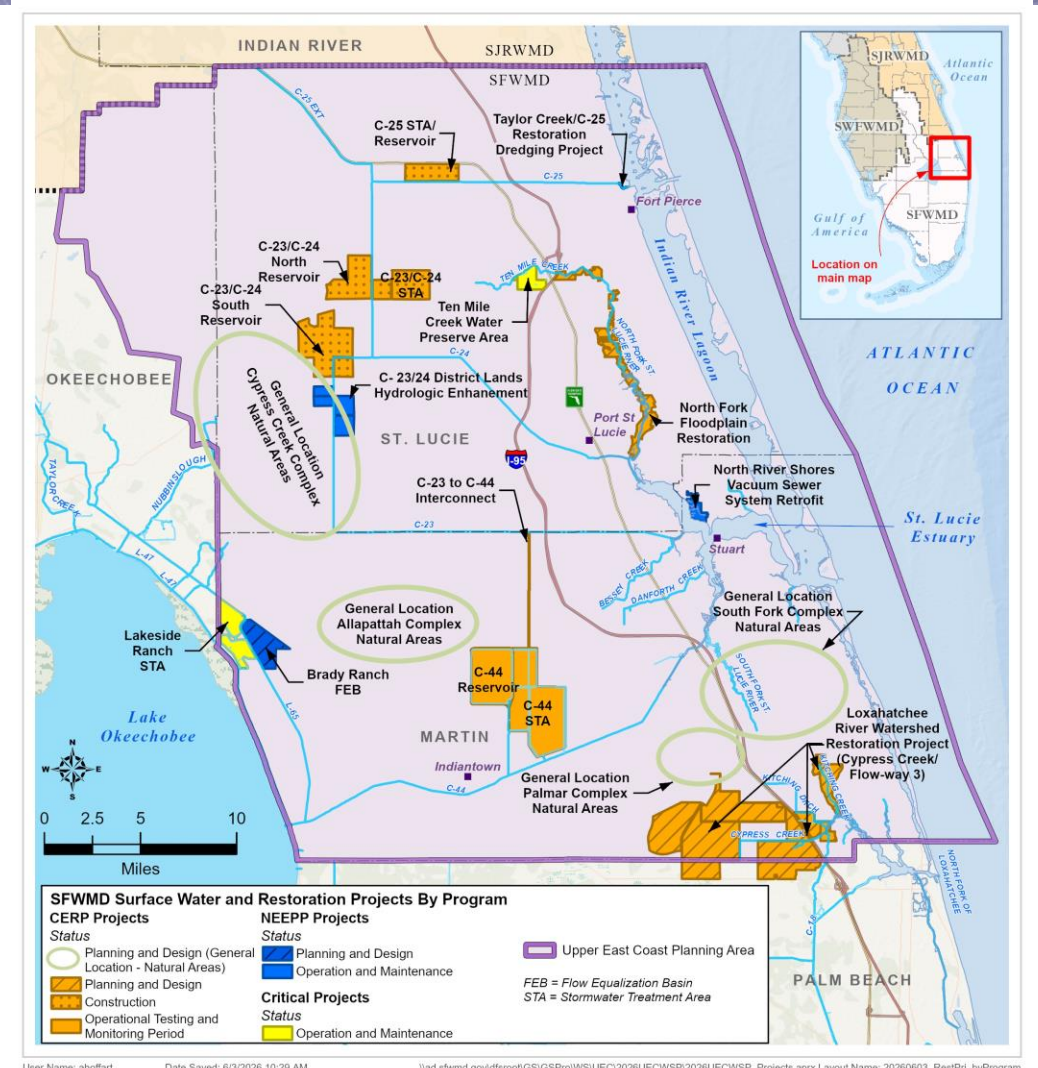
From: <https://www.saj.usace.army.mil/Media/Fact-Sheets/Article/479985/ten-mile-creek-water-preserve-area/>

St. Lucie Estuary Prevention Strategy

Subsection 40E-8.421(5), F.A.C., and Upper East Coast Water Supply Plan

Flow targets are consistent with the Comprehensive Everglades Restoration Plan (CERP) performance requirements for Indian River Lagoon as part of the CERP Indian River Lagoon – South (IRL-S) Project.

This is the only MFL within the planning area with a prevention strategy being analyzed for the 2026 UEC Plan Update.



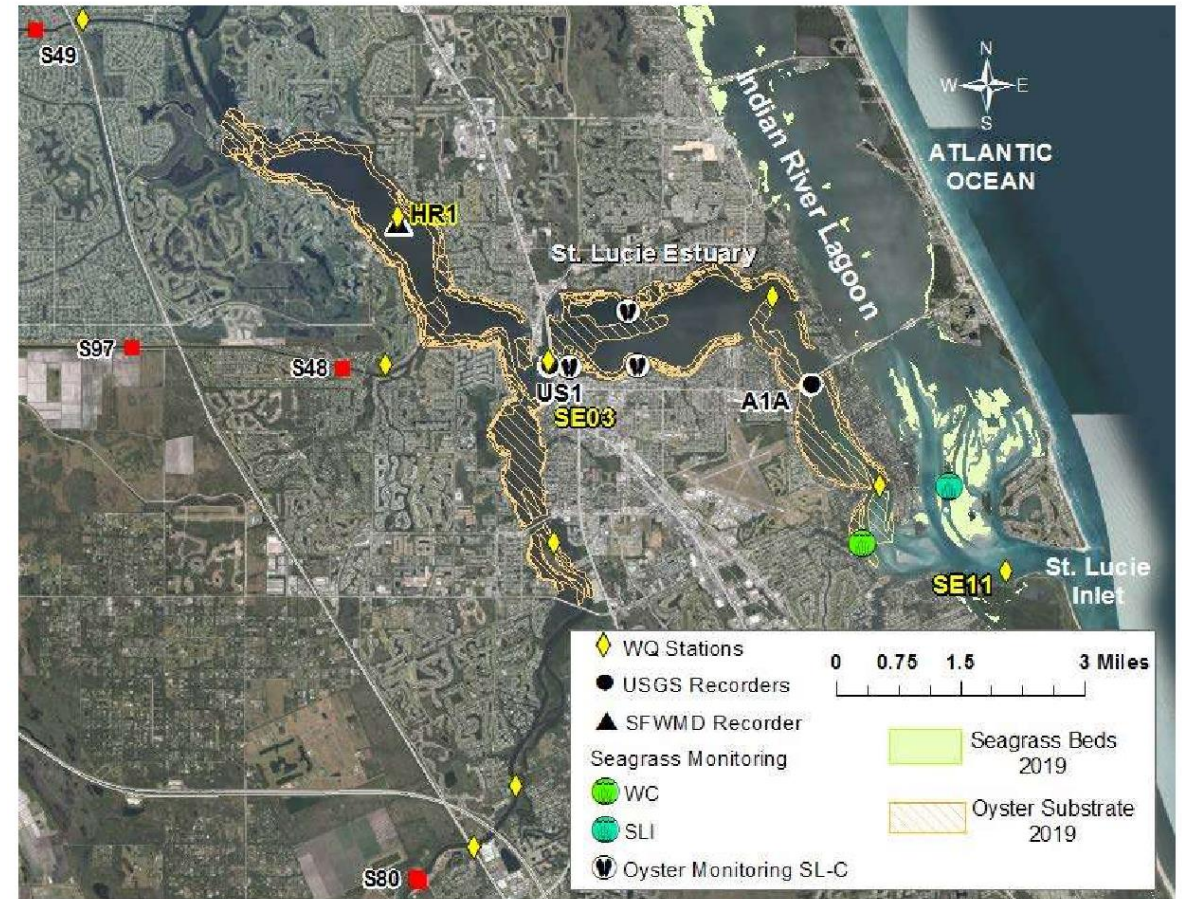
St. Lucie Estuary Prevention Strategy

Subsection 40E-8.421(5), F.A.C., and Upper East Coast Water Supply Plan

Ongoing research and monitoring are conducted in the North and South Forks of the St. Lucie River



Eastern Oyster (*Crassostrea virginica*).

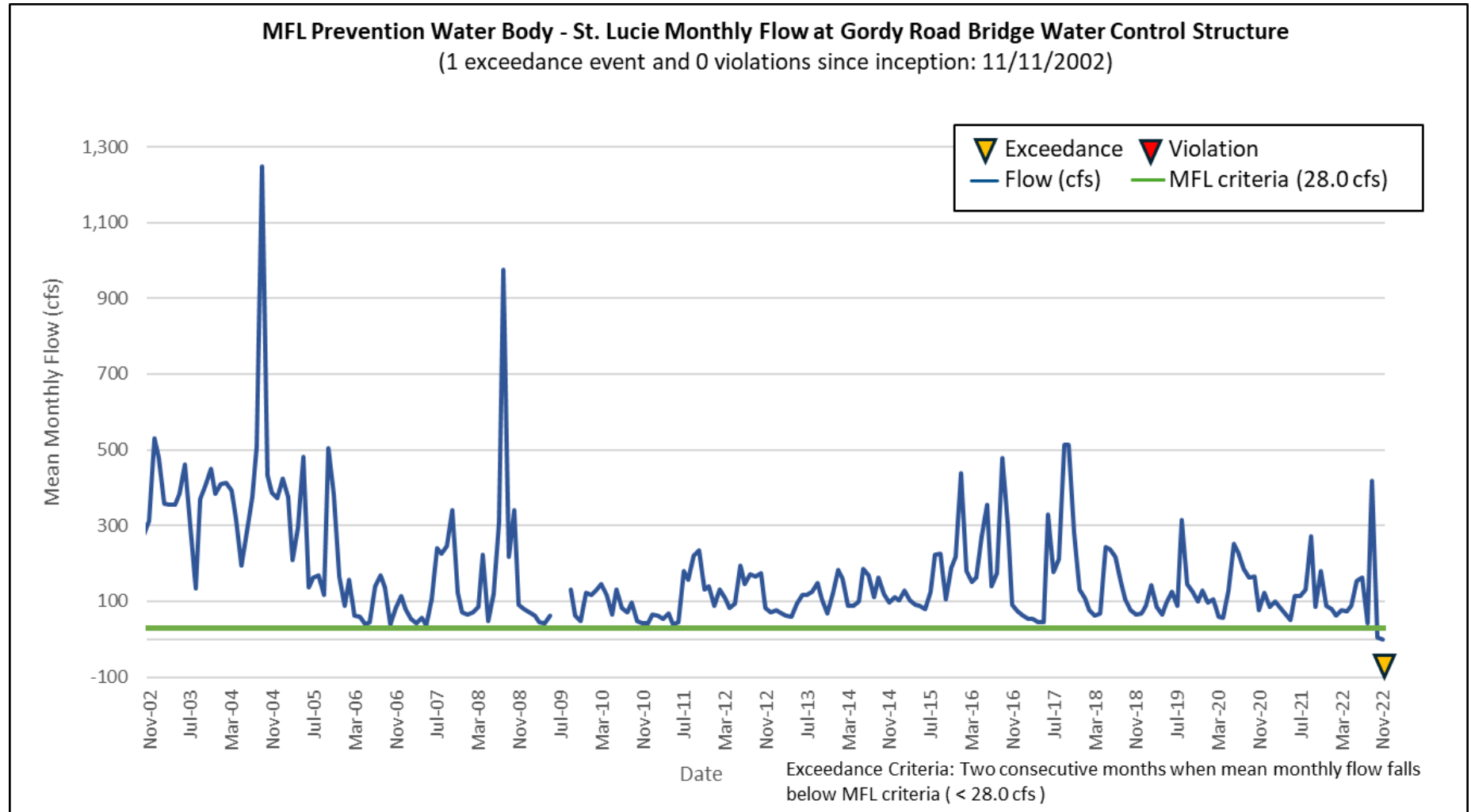


St. Lucie Estuary monitoring locations for water quality (HR1, SE03, and SE11), salinity (US1 and A1A salinity recorders), seagrass (Willoughby Creek= WC and St. Lucie Inlet= SLI sites), and oysters (St. Lucie Central Site = SL-C, stations C1, C2, and C3). Also shown are the seagrass cover maps from aerial photography conducted in 2019 of the Southern IRL and lower SLE, and the 2019 sidescan-sonar mapping results for oyster substrate, which includes live oysters and oyster shell.

From: 2021 South Florida Environmental Report https://apps.sfwmd.gov/sfwmd/SFER/2021_sfer_final/v1/chapters/v1_ch8c.pdf

MFL Flow Compliance Data

There has been only one exceedance and no violations of the MFL criteria since adoption in 2002.



Shimelis Setegn

MFLs Covered in Other Water Supply Plans

MFL Waterbody	Water Supply Plan	MFL Criteria	Recovery or Prevention Strategy
Biscayne Aquifer	Lower East Coast	Section 40E-8.231, F.A.C.	Prevention Subsection 40E-2, F.A.C.
Florida Bay	Lower East Coast	40E-8.221(5), F.A.C.	Prevention Subsection 40E- 8.421(8), F.A.C.-
Everglades	Lower East Coast	Subsection 40E-8.221, F.A.C.	Recovery Subsection 40E- 8.421(2), F.A.C.
Lake Okeechobee*	Lower East Coast	Subsection 40E-8.221(1), F.A.C	Recovery Subsection 40E- 8.421(2), F.A.C.
NW Fork of Loxahatchee River*	Lower East Coast	Subsection 40E-8.221(4), F.A.C.	Recovery Subsection 40E- 8.421(6), F.A.C

*Summarized in but not being fully addressed for the 2026 UEC Plan Update

Lake Okeechobee Adopted MFL

Subsection 40E-8.221(1), F.A.C

Lake level of 11' NGVD

An MFL “exceedance” occurs when:

- Lake level declines below 11', for > 80 consecutive or non-consecutive days, during an 18-month period
- 18-month period shall not include more than one wet season (May 31 through October 31)

An MFL violation occurs when an exceedance occurs more than once every 6 years (return frequency)

Lake Okeechobee Recovery Strategy

Subsection 40E-8.421(2), F.A.C. and 2023-2024 LECWSP Appendix C

- Environmental Enhancement Projects
 - Native vegetation planting, sediment scraping, prescribed burns, etc.
- Lake Water Consumptive Use Constraints
 - Restricted Allocation Areas
- Water Restrictions
 - Phases 1 through 4 as needed
- Capital Projects to Improve Storage Capacity in and adjacent to lake
 - Lake Okeechobee Watershed Restoration Project (LOWRP)
 - Lake Okeechobee Component A Reservoir (LOCAR)
 - Central Everglades Planning Project (CEPP) A-2 Reservoir/STA

NW Fork of Loxahatchee River Adopted MFL

Subsection 40E-8.221(4), F.A.C.

Flow of 35 cfs over Lainhart Dam; and average daily salinity of ≤ 2 at river mile 9.2

An MFL exceedance occurs when:

- Flows decline below 35 cfs for > 20 consecutive days; or
- Salinity, expressed as 20-day rolling average, is > 2 at river mile 9.2

An MFL violation occurs when an exceedance occurs more than once in a 6-year period



Northwest Fork of the Loxahatchee River (in red)

NW Fork of Loxahatchee River Recovery Strategy

Subsection 40E-8.421(6), F.A.C.

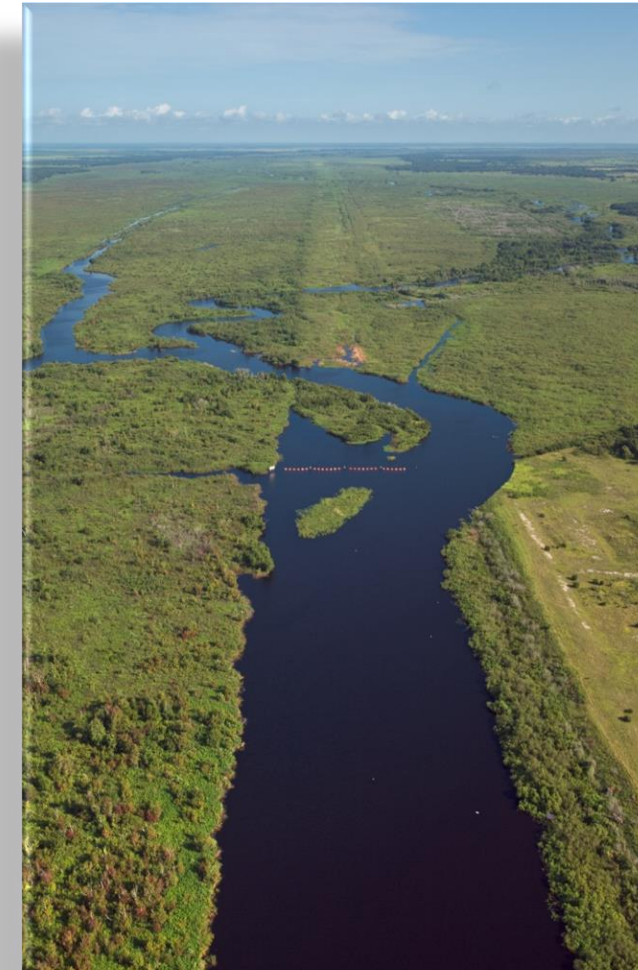
- Structural Improvements to increase water storage and delivery capabilities
 - G-160 and G-161 Structure Projects
 - Loxahatchee River Watershed Restoration Project
- Operational Protocols at G-92 to provide flows ≥ 50 cfs at Lainhart Dam when supplies are available
- Regulatory Activities - SFWMD regulatory program, water shortage plans, and the North Palm Beach County/ Loxahatchee River Watershed Restricted Allocation Area



Water Reservations

Sets aside water for the protection of fish and wildlife (or public health and safety)

- Based on scientifically defensible determination of water needed for protection of fish and wildlife
- Reserves water from allocation to consumptive uses
- Required for Comprehensive Everglades Restoration Plan (CERP) projects.



Water Reservations

Statutory Authority: Chapter 373, F.S.

Functions and Considerations

- Reserve water for the protection of fish and wildlife or public health and safety
- Prevent use of reserved water for consumptive uses
- Required for CERP projects per federal Water Resources Development Act of 2000 (WRDA 2000)
- May be used as MFL recovery or prevention strategies

Adopted for both surface waters and groundwaters



Osprey (*Pandion haliaetus*) with bass (*Micropterus* sp.) on Merritt's Mill Pond
Source: <http://nykography.weebly.com>

Water Reservations Do Not...

- Prevent use of unreserved water or water allocated under CUPs
- Establish an operating regime
- Drought-proof the natural system
- Ensure wildlife proliferation

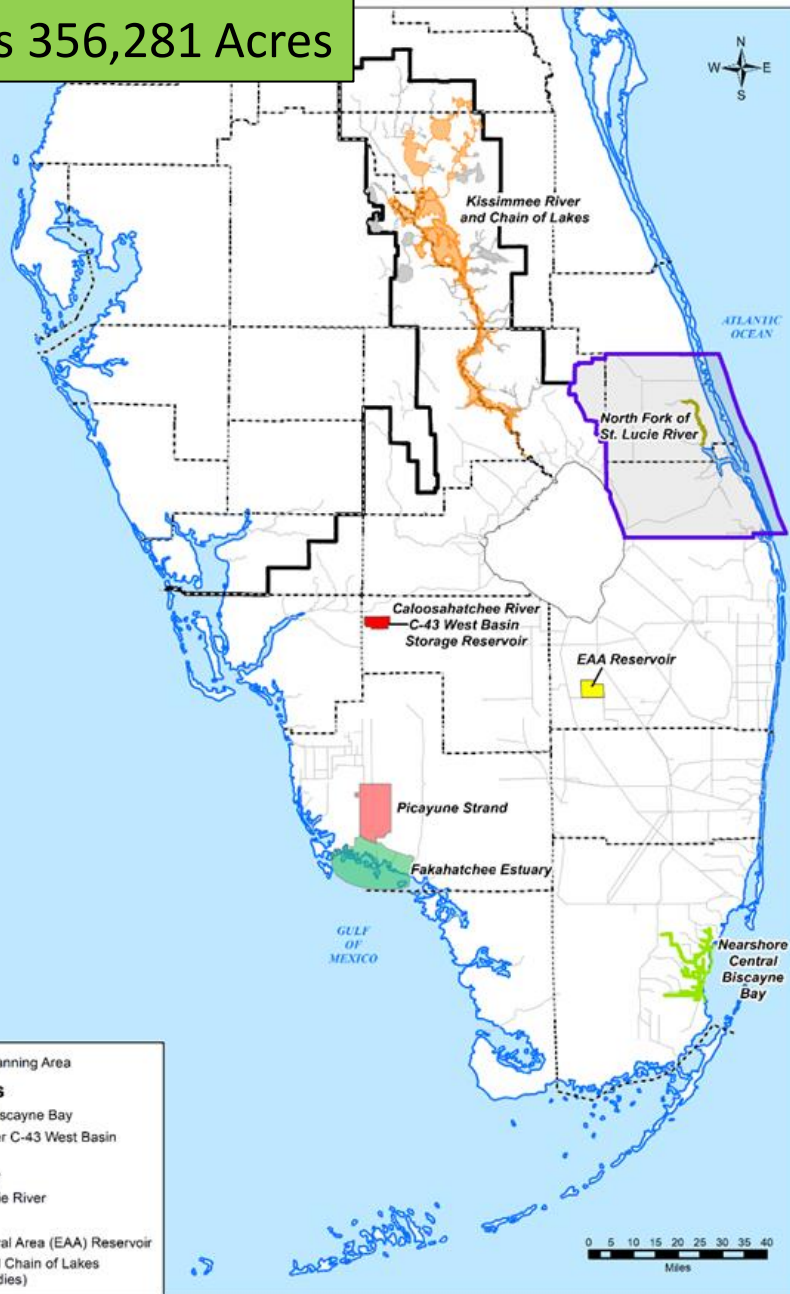


Lake Okeechobee under drought conditions
Source: SFWMD



American Alligator (*Alligator mississippiensis*)
Source: <http://www.photodrom.com>

Protects 356,281 Acres



Water Reservations in the SFWMD

- Picayune Strand – 2009
- Fakahatchee Estuary – 2009
- **North Fork of the St. Lucie River – 2010**
- Nearshore Central Biscayne Bay – 2013
- CERP Caloosahatchee River (C-43) West Basin Storage Reservoir – 2014
- The Everglades Agricultural Area (EAA) Reservoir – 2021
- Kissimmee River & Chain of Lakes – 2021

Water Reservation Adopted in the UEC

North Fork of the St. Lucie River, Subsection 40E-10.051, F.A.C.

For the protection of fish and wildlife

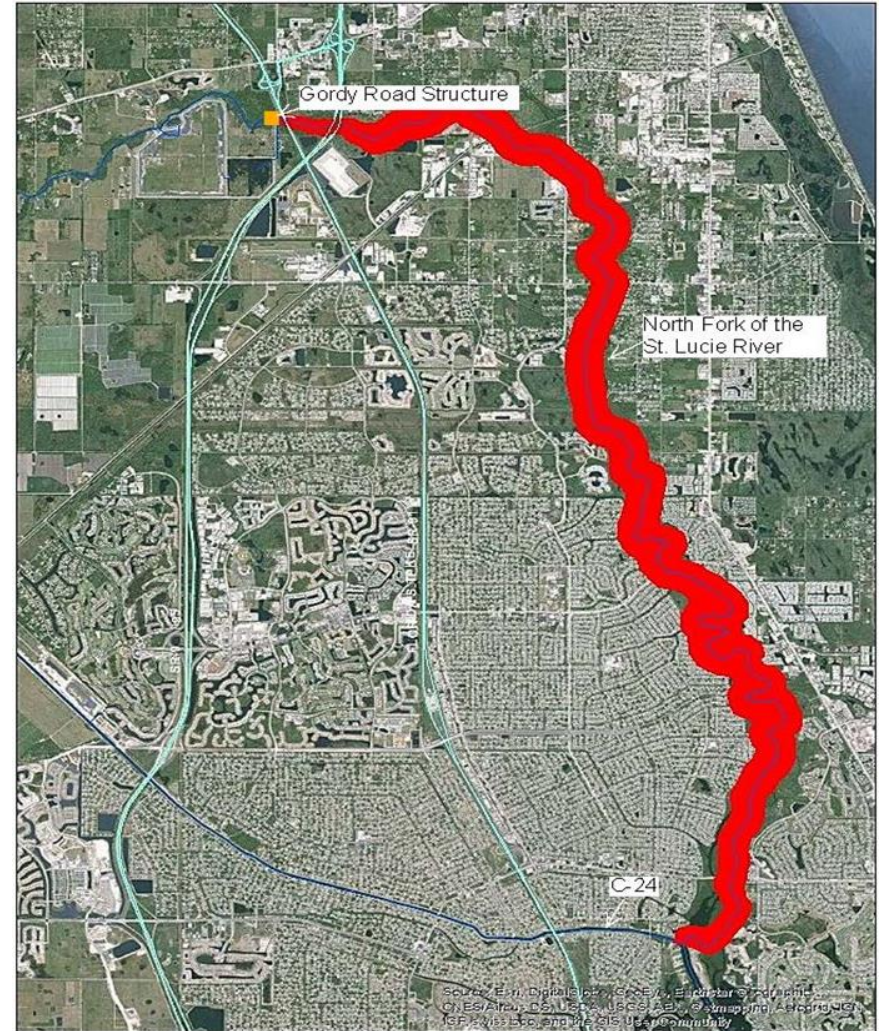
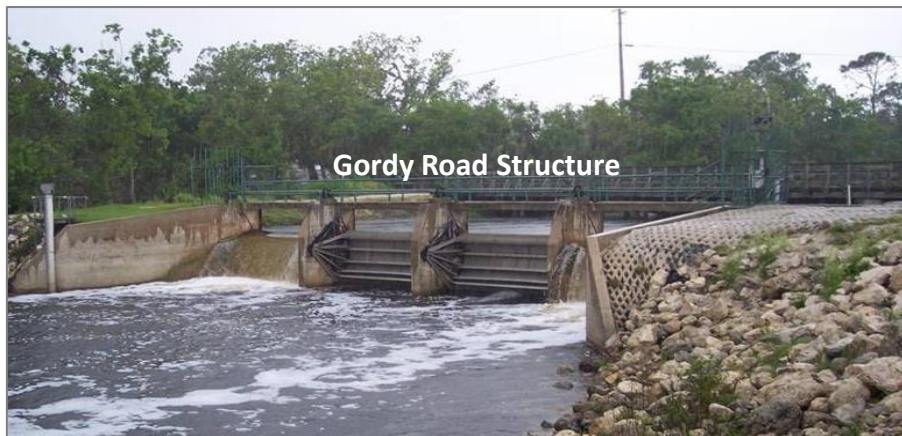


West Indian manatee (*Trichechus manatus latirostris*)
Source: James R. D. Scott
<https://www.gettyimages.com>

North Fork of St. Lucie River Water Reservation

Section 40E-10.051, F.A.C.

- Prospective reservation - water available to fish and wildlife when the CERP C-23/C-24 North and South Reservoirs and STA Project components are operational
- Mean monthly flow of 130 cfs over Gordy Road Structure from November 1 through May 31



Restricted Allocation Areas (RAAs)

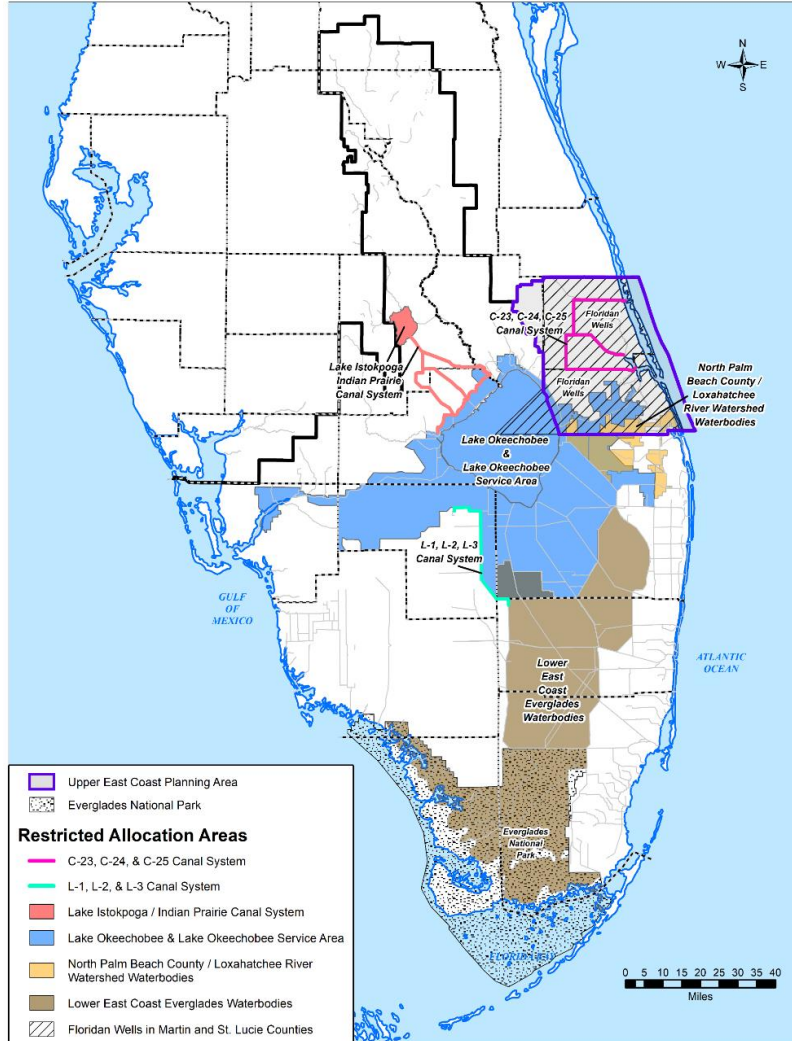
Listed in **Section 3.2.1 of the SFWMD *Applicant's Handbook*¹**, incorporated by reference in **Rule 40E-2.091, F.A.C.**

Definition and Uses

- Areas from which new or increased water allocations are restricted
- Regional in scope, for specific sources or areas of the SFWMD
- Implemented where water for projected needs is insufficient
- Protect water for natural systems and future restoration projects (CERP)
- May be designated as part of MFL recovery or prevention strategies

¹ SFWMD. 2025. *Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District*. South Florida Water Management District, West Palm Beach, FL. Dec 2025.

Restricted Allocation Areas in the SFWMD



- C-23, C-24, & C-25 Canal System
- L-1, L-2, & L-3 Canal System
- Lake Istokpoga/Indian Prairie Canal System
- Lower East Coast Everglades Waterbodies
- North Palm Beach County/Loxahatchee River Watershed Waterbodies
- Pumps on Floridan Wells in Martin and St. Lucie Counties
- Lake Okeechobee & Lake Okeechobee Service Area
- Upper Floridan Aquifer or Avon Park Permeable Zone near the C-18W Reservoir

Covers > 4.3 million acres Districtwide

Restricted Allocation Area Criteria

➤ Lake Istokpoga/Indian Prairie Canal System

- No additional surface water will be allocated from District controlled surface water bodies over and above existing allocations. No increase in surface water pump capacity will be recommended.

➤ C-23, C-24, and C-25 Canal System

- No additional surface water allocations from these canals, or directly connected canals, above existing allocations. No increase in surface water pump capacity will be recommended.

➤ L-1, L-2 and L-3 Canal System

- No additional surface water will be allocated from District canals L-1, L-2 and L-3 over and above existing allocations. No increase in surface water pump capacity will be recommended.

➤ Floridan Wells in Martin and St. Lucie Counties

- No pumps on flowing Floridan aquifer wells in Martin and St. Lucie counties, except under *Applicant's Handbook* guidelines

➤ Northern Palm Beach County/Loxahatchee River Watershed Waterbodies

- Water allocations are limited to base condition uses described in *Applicant's Handbook*

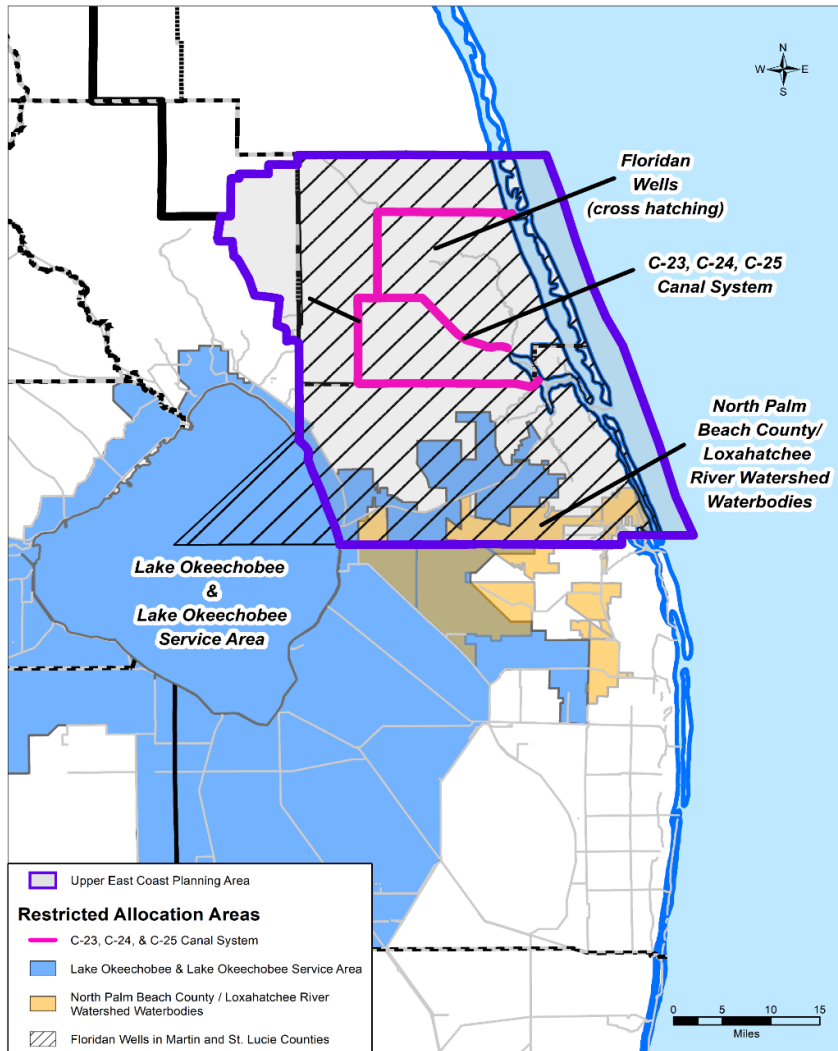
➤ Lake Okeechobee and Lake Okeechobee Service Area

- Water allocations are limited to historical condition water uses that occurred from April 1, 2001, to January 1, 2008

➤ Utilization of the Upper Floridan Aquifer or Avon Park Permeable Zone Near the C-18W Reservoir

- Groundwater use from the UFA or APPZ restricted to protect ASR storage buffer zone beneath the reservoir as part of Loxahatchee River Restoration Project

Restricted Allocation Areas Adopted in the UEC



1. Floridan Wells (cross hatching)
2. C-23, C-24, C-25 Canal System (pink lines)
3. Loxahatchee River Watershed Waterbodies (orange areas)
4. Lake Okeechobee/LOSA (blue areas)



Florida Agriculture Along Lake Okeechobee, Aerial View, 1974.
 Source: Southeast Florida Memories by Philip Abromats
<https://www.pinterest.com/pin/592856738421422043/>

Thank You



North Fork of the St. Lucie River
Source: <https://www.flamingomag.com>

For more information contact:

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or (561)682-2282

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or (561)682-2028

<https://www.sfwmd.gov/our-work>

Questions and Public Comment



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Comprehensive Everglades Restoration Plan: Project Updates

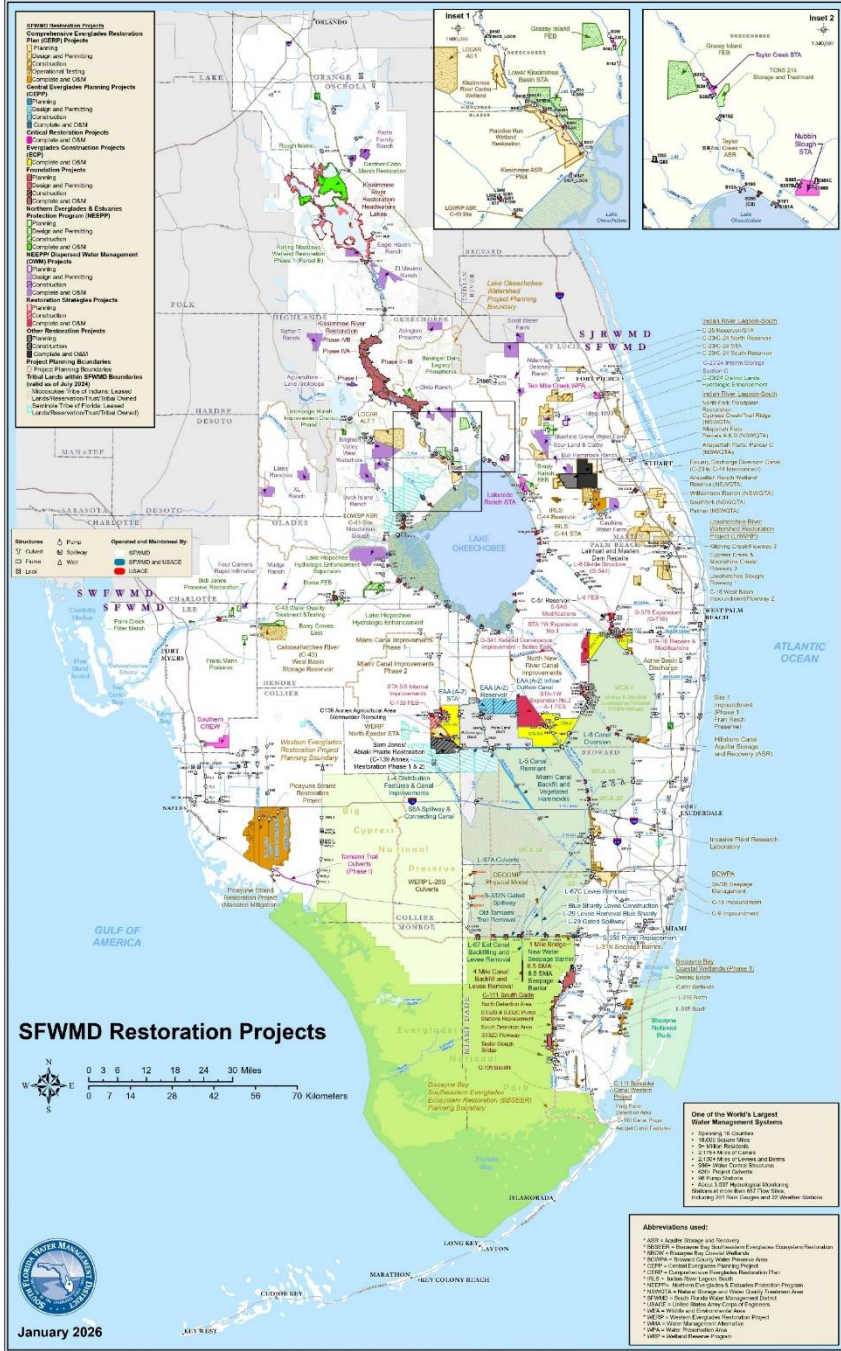
2026 Upper East Coast Water Supply Plan Update - Public Stakeholder Meeting
June 18, 2026



Leslye Waugh
Section Administrator
Ecosystem Restoration Planning & Project Management
South Florida Water Management District



Restoration Projects



State Projects

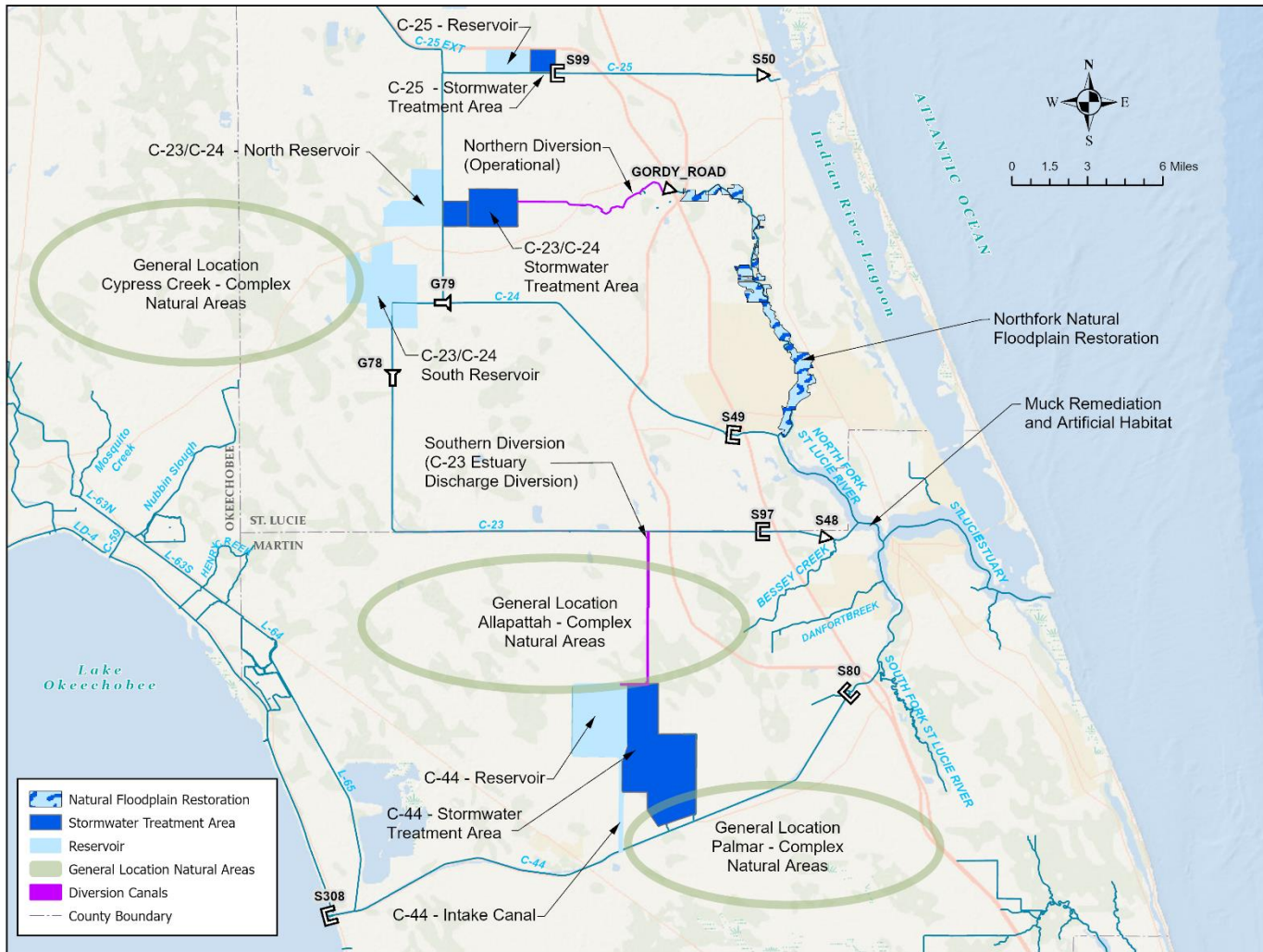
- Restoration Strategies Program
- Everglades Construction Project
 - Stormwater Treatment Areas (STA)
- Northern Everglades and Estuaries Program
 - Dispersed Water Management

Federal Projects

- South Florida Ecosystem Restoration Program
 - Comprehensive Everglades Restoration Plan (CERP)
 - Non-CERP and Foundation Projects



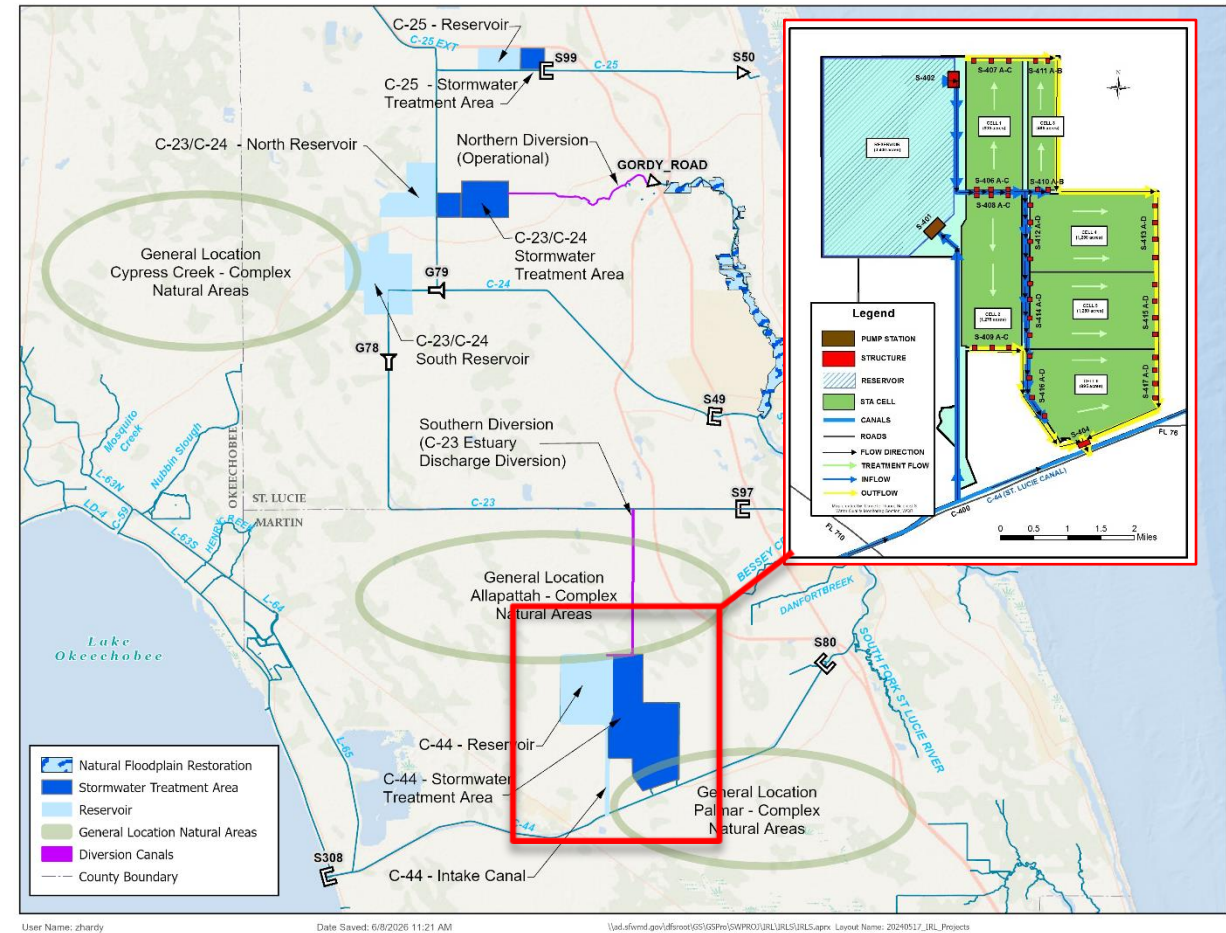
Indian River Lagoon - South (IRL-S)



- Purpose: Capture, store, and treat local basin runoff to restore the delicate balance of freshwater and salt water in the St. Lucie Estuary and the southern portion of the Indian River Lagoon and revitalize degraded habitat within the watershed.
- Phase I
 - C-44 Reservoir & STA
 - C23/C44 Estuary Discharge Diversion (Interconnect Canal)
 - C23/C24 South and North Reservoirs & STA
 - C25 Reservoir & STA
- Phase II
 - Cypress Creek Natural Area
 - Allapattah Complex Natural Area
 - Palmar Complex Natural Area
 - Northfork Floodplain Restoration
 - Muck Remediation and Artificial Habitat

IRL-S: C-44 Reservoir & STA

- Purpose: Capture, store, and treat local C-44 basin runoff, improving salinity in the St. Lucie Estuary and southern portion of the Indian River Lagoon.
- Projects Components:
 - Pump Station 1,100 cfs
 - STA 6,300 acres
 - Reservoir 3,400-acre area
 - 50,600-acre-feet storage capacity
- Construction completed in 2021



IRL-S: C-44 Reservoir & STA



S-401 Pump Station



SW Corner of Reservoir
Looking South



Sandhill Cranes in C-44 STA

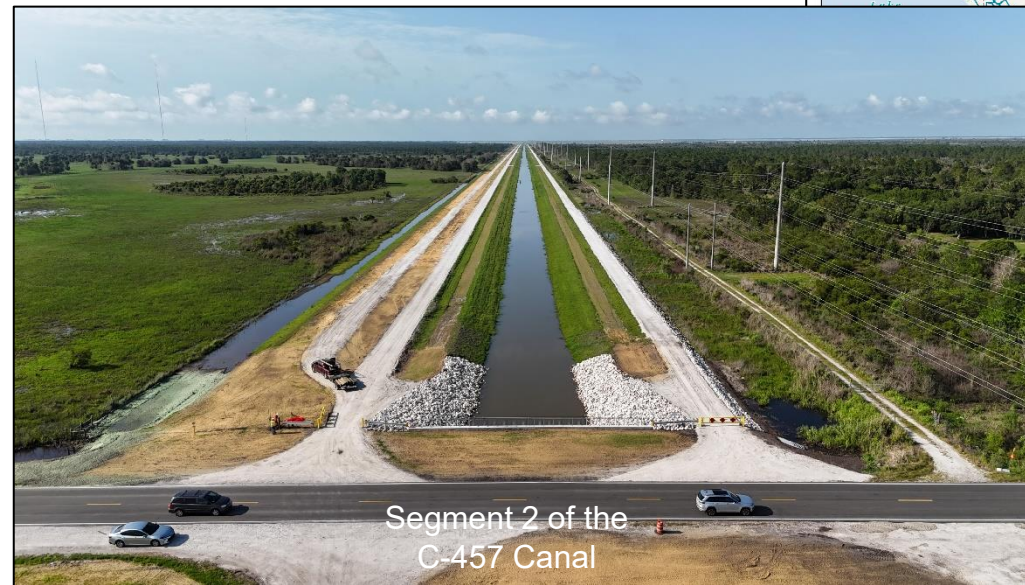
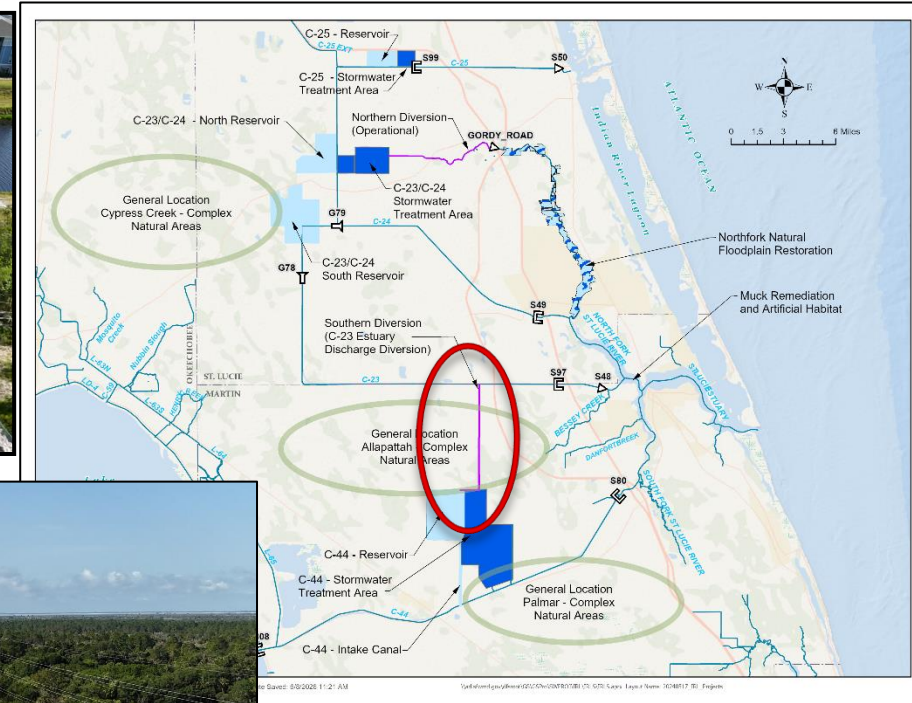


C-44 STA

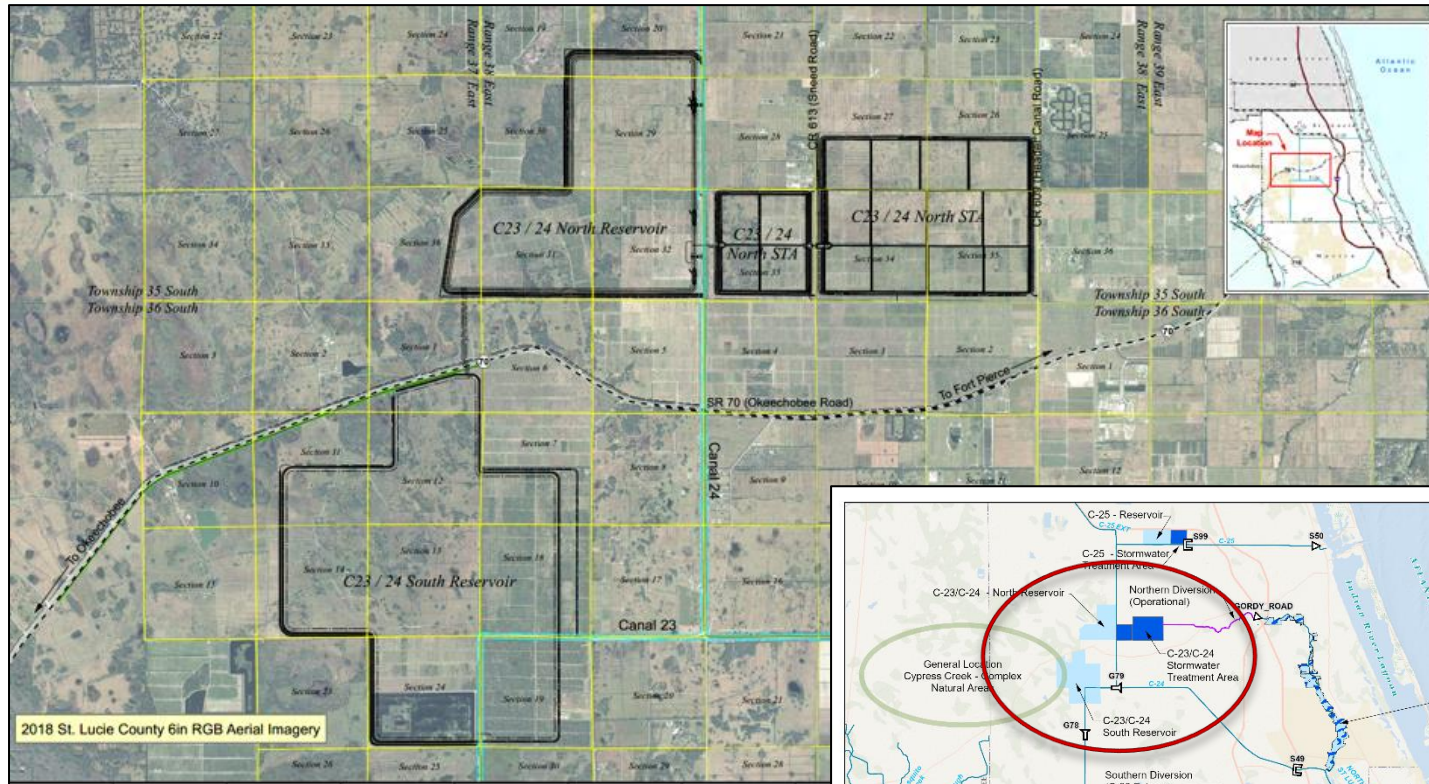


IRL-S: C-23/C-44 Estuary Discharge Diversion

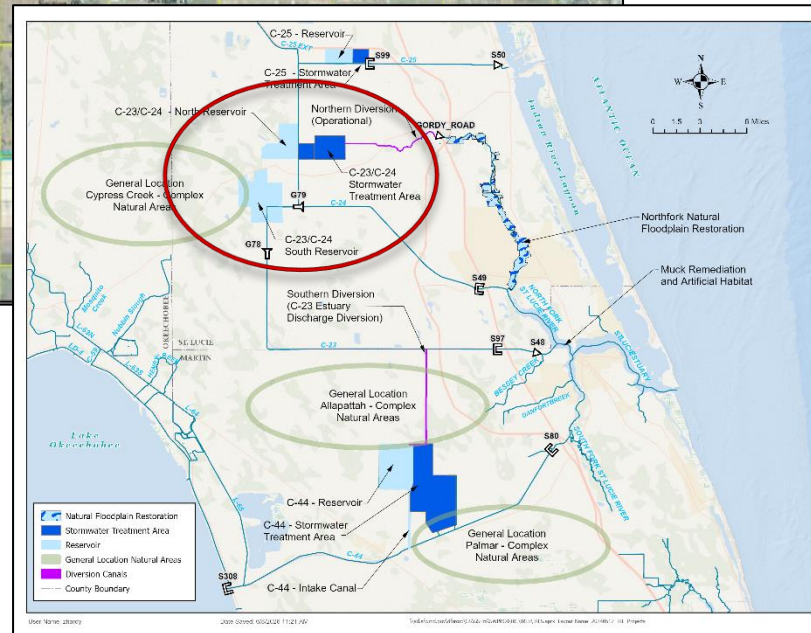
- Final Inspection conducted on May 7th and commissioning phase began on May 13th.
- Ribbon cutting coming up soon.
- Operations included in the updated C-44 Preliminary Project Operations Manual to be approved in July 2026
- This interconnect canal project will divert harmful discharges from the C-23 Canal and send it south to the C-44 Reservoir.
- Improves water quality in the St. Lucie estuary.



IRL-S: C-23/C-24 Reservoirs & STA



2018 St. Lucie County 6in RGB Aerial Imagery



Stormwater Treatment Area (USACE)

- 1,970-acre treatment area
- Construction completion 2026
- Temporary pump station to hydrate the STA expected to begin construction this year

North Reservoir (USACE)

- Approximately 2,000 acres
- 32,000 acre-feet storage capacity
- Construction began 2024
- Remaining construction pending available funding

South Reservoir (SFWMD)

- Approximately 3,500 acres
- 59,000 acre-feet storage capacity
- Construction began 2024
- Remaining construction pending available funding



IRL-S: C-23/24 Stormwater Treatment Area (STA)

C23/24 STA – USACE led contract

- 2,700 acre STA
- Construction began in 2022
- Anticipate construction completion in 2026
- Temporary pump station to be constructed to hydrate the STA



IRL-S: C-23/24 North Reservoir



Contract 4A – USACE led contract

- S-426 Pump Station, S-425 Culvert, PC-37 Canal and G-791 Structure
- Awarded in 2024
- Anticipate construction completion in 2028



IRL-S: C-23/24 South Reservoir

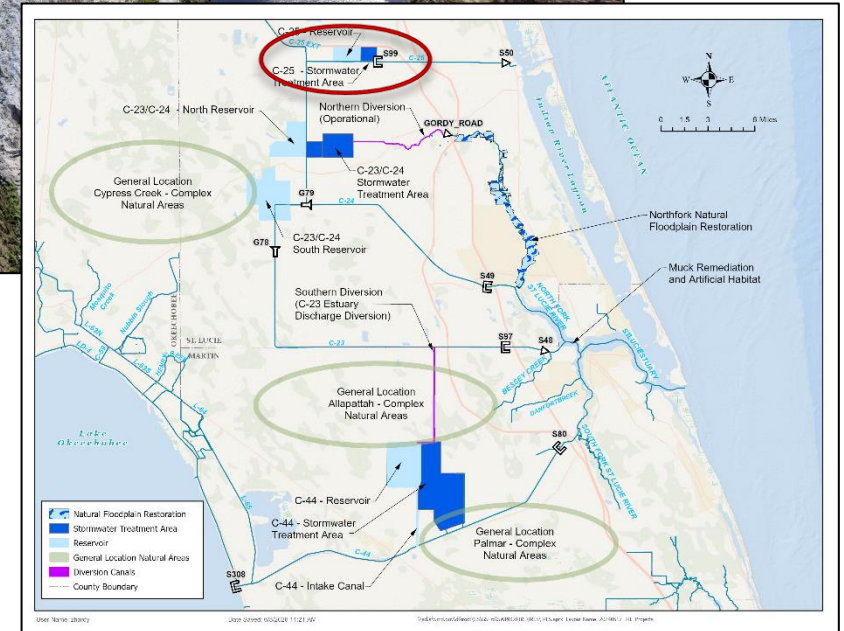
Package 1- SFWMD led contract

- Awarded in April 2024
- Anticipate construction completion in 2026



IRL-S: C-25 Reservoir & STA

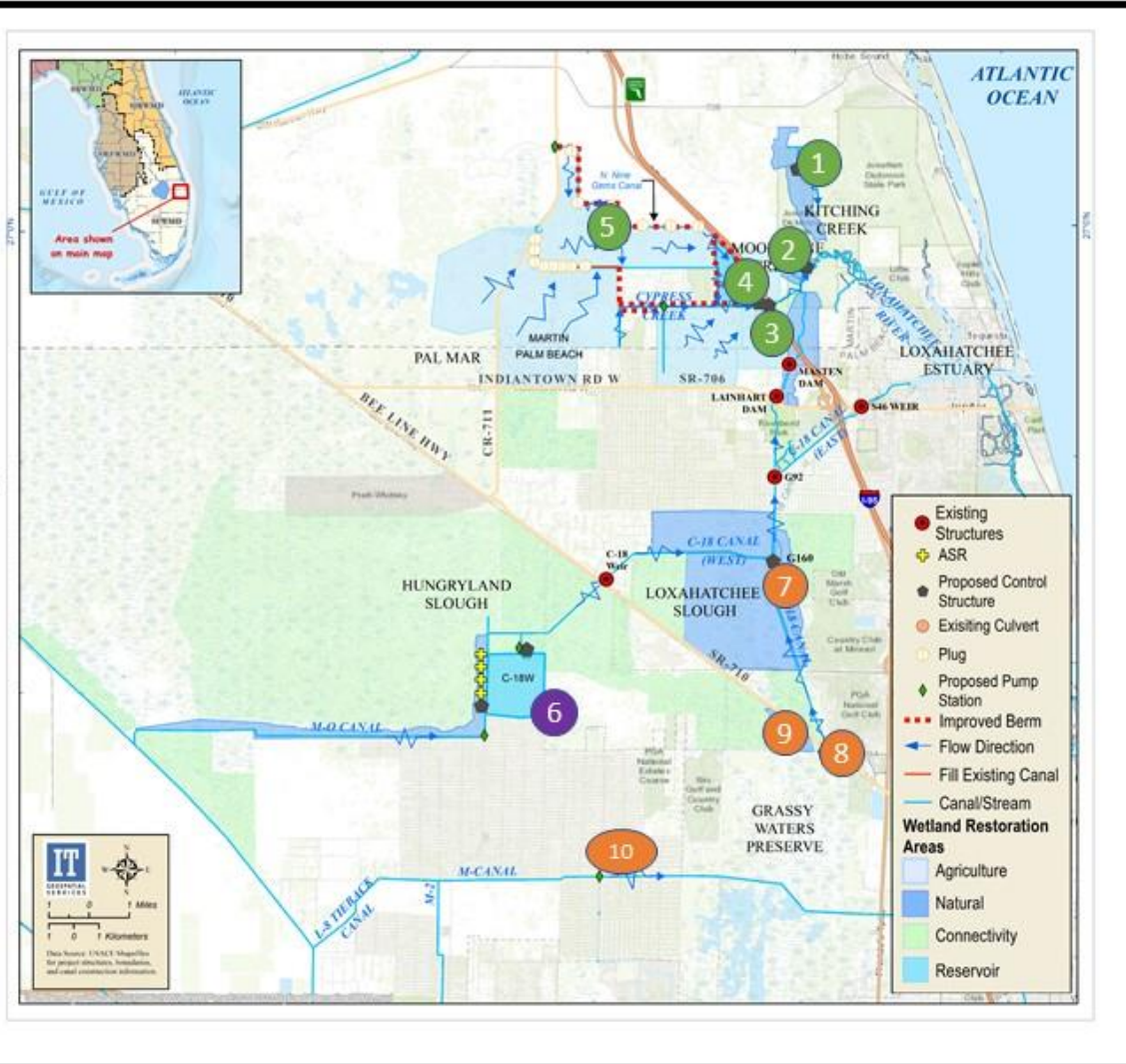
- SFWMD lead for design and construction
- Site preparation contract completed in 2026
- Remaining construction subject to future appropriations
- Projects Components:
 - Pump Station 250 cfs
 - STA 520 acres
 - Reservoir 810-acre area
 - 5,176-acre-foot storage capacity



Loxahatchee River Watershed Restoration Project (LRWRP)

Alternative 5R

1. **Kitching Creek (Restoration/hydration):** (Spreader canal; weir/plug (Jenkins Ditch)
2. **Moonshine Creek (MC) & Gulfstream East (GE) Restoration:** Connect HSLCD ditch to MC; clear MC vegetation; weir in Hobe Grove Ditch; grade area to historic topography
3. **Cypress Creek Canal (CCC)(Reduce over-drainage):** Replace CCC weir to raise control elevation, raise berm at Ranch Colony, automate twin 84" culverts; pump and spreader swale; regrade CC southern forks
4. **Gulfstream West (GW)(Restoration & reduce over-drainage):** Partial backfill & relocate southern end of HSLCD canal; small pump, construct flow through marsh to attenuate flows
5. **Pal-Mar East (Restoration & Connectivity):** Plug ditches; remove pipes; improve northern berm; construct western berm improve eastern berm; pumps at Thomas Farm to redirect drainage to GW flow- redirect drainage to GW flow-through marsh via north Nine-Gems Canal
6. **C-18W Reservoir (9,500 ac-ft. & 4 ASR wells):** Above ground reservoir; inflow pump, discharge structure; seepage control; M-O canal connector and pump
7. **G-160 Structure (Reduce over-drainage):** Improve hydroperiod in Loxahatchee Slough
8. **G-161 Structure (Connectivity):** GWP water to Loxahatchee Slough
9. **GWP Triangle (Connectivity):** Grade and reconnect
10. **M-1 Pump Station (conveyance):** Deliver lower M-1 basin water to M-Canal, GWP and G-161



- **Authorized in Water Resources Development Act (WRDA) of 2020**
- Purpose is to restore and sustain the overall quantity, quality, timing, and distribution of fresh waters to the federally designated “National Wild and Scenic” Northwest Fork of the Loxahatchee River for current and future generations.
- This project also seeks to restore, sustain, and reconnect the area’s wetlands and watersheds that form the historic headwaters for the river.
- Project features located in Palm Beach County and Martin County

LRWRP: Project Benefits

- Northwest Fork of Loxahatchee River target flows
 - 91% dry season
 - 98% wet season
 - Promotes recovery of riverine freshwater species and estuarine zones for fish, seagrass, oysters and other protected species
- Improves watershed wetland hydrology
 - 17,000 acres existing or former agricultural lands
 - 10,000 acres existing natural areas
- Improves/maintains ecological connectivity for ~78,000 acres
- Provides additional recreation opportunities



LRWRP: Flow-way 1

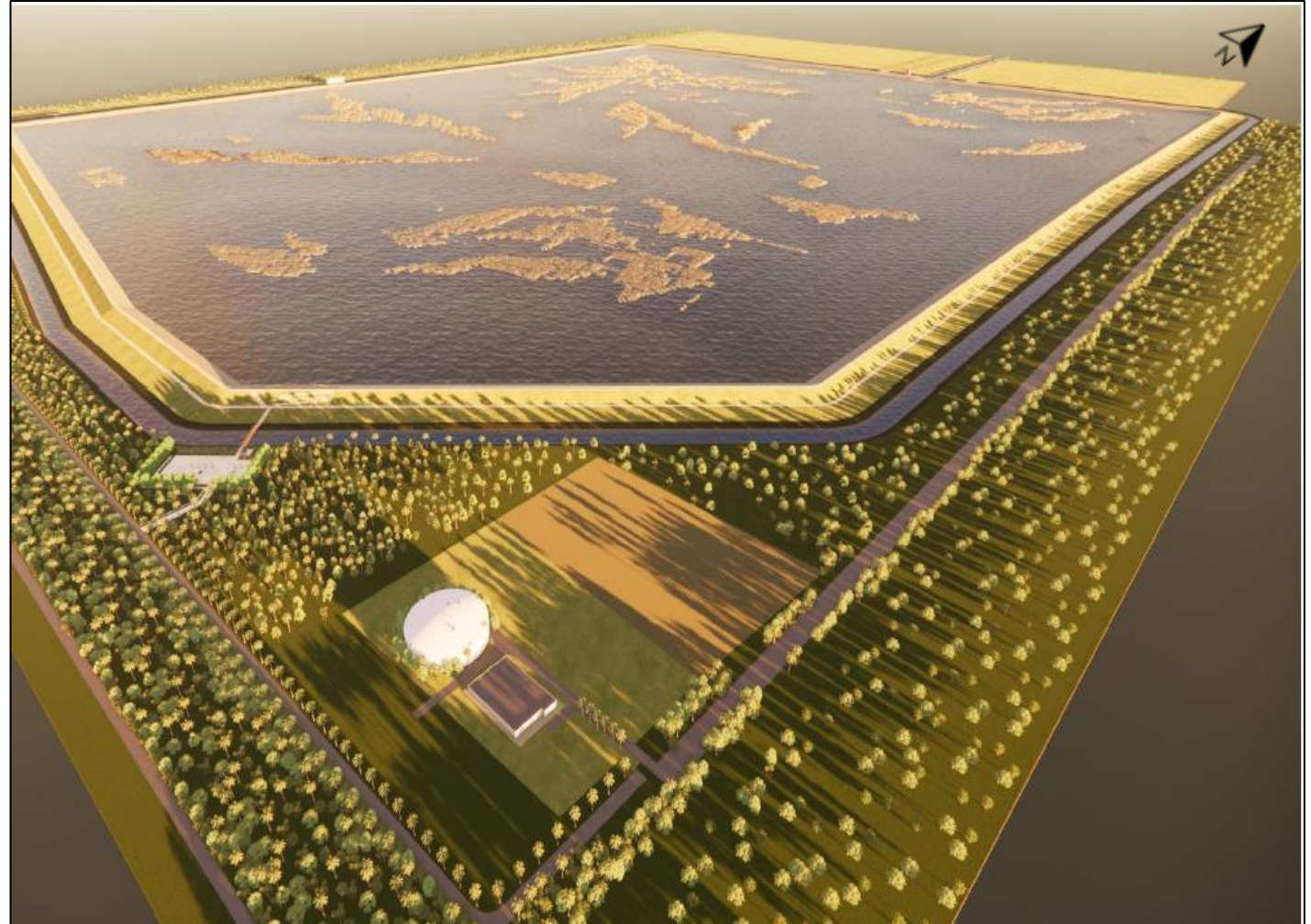
- Project Features
 - M-Canal Pump Station (S-100)
 - Grassy Waters Triangle Regrading
- Purpose
 - Capture excess water from Indian Trail Improvement District Lower Basin that would otherwise be lost to tide and redirect to Northwest Fork of the Loxahatchee River.
 - Restore and enhance connectivity for Wildlife
- Status
 - Agreements and stakeholder engagement – Ongoing
- Next Steps
 - Modeling contract execution expected 2026
 - Preliminary design - to follow modeling



LRWRP: Flow-way 2



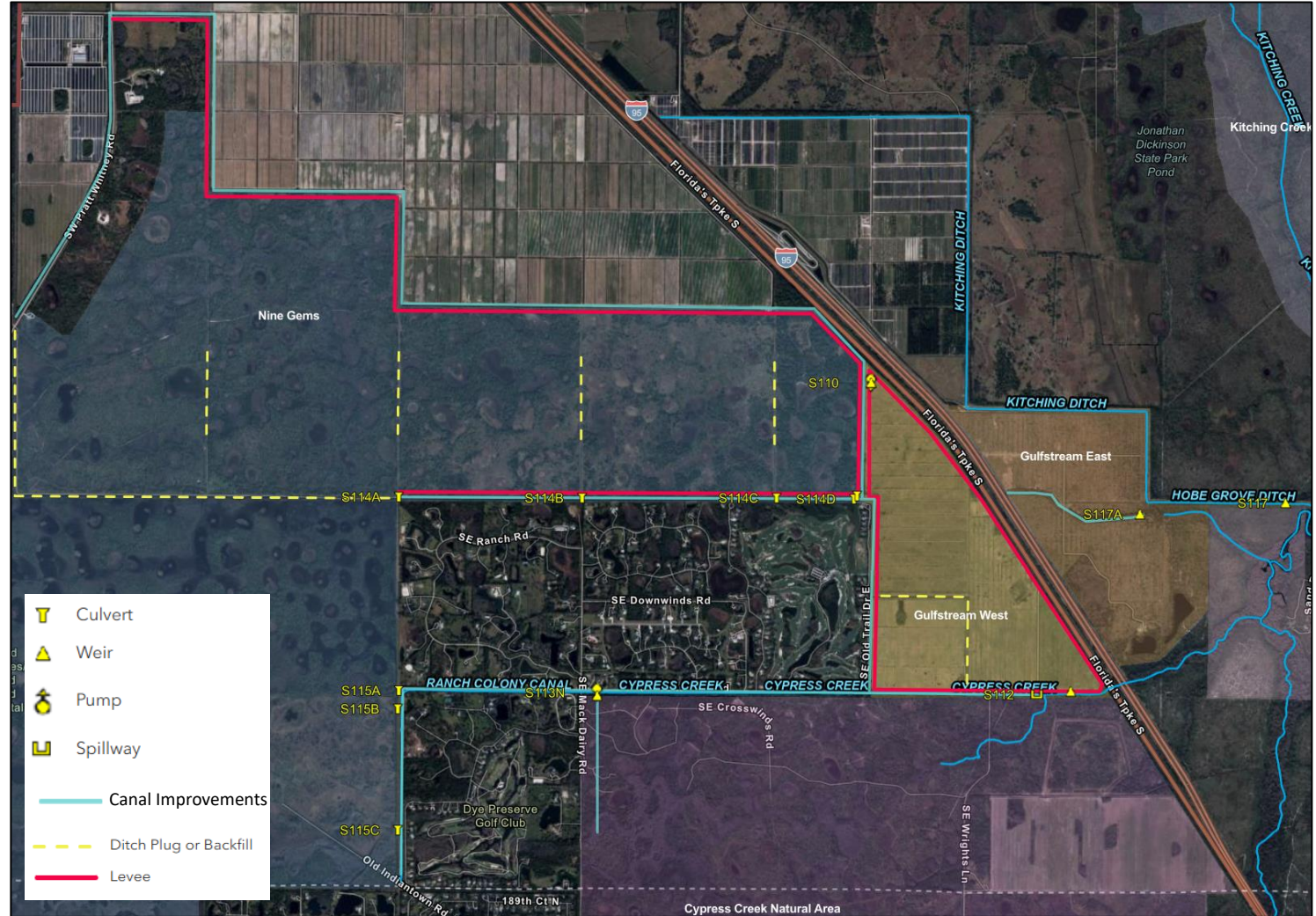
- Status
 - Preliminary Design Contract (Arcadis) - Executed July 2023
 - Design Charette - Sep 2024
 - Site investigations - ongoing
 - Preliminary design underway - Dec 2026
 - Agreements and stakeholder engagement - Ongoing
- Next Steps
 - Intermediate and final design
 - Construction subject to future appropriations



Visual representation of C-18W Impoundment

LRWRP: Flow-way 3

- Design began in FY23
- Site investigations and semi-regional modeling completed
- Preliminary Design of Gulfstream East and Kitching Creek - Ongoing
- Permitting, Cultural Resources Surveys and Environmental Site Remediation - Ongoing
- Design contract West of I-95 - pending



Lake Okeechobee Watershed Restoration Project Aquifer Storage and Recovery (ASR) Wells



- Lake Okeechobee Watershed Restoration Project Study was terminated.
- SFWMD continuing to work on Aquifer Storage and Recovery (ASR) well clusters
 - siting evaluation and site selection activities
 - conducting continuous cores as part of exploratory well program
 - initiating exploratory testing and well drilling
 - design of demonstration facility



Integrated Delivery Schedule 2026 Update

- Proven to be a steady, reliable “road map” that guides projects and maximizes the benefits of all Comprehensive Everglades Restoration Plan (CERP) efforts
- Schedule is reviewed each year and has yielded significant Everglade's restoration progress
- Developed through an extensive public process with participation of the South Florida Ecosystem Restoration Task Force and its Working Group

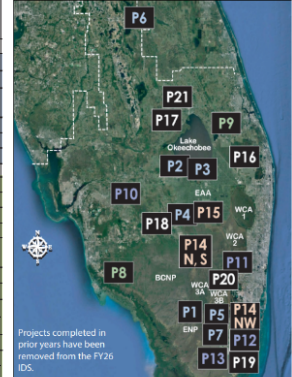


INTEGRATED DELIVERY SCHEDULE 2026 UPDATE

SOUTH FLORIDA ECOSYSTEM RESTORATION | CENTRAL & SOUTHERN FLORIDA COMPREHENSIVE EVERGLADES RESTORATION PLAN

Project Locator	Project	Yellow Book Component	FISCAL YEAR (dollars in millions) ¹												
			2024 W	2025	2026 W	2027	2028 W	2029	2030 W	2031	2032 W	2033	2034 W	2035	2036 W
	Planning Estimates Federal Construction Cost (SFER)++		\$429	\$1519	\$2,761										
	Planning Estimates Non-Federal Construction Cost (SFER)++		\$442	\$538	\$682	\$2,227	\$3,157	\$1,338	\$2,275	\$537	\$302	\$64	\$61	\$57	\$36
	Planning Estimates Total Construction Cost (SFER)++		\$871	\$2057	\$3,443										
NON-CERP AND FOUNDATION															
P4	Restoration Strategies ²		—	—	—										
P5	Tamiami Trail Next Steps (TTNS) Phase 2 ²		—	—	—										
P6	Kissimmee River Restoration - Development of Operational Transition Plan/Evaluation Monitoring	N/A Non-CERP	○○○○○	○○○○○	○○○○○	○○●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
P7	C-111 South Dade - S-332 B Pump Station Replacement		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-111 South Dade - S-332 C Pump Station Replacement		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
CERP GENERATION 1 (AUTHORIZED IN WRDA 2007)															
P8	Picayune Strand Restoration	OPE	—	—	—	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Flood Protection Features - Conveyance		—	—	—	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Flood Protection Features - Levee		—	—	—	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Canal plugging		—	—	—	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
P9	Indian River Lagoon-South	B, UU Phases 1 & 2	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-44 Reservoir		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 Reservoir North - S-426 Inflow Pump Station		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 Reservoir North - S-425 Sag Culvert		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 Reservoir North - Relocation of Raulerson Canal		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 Reservoir North - S-427 Emergency Spillway & Embankment		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 Reservoir North - Reservoir Remaining Embankment		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 Reservoir South		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 STA		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/24 STA Temporary Inflow Pump Station		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-25 Reservoir & STA		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-23/C-44 Estuary Discharge Diversion		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Natural Water Quality Storage Areas, Muck Removal, Artificial Habitat Creation, and Flood Plain Restoration (Phase II)		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
CERP GENERATION 2 (AUTHORIZED IN WRDA 2014)															
P10	Caloosahatchee River (C-43) West Basin Storage	D	—	—	—	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-43 Reservoir		—	—	—	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
P11	Broward County Water Preserve Areas	O, Q, R	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-11 Impoundment Clearing and Grubbing		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-11 Impoundment Embankment and Inflow Pump Station		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	WCA 3A & 3B Seepage Management		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	C-9 Impoundment		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
P12	Biscayne Bay Coastal Wetlands	FFF, OPE Phase 1	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	L-31 East Flow-way S-709 PS		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	L-31 East Flow-way S-705 PS		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	L-31 East Flow-way S-703 PS		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	L-31 East Flow-way S-710 PS, S-711 PS, and C-711W Seepage Canal		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Outlet Wetlands		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●

IDS PROJECT LOCATIONS (NOT TO SCALE)
(Refer to Project Locator in Table)



LEGEND

- Does not reflect budgetary development dollars or capability
- Blue = Non-Federal
- Black = Federal
- Red = State fed using federal funding
- Once authorized, the design and construction of current planning projects will increase annual estimates and extend beyond FY2036
- Funded through other program authorities or by other entities
- Requires WCA 3A outlet and conveyance structures to maximize operational flexibility.
- Construction and funding TBD
- Project Implementation Report with Exception
- Design, PPA Execution, Real Estate Acquisition
- Construction (Initiated by award of construction contract)
- Operational Testing and Monitoring Period
- Fiscal Closeout
- Monitoring
- Operational Plan
- W = Expected WRDA year

NOTE: The funding shown for FY26 and beyond is only nominal, representing approximate funding levels that would be needed to sustain the work displayed in the IDS for any particular FY. The funding does not represent a commitment by the Administration to budget the amounts shown.

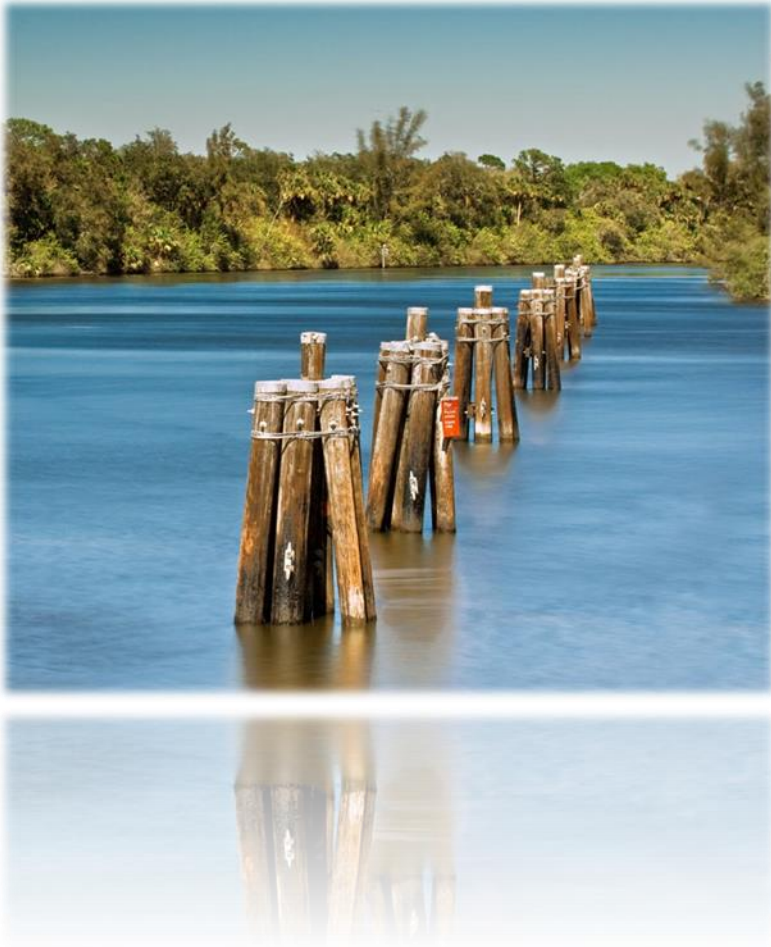


Thank You

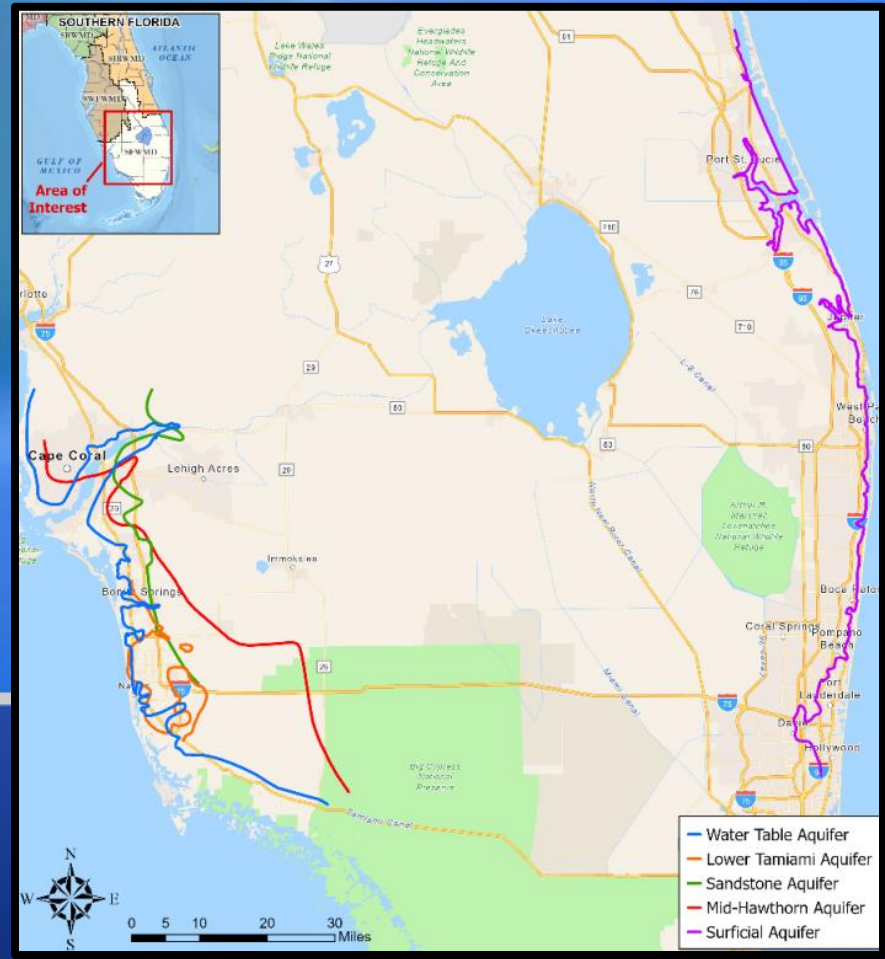


Loxahatchee River

Questions and Public Comment



- If **you** are participating via Zoom:
 - Click the Reactions button to access the Raise Hand feature
- If you are participating via phone:
 - *9 raises hand
 - *6 mutes/unmutes your line
- When you are called on, please state your full name and affiliation prior to providing comments and/or questions

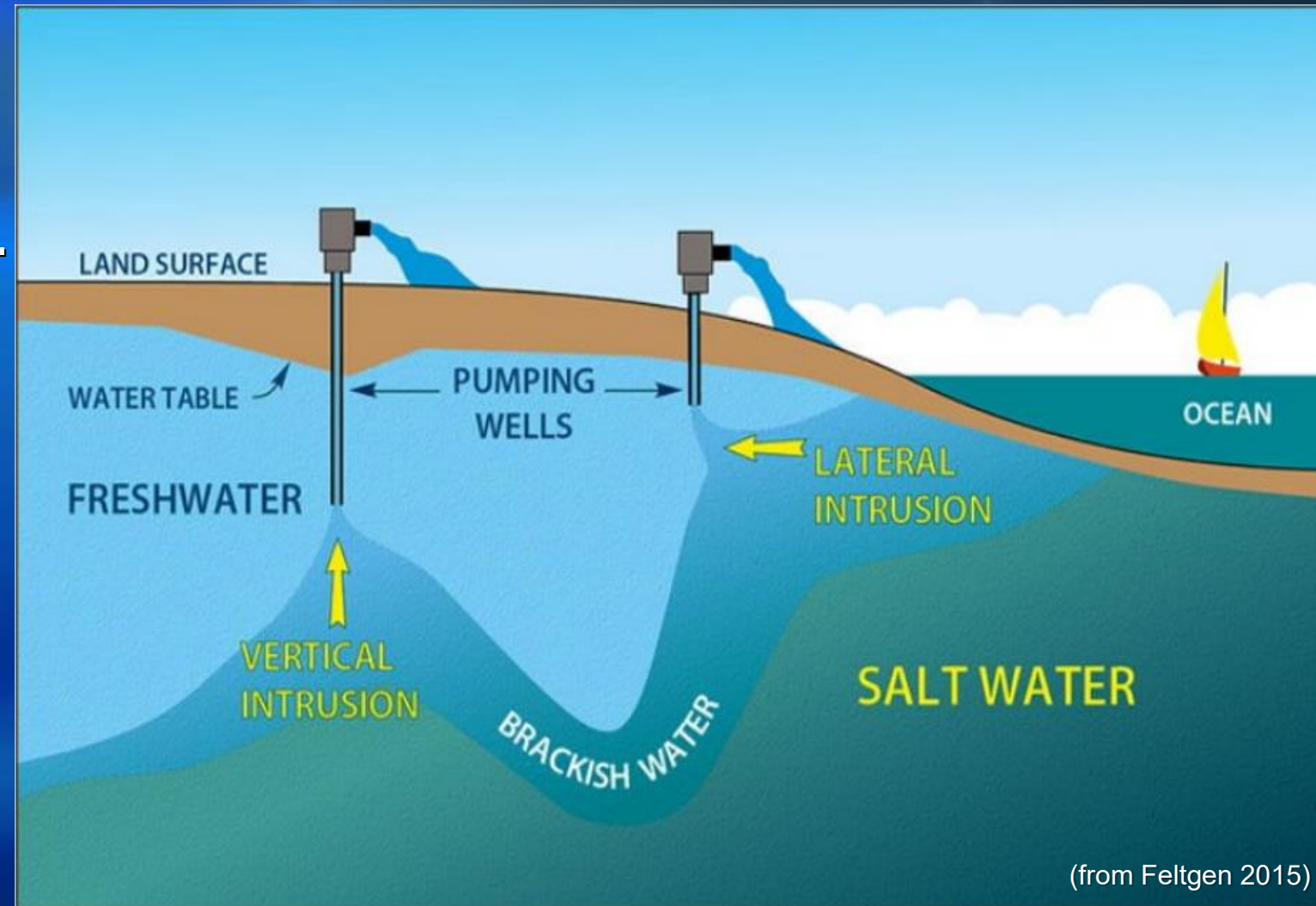


Saltwater Intrusion Mapping

Stacey Coonts, P.G.
Lead Hydrogeologist
SFWMD Hydrogeology Unit

Objective

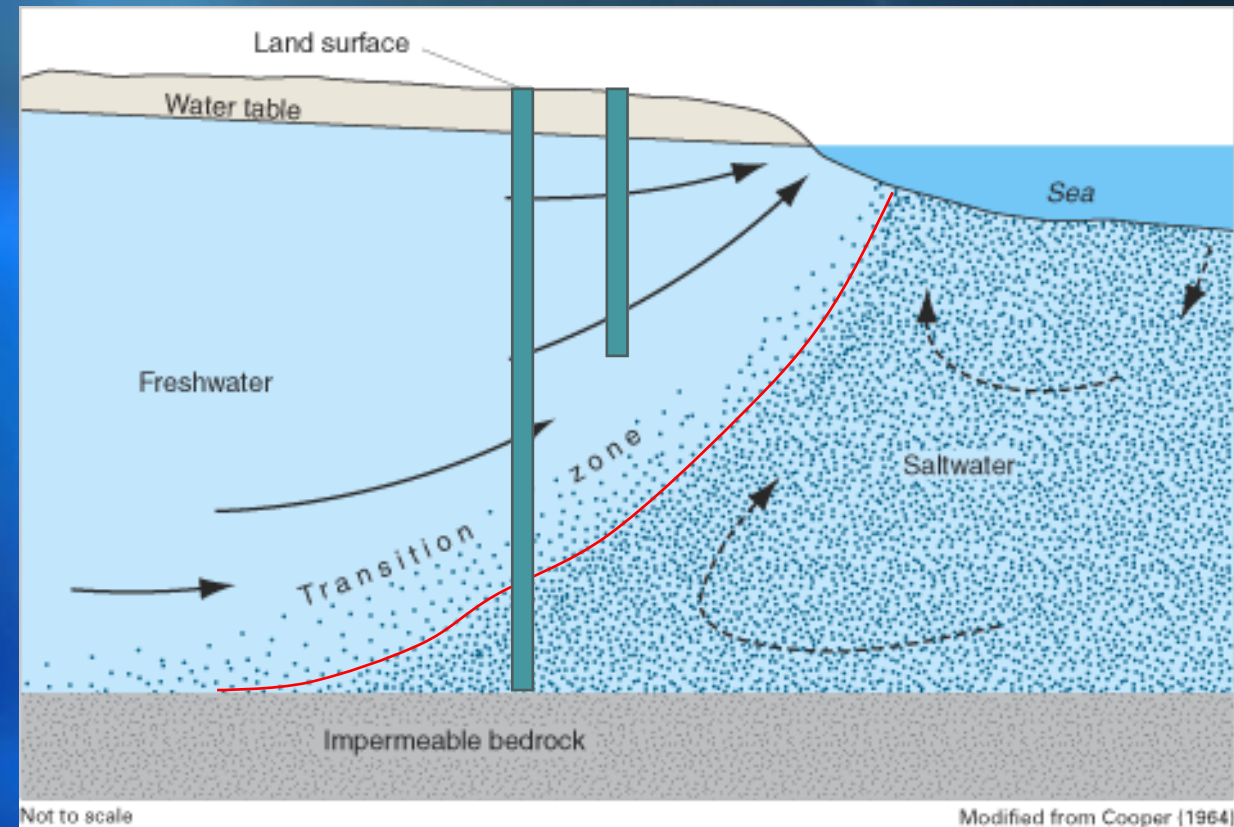
- Every 5 years we update maps of the saltwater isochlor in the surficial and intermediate aquifer systems.
- Mapping completed in 2009, 2014, 2019, and 2024.
- The purpose is to track the location of the saltwater interface to protect the coastal freshwater aquifers.
- 250 mg/L chloride concentration is the US EPA secondary drinking water standard.



(from Feltgen 2015)

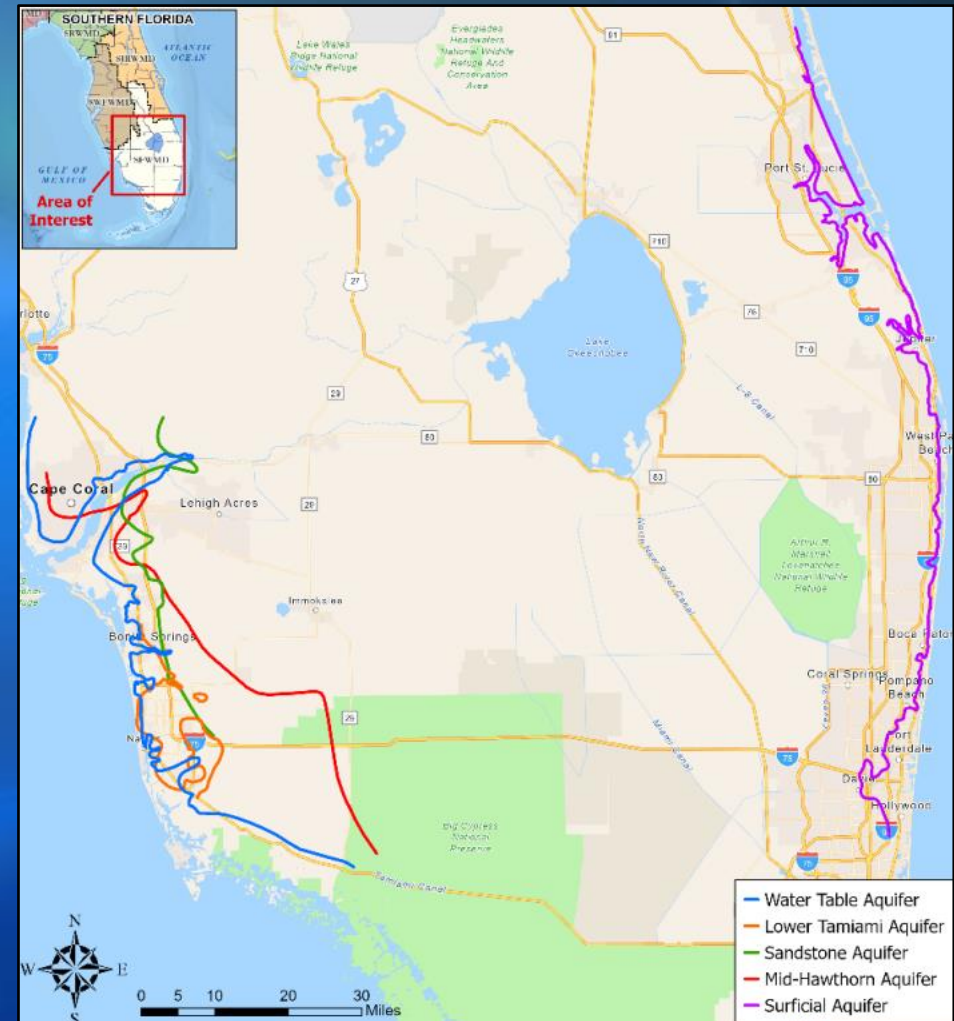
Mapping Challenges

- Representing a three-dimensional feature on a two-dimensional map
- Representing a dynamic interface with fixed-time snapshots
- Representing a diffuse front with a single line
- Some wells used in previous mapping efforts may not be available in 2024 (e.g., wells abandoned, destroyed, no longer required to be monitored, etc.)



District-Wide Locations

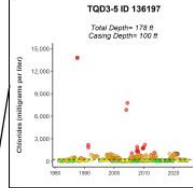
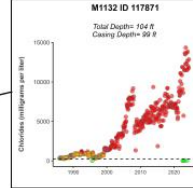
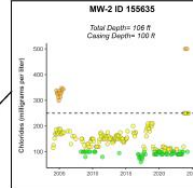
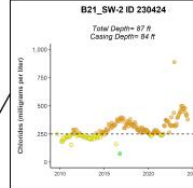
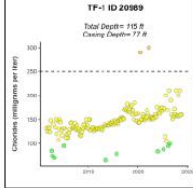
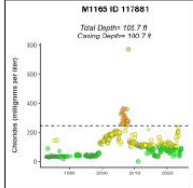
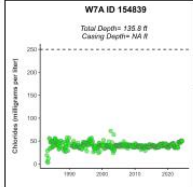
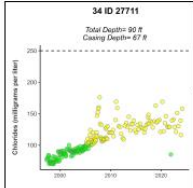
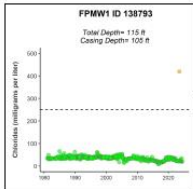
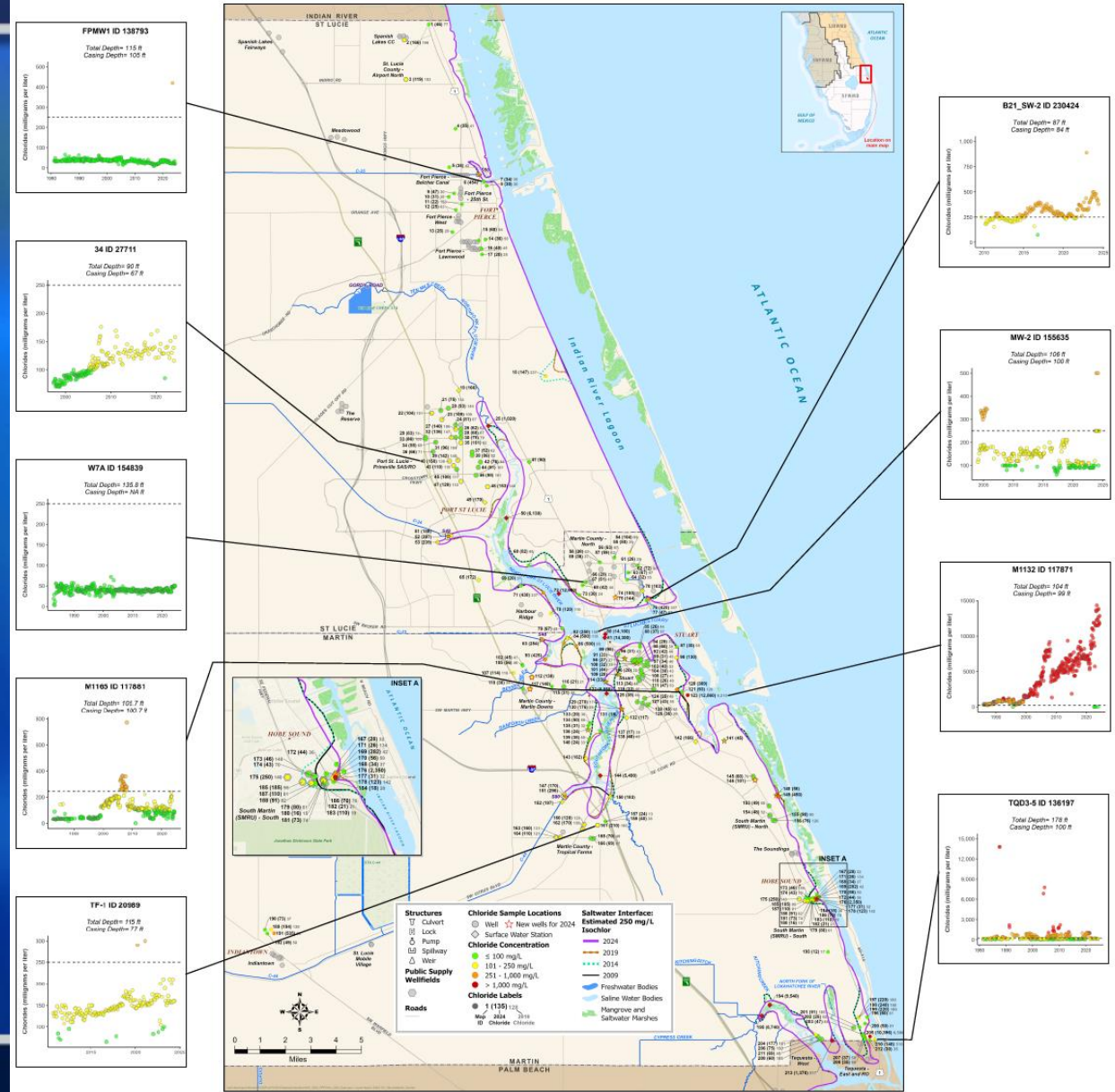
- East Coast (St. Lucie, Martin, Palm Beach, Boward):
 - Surficial Aquifer System
- West Coast (Charlotte, Lee, Collier):
 - Water Table aquifer
 - Lower Tamiami aquifer
 - Sandstone aquifer
 - Mid-Hawthorn aquifer
- United States Geological Survey covers Miami-Dade and Monroe



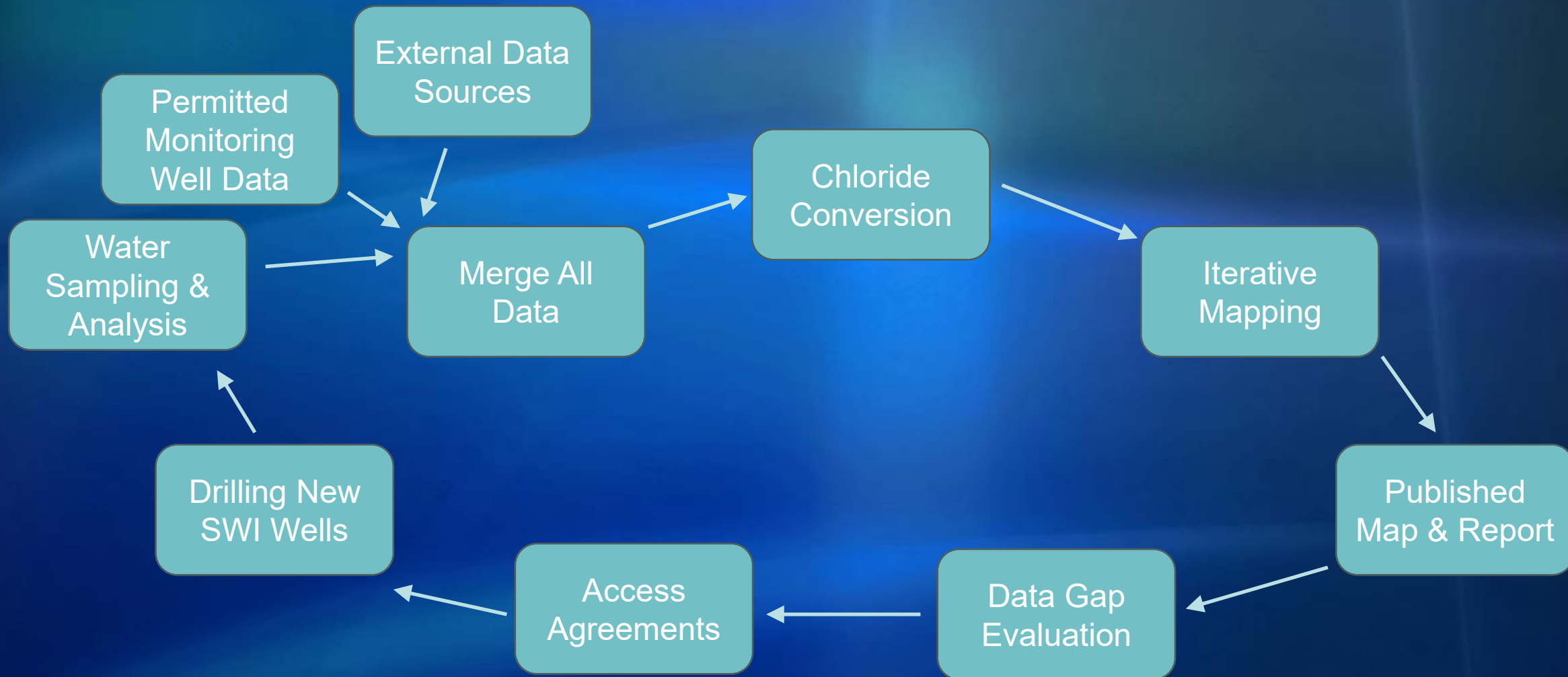
UEC SWI Map

- No significant movement of SWI found
- Surficial Aquifer System has low permeability restricting movement
- Future demand increases coming from the Floridan Aquifer System

Martin and St. Lucie Counties
 Estimated Position of the Saltwater Interface
 Surficial Aquifer System
 March/April/May 2024



SWI Mapping Life Cycle



Groundwater Sampling



Data Compilation

- Hydrogeology Unit collected 86 groundwater samples
- 1,034 groundwater results reported
- East Coast:
 - 611 groundwater samples
 - 34 surface water samples
- West Coast:
 - 509 groundwater samples
 - 45 surface water samples

Map ID	SFWMD Facility ID	Project Name	Well or Station Name	Facility Type	XCOORD (feet)	YCOORD (feet)	Cased Depth (feet bls)	Total Depth (feet bls)	2019 Chloride (mg/L)	2024 Chloride (mg/L)
1	273318080221301	USGS	STL-266R	WELL	860222	1171490	38	42	77	46
2	1060	ST LUCIE COUNTY	W-2 (Holiday Pines) ID 1060	WELL	855116	1168259	65	95	166	166
3	1059	ST LUCIE COUNTY	W-1 (Holiday Pines) ID 1059	WELL	855469	1160012	76	108	153	119
4	138809	FORT PIERCE UTILITIES AUTHORITY	FPTW1 ID 138809	WELL	865823	1149750	105	115	41	35
5	138811	FORT PIERCE UTILITIES AUTHORITY	FPTW2 ID 138811	WELL	864510	1141710	105	115	42	38
6		SFWMD	C25550	CANAL	870746	1140220				454
7	138793	FORT PIERCE UTILITIES AUTHORITY	FPMW1 ID 138793	WELL	871750	1138704	105	115	35	34
8	138794	FORT PIERCE UTILITIES AUTHORITY	FPMW2 ID 138794	WELL	872316	1137830	105	115	30	30
9	138857	FORT PIERCE UTILITIES AUTHORITY	FPWT6 ID 138857	WELL	865545	1136262	20	25	30	47
10	138835	FORT PIERCE UTILITIES AUTHORITY	FPTW5 ID 138835	WELL	864433	1135533	105	115	38	31
11*	138858	FORT PIERCE UTILITIES AUTHORITY	FPWT7 ID 138858	WELL	867162	1133977	20	25	153	22
12	138855	FORT PIERCE UTILITIES AUTHORITY	FPWT4 ID 138855	WELL	865895	1132790	20	25	63	25
13	138839	FORT PIERCE UTILITIES AUTHORITY	FPWT2 ID 138839	WELL	865186	1128170	20	25	25	25
14	138854	FORT PIERCE UTILITIES AUTHORITY	FPWT3 ID 138854	WELL	872072	1126634	20	25	55	36
15	138824	FORT PIERCE UTILITIES AUTHORITY	FPTW4 ID 138824	WELL	870676	1126406	105	115	84	60
16	138836	FORT PIERCE UTILITIES AUTHORITY	FPTW7 ID 138836	WELL	871245	1124712	105	115	45	40
17	138801	FORT PIERCE UTILITIES AUTHORITY	FPMW4 ID 138801	WELL	871351	1123530	105	115	25	20
18	272111080174601	USGS	STL278	WELL	884653	1098165	27	28	237	147
19		SFWMD	SLT-19	CANAL	866462	1095153				166
20	27710	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	33 ID 27710	WELL	864326	1091451	51	84	144	93
21	27718	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	32 ID 27718	WELL	862737	1090963	60	103	114	75
22	27713	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	37 ID 27713	WELL	860836	1090425	64	97	101	104
23	27704	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	22 ID 27704	WELL	862966	1089074	59	100	109	109
24	27690	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	8 ID 27690	WELL	865841	1087972	75	111	97	81
25		SFWMD	SE 12	ESTUARY	872682	1087761				1,020
26	27693	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	11 ID 27693	WELL	866918	1087069	71	111	62	62
27	27689	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	7 ID 27689	WELL	865846	1087064	70	111	106	140
28	27692	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	10 ID 27692	WELL	866933	1086261	70	110	67	68
29	27701	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	19 ID 27701	WELL	859545	1085385	60	95	74	83
30	27691	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	9 ID 27691	WELL	866937	1085353	65	110	79	75
31	27688	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	6 ID 27688	WELL	865846	1085348	76	111	104	96
32	27695	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	13 ID 27695	WELL	864953	1085342	55	100	147	136
33	27702	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	20 ID 27702	WELL	859550	1085020	57	105	100	86
34	27707	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	29 ID 27707	WELL	861707	1084353	40	99	69	55
35	27687	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	4 ID 27687	WELL	866943	1084242	76	111	92	101
36	27706	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	28 ID 27706	WELL	861122	1082429	23	107	71	66
37	27686	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	3 ID 27686	WELL	869298	1082336	45	90	62	52
38	27684	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	1 ID 27684	WELL	869302	1081629	60	95	92	86
39	27696	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	14 ID 27696	WELL	866331	1080603	60	100	146	142
40	27711	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	34 ID 27711	WELL	864528	1080434	67	90	138	158
41		SFWMD	SLT-26	CANAL	881198	1080260				80
42	27699	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	17 ID 27699	WELL	871024	1080224	55	110	94	76
43	27697	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	15 ID 27697	WELL	865434	1079488	65	100	118	110
44	27700	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	18 ID 27700	WELL	870578	1079111	50	95	101	91
45	27698	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	16 ID 27698	WELL	866070	1078683	55	90	111	100
46	27709	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	26 ID 27709	WELL	870109	1077448	52	85	101	88
47	27712	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	36 ID 27712	WELL	866969	1076181	63	91	133	129
48	27708	PUBLIC SUPPLY W U P PORT ST LUCIE UTILITY SYSTEM	25 ID 27708	WELL	872509	1075092	61	111	146	153
49		SFWMD	SLT-11	CANAL	871993	1071784				170
50		SFWMD	SE 06	ESTUARY	876410	1068539				6,130
51		SFWMD	SLT-41	CANAL	864896	1064827				189
52		SFWMD	C24549	CANAL	864298	1064744				397
53		SFWMD	SLT-42B	CANAL	862093	1063484				239

Iterative Mapping



- **Review and Review**
- **Considering:**
 - **Change in chloride concentration**
 - **New data points**
 - **Well construction**
 - **Surface water flow and structures**

Published Map & Report

Technical Publication, WS-67:

https://www.sfwmd.gov/sites/default/files/documents/WS-67_2024_swi_mapping_report.pdf

2024 Saltwater Interface interactive map:

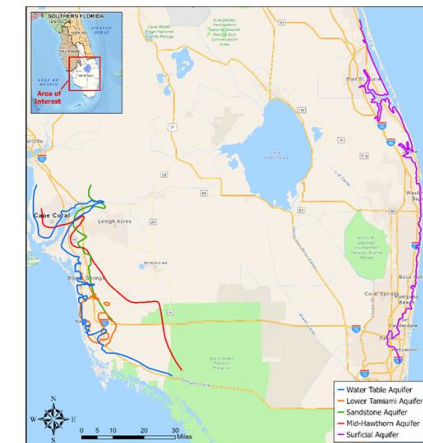
<https://geoportal.sfwmd.gov/portal/apps/experiencebuilder/experience/?id=c032a295297b417e85c92d872de00559>

Resilience Metrics Hub

<https://sfwmd-district-resiliency-sfwmd.hub.arcgis.com/apps/8215a698e6b74b4fbf26d0b8a0d82211/explore>

Saltwater Interface Monitoring and Mapping Program Update 2024

Technical Publication WS-67
February 2025



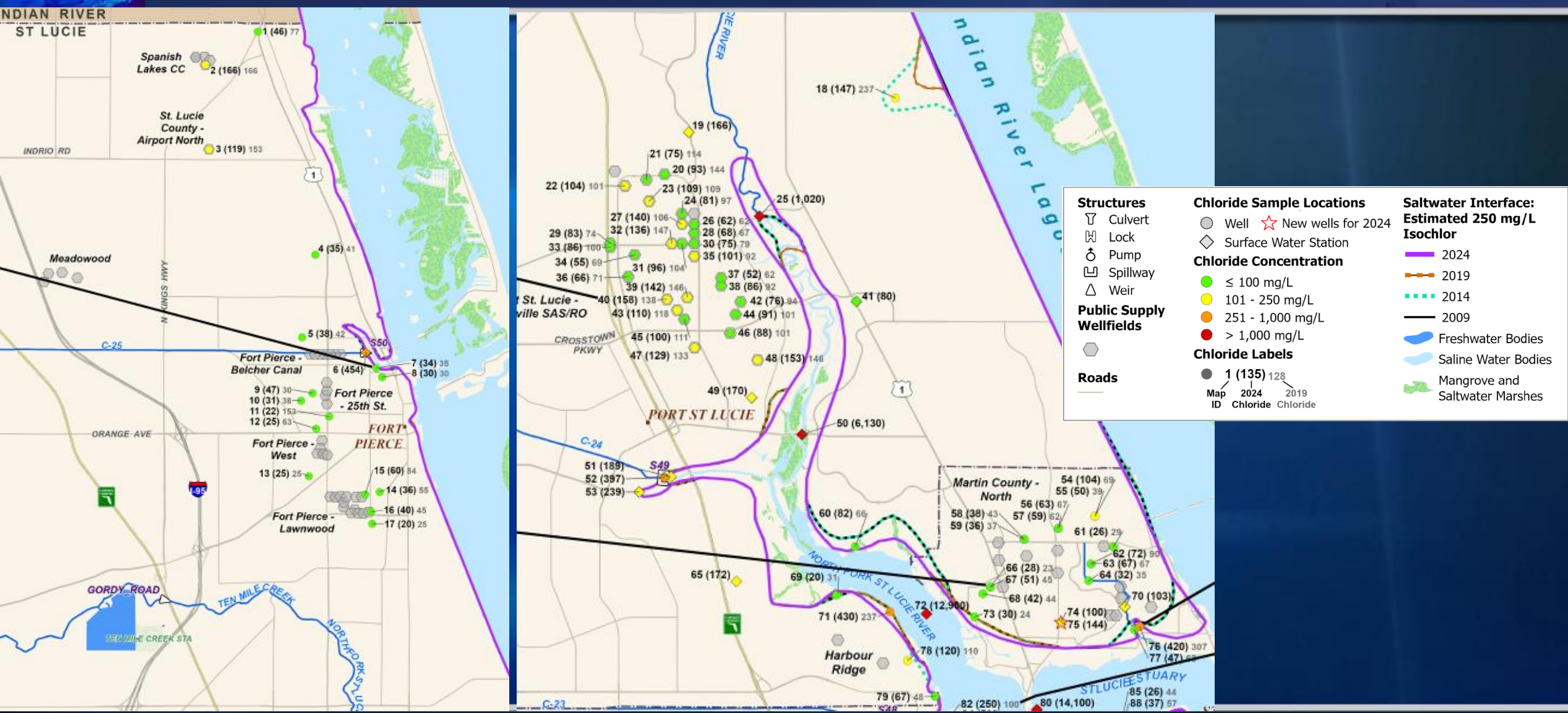
Justin Zumbro, P.G. and Stacey Coonts, P.G.
Hydrogeology Unit, Resource Evaluation Section, Water Supply Bureau



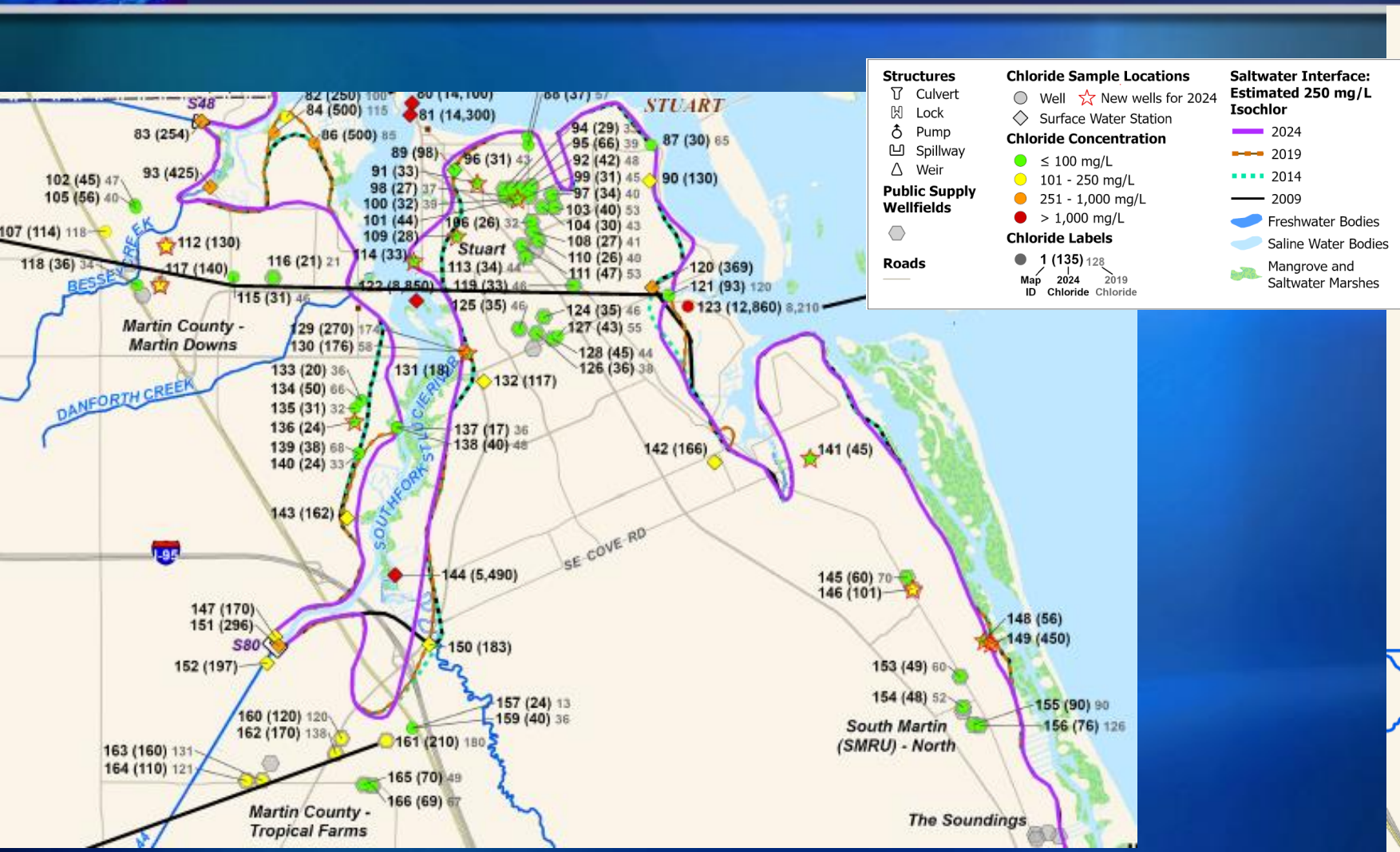
[sfwmd.gov](https://www.sfwmd.gov)

South Florida Water Management District | 3301 Gun Club Road | West Palm Beach, FL 33406

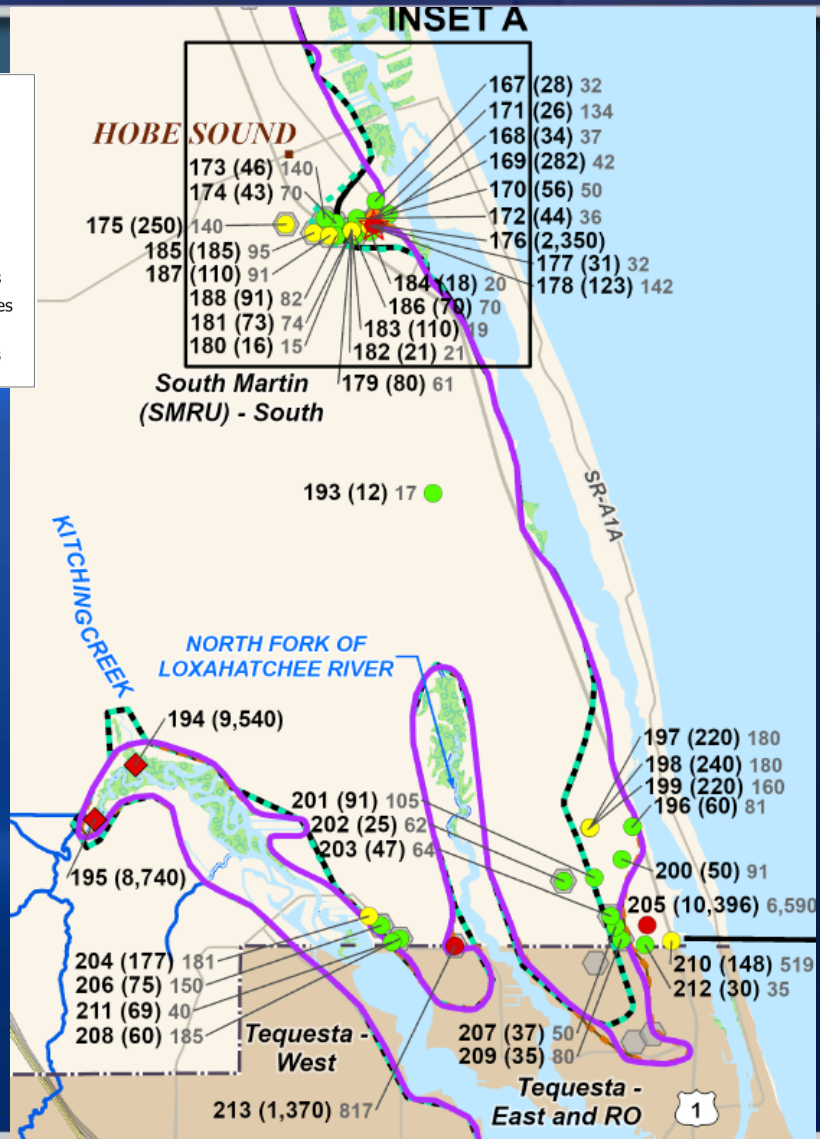
UEC SWI Map – St. Lucie County



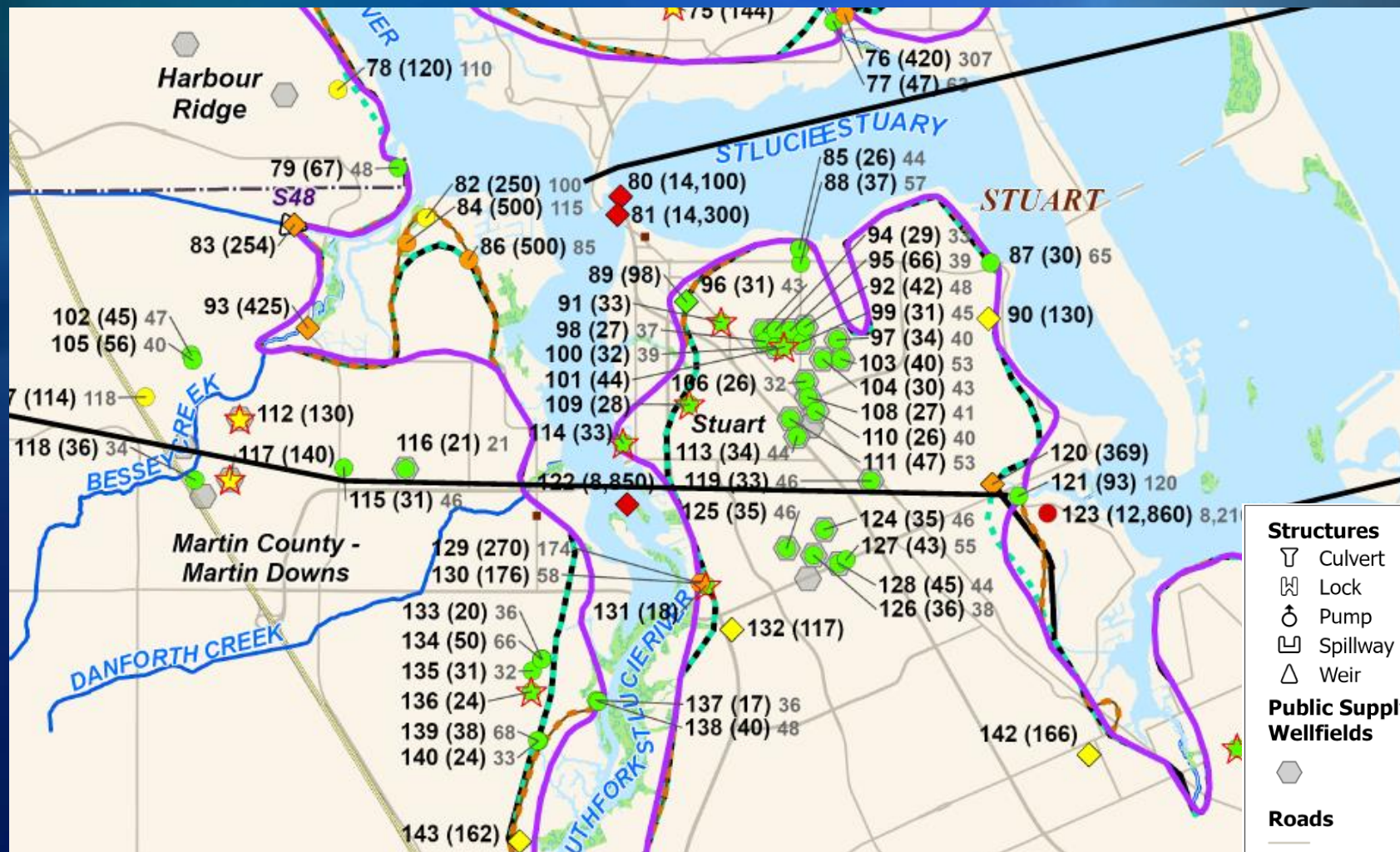
UEC SWI Map – Martin County



Structures	Chloride Sample Locations	Saltwater Interface: Estimated 250 mg/L Isochlor
<ul style="list-style-type: none"> Culvert Lock Pump Spillway Weir 	<ul style="list-style-type: none"> Well Surface Water Station New wells for 2024 	<ul style="list-style-type: none"> 2024 2019 2014 2009
Public Supply Wellfields	Chloride Concentration	<ul style="list-style-type: none"> Freshwater Bodies Saline Water Bodies Mangrove and Saltwater Marshes
Roads	Chloride Labels	
	<ul style="list-style-type: none"> ≤ 100 mg/L 101 - 250 mg/L 251 - 1,000 mg/L > 1,000 mg/L 	
	<ul style="list-style-type: none"> 1 (135) 128 	
	Map ID	<ul style="list-style-type: none"> 2024 Chloride 2019 Chloride



SWI Movement - Stuart



<p>Structures</p> <ul style="list-style-type: none"> Culvert Lock Pump Spillway Weir <p>Public Supply Wellfields</p> <ul style="list-style-type: none"> Wellfield <p>Roads</p> <ul style="list-style-type: none"> Road 	<p>Chloride Sample Locations</p> <ul style="list-style-type: none"> Well New wells for 2024 Surface Water Station <p>Chloride Concentration</p> <ul style="list-style-type: none"> ≤ 100 mg/L 101 - 250 mg/L 251 - 1,000 mg/L > 1,000 mg/L <p>Chloride Labels</p> <ul style="list-style-type: none"> 1 (135) 128 <p>Map ID 2024 Chloride 2019 Chloride</p>	<p>Saltwater Interface: Estimated 250 mg/L Isochlor</p> <ul style="list-style-type: none"> 2024 2019 2014 2009 <p> Freshwater Bodies</p> <p> Saline Water Bodies</p> <p> Mangrove and Saltwater Marshes</p>
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SWI Movement – New Data Points



Structures	Chloride Sample Locations	Saltwater Interface: Estimated 250 mg/L Isochlor
<ul style="list-style-type: none"> Culvert Lock Pump Spillway Weir 	<ul style="list-style-type: none"> Well Surface Water Station 	<ul style="list-style-type: none"> 2024 2019 2014 2009
Public Supply Wellfields <ul style="list-style-type: none"> 	Chloride Concentration <ul style="list-style-type: none"> ≤ 100 mg/L 101 - 250 mg/L 251 - 1,000 mg/L > 1,000 mg/L 	<ul style="list-style-type: none"> Freshwater Bodies Saline Water Bodies Mangrove and Saltwater Marshes
Roads <ul style="list-style-type: none"> 	Chloride Labels <ul style="list-style-type: none"> 1 (135) 128 Map ID 2024 Chloride 2019 Chloride 	



Thank You



Questions and Public Comment



- If you are participating via Zoom:
 - Use the Raise Hand feature

- If you are participating via phone:
 - *9 raises hand
 - *6 mutes/unmutes your line

- When you are called on, please state your full name and affiliation prior to providing comments and/or questions

Assessing Changing Conditions



Karin Smith, P.G.


Resiliency Project Manager – Water Supply

2026 UEC Water Supply Plan Stakeholder Meeting #2

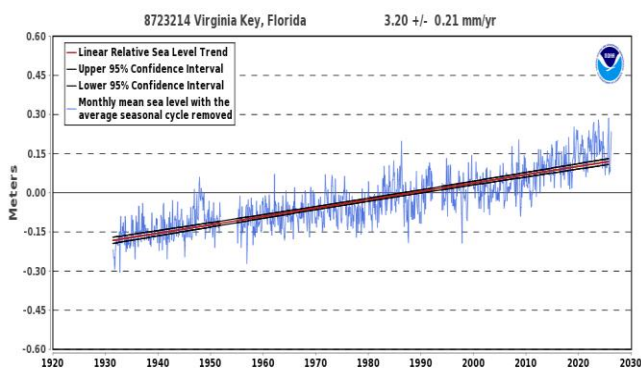
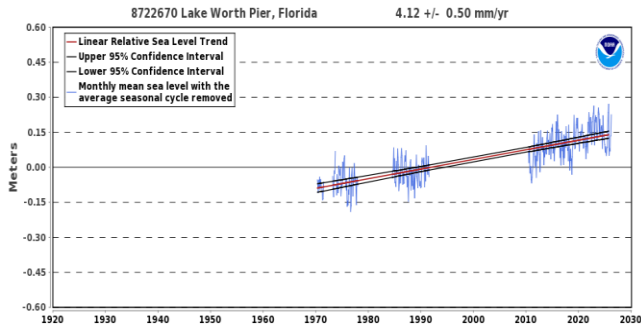
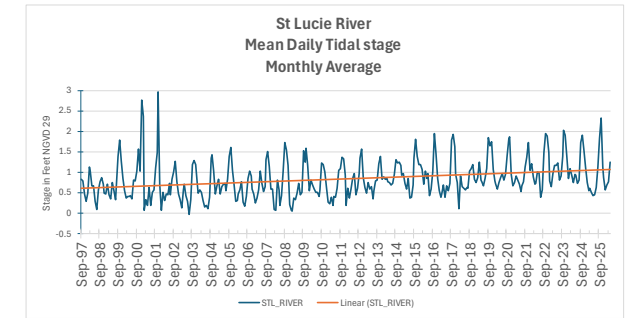
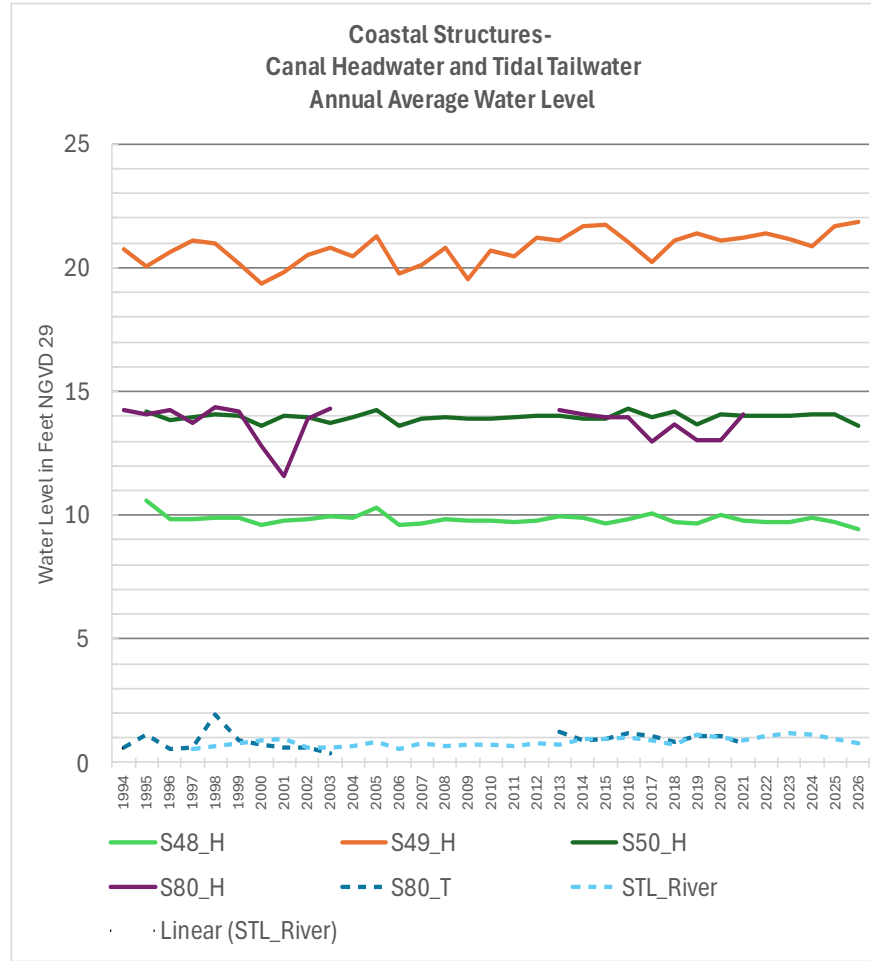
June 18, 2026



Overview

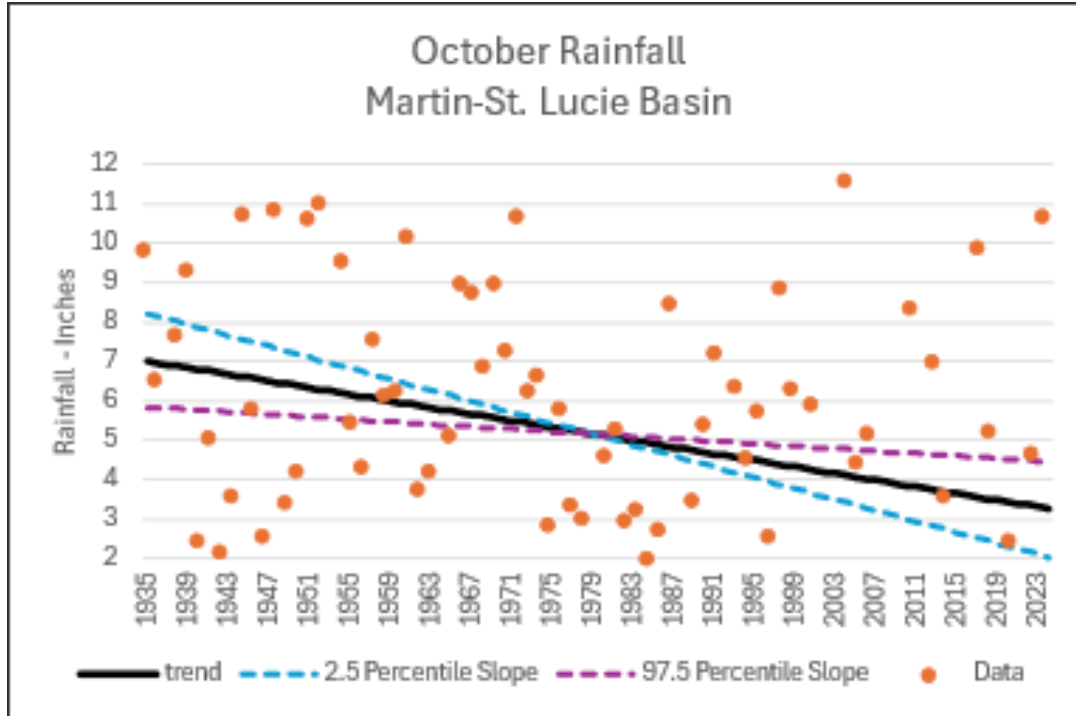
- 
1. Understanding planning needs through Data & Modeling
 2. District efforts that enhance the resiliency of our water supply
 3. Vision for the future

Observations- Canal/Tidal Stages UEC

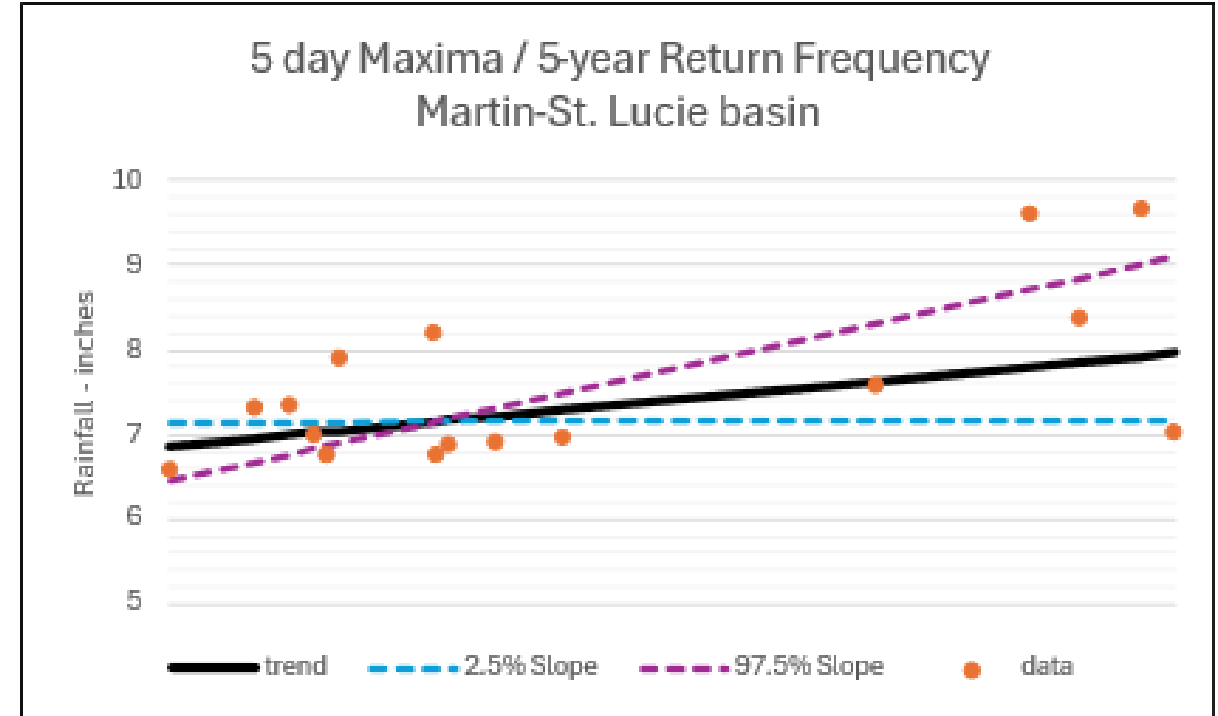


No current evidence that tidal water will overtop structures

Observations – Rainfall UEC

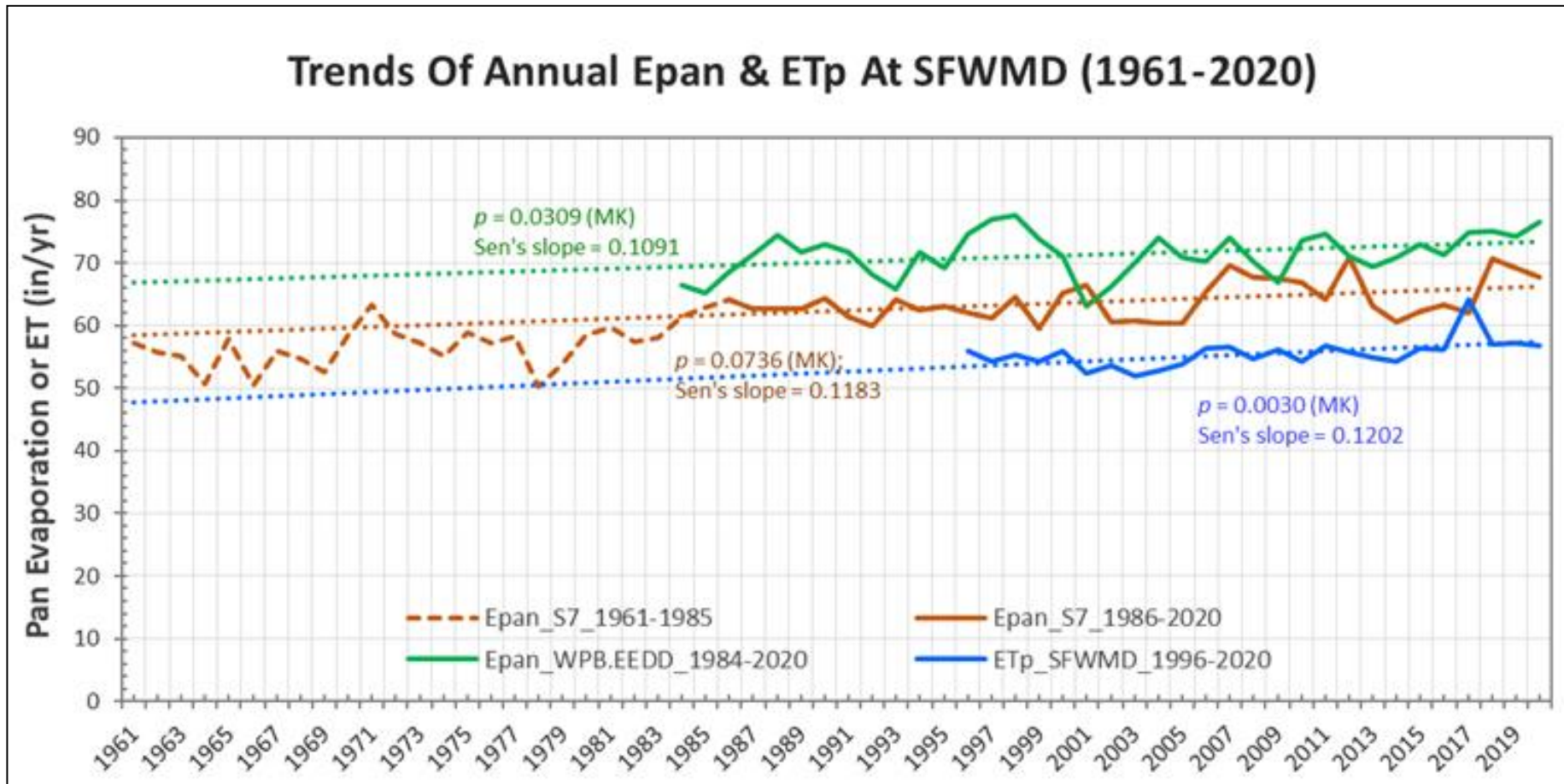


Statistically significant downward trend
Drier conditions going into dry season



Increasing trend longer duration rainfall extremes

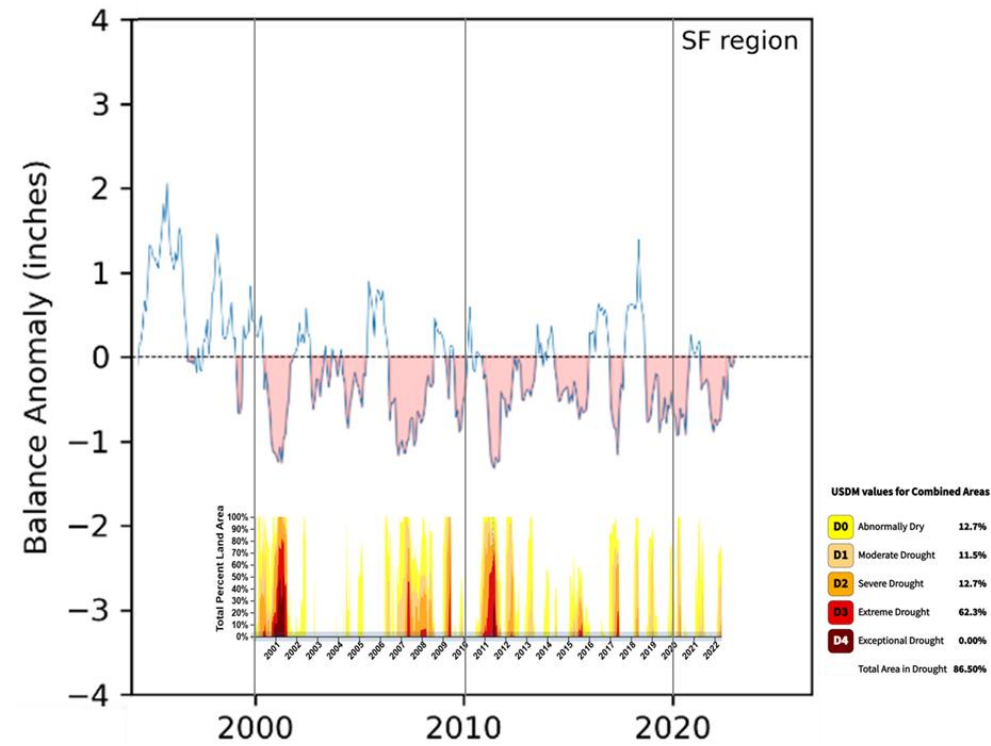
Observations- Evapotranspiration



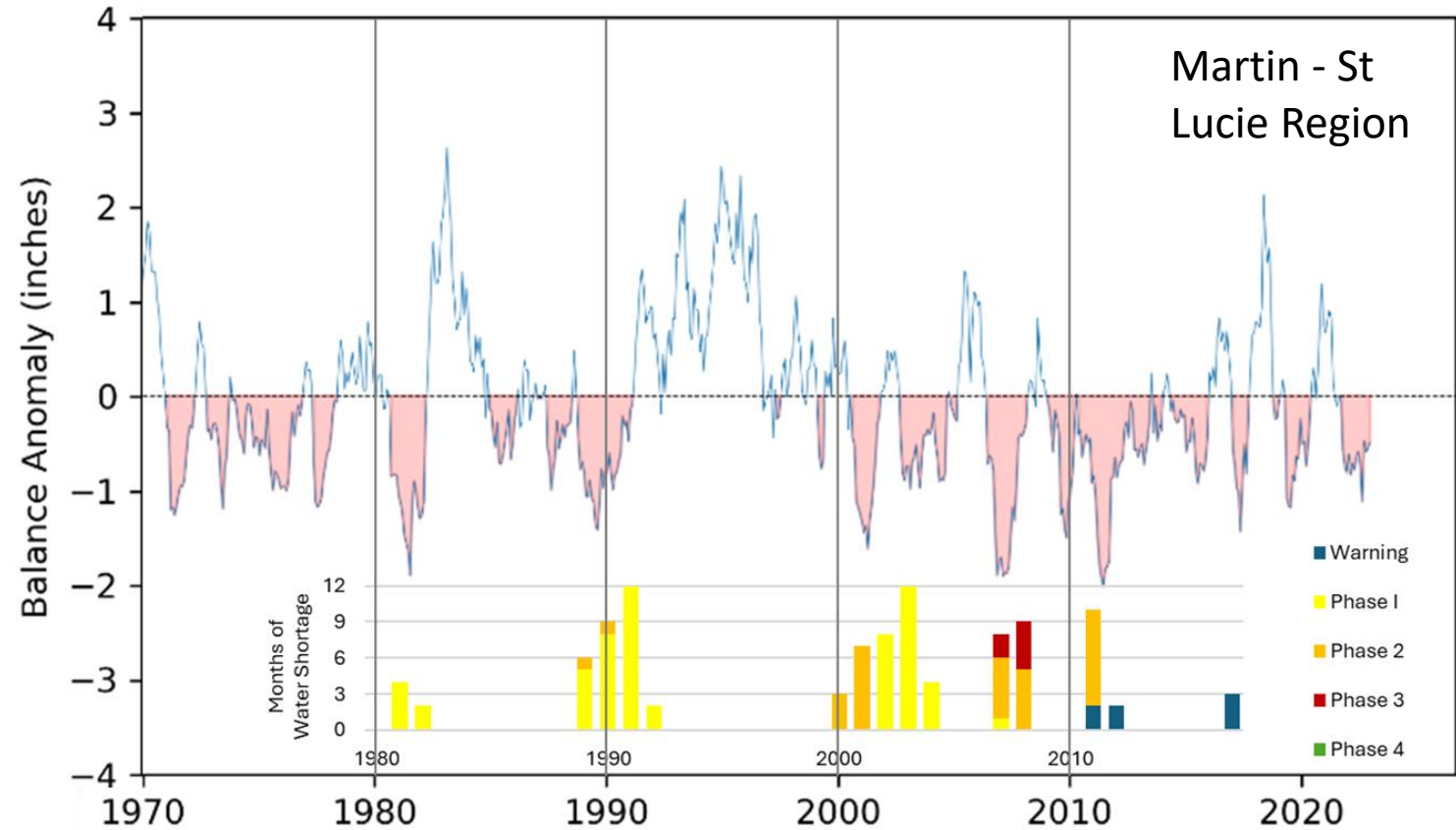
South Florida Environmental Report 2025 Volume I - Chapter 2B

Technical report link: https://sfer-docs.sfwmd.gov/2025_sfer_final/sfer_toc_v1.pdf

Drought Conditions



Meteorological drought – prolonged precipitation deficits, intensified evapotranspiration



Hydrological drought – influenced by antecedent dry periods, ground & surface water storage, land use, human water mgmt. practices

South Florida Environmental Report 2026 Volume I - Chapter 2B

Technical report link: https://sfer-docs.sfwmd.gov/2026_sfer_final/sfer_toc_v1.pdf

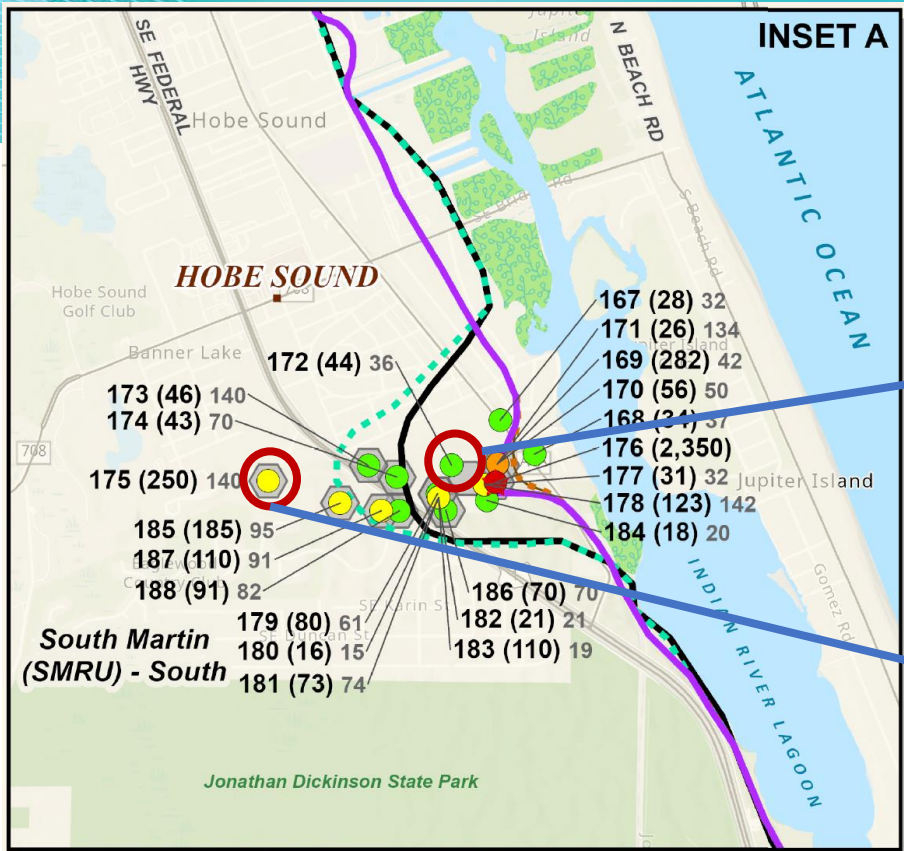
Characterizing projected future droughts for South Florida (2056–2095)

Technical report link: <https://doi.org/10.1007/s00477-025-03019-8>

Saltwater Interface Maps

Observations- Groundwater UEC

Monthly water level and chloride concentrations



Chloride Concentration

- ≤ 100 mg/L
- 101 - 250 mg/L
- 251 - 1,000 mg/L
- > 1,000 mg/L

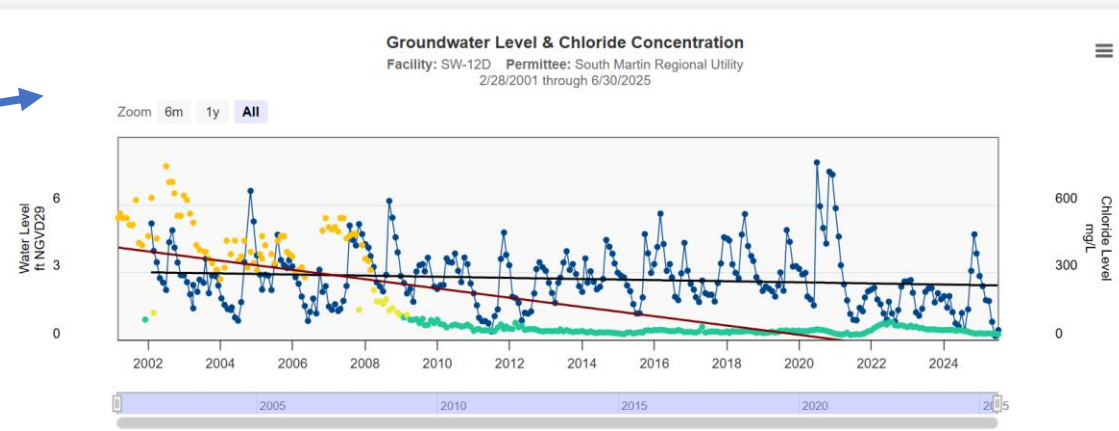
Saltwater Interface: Estimated 250 mg/L Isochlor

- 2024
- - - 2019
- - - 2014
- 2009

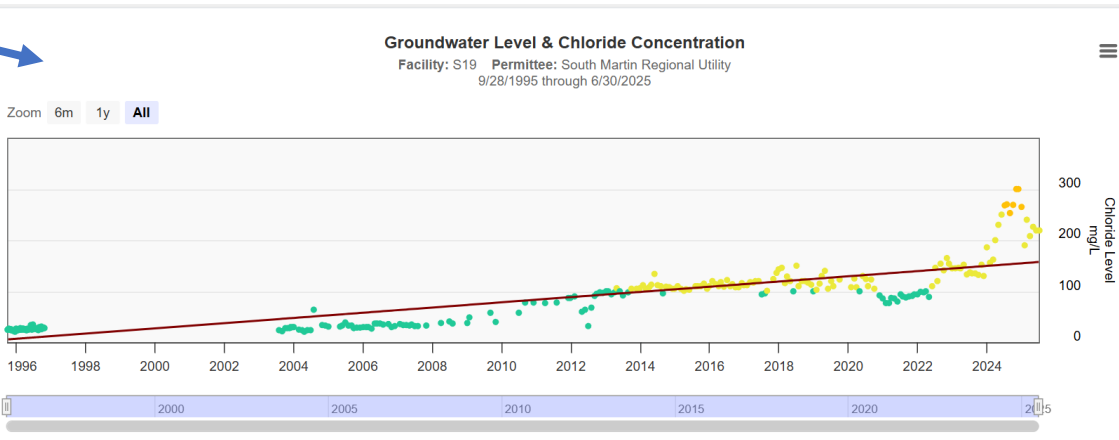
Chloride Labels

●	1 (135)	128
Map ID	2024 Chloride	2019 Chloride

Well Details	
Cased Depth	0 (ft)
Depth	140 (ft)
Pump Intake Depth	0 (ft)
Diameter	0 (in)
X Coordinate (state planar)	940440
Y Coordinate (state planar)	989327
Latitude	27.052731
Longitude	-80.126595

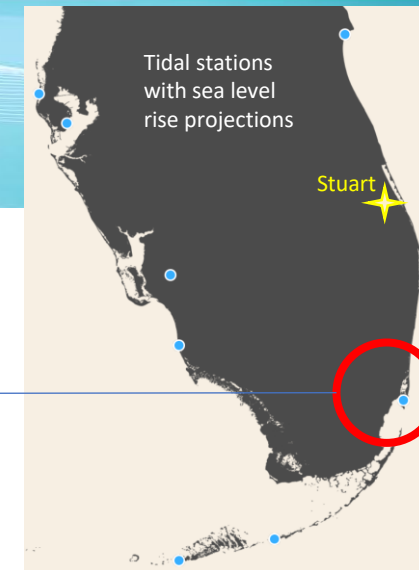


Well Details	
Cased Depth	70 (ft)
Depth	125 (ft)
Pump Intake Depth	0 (ft)
Diameter	16 (in)
X Coordinate (state planar)	937541
Y Coordinate (state planar)	989080
Latitude	27.052106
Longitude	-80.135507

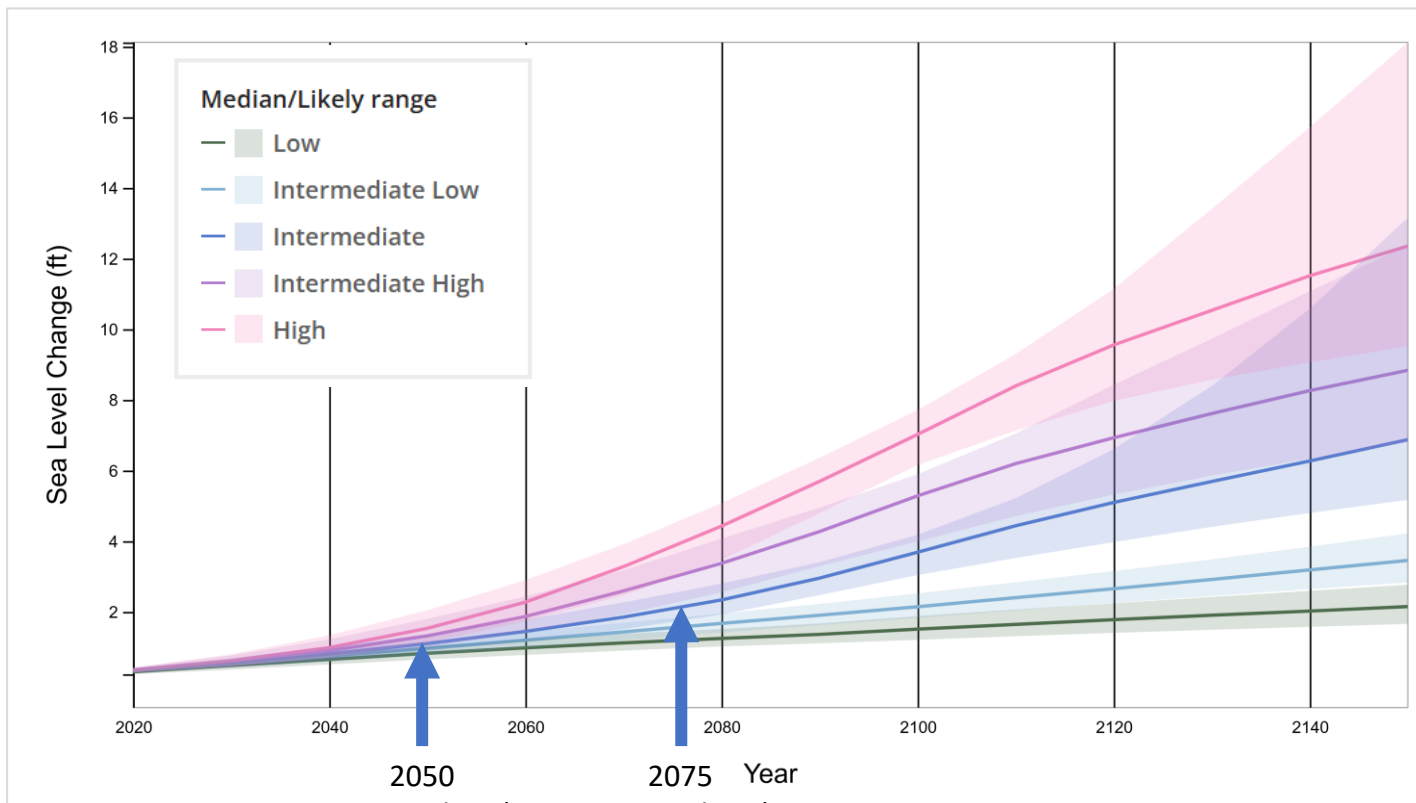


Metrics Hub: [Saltwater Intrusion in Coastal Aquifers](#) for map with links to DBHydro Insights plots and statistics

Projections- Sea Level Rise UEC



NOAA 2025 - Virginia Key, FL



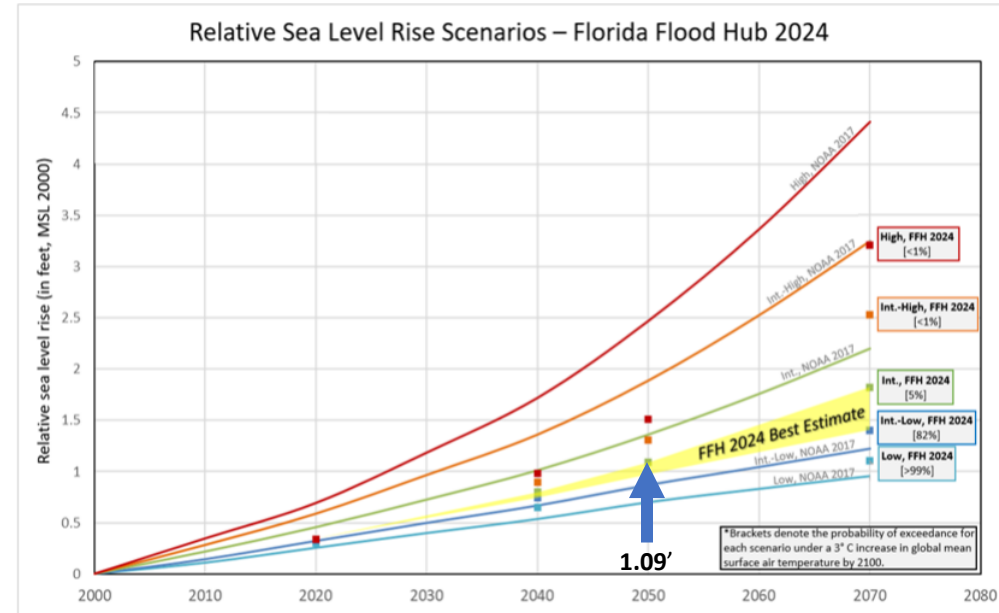
Source: [Interagency Sea Level Rise Scenario Tool – NASA Sea Level Change Portal](#)



Intermediate* 1.10 ft
 Intermediate* 2.10 ft
 * Change relative to 2000

For a vulnerability assessment initiated after July 1, 2024, [apply] at a minimum, the 2022 NOAA intermediate-low and intermediate sea level rise scenarios or the statewide sea level rise projections

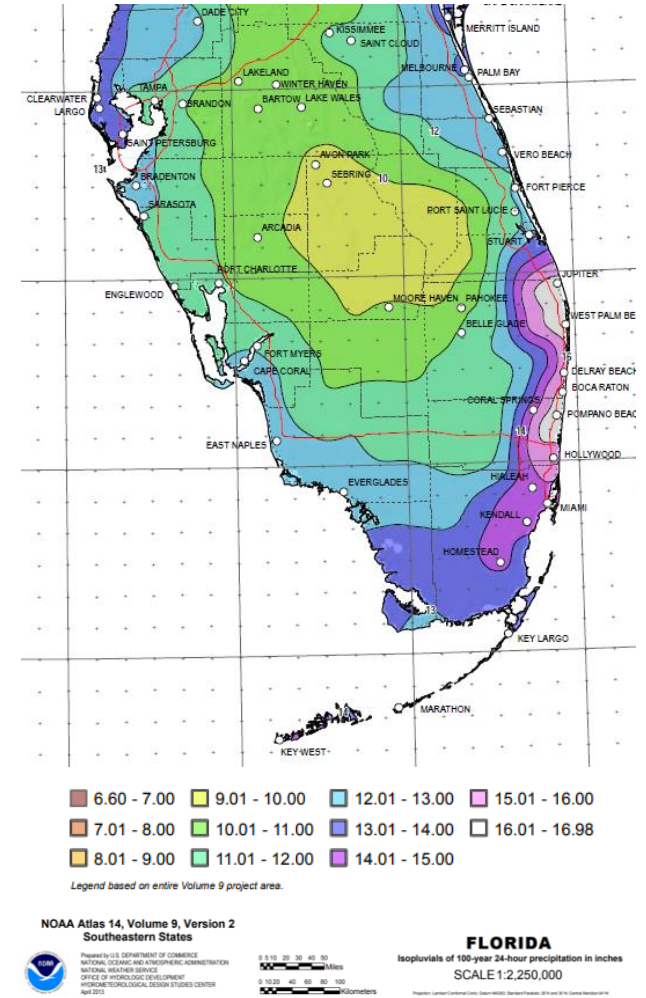
Resilient Florida
[Section 380, Florida Statutes](#)



Source: [Florida SLR Dataset 2.0 | Florida DEP](#)

Future Rainfall Estimates

Values	Regional	Statewide
Reporting Agency	SFWMD	Resilient Florida / Florida Flood Hub
Geographic Area	AHED Rain Area; County	State of Florida
Model Framework	CMIP5	CMIP6
Downscaling Method	All datasets (CORDEX; LOCA; LOCA2; MACA)	LOCA2
Climate Scenario	RCP4.5-RCP8.5	SSP2-4.5, SSP3-7.0, SSP5-8.5
Planning Horizon	2020-2059 (centered in 2040); 2050-2089 (centered in 2070)	2030-2069 (centered in 2050); 2060-2099 (centered in 2080)
Source	2022 SFWMD TM Adoption of Future Extreme Rainfall Change Factors for Resiliency Planning in South Florida rev2.0.pdf	Florida Change Factor Dataset 1.0 Florida Department of Environmental Protection



Collaborators



Irizarry-Ortiz, M.M., Stamm, J.F., Maran, C., and Obeysekera, J., 2022, Development of projected depth-duration frequency curves (2050–89) for south Florida: U.S. Geological Survey Scientific Investigations Report, <https://doi.org/10.3133/sir20225093>.

Irizarry-Ortiz, M.M., 2026, Development of projected depth-duration-frequency curves for precipitation in Florida, 2020–59 and 2050–89: U.S. Geological Survey Scientific Investigations Report 2025–5111, 75 p., <https://doi.org/10.3133/sir20255111>

Planning for Future Conditions

- Commitment to determine the best short- and long-term strategies for water resource management
- Continue to develop and improve data analysis, surface and ground water, coastal and inland, with focus on saltwater intrusion
- Advanced groundwater models being designed to support the evaluation of sea level rise and rainfall changes, anticipate demand and availability impacts and simulate future saltwater inland movement.
- To be expanded to the Upper East Coast planning region for subsequent water supply plans
- Incorporation of future project recommendations as part of the Water Supply Plan and/or District's Resiliency Plan



Water Supply Vulnerability Assessment

South Florida Water Management District

Water Supply Vulnerability Assessment Approach

Planning Assumptions and Scenario Recommendations for the Lower East Coast Region

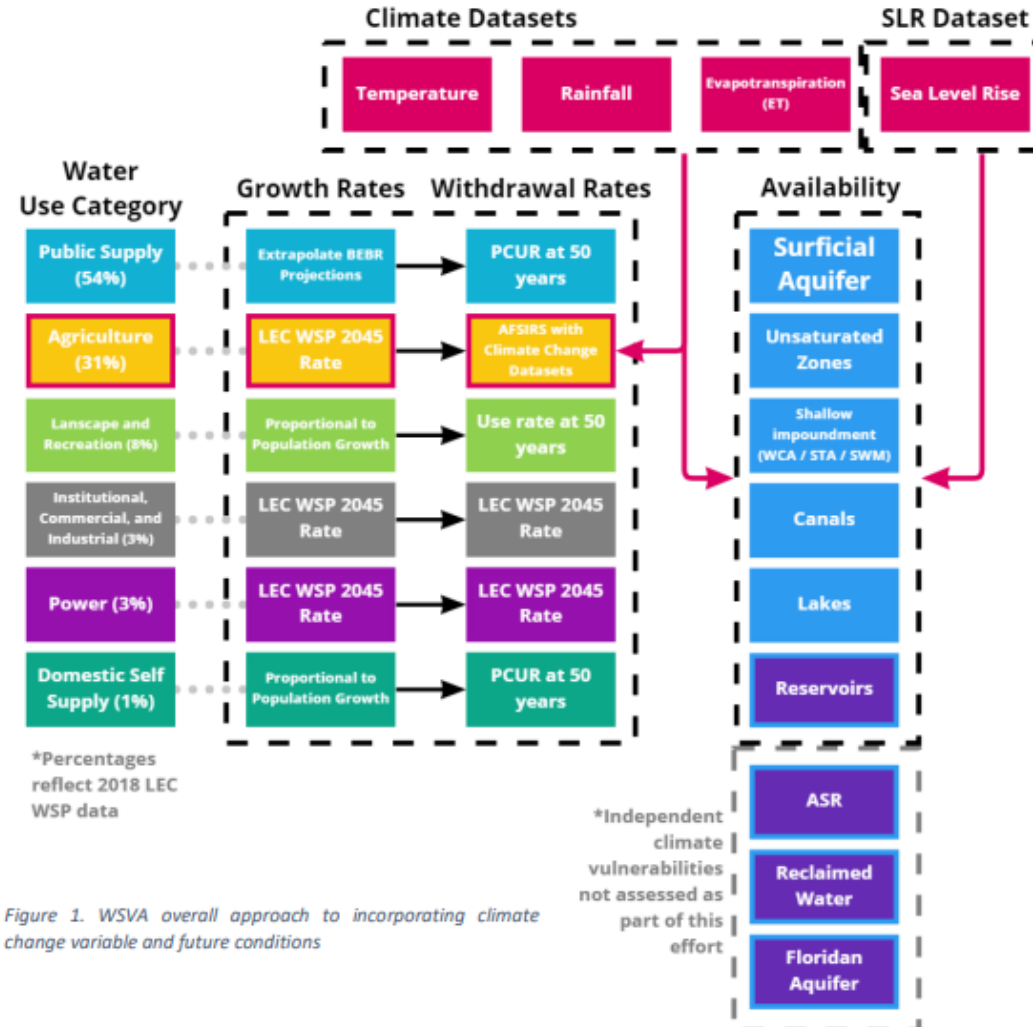


Figure 1. WSVA overall approach to incorporating climate change variable and future conditions

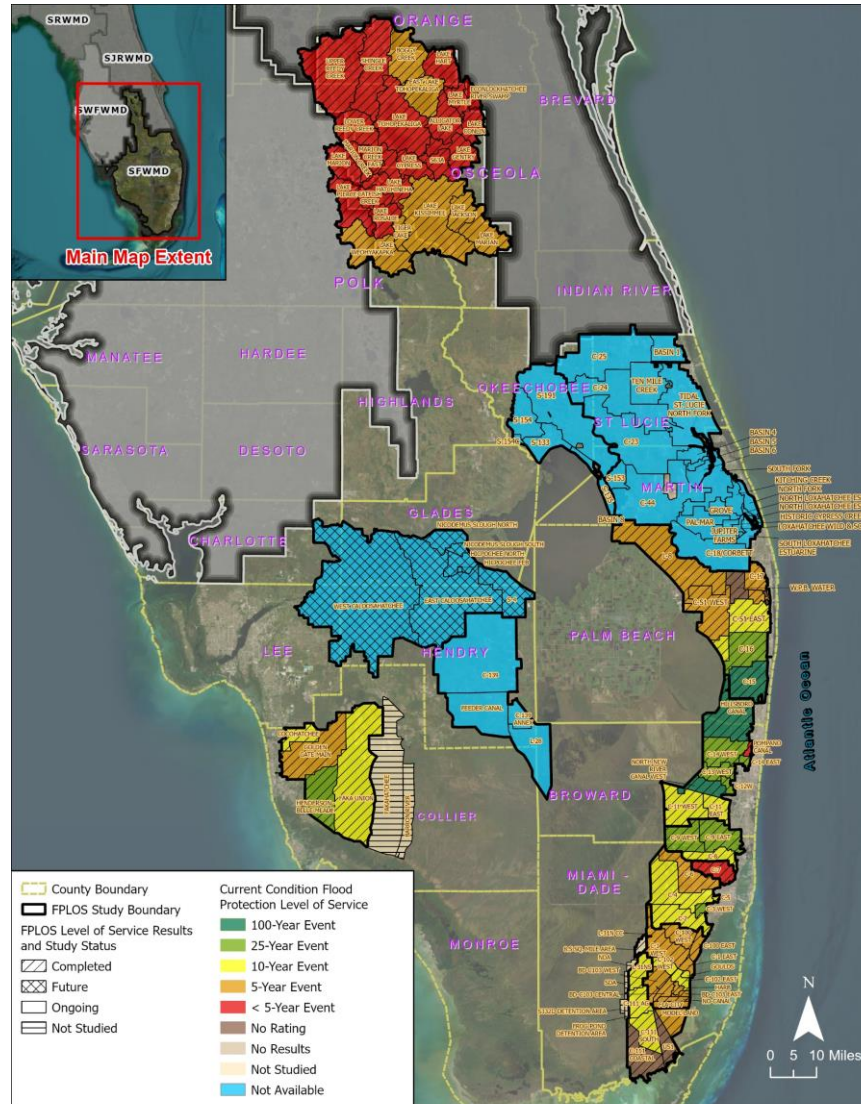
Flood Resiliency Studies

SFWMD

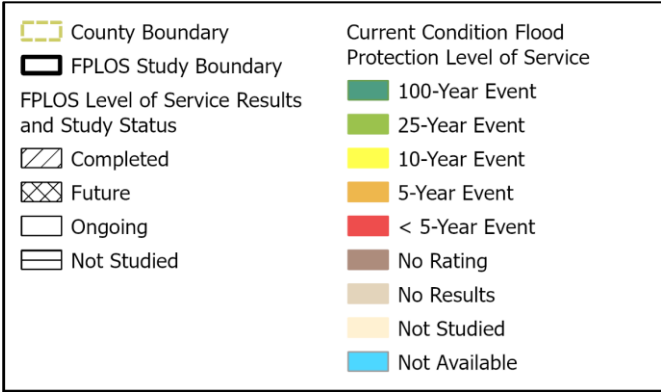
FPLOS Program

- District’s strategy for assessing the impacts of land development, sea level rise and other changing conditions on flood control infrastructure
- Evaluate current and future flood risks to communities in South Florida
- Support decision making on prioritizing and sequencing infrastructure investments

www.sfwmd.gov/our-work/flood-protection-level-service



Current Flood Protection Level of Service and Status of Study



Our Resiliency Vision

Reducing the risks of flooding, sea level rise and other climate impacts on water resources and increasing community and ecosystem resiliency in South Florida

Risk Reduction / Effectiveness

Implementation Resources

Anticipated Future Conditions

Critical Infrastructure and Population Benefits

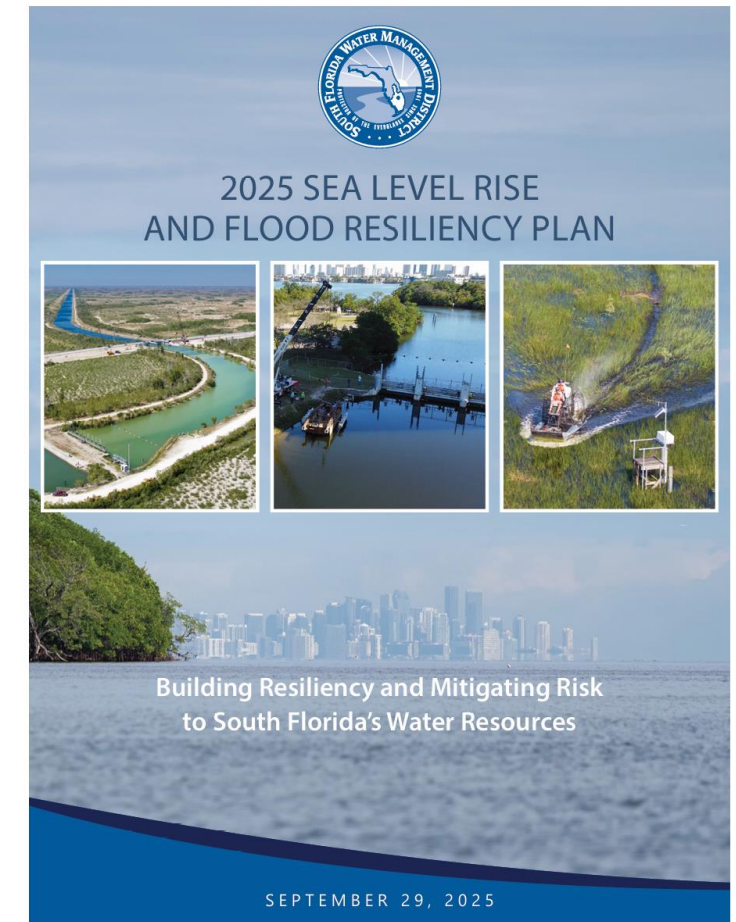
Public Engagement & Leveraging Partnerships

Ongoing Ecosystem Restoration Efforts

Innovative Green/Nature-Based Solutions

Statewide Alignment and the Resilient Florida Program

Plan updated every 5 years, with projects status being updated annually.



Resiliency Plan Dashboard



SFWM Resilience Priority Project Descriptions



Project Selection

Use Dropdown Menus Below to Select Projects by Attributes. Reset the Selection in the Dropdown When Complete. You Can Select Multiple Options from One Filter Selection Type. Clear the Selection to Start New Filtering. Do Not Filter for Multiple Attribute Types.

- Project Name**
Select Project Name(s)
- Implementation Phase Filter**
Select Phase
- Funding Status Filter**
Select Project Funding Status

Select a County
No category selected

Projects Selected

55

Selected Project Impacted Areas

- S-169W Trash Rake
- C-9 Basin Resiliency and S-29 Coastal Structure
- Hardening of S-2, S-3, S-4, S-7, S-8 Engine Control Panels - Building Resiliency in Water Management South of Lake Okeechobee
- Homestead Field Station Replacement
- Big Cypress Basin Microwave Tower
- C-8 Basin Resiliency and S-28 Coastal Structure
- C-14 Basin Resiliency

Legend

Resiliency Project Geodatabase

Structural Components - Under Construction



Structural Components - Existing Structure Proposed Improvements

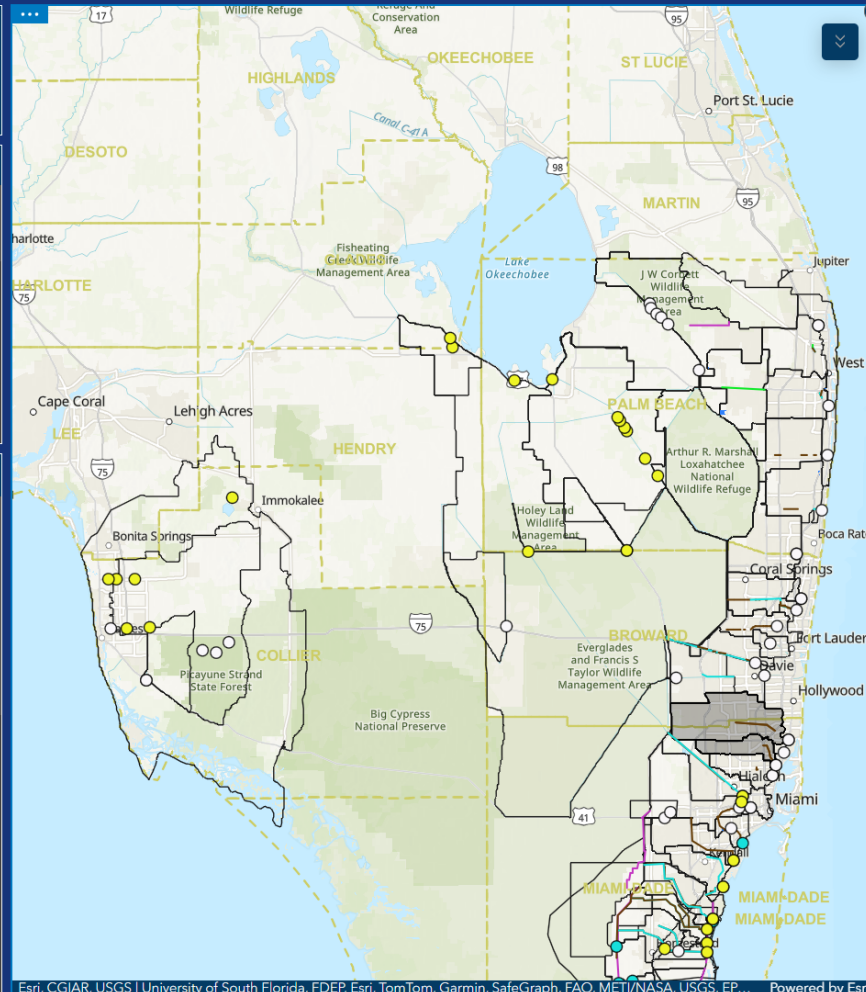


Structural Components - Proposed New Structure



Canal and Levee Improvement Components

- Embankment Maintenance and Elevation Increases
- Canal Dredging to Increase Canal Capacity



Esri, CGIAR, USGS | University of South Florida, FDEP, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EP... Powered by Esri

Structural Projects

Component Name	Description	Design Phase
S-63 Structure Resiliency	New Gate - 29' x 17' (1390 cfs), Demolition & Removal of Existing Structure.	BODR (15%) / Feasibility Study
S-60 Structure Enhancement	New Gate - 29' x 15' (cfs), Demolition & Removal of Existing Structure.	BODR (15%) / Feasibility Study
S-57 Structure Resiliency	New Gate - 9' x 10' (470 cfs), Demolition & Removal of Existing Structure.	BODR (15%) / Feasibility Study
Lake Mary Jane Pump Station	Pump Station Upgrades and Replacement	BODR (15%) / Feasibility Study
S-65 Pump Resiliency	Installation of 2000 cfs Pump	Conceptual Design

Canal & Linear Projects

Component Name	Description	Design Phase
JW Corbett Wildlife Management Area Hydrologic Restoration and Levee Resiliency	2.6 miles levee strengthening and construction has been completed since 2012. 3.7 miles remaining. Proposed 3 miles levee construction to allow operation change to JW Corbett WMA.	Construction
C-29A Canal Embankment Resiliency	The project involves raising canal banks by 3 feet along 1.398 miles to mitigate flood risks during severe storms. Measures include improved drainage systems, installation	BODR (15%) / Feasibility Study

Water Storage Projects

Component Name	Description	Design Phase
Stormwater Green Infrastructure / Nature-Based Solutions	Enhancement of Stormwater Detention at Pickwick Lake	Conceptual Design
Temporary Storage - Two Potential Sites	50 Ac-Ft Excavation; 7450 ft Levee (4-ft height); 1 Gated Inflow/outflow Weir; 100 cfs Pump Station; 112 ac-ft volume storage	Conceptual Design
Temporary Storage - Three	The volume of storage provided by this project is estimated to be 15.2 ac-ft, assuming 2 ft of storage. The	Conceptual Design

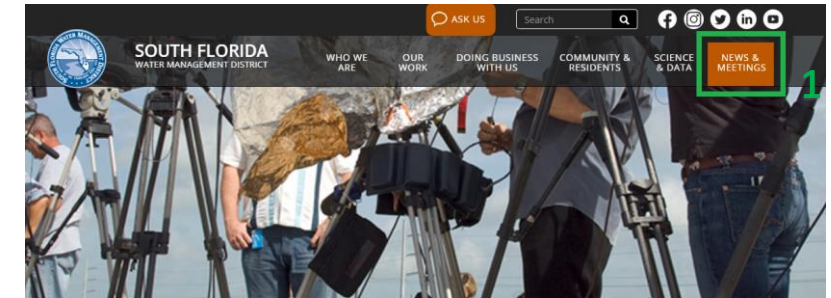
“...hard to recognize, but there used to be a canal somewhere in the foreground.” – Merritt Canal Plugged

Ecosystem Restoration
supports mitigation
against sea level rise
and other impacts
from a changing
climate.

CERP goals are
aligned with the
adaptation strategies
needed to build
Resiliency in South
Florida.

How can you be involved?

- Sign-up for our updates by visiting <https://www.sfwmd.gov/news-events> and following these steps:
 - 1 - Click on the “Subscribe for Email” icon
 - 2 - Enter your email address
 - 3 - Select “District Resiliency”
under Subscription Topics / News
- Contribute on our initiatives and send us an email to resiliency@sfwmd.gov
- Visit www.sfwmd.gov/resiliency to get updated information
- Visit www.sfwmd.gov/meetings to attend and participate at District events



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Thank You

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karismit@sfwmd.gov
www.sfwmd.gov/resiliency

Questions and Public Comment



- If you are participating via Zoom:
 - Use the Raise Hand feature

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 - *6 mutes/unmutes your line

- When you are called on, please state your full name and affiliation prior to providing comments and/or questions

Next Steps



Chad Brcka

Upper East Coast Plan Manager

2026 UEC Stakeholder Meeting #2

June 18, 2026



Next Steps

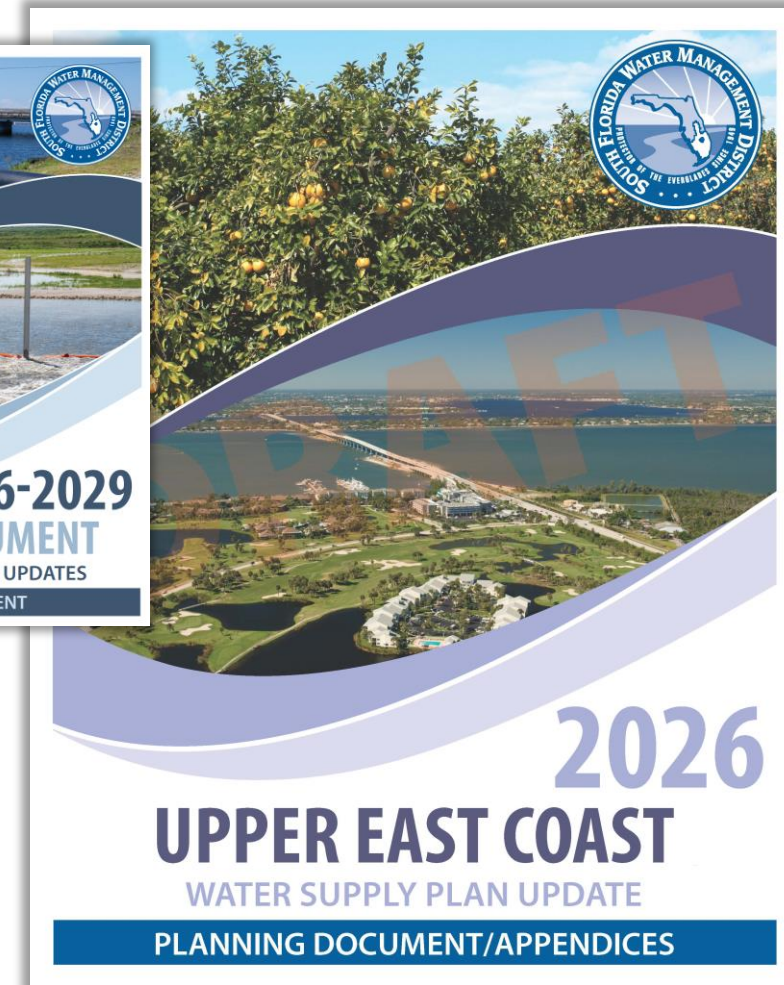
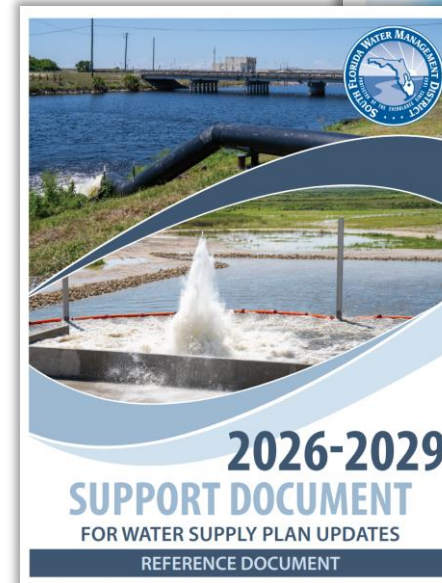
- Continue coordination with utilities, agricultural operations, state agencies, and other stakeholders while drafting remaining chapters and appendices
- Groundwater model simulations
- Next stakeholder meeting: Fall of 2026



2026 UEC Water Supply Plan Organization

- Executive Summary
- **Chapter 1: Introduction**
- **Chapter 2: Demand Estimates & Projections**
- **Chapter 3: Water Conservation**
- Chapter 4: Resource Protection
- Chapter 5: Water Source Options
- Chapter 6: Water Resource Issues & Analyses
- Chapter 7: Water Resource Development Projects
- Chapter 8: Water Supply Development Projects
- Chapter 9: Future Direction
- Appendices **A**, B, C, D, and E

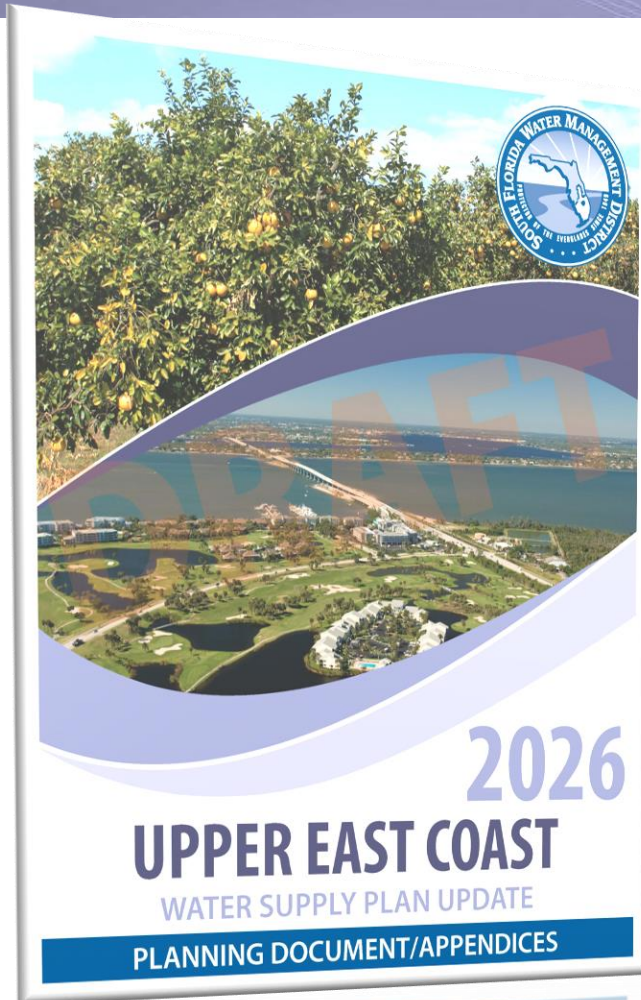
***Bold font indicating posted early draft chapters**



2026 UEC Plan Schedule Summary

Topic	Dates
<i>Stakeholder Meeting 1</i>	<i>April 28, 2026</i>
<i>Early chapters public comment period ends</i>	<i>May 26, 2026</i>
<i>Stakeholder Meeting 2</i>	<i>June 18, 2026</i>
Post Draft Plan for public review & comment	Late-summer/Early-fall 2026
Stakeholder Meeting 3	Fall 2026
Governing Board Meeting (Draft)	September 10, 2026
Full draft public comment period ends	October 12, 2026
Governing Board Meeting (Final)	November 12, 2026

Need Water Supply Plan Information?



- Plan information can be found at www.sfwmd.gov/uecplan
 - 2021 UEC Plan and previous
 - Draft Chapters 1-3 and Appendix A for the 2026 UEC Plan update
 - Upcoming Workshop information
- Workshop announcements sent via email

Questions and Public Comment

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