



# Central and Southern Florida Flood Resiliency Study

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Governing Board Meeting  
March 12, 2020



# Overview

- Central and Southern Florida (C&SF) project background
- Previous review study: Comprehensive Everglades Restoration Plan
- New review study due to changed conditions: C&SF Flood Resiliency Study
- Impacts observed and SFWMD efforts to address changed conditions
- Other Coastal Studies & USACE Coordination
- Initial Appraisal Report request and next steps

Board's Action: consider approval of SFWMD Letter of Endorsement to  
C&SF Flood Resiliency Study – USACE Budget Request

# Background: Central & Southern Florida Project

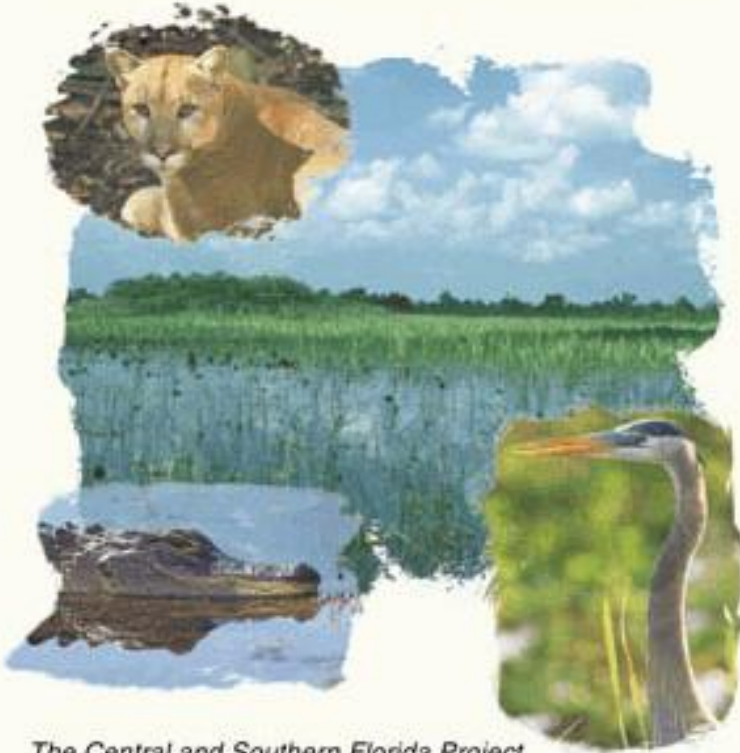


- Flood Control Act of 1948 – Congress authorizes the U.S. Army Corps of Engineers to design and construct water management infrastructure
- Projected to serve a population of 2 million people
- Authorized purposes: flood control, water supply, navigation, prevention of saltwater intrusion, and protection of fish and wildlife resources
- Served as the foundation for the creation of the District



# Comprehensive Review Study

*Rescuing an Endangered Ecosystem:  
The Plan to Restore America's Everglades*



*The Central and Southern Florida Project  
Comprehensive Review Study  
(The Restudy)*

Central and Southern  
Florida Project (C&SF)  
Restudy – WRDA 1992

Reconnaissance  
Report by USACE -  
1994

Governor's Commission for a Sustainable  
South Florida develops Conceptual Plan –  
1996

Comprehensive  
Review Study by  
USACE - 1999

CERP authorized  
by Congress - 2000

CENTRAL AND SOUTHERN FLORIDA PROJECT  
COMPREHENSIVE REVIEW STUDY  
  
FINAL  
INTEGRATED FEASIBILITY REPORT AND  
PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

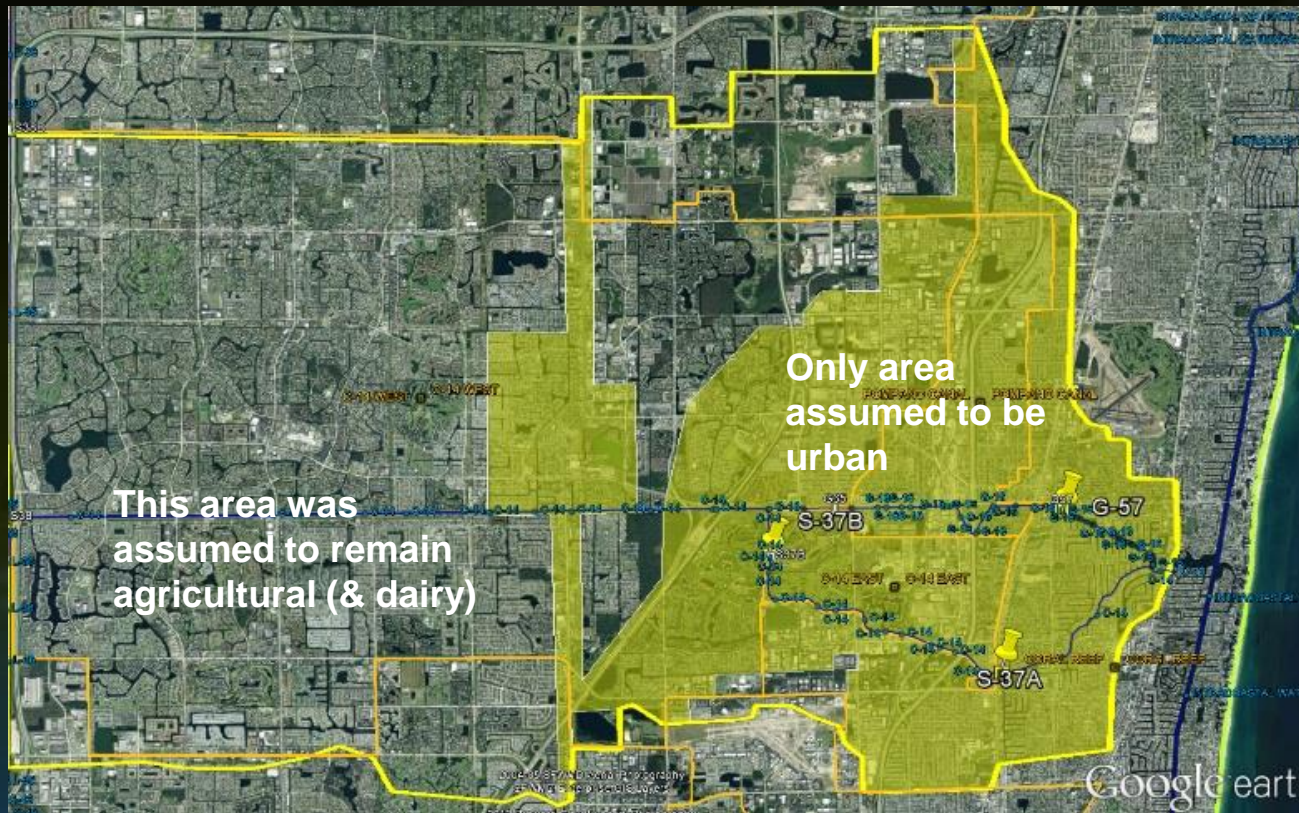


April 1999

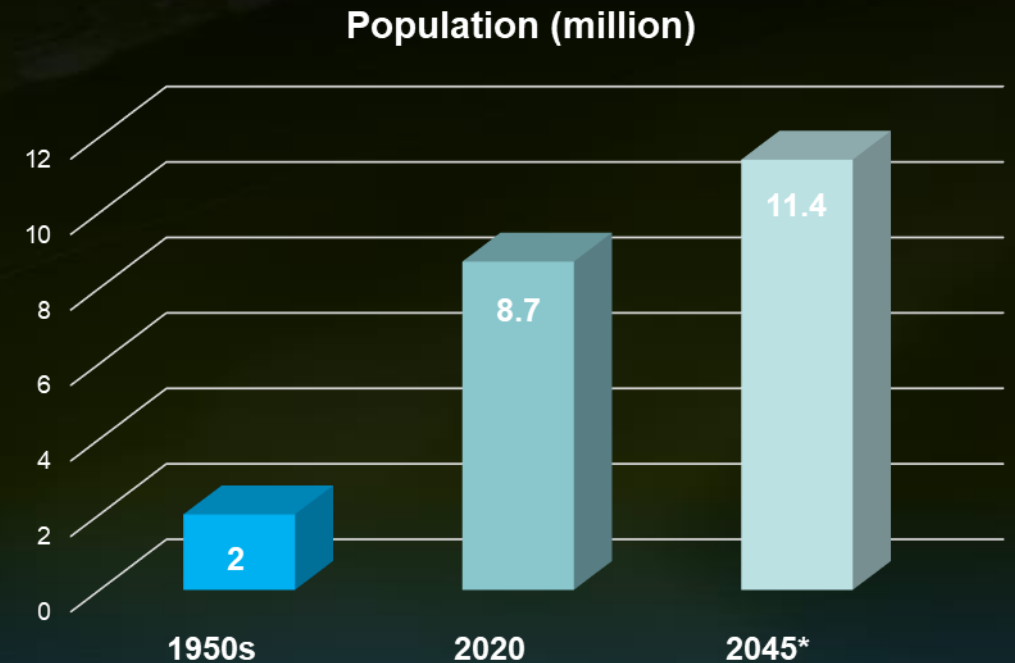


# New Review Study: Changed Conditions

## LAND DEVELOPMENT



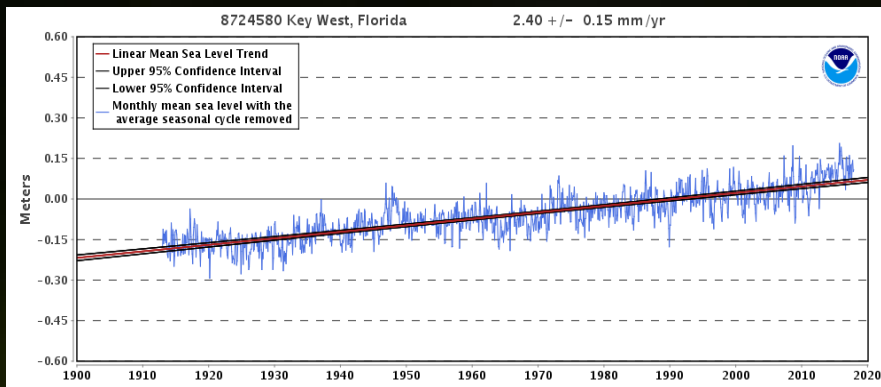
## POPULATION GROWTH



\* Estimate taken from BEBR 2017 publication (Median, SFWMD boundaries)

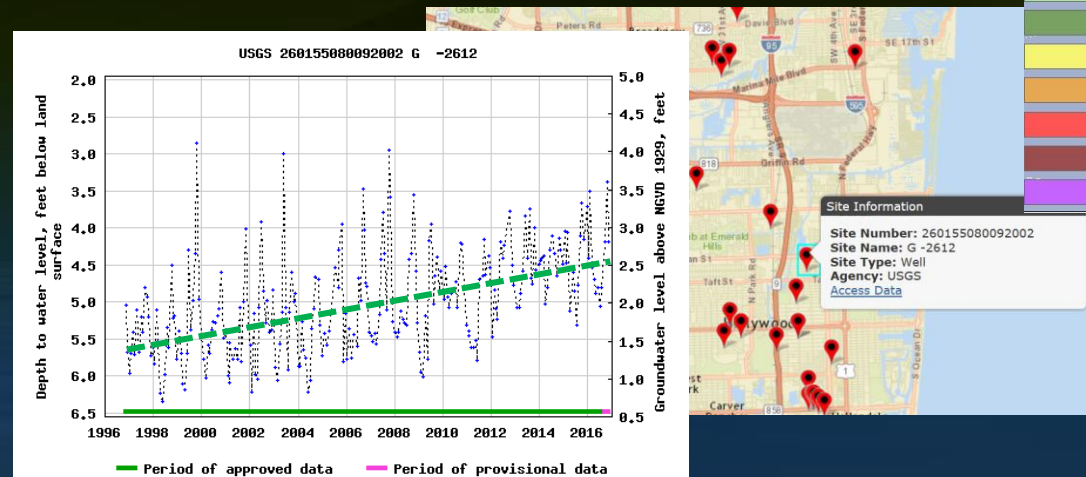
# Climate Changed Conditions

## SEA LEVEL RISE

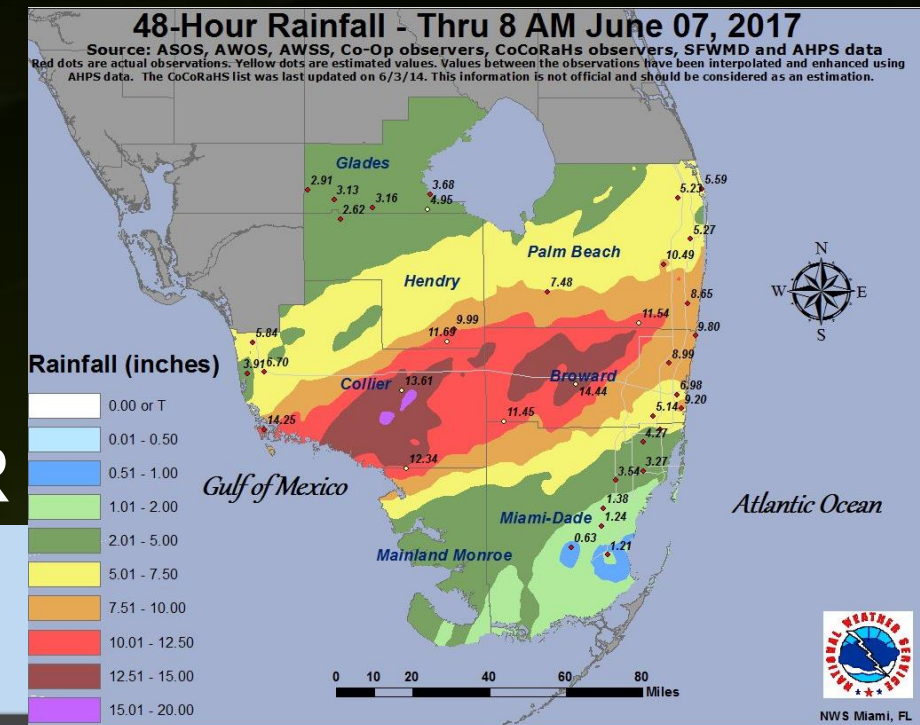


*Associated with High Tides*

## HIGHER GROUNDWATER

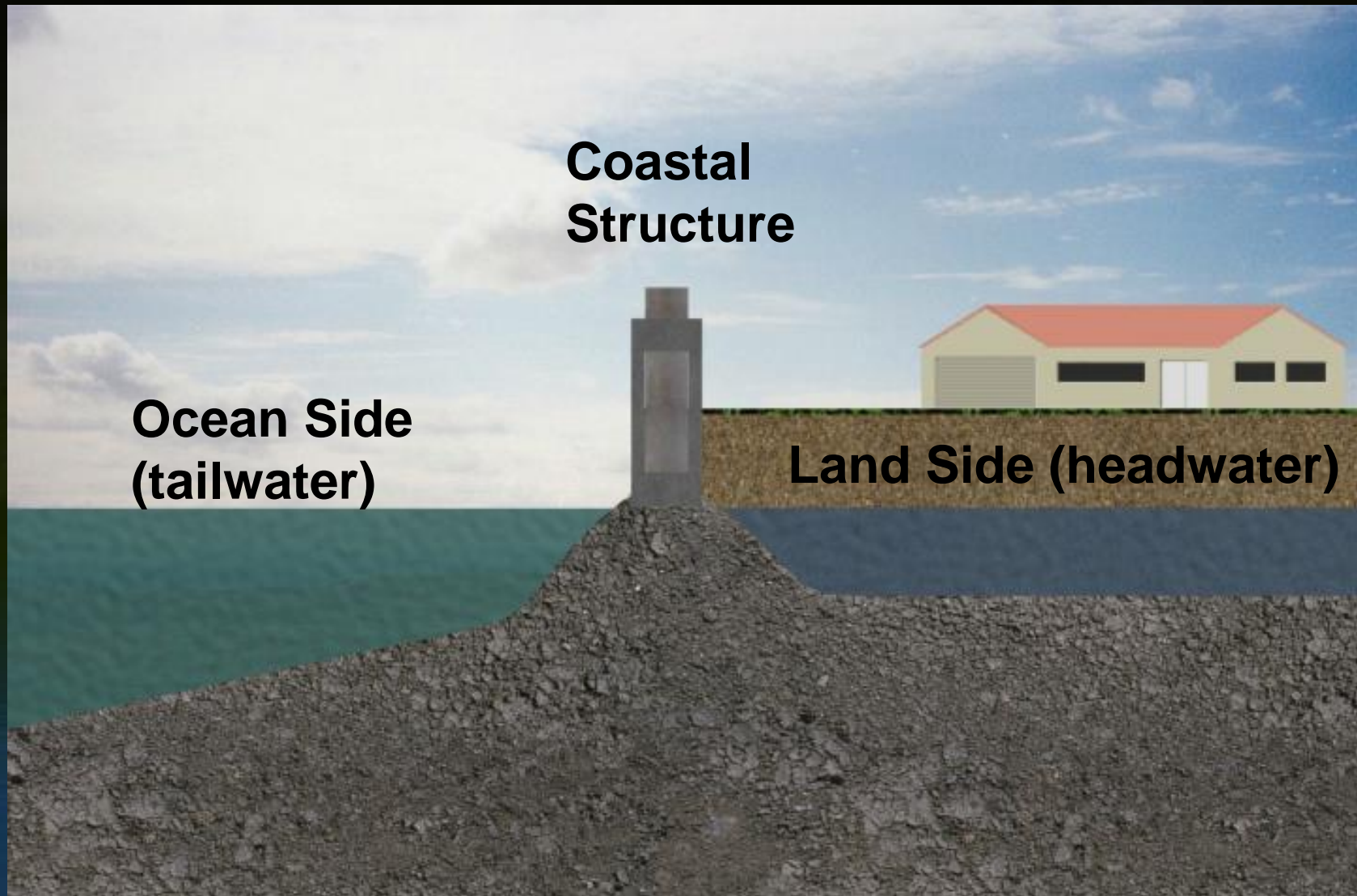


## MORE EXTREME RAINFALL



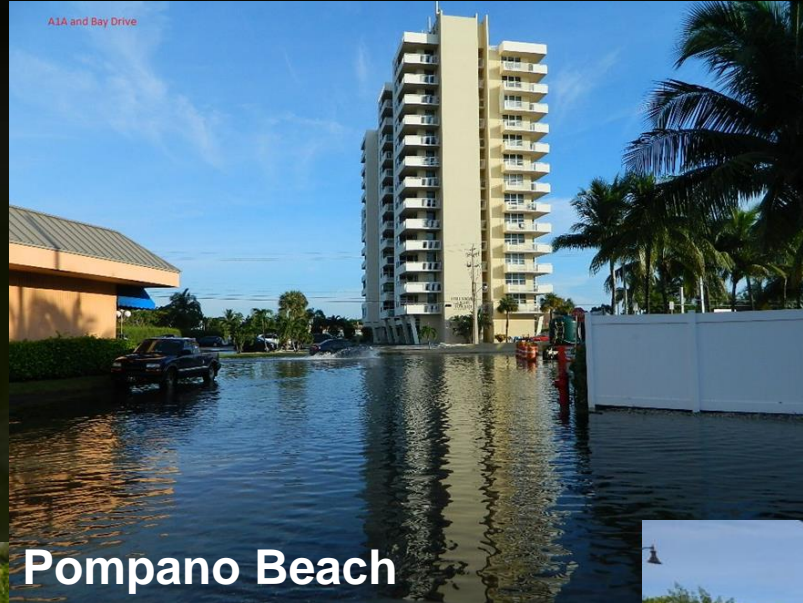


# Impacts Already Being Observed





# Sunny Day Flooding



Pompano Beach



Delray Beach



Miami Beach



Lantana



# Extreme Rainfall Flooding



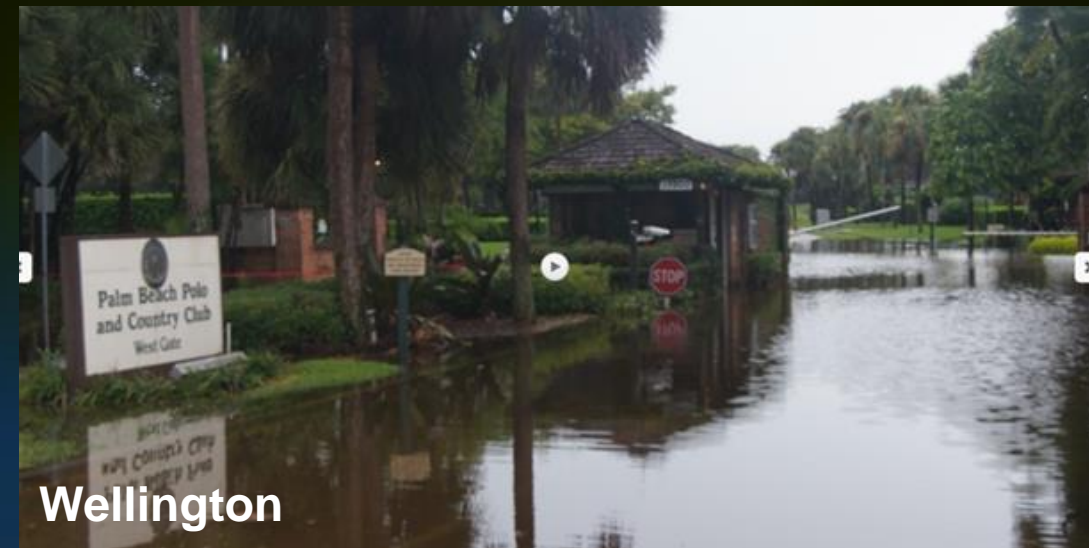
North Miami



Pure Thoughts Horse Rescue - Loxahatchee



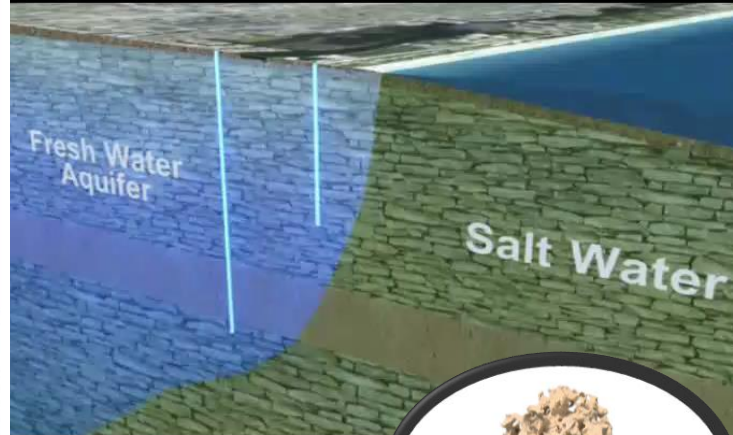
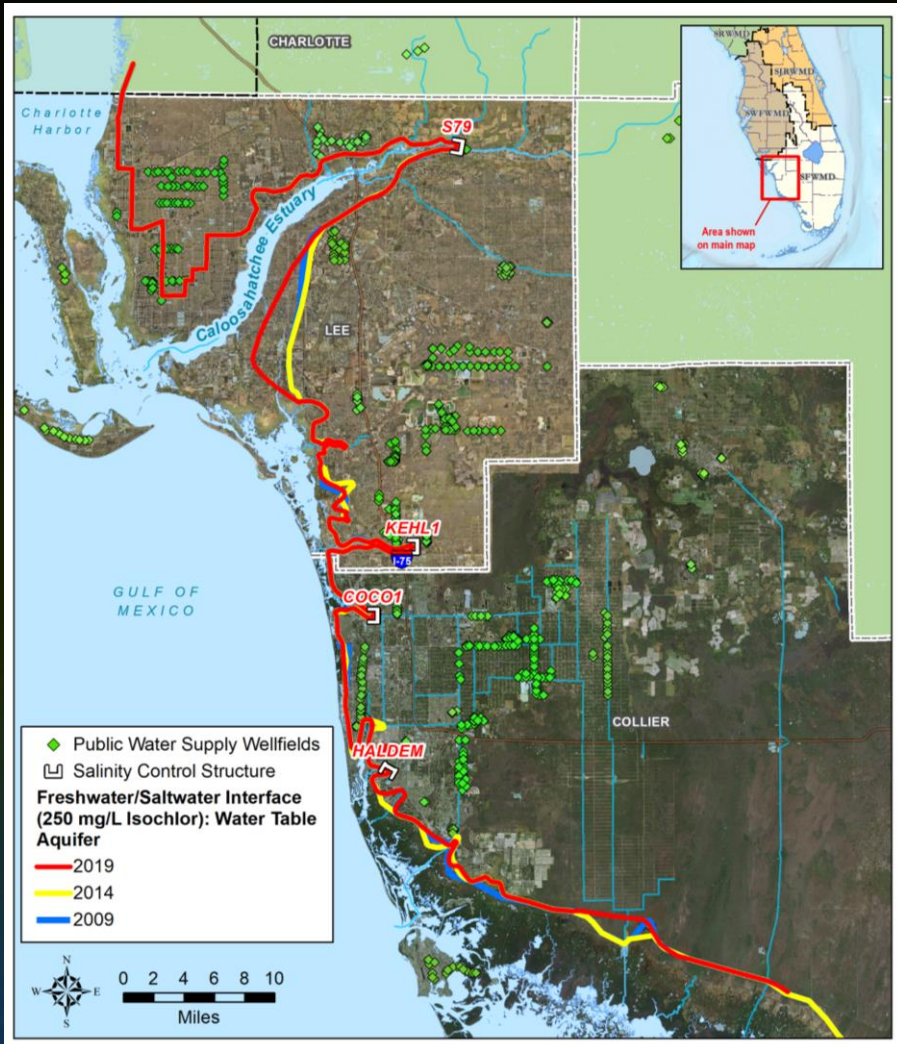
Sawgrass Mall - Sunrise



Wellington

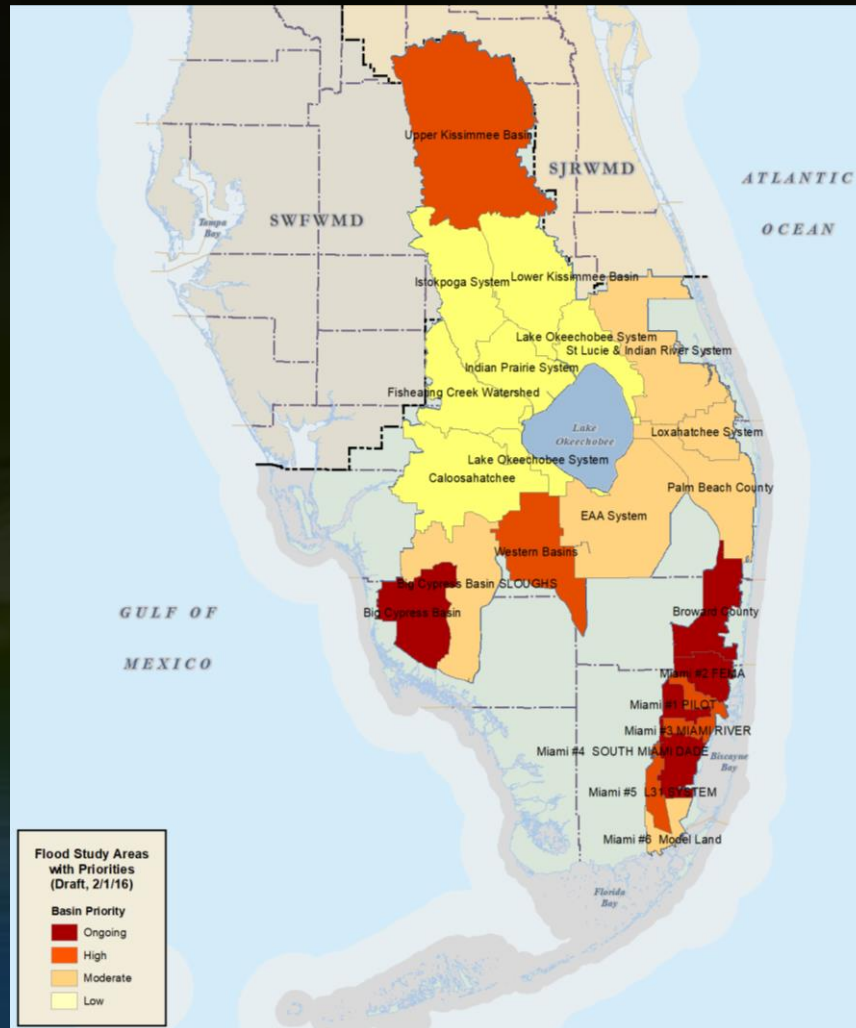


# Saltwater Intrusion



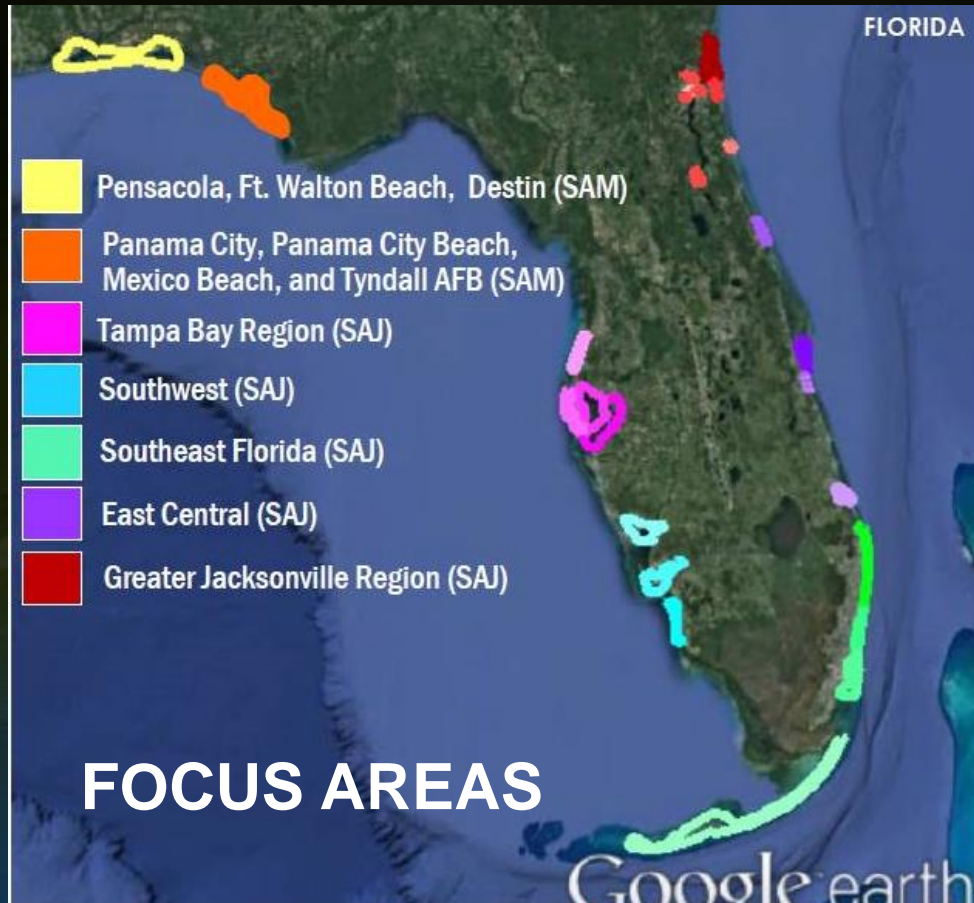


# Flood Protection Level of Service Program

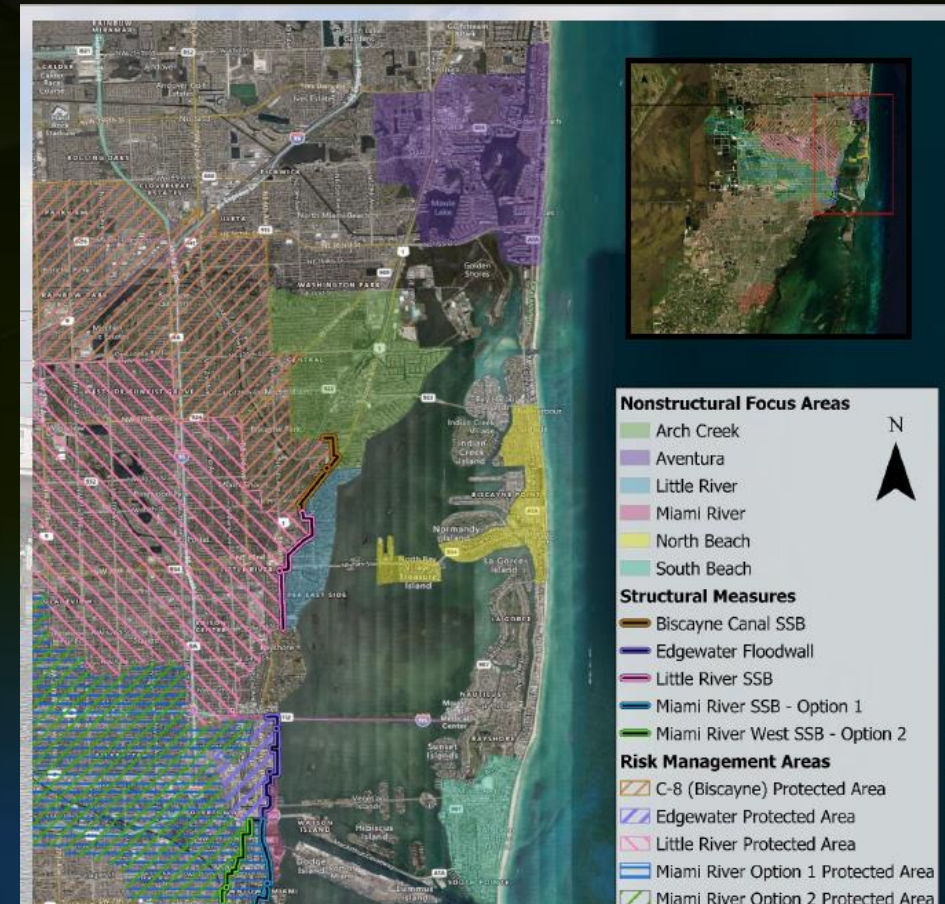


# Additional Efforts: Coastal Study Examples

## SOUTH ATLANTIC COASTAL STUDY (SACS)



## MIAMI-DADE BACK BAY COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY





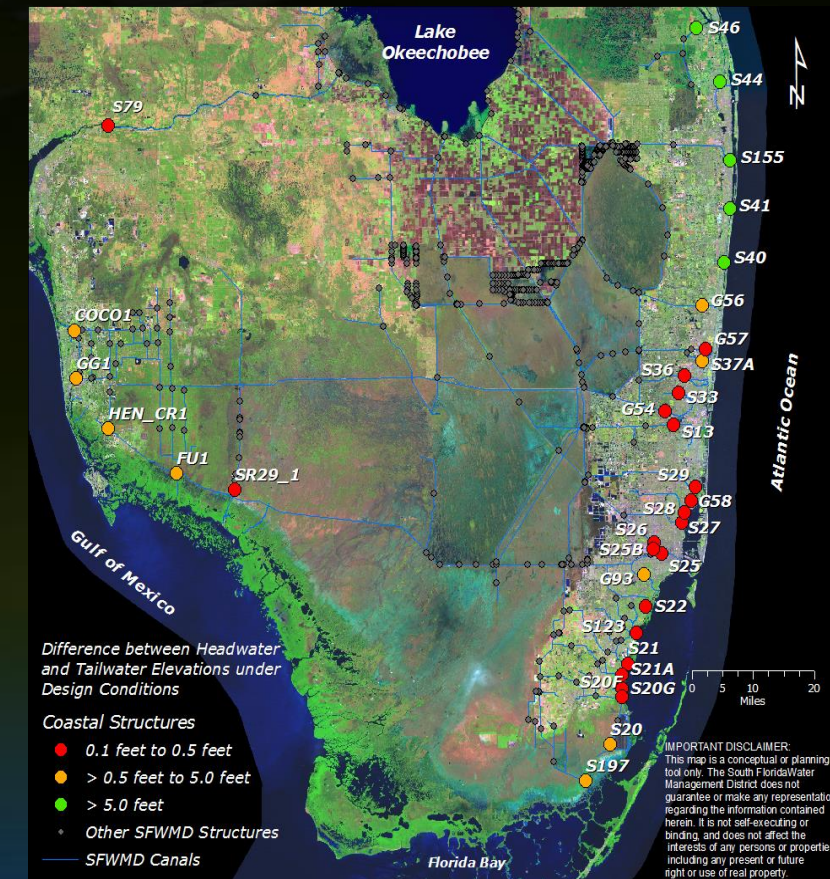
# C&SF Flood Resiliency Study

- Current request: C&SF Review Study due to changed physical conditions
- Conducted under section 216 of the Flood Control Act of 1970
  - Initial request for \$6M over 4 years
- USACE Jacksonville District is completing a 216 Initial Appraisal Report in order to qualify for study funds
- FY22 Regular Budget or FY21 Workplan



# C&SF Flood Resiliency Study

- Opportunity to address vulnerabilities with a phased approach
- Identify improvements needed and inform how the system should look, operate, and adapt considering changes since initial construction
- Focus on the project features which can reduce the most immediate flood risk, based on a broad C&SF system overview
- Selection of critical structures will be defined jointly between SFWMD and USACE
- Study would be conducted in coordination with stakeholders, Federal agencies, State, Tribal and local officials.





# Next Steps

- Consider approval of the SFWMD Letter of Endorsement to the USACE to seek federal funding to initiate a Section 216 Feasibility Study
- Federal Cost-Share Agreement for the C&SF Review Study at 50%/50% cost-share
  - Preliminary Engineering and Design through a 75%/25% cost-share agreement
- Project Partnership Agreement for construction at 65%/35%
- 100% O&M will be SFWMD's responsibility (continue non-federal sponsor)



2020





# Discussion

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