



December 18, 2025

Public Meeting – Draft Integrated Feasibility Report and Environmental Evaluation

Central & Southern Florida System Flood Resiliency Study (Section 203) for Broward Basins



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Public Meeting – Draft Integrated Feasibility Report and Environmental Evaluation

Welcome and Introductions

Steven A. Geller, Commissioner, Broward County
Carolina Maran, Division Director, SFWMD

Central & Southern Florida System
Flood Resiliency Study (Section 203) for Broward Basins



MEETING AGENDA



South Florida Water Management District

CENTRAL AND SOUTHERN FLORIDA (C&SF) FLOOD RESILIENCY (SECTION 203) STUDY - BROWARD BASINS DRAFT INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL EVALUATION AGENDA

December 18, 2025
10:00 AM

Broward County Government Center West
1st Floor MAP Meeting Area
1 North University Drive, Suite 1400A
Plantation, FL 33324

Zoom Registration Link: <https://broward-org.zoomgov.com/meeting/register/ivVA3eigS5uBevgf55JOgQ#/registration>

1. Welcome and Introduction - Steven A. Geller, Commissioner, Broward County; and Carolina Maran, Ph.D., P.E., Division Director of Flood Control and Water Supply Planning, Chief of District Resiliency, SFWMD
2. Tentatively Selected Plan - Walter Wilcox, Bureau Chief of Water Resources Systems Modeling, SFWMD
3. Draft Integrated Feasibility Report and Environmental Evaluation - David Griffin, CFM, PWS, Resiliency Project Manager, SFWMD
4. Next Steps - David Griffin, CFM, PWS, Resiliency Project Manager, SFWMD
5. Public Comment
6. Closing Remarks - Carolina Maran, Ph.D., P.E., Division Director of Flood Control and Water Supply Planning, Chief of District Resiliency, SFWMD
7. Adjourn





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Tentatively Selected Plan

Walter Wilcox, Bureau Chief of Water Resources Systems Modeling, SFWMD

Central & Southern Florida System
Flood Resiliency Study (Section 203) for Broward Basins



Resiliency Initiatives Coordination

Integrating Inland and Coastal Flood Mitigation Strategies

Counties
Studies/
Projects

Water Control
Districts and
Municipalities
Projects

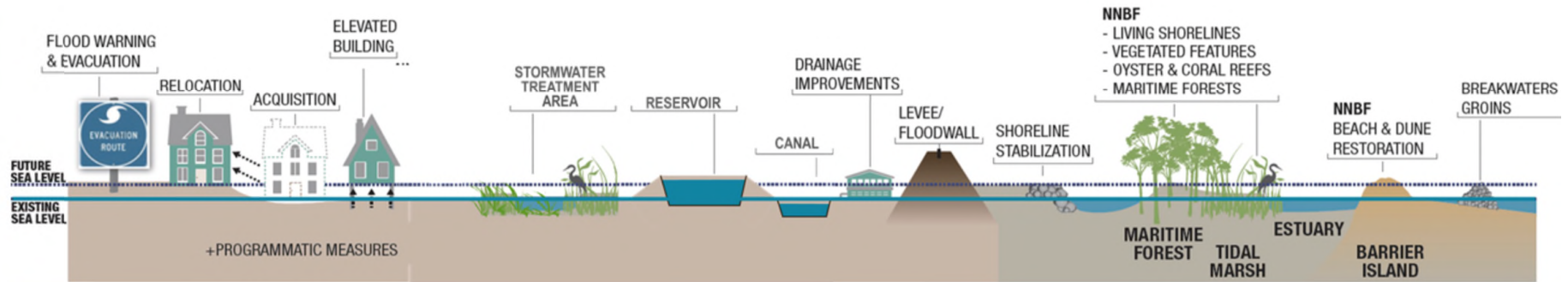
USACE
Studies/
Projects

Regional
Climate
Compacts

Other Partners

POTENTIAL MEASURES TO IMPROVE RESILIENCE AND SUSTAINABILITY

Graphic modified from https://ewn.el.erdc.dren.mil/nmbf/other/5_ERDC-NMBF_Brochure.pdf





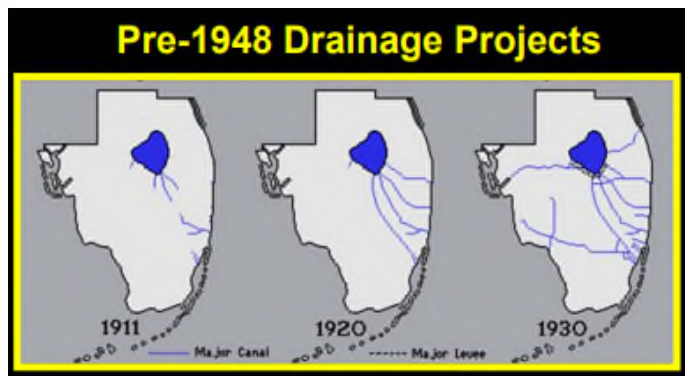
Central & Southern Florida (C&SF) Project

- Flood Control Act of 1948 – Congress authorizes the U.S. Army Corps of Engineers (USACE) to design and construct water management infrastructure
- South Florida Water Management District (SFWMD) is the local sponsor and 50/50 partner on the C&SF Project
- 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

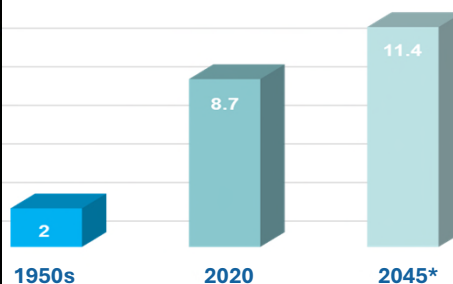




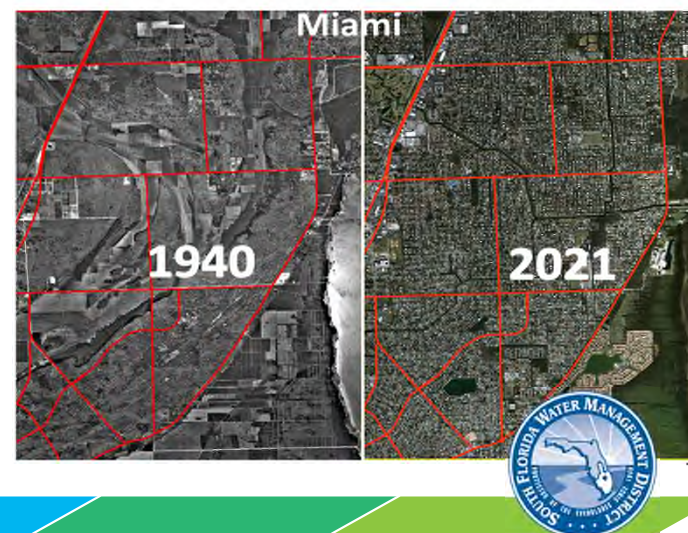
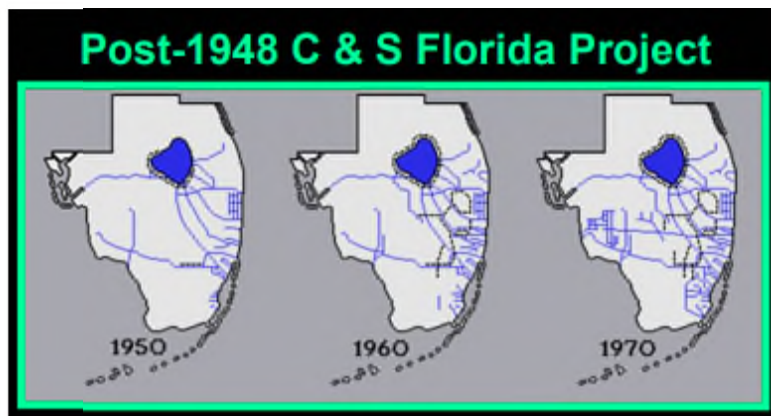
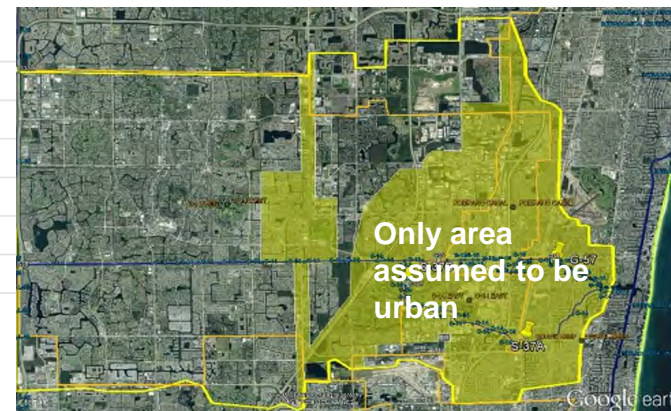
RECOGNIZING CHANGED CONDITIONS



POPULATION GROWTH
(millions)



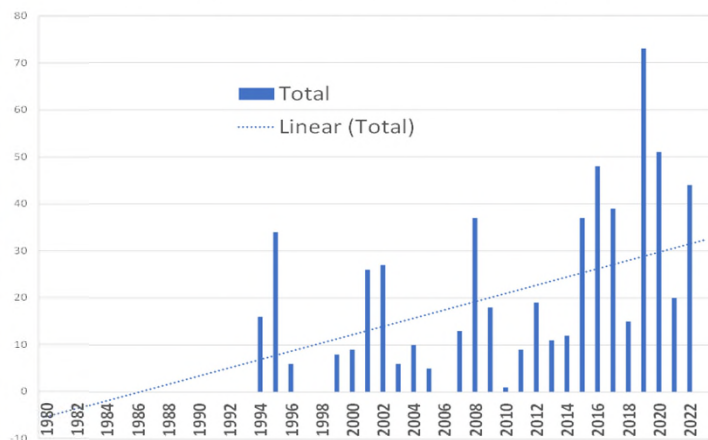
* Estimate taken from BEBR 2017 publication
(Median, SFWMD boundaries)



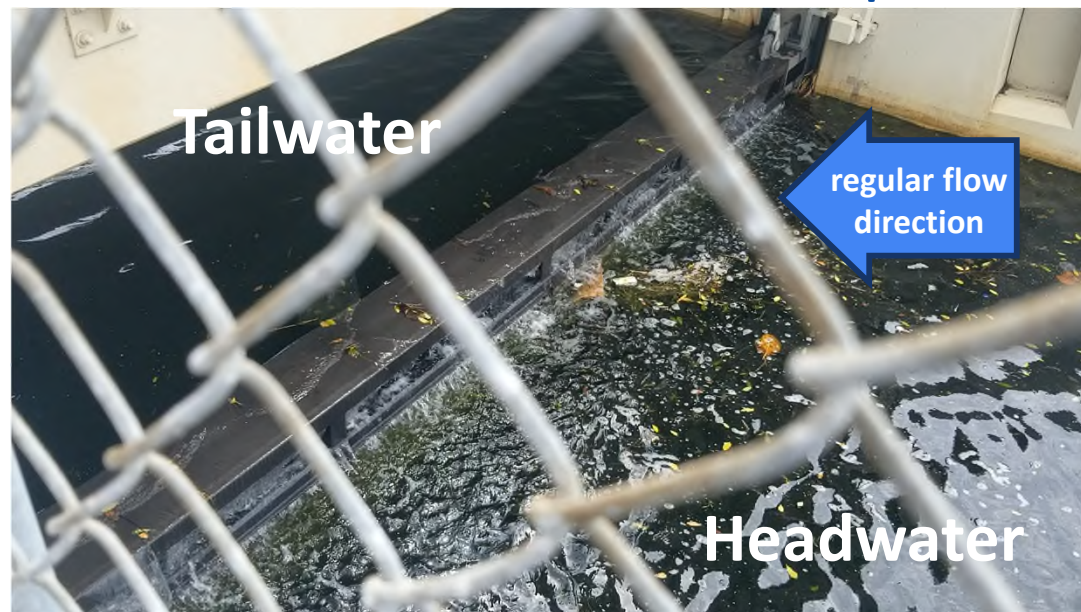


CHANGING CONDITIONS: SEA LEVEL RISE

S28 - Number of Days in a Year where TW > HW



Coastal Structure Gate Overtop



Saltwater moving inland, bypassing the top of the gate of the salinity coastal structure during a High Tide event in 2019. Similar conditions were observed during recent King Tide peaks.





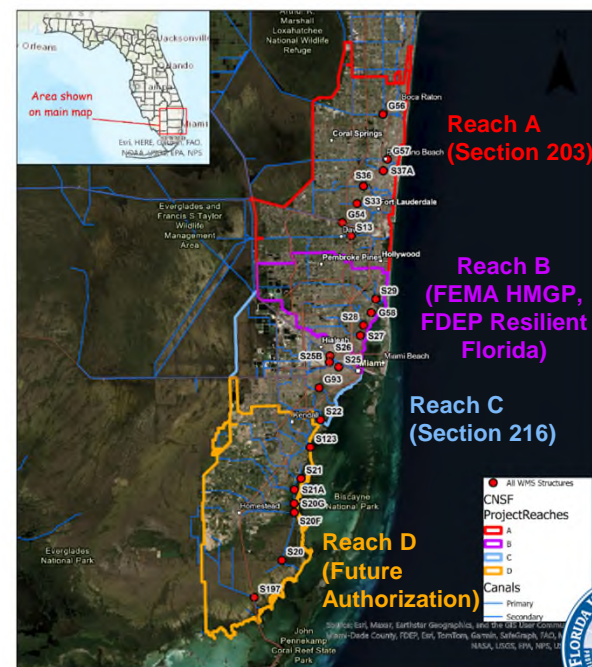
SECTION 203

C&SF FLOOD RESILIENCY STUDY FOR BROWARD BASINS

Project Goals: To develop, evaluate and recommend flood risk management measures and adaptation strategies to build flood resiliency in the communities served by the C&SF system, now and in the future

Study Objective: Enhance C&SF Project **water control structures' functionality and capacity** to reduce flood damages and improve resiliency caused by inundation and changed conditions within the Study Area over the 50-year period of analysis of 2035–2085

- Study using WRDA 1986 **Section 203 process** to complete an integrated Flood Resiliency Study and required NEPA documentation for Broward Basins
- SFWMD is the **Non-Federal Sponsor** in partnership and with funding support from **FDEP and Broward County**
- Study focuses on the primary canals and coastal water control structures in the managed watersheds that are part of the C&SF Project
- **Leveraging C&SF Flood Resiliency Study (216 Study) Milestones - Reach A**
- Project management, modeling, and evaluations completed by SFWMD
- Consulting services providing technical, policy, modeling, and engineering support services
- Federal assistance from the USACE Jacksonville District
- **Targeting authorization in WRDA 2026**



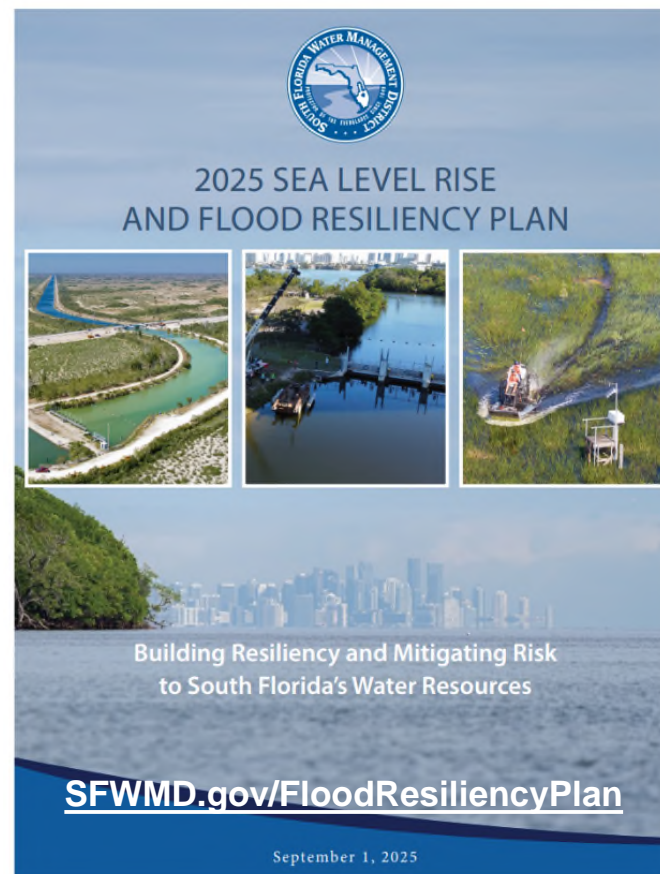


PLAN FORMULATION AND STUDY APPROACH

Where Our Study Foundation Came From:

To build this project study, we pulled together resources and information from many places, including:

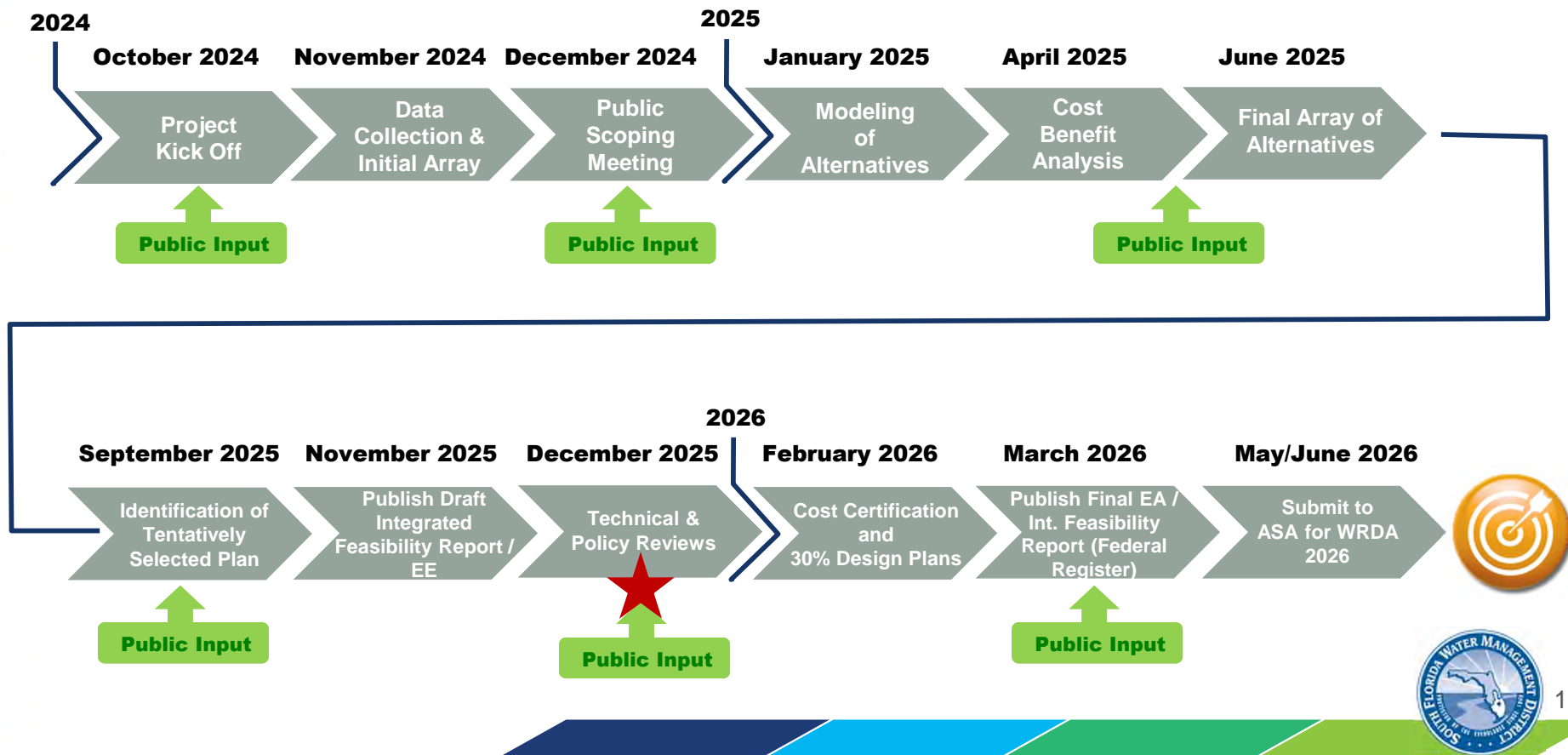
- C&SF Flood Resiliency Study (Section 216)
- SFWMD Sea Level Rise and Flood Resiliency Plan
- SFWMD Flood Protection Level of Service Program
- Broward County's resiliency planning efforts
- Comments from the scoping meeting and scoping letters
- Feedback from public meetings





BB-203 PROJECT SCHEDULE

Targeting June 2026 - Deliver Final Integrated Feasibility Report and Environmental Assessment (EA) to ASA Civil Works

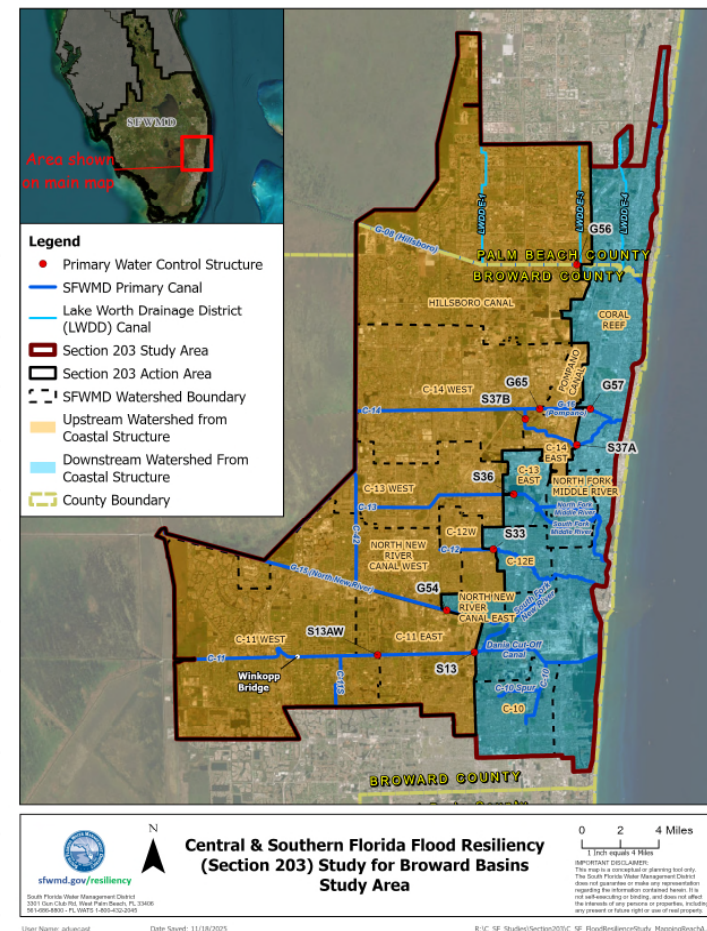




Project Study Area – Managed Basins

- Nine (9) Upstream Inland Managed Watershed Basins
- Seven (7) Primary Canals
- Nine (9) Water Control Structures

MANAGED BASIN	PRIMARY CANAL	PRIMARY WATER CONTROL STRUCTURE
Hillsboro Canal Basin	G-08 (Hillsboro) Canal	G-56 Gated Spillway
Pompano Canal Basin	G-16 (Pompano) Canal	G-57 Gated Spillway
C-14 West Basin	C-14 (Cypress Creek) Canal	S-37B Gated Spillway
C-14 East Basin	C-14 (Cypress Creek) Canal	S-37A Gated Spillway
C-13 West Basin	C-13 (West Middle River) Canal	S-36 Gated Spillway
C-12 West Basin	C-12 (Plantation) Canal	S-33 Gated Spillway
North New River Canal West Basin	G-15 (North New River) Canal	G-54 Gated Spillway
C-11 West Basin	C-11 (South New River) Canal	S-13AW Gated Culvert
C-11 East Basin	C-11 (South New River) Canal	S-13 Pump Station and Gated Spillway





STUDY APPROACH

Study Goal

To develop, evaluate, and recommend flood risk management measures and adaptation strategies to build flood resiliency in the communities served by the C&SF system, now and in the future.

Section 216
Public Involvement

- Section 216 Process
- Section 203 Process
- Modeling/Data Analysis

Problems

The existing C&SF system was not designed to manage the combination of runoff, storm surge, high tides and a high groundwater table, which is exacerbated by sea level rise, extreme rainfall events, and land development patterns. Therefore, natural, agricultural, and highly-dense urban areas in south Florida are currently experiencing significant flooding and conditions are expected to worsen in the future. Enhancements to the existing C&SF infrastructure are necessary to provide flood protection and water supply to more than 9 million people.

Opportunities

- Manage life safety risk caused by inundation.
- Manage risk to historical and cultural resources.
- Unify coordination and build trust with stakeholders and the public.

Objectives

Enhance the C&SF system water control and salinity structures' functionality and capacity to reduce flood damages and improve resiliency caused by inundation and changed conditions within Broward Basins over the 50-year period of analysis from 2035-2085.

Constraints

- Avoid, minimize, and/or mitigate induced flood risk to other areas within the Study Area over the period of analysis.
- Avoid, minimize, and/or mitigate impacts to objectives and authorized benefits of other Federal studies and projects within the Study Area.

USACE Risk Informed Planning Guidance (ER 1105-2-103)

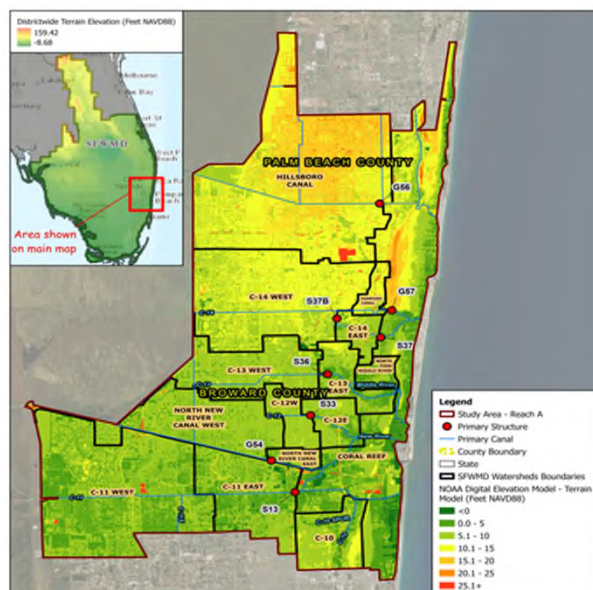




STUDY APPROACH

Section 216 Public Involvement

Reach A Management Measures



Structural Management Measures:

- Expanding canal cross sections
- Raising canal banks
- Adding gates
- Moving existing gates
- Adding pump stations
- Upgrading existing pump stations
- Constructing flood barriers
- Hardening structures
- Removing coastal water control structures
- Relocating coastal water control structures
- Creating inter-basin transfers
- Creating well injection sites

Nature-based Management Measures:

- Enhancing floodplain restoration
- Freshwater wetlands
- Rain gardens / Bio-swales

Nonstructural Management Measures:

- Elevating properties
- Flood proofing
- Floodplain management

Section 216 Process
Section 203 Process
Modeling/Data Analysis

Section 203 Study (Reach A) Plan Formulation

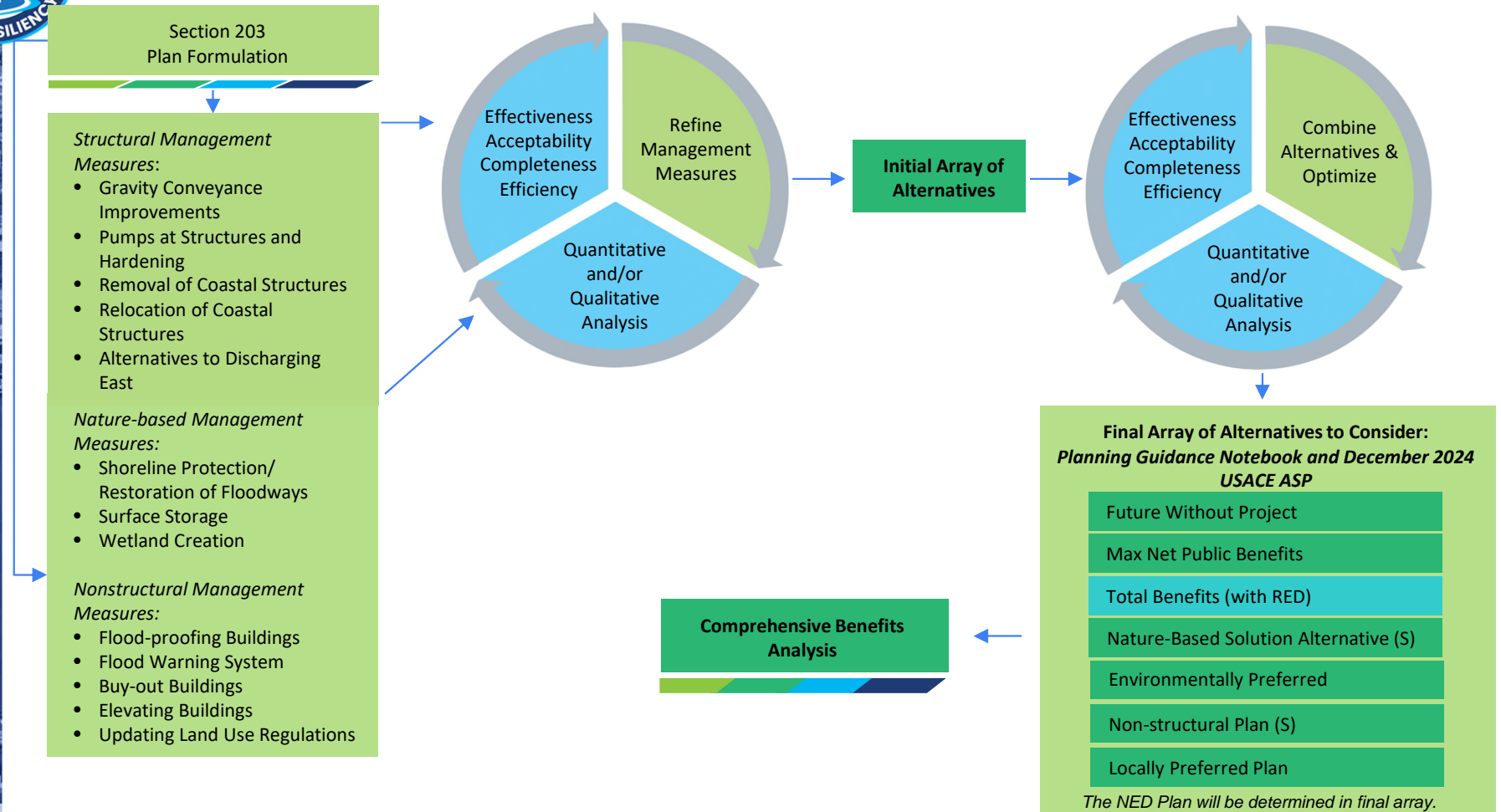
Informed by **management measures collected from previous studies** and presented in public engagement and kickoff meeting (included at the December 2024 Scoping Meeting)





PLAN FORMULATION

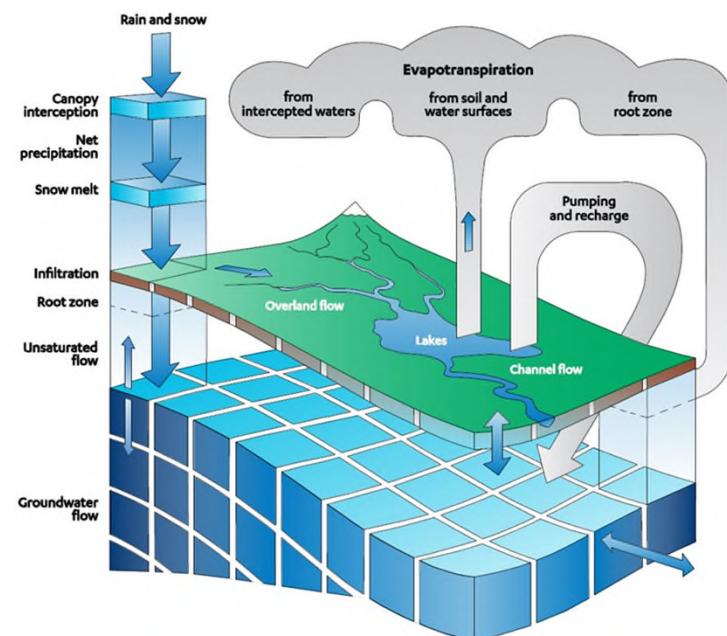
■ Section 216 Process ■ Modeling/Data Analysis (as approved by PCX)
■ Section 203 Process





H&H MODELING APPROACH & IMPLEMENTATION

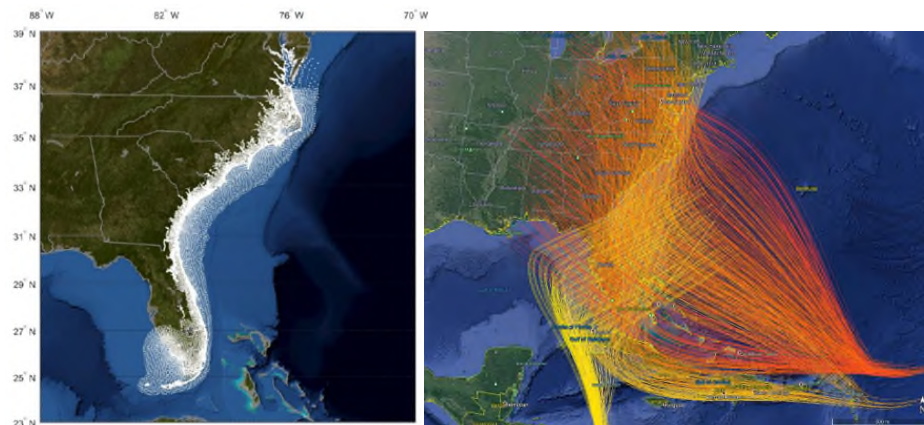
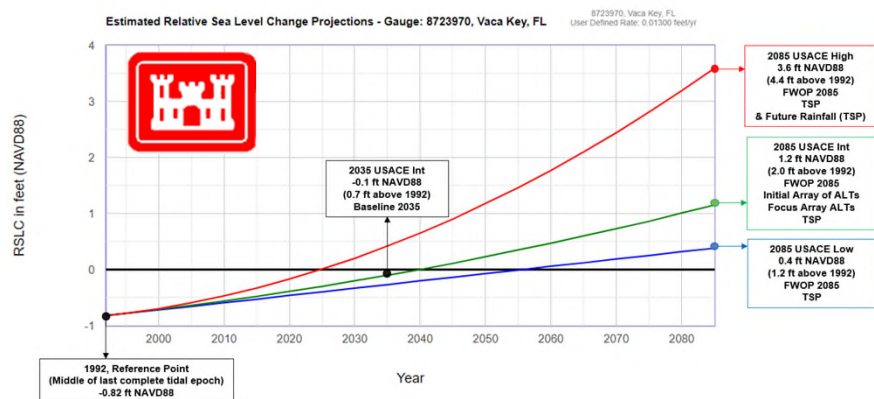
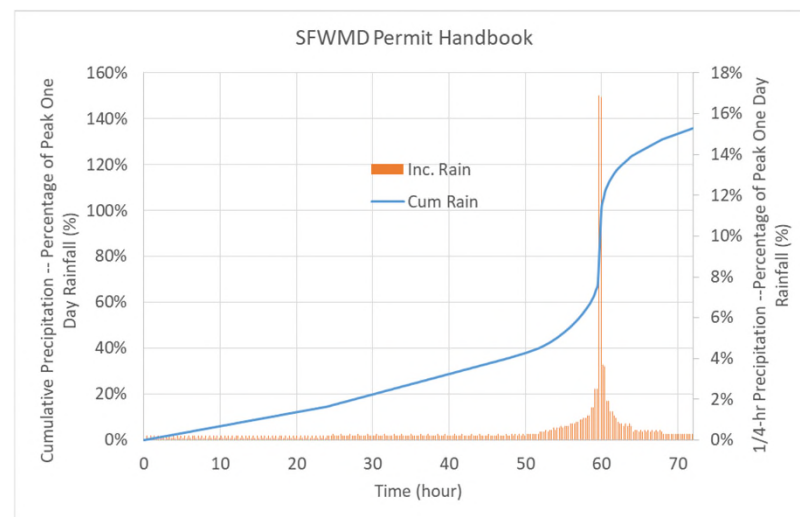
- Utilize available **MIKE SHE/HYDRO models** with successful application history in the SFWMD Flood Protection Level of Service and Broward County Resiliency planning efforts
 - These models are also “approved for use” by USACE
- Available models have been extended to include the downstream coastal areas and updated with the latest available data
 - Assumed land use is a combination of SFWMD 2014-2016 Land Use dataset and the 2019 Broward County Current Conditions model, which was developed from the SFWMD Land Use Land Cover data with minor changes based on satellite imagery from 2015 with 2018.
 - The future conditions land use map was developed by modifying the current conditions land use map to reflect projected future conditions land use maps for 2040 from the Broward County Planning Council, Palm Beach County Planning, Zoning and Building Department.
- The focus of this study is on the primary system; however, the **models include a high level of detail within the secondary/tertiary canal systems**





MODEL INPUT ASSUMPTIONS: RAINFALL & TIDE

- **Rainfall**
 - Spatially distributed gridded input derived from National Oceanic and Atmospheric Administration (**NOAA**) **Atlas 14** rainfall depths
 - **Temporally distributed** based on SFWMD 72-hour distribution
- **Sea Level Rise (USACE Low, Int, High Curves)**
- **Coastal Boundary**
 - The **South Atlantic Coastal Study (SACS) Coastal Hazard System (CHS)** provides numerical and probabilistic modeling results for **coastal forcings**, including storm surge
 - The CHS stage-hydrographs will be applied as a downstream boundary condition

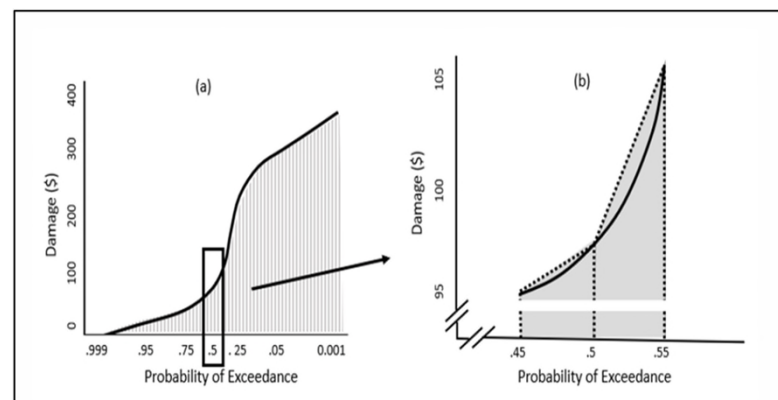




USACE APPROVED ECONOMIC MODEL: HEC-FDA

Hydrologic Engineering Center's Flood Damage Analysis software (HEC-FDA)

- Developed by USACE Hydrologic Engineering Center, Institute for Water Resources
- Integrates hydrology/hydraulics/economics in a single model
- **Incorporates risk analysis and uncertainty**
- Incorporates flood state data for eight distinct probability events from MIKE-SHE outputs to estimate **Expected Annual Damage (EAD)**
- Support from UCF on determining joint probabilities



Coastal Water Level Return Period (CHS Data)	Rainfall Return Period (NOAA Atlas 14 Data)	Joint Probability (%)	Joint Recurrent Frequency (years)
2-year	5-year	0.125	8
2-year	10-year	0.0714	14
2-year	25-year	0.0333	30
10-year	10-year	0.0313	32
20-year	25-year	0.0133	75
2-year	100-year	0.0091	110
100-year	100-year	0.0023	430
2-year	500-year	0.0019	538





INITIAL ARRAY OF ALTERNATIVES

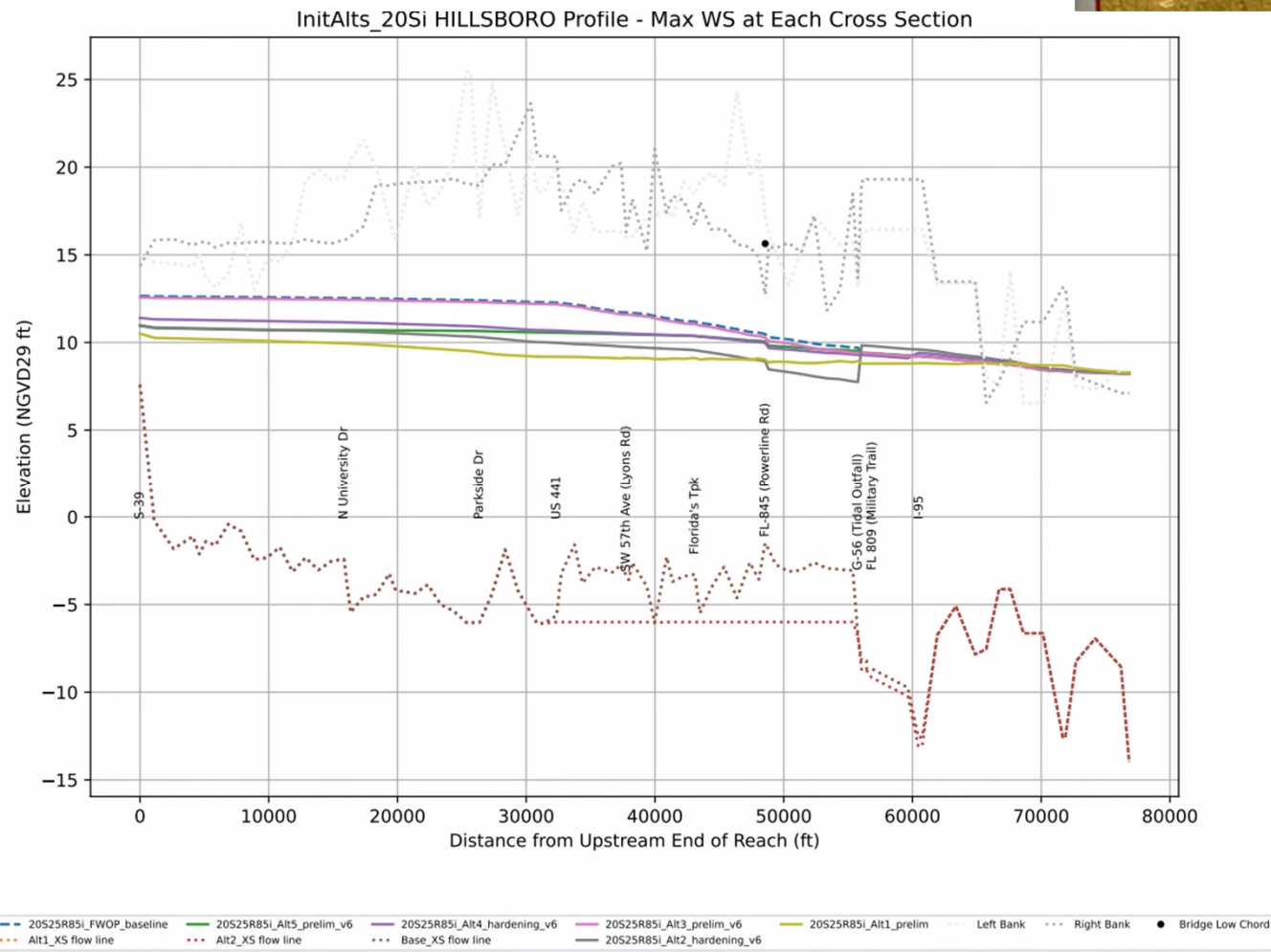
Management Measures	Initial Array of Alternatives	Decision Criteria	Acceptability	Efficiency	Effectiveness	Completeness	Carry Forward to Final Array
		The alternative meets the study objectives.	The alternative is consistent with existing federal laws, authorities, and public policies and does not include local or regional preferences for solutions or political expediency	The alternative alleviates the specified problems and realizes the specified opportunities at the least cost	The alternative alleviates the problems and achieves the opportunities	The alternative provides and accounts for all features, investments, and actions to realize the planned effects, including actions by others	
Gravity Conveyance Improvements	Alternative 1 Gravity Conveyance Improvements (Canals and Structures)	✓	✓	✓	✓	!	✓
Pumps at Structures and Hardening	Alternative 2 Pumps at Structures & Hardening	✓	✓	✓	✓	✓	✓
Removal of Coastal Structures	Alternative 3 Removal of Coastal Structures	✗	✗	✗	✗	✗	✗
Relocation of Coastal Structures	Alternative 4 Relocation of Coastal Structures (to the East)	✓	✗	✗	✗	✗	✗
Alternatives to Discharging East	Alternative 5 Alternatives to Discharging East on Peak	✓	✗	✓	!	✗	✓
Shoreline Protection-Restoration of Floodways	Alternative 6 Natural & Nature Based Only	✗	✓	✗	✗	✗	✓
Surface Storage							
Wetland Creation	Alternative 7a Non-Structural Only	✗	!	✗	!	✗	✗
Flood-proofing Buildings							
Flood Warning System							
Buy-out Buildings							
Elevating Buildings	Alternative 7b Nonstructural for Residual Risk	✗	✓	!	!	!	✓
Updating Land Use Regulation							
Flood-proofing Buildings							
Flood Warning System							
Buy-out Buildings							
Elevating Buildings							
Updating Land Use Regulations							

✓ Likely ! Partially ✗ Not likely





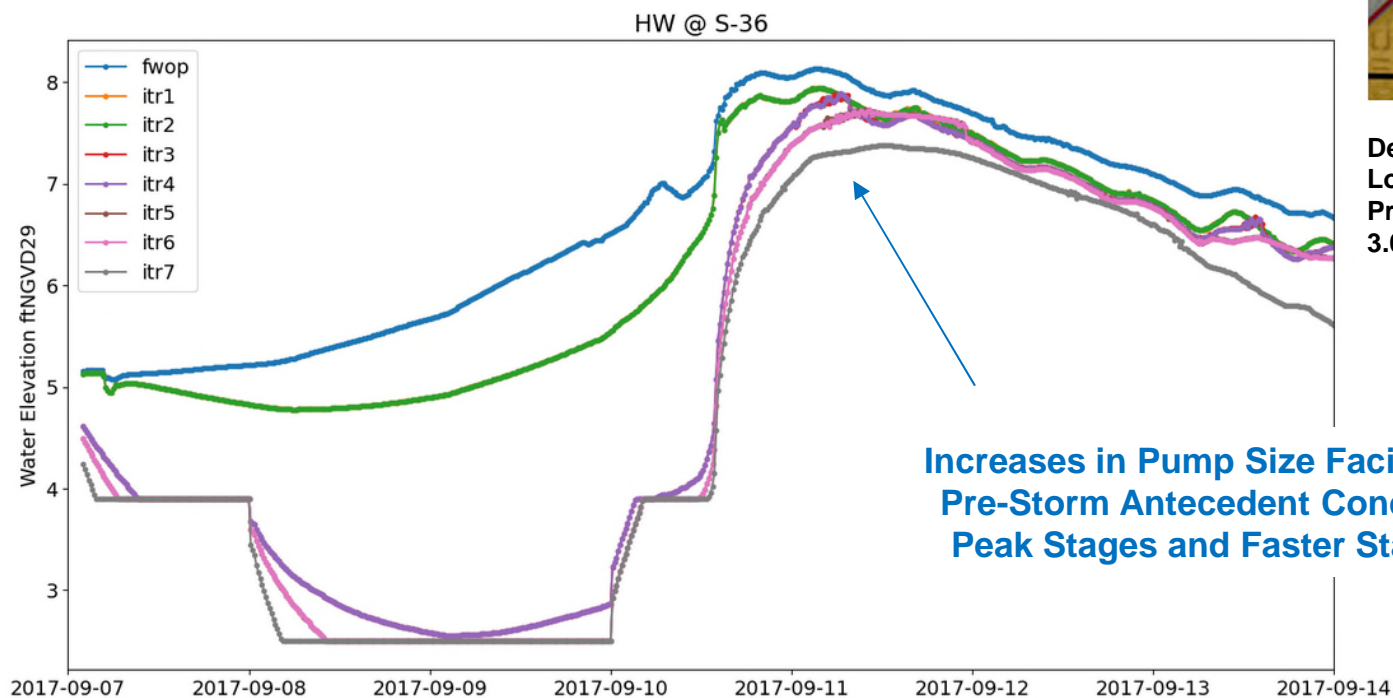
ALT 1 – EXAMPLE RESULTS (MANAGING CANAL STAGES)





ALT 2 – EXAMPLE PUMP SIZING SENSITIVITY TESTING

Structure	iteration_1	iteration_2	iteration_3	iteration_4	iteration_5	iteration_6	iteration_7
S36	0	0	500	500	600	600	800



Design discharge: 1,090cfs
 Low range: [3.0ft – 3.9ft]
 Pre-storm drawdown:
 3.0ft - 0.5ft = 2.5ft

Increases in Pump Size Facilitate Improved
 Pre-Storm Antecedent Conditions, Lower
 Peak Stages and Faster Stage Recovery



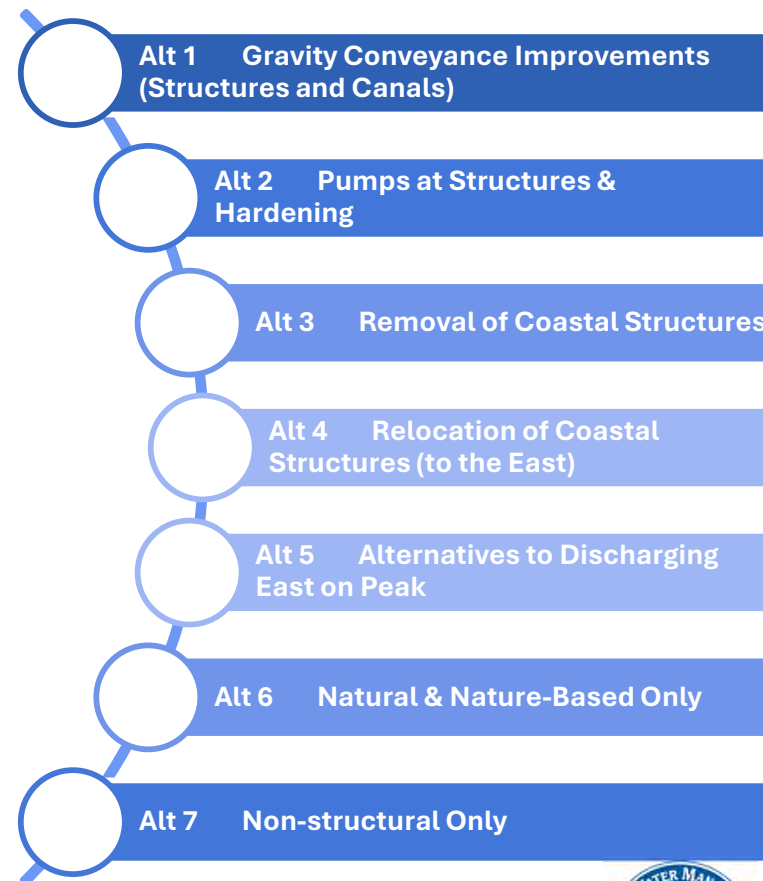


INITIAL ARRAY TO FINAL ARRAY

The **Initial Array of Alternatives** underwent **detailed assessments** to determine the best solution to meet the project objectives. The detailed assessments and analyses included but were not limited to:

- Historic and Cultural Resource Assessments
- Environmental Assessments
- Geotechnical Investigations
- Topographic Surveys
- Additional Hydrology and Hydraulics Studies
- Initial Economic, Social, and Environmental Benefits Analysis
- Real Estate Evaluations

The results of these assessments were used to **narrow down the Final Array**, which was then further analyzed to identify a Tentatively Selected Plan.





FINAL ARRAY OF ALTERNATIVES

Alternatives proposed in the Final Array:

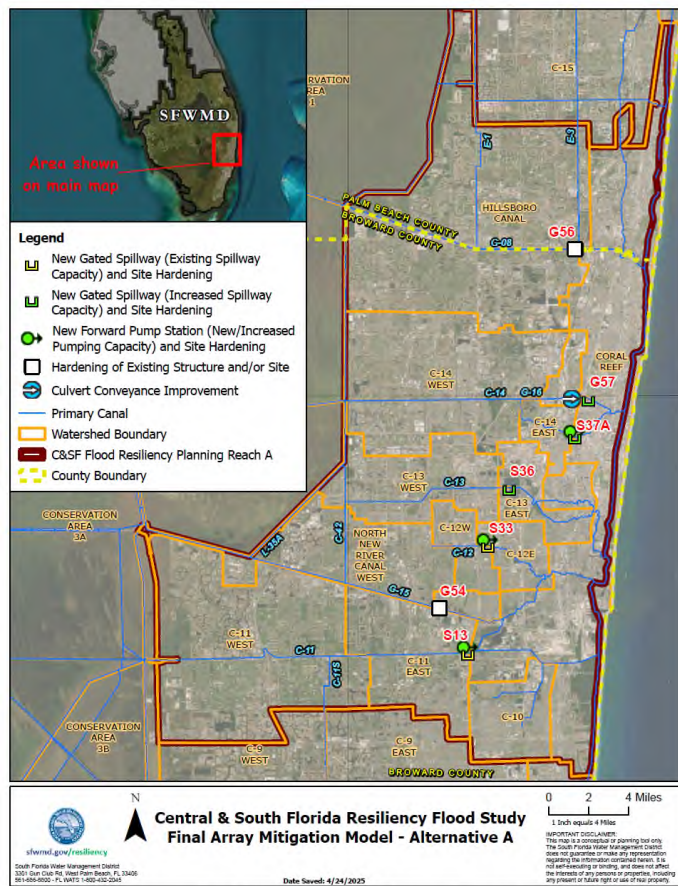
- Alternatives A, B, and C; **compared to No Action** (Future Without Project)
- Each **increasing in complexity or level of intervention** (and associated cost)
- Alternatives focus on improvements to the inland watersheds; targeted coastal watershed modifications may be considered when optimizing the selected plan

Infrastructure modifications proposed in Final Array:

- Tidal gate structure improvements
 - Hardening, capacity (gravity or pump)
 - Changes to pre-storm operation levels
- Primary C&SF canal conveyance capacity improvements
 - **Channel improvements to improve areas of constricted flow; not intended to represent large-scale, uniform canal expansion or widening**
 - Bridges and/or culvert enhancements to address significant constrictions
- **Storage and Nature-based Features**
- Secondary structures - changes to pre-storm operation



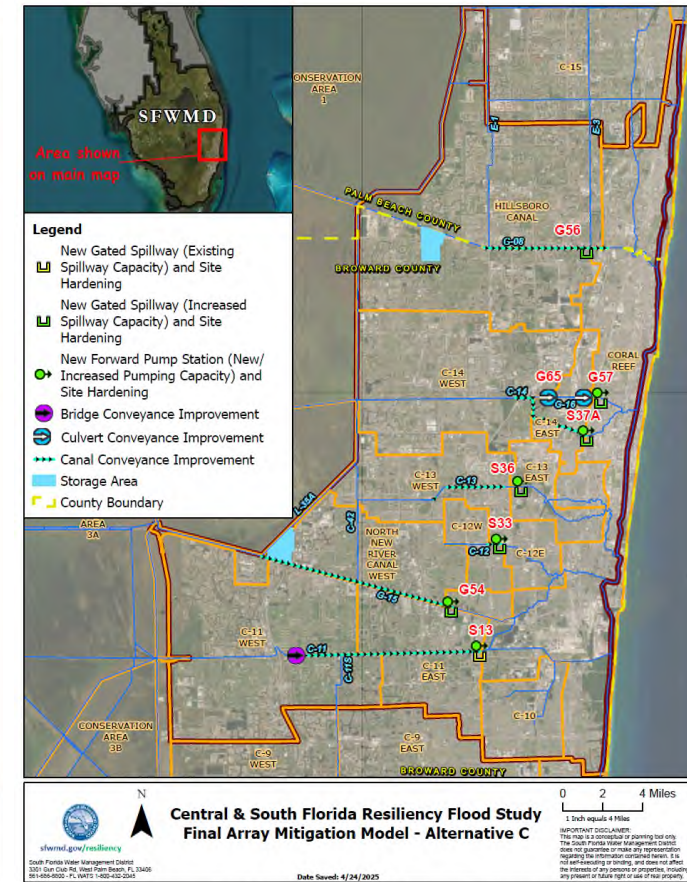
Alternative A



Alternative B



Alternative C



Final Array of Alternatives

Note: A test case (C1) exploring the addition of nonstructural elements into Alternative C to reduce residual risk was also performed.



FINAL ARRAY OF ALTERNATIVES: STRUCTURE DETAILS

Site	Canal	Alternate A				Alternate B				Alternate C			
		New Pump Sta.		New Gated Structure (nominal gate widths provided)	Local Canal Improvements / Storage & Nature Based Features	New Pump Sta.		New Gated Structure (nominal gate widths provided)	Local Canal Improvements / Storage & Nature Based Features	New Pump Sta.		New Gated Structure (nominal gate widths provided)	Local Canal Improvements / Storage & Nature Based Features
		Design Pumping Capacity (cfs)	Mix of Pumps			Design Pumping Capacity (cfs)	Mix of Pumps			Design Pumping Capacity (cfs)	Mix of Pumps		
G56	G-08 (Hillsboro)	N/A	N/A	N/A	N/A	N/A	N/A	Gated Spillway w/ (4) 25' wide roller gates	Hillsboro Canal Improvement	1,005	(3) 335 cfs pumps	Gated Spillway w/ (4) 25' wide roller gates	Hillsboro Canal Improvement Hillsboro Storage
G57	G-16 (Pompano)	N/A	N/A	U/S Culvert 10"	N/A	N/A	N/A	Gated Spillway w/ (2) 21' wide roller gates + U/S Culvert 10"	N/A	300	(3) 100 cfs pumps	Gated Spillway w/ (2) 21' wide roller gates + U/S Culvert 10"	
S37B	C-14 (Cypress Creek)	N/A	N/A	N/A	N/A	N/A	N/A	Gated Spillway w/ (3) 25' wide roller gates	C14 West Canal Improvement	N/A	N/A	N/A	C14 West Canal Improvement
S37A	C-14 (Cypress Creek)	1,200 (+ aux.)	(3) 400 cfs pumps (1) 400 cfs aux. pump	Gated Spillway w/ (4) 25' wide roller gates	N/A	1,500	(3) 500 cfs pumps	N/A	N/A	1,200	(3) 400 cfs pumps	Gated Spillway w/ (4) 25' wide roller gates	C14 East Canal Improvement
S36	C-13 (Middle River)	N/A	N/A	Gated Spillway w/ (2) 25' wide roller gates	N/A	510	(3) 170 cfs pumps	N/A	N/A	600	(3) 200 cfs pumps	Gated Spillway w/ (2) 25' wide roller gates	C13 West Canal Improvement
S33	C-12 (Plantation)	510 (+ aux.)	(3) 170 cfs pumps	N/A	N/A	510	(3) 170 cfs pumps	Gated Spillway w/ (2) 20' wide roller gates	N/A	705	(3) 235 cfs pumps	Gated Spillway w/ (2) 20' wide roller gates	C12 West Canal Improvement
			(1) 170 cfs aux. pump				(1) 170 cfs aux. pump				(1) 235 cfs aux. pump		
G54	G-15 (North New River)	N/A	N/A	N/A	N/A	N/A	N/A	Gated Spillway w/ (4) 20' wide roller gates	NNR West Storage	810	(3) 270 cfs pumps	Gated Spillway w/ (4) 20' wide roller gates	NNR Canal Improvement NNR West Storage
S13	C-11 (South New River)	700 (+ aux.)	(2) 115 cfs pumps	Gated Box Culvert w/ (1) 25' wide roller gate	N/A	1,080	(2) 180 cfs pumps	Gated Box Culvert w/ (1) 25' wide roller gate	C-11 West / C-11 East Canal Improvement	1,500	(2) 250 cfs pumps	Gated Box Culvert w/ (1) 25' wide roller gate	C-11 West / C-11 East Canal Improvement
			(2) 235 cfs pumps				(2) 360 cfs pumps				(2) 500 cfs pumps		
			(1) 235 cfs aux. pump				(1) 360 cfs aux. pump				(1) 500 cfs aux. pump		





FINAL ARRAY OF ALTERNATIVES: ADDITIONAL MEASURES

- Implementing operational activities that draw down water in SFWMD-managed primary canals upstream of WCS prior to a storm (i.e., pumping water from the upstream to the downstream side of the WCS).
- Deploying monitoring stations to track canal stage (i.e., water height) at each WCS. Stations would be tied to an enhanced monitoring strategy.

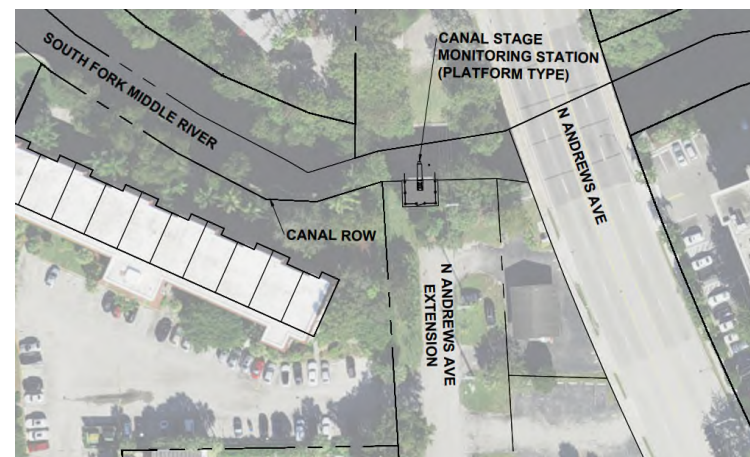
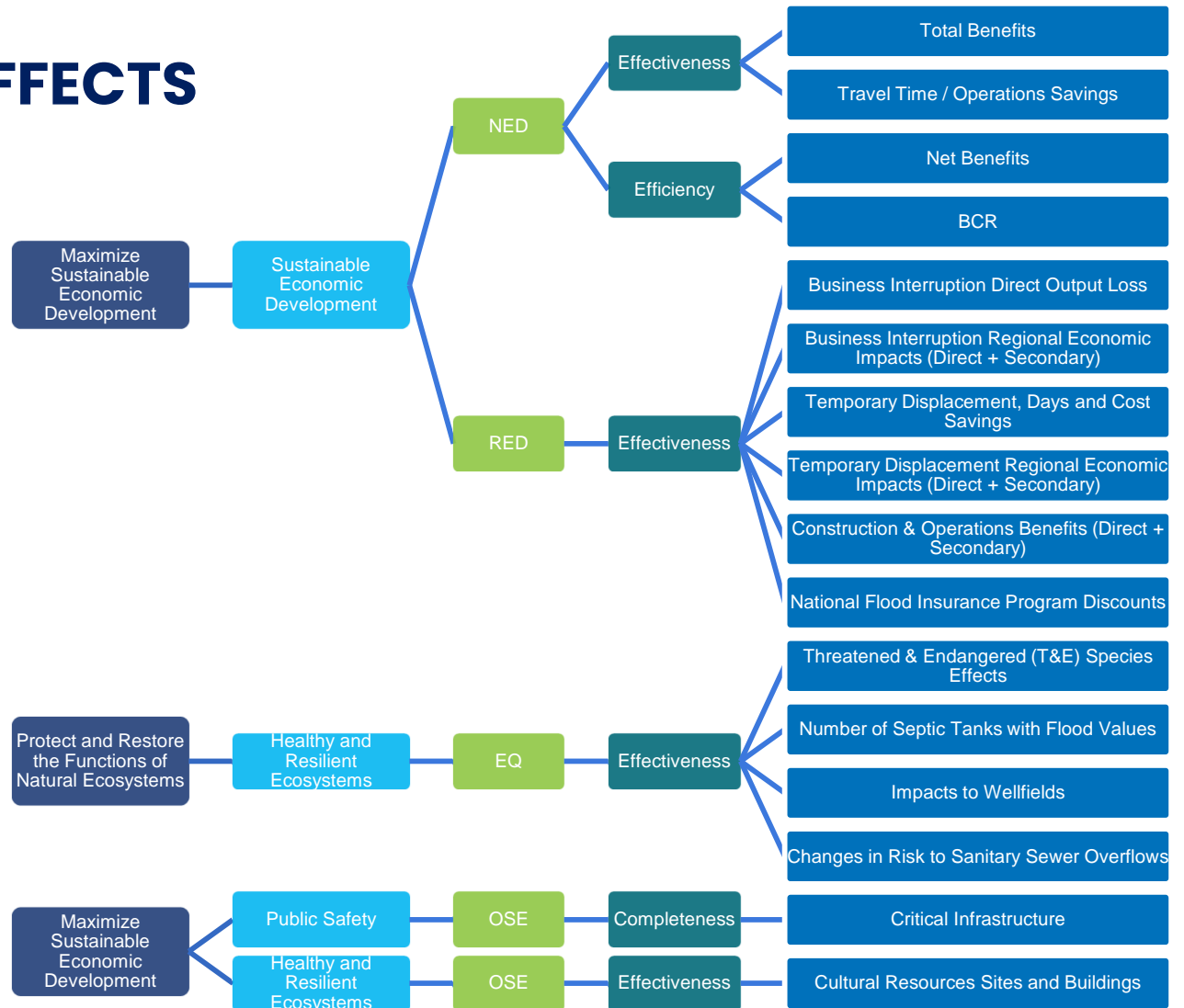




TABLE OF EFFECTS

- Federal Objective
- Guiding Principle
- P&G Account
- Evaluation Criteria
- Effects/Metric

Study Objective:
Enhance C&SF Project water control structures' **functionality** and **capacity** to reduce flood damages and **improve resiliency** caused by inundation and changed conditions within the Study Area over the 50-year period of analysis of 2035–2085.



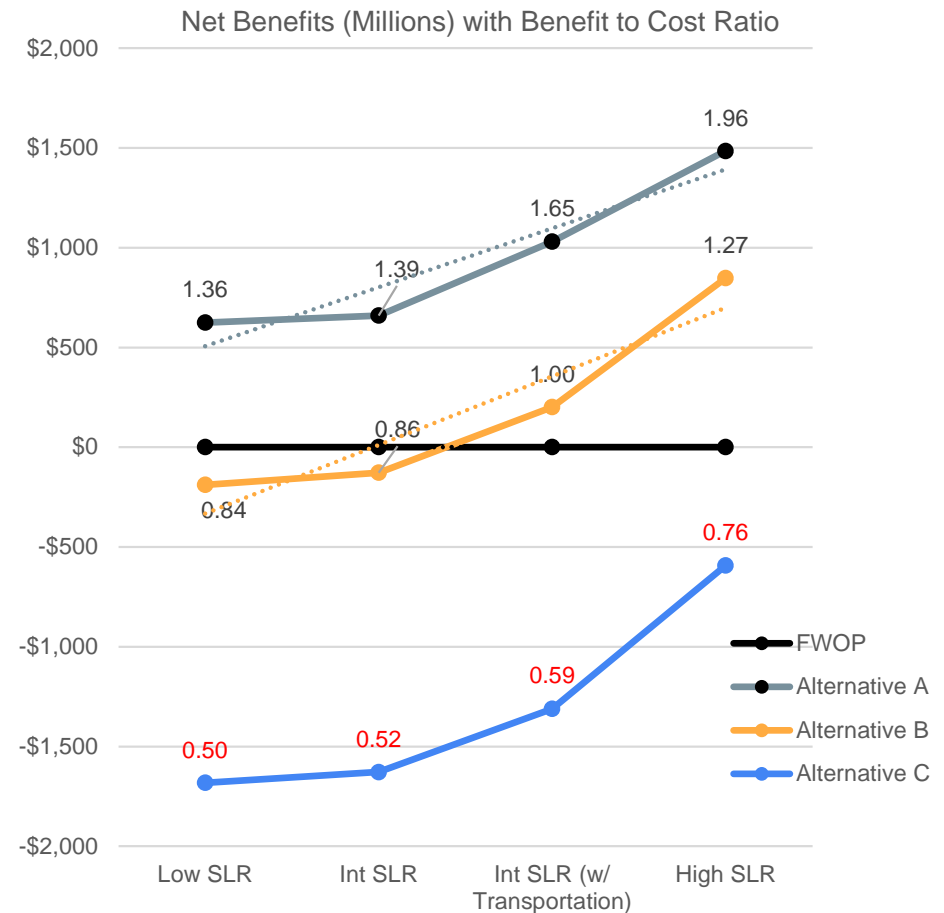


Central & Southern Florida Broward Basins Flood Resiliency Study

NED Account – Net Benefits and Benefit to Cost Ratio (BCR)



Federal Objectives & Policy Requirements of the Region	Maximize Sustainable Economic Development					
Guiding Principles	Sustainable Economic Development					
P&G Accounts	NED					
Formulation & Evaluation Criteria	Efficiency					
Metrics	Net Benefits (Millions)			BCR		
	Low SLR	Int. SLR (+ Transportation Benefits)	High SLR	Low SLR	Int. SLR (+ Transportation Benefits)	High SLR
No Action Alternative	--	--	--	--	--	--
Alternative A	\$482	\$514 (\$863)	\$1,278	1.36	1.39 (1.65)	1.96
Alternative B	-\$363	-\$307 (\$3)	\$597	0.84	0.86 (1.00)	1.27
Alternative C	-\$1,945	-\$1,896 (-\$1,596)	-\$937	0.50	0.52 (0.59)	0.76



BCR < 1 → Project is not cost-effective

BCR > 1 → Project is cost-effective and economically justified



RESULTS

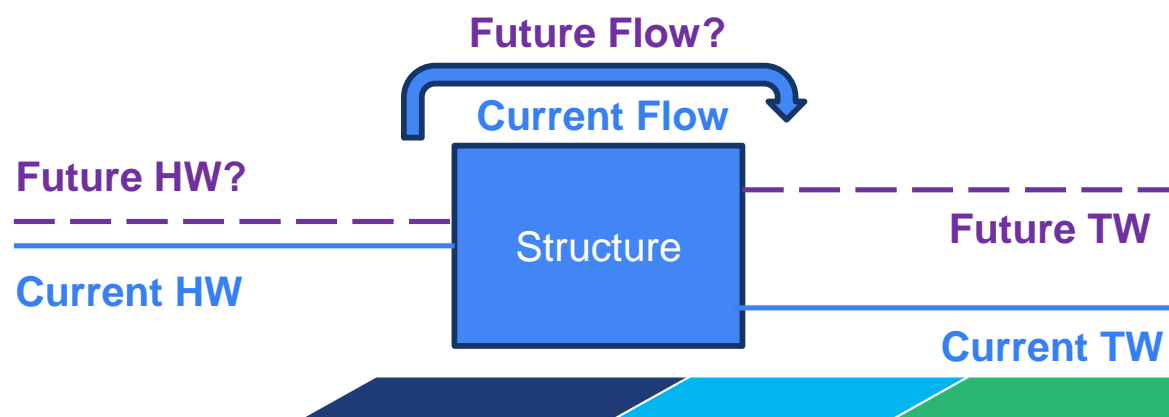
Benefit Metric	Alternative with Greatest Benefit	Explanation
Total Benefits	Alternative C	Greatest avoided equivalent annual damages across three sea level rise scenarios
Travel Time / Operations Savings	Alternative A	Greatest travel time and operations savings
Net Benefits	Alternative A	Greatest net benefits across three sea level rise scenarios
Benefit-to-cost Ratio (BCR)	Alternative A	Greatest benefit to cost ratio across three sea level rise scenarios
Business Interruption, Direct Output Loss	Alternative C	Lowest observable direct output loss across three frequency events, intermediate and high sea level rise
Business Interruption Regional Economic Impacts (Direct and Secondary)	Alternative B	Greatest regional benefits across three frequency events, high sea level rise
Temporary Displacement, Days and Cost Savings	Alternative C	Greatest number of days saved and valued saved across three frequency events, intermediate and high sea level rise
Temporary Displacement Regional Economic Impacts (Direct and Secondary)	Alternative C	Greatest regional benefits across three frequency events, intermediate and high sea level rise
Construction and Operations Benefits (Direct and Secondary)	Alternative C	Greatest regional benefits across three frequency events, intermediate and high sea level rise
National Flood Insurance Program Discounts	Alternative C	Greatest likelihood of insurance discounts across three frequency events, intermediate and high sea level rise
Threatened and Endangered Species	Alternative A	Lowest insignificant impacts to the environment
Wellfield Effects	Alternative C	Greatest operational enhancements that are protective to wellfield resources
Change in Risk to Septic Tanks	Alternative C	Lowest number of septic tanks with flood values across three frequency events, intermediate and high sea level rise
Change in Risk to Sanitary Sewer Overflow Incidents	Alternative C	Greatest percent change in flood depths in areas of recurring sanitary sewer overflow incidents across three frequency events, intermediate and high sea level rise
Change in Risk to Critical Infrastructure	Alternative C	Lowest number of critical infrastructure with flood values across three frequency events, intermediate and high sea level rise
Change in Risk to Cultural Resources Sites and Buildings	Alternative C	Lowest number of cultural resources sites and buildings with flood values across three frequency events, intermediate and high sea level rise



ALTERNATIVES COMPARISON AND OPTIMIZATION STRATEGY

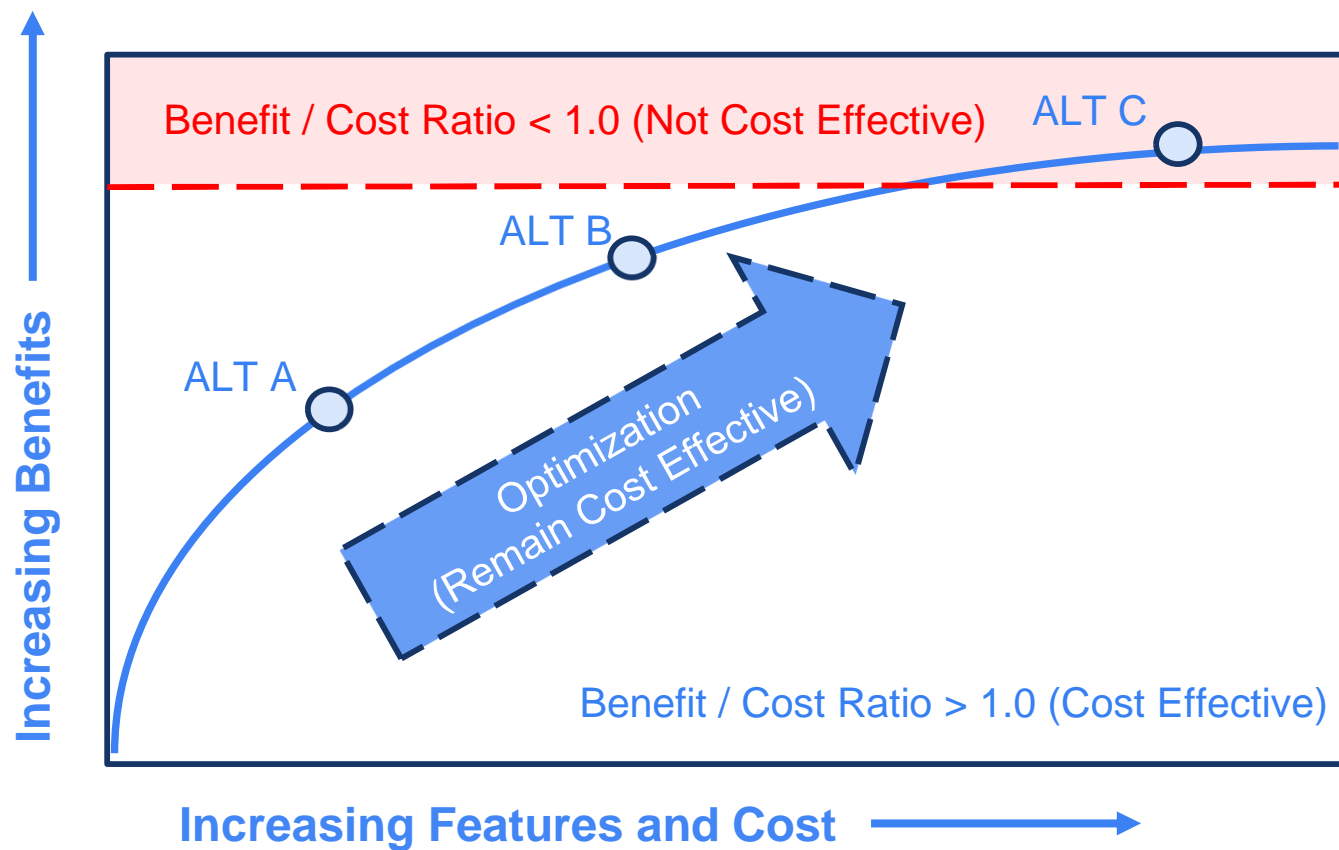
Focusing in on the performance of the “primary” infrastructure, a normalized index examining structure headwater (HW) and volume conveyed gives additional insight:

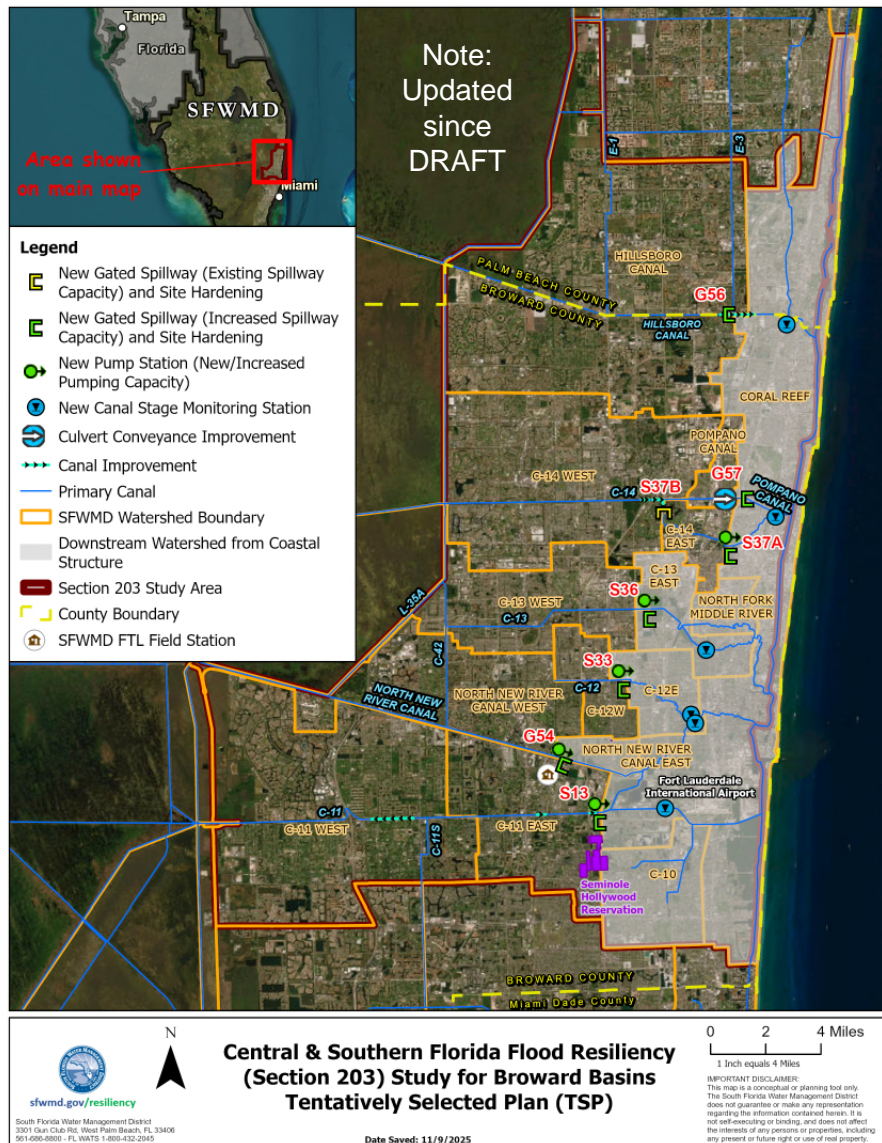
Basin	Structure	ECB	2085L				2085i				2085h			
			FWOPL	AltA	AltB	AltC	FWOPi	AltA	AltB	AltC	FWOPH	AltA	AltB	AltC
Hillsboro Canal	G-56	1.00	0.98	0.95	0.96	0.95	0.93	0.91	0.92	0.92	0.71	0.77	0.77	0.78
Pompano Canal	G-57	1.00	0.96	0.95	0.95	0.96	0.88	0.89	0.89	0.90	0.60	0.57	0.55	0.75
C-14 West Basin	S-37B	1.00	0.98	0.99	1.00	1.00	0.93	0.94	1.00	0.98	0.73	0.83	0.87	0.85
C-14 East Basin	S-37A	1.00	0.95	0.99	0.99	0.99	0.86	0.90	0.92	0.94	0.45	0.68	0.72	0.67
C-13 West Basin	S-36	1.00	0.94	0.98	1.00	1.00	0.80	0.91	0.93	0.98	0.35	0.40	0.70	0.83
C-12 Basin	S-33	1.00	0.97	0.97	0.97	0.99	0.90	0.93	0.94	0.97	0.65	0.83	0.83	0.92
North New River Canal West Basin	G-54	1.00	0.91	0.96	0.98	1.00	0.77	0.87	0.82	0.97	0.26	0.37	0.25	0.79
C-11 East and West Basins	S-13	1.00	0.95	0.94	0.93	0.92	0.87	0.88	0.87	0.86	0.49	0.68	0.66	0.65





ALTERNATIVES OPTIMIZATION STRATEGY





TENTATIVELY SELECTED PLAN (TSP) IS ALTERNATIVE RO



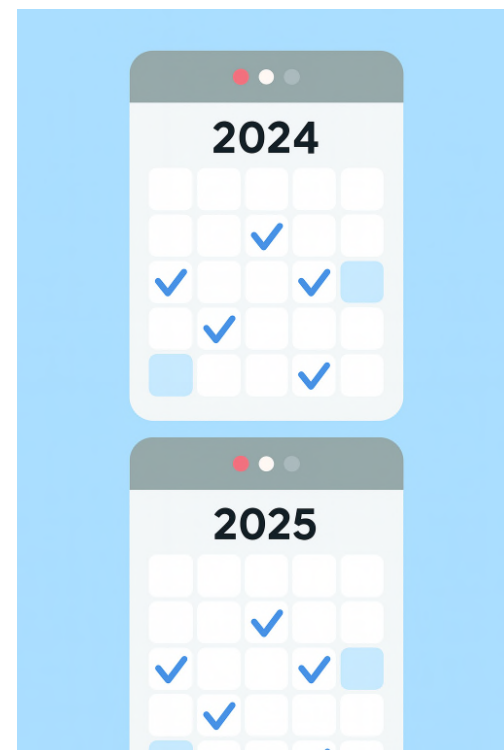
DRAFT Presented to Stakeholders in Broward County on September 9, public comments received, follow up meetings were held to discuss recommendations





PUBLIC ENGAGEMENT

- First Public Planning Meeting was hosted on **October 24, 2024**
- National Environmental Policy Act (NEPA) Scoping Meetings were hosted on **December 10, 2024**
- Project Alternatives / Comp. Benefits Public Meeting was hosted on **April 29, 2025**
- Draft Tentatively Selected Plan Public Meeting was hosted on **September 9, 2025**
- Follow up meetings were hosted to address all main comments received
- Draft Integrated Feasibility Report and Environmental Evaluation Public Meeting is on **December 18, 2025**





PUBLIC ENGAGEMENTS: THANKS FOR YOUR COMMENTS!



MONICA CEPERO, County Administrator
115 S. Andrews Avenue, Room 409 • Fort Lauderdale, Florida 33301 • 954-357-7354 • FAX 954-357-7360

December 12, 2025

The Honorable Adam R. Telle
Assistant Secretary of the Army for Civil Works
Department of the Army
108 Army Pentagon
Washington, DC 20310-0108

RE: Broward County Support for Draft Tentatively Selected Plan – Central and Southern Florida Flood Resiliency Study, Broward Basins

Dear Secretary Telle,

On behalf of Broward County, I am writing to express our strong support for Selected Plan (TSP) developed under Section 203 of the Water Resources 1986, as amended, for the Central and Southern Florida Flood Resiliency Basins. This collaborative effort, supported by the South Florida Water Management District (SFWMD), the Florida Department of Environmental Protection, Broward County, and assistance from the U.S. Army Corps of Engineers – Jacksonville District, is a step forward in addressing the unique and growing flood risks faced by our community.

Broward County has actively contributed to the development of this plan through engagement in the initial study phases, public planning and scoping meeting, and sharing local and regional knowledge, combined with federal and technical expertise, in shaping a Draft TSP that is technically sound, resilient in design, and addresses the community's flood risk reduction needs.

Broward County was a direct contributor in the finalization of project elements and wishes to underscore the importance of each of the included plan elements. The TSP (alternative RO) provides the highest level of flood risk management and is shown to both maintain and improve system function, discharge capacity and managing peak headwater levels for each of the basins in the county, while providing a positive benefit-cost ratio.

Alternative RO reflects a superior level of system and component optimization, spatial variability and intensity of rainfall distribution within the large Broward County area, and provides a robust and flexible system for reliable flood risk protection for individual and community. This TSP delivers on this need while achieving an overall positive benefit-cost ratio, superior refinement of elements for optimal plan performance and cost-benefit.

The Honorable Adam R. Telle, Assistant Secretary of the Army for Civil Works, Department of the Army
Broward County Support for Draft Tentatively Selected Plan – Central and Southern Florida Flood Resiliency Study, Broward Basins
Page 2 of 2

As a cost-share partner in the plan's development, we strongly endorse the components highlighted in the Draft TSP. Experience dictates that these elements are vital to ensuring the plan achieves the level of performance necessary to protect our residents, infrastructure, and environment. The Draft TSP reflects a level of resilience and forward-thinking design that is fundamental to the flood risk reductions upon which our community relies.

The public presentation of the Draft TSP on September 9, 2025, and subsequent refinements through conversations with local governments, further underscore the plan's responsiveness and alignment with community needs and priorities. Broward County emphasizes the importance of moving forward with this plan as a top priority. The County's ongoing partnership and collaboration with SFWMD, the Florida Department of Environmental Protection, and the U.S. Army Corps of Engineers reflects our shared commitment and obligation to building a more resilient, safe, and sustainable future for all residents. This plan will provide a major and positive advancement in delivering on this shared objective and responsibility.

In closing, Broward County celebrates and fully endorses this Tentatively Selected Plan. The projected benefits, resilience-embedded design, and the collaborative process integrated in each element of the recommended improvements provide the high-performance flood risk reduction plan our community needs in the face of increasing environmental challenges. We urge the Corps' advancement of this plan and remain committed as a collaborative partner in its implementation.

Thank you for your consideration.

Sincerely,

Monica Cepero
County Administrator

cc: Broward County Board of County Commissioners
Kevin Kelleher, Deputy County Administrator
Isami Ayala-Colazo, Assistant County Administrator
Michael Ruiz, Assistant County Administrator
Lenny Valpando, Director, Public Works & Environmental Services Department
Jennifer Jurado, Deputy Director, Public Works & Environmental Services Department
Marty Cassini, Director, Intergovernmental Affairs

Broward County Board of County Commissioners
Mark D. Bogen • Alexandra P. Davis • Lantier F. Fisher • Brian Furr • Steven Geller • Robert McKinley • Nan H. Rich • Hazelise P. Rogers • Michael Utine
www.broward.org

Page 1 of 2

Thanks to all who provided comments!

A special thanks to the Broward
Municipalities that reached out for
follow up discussions:

- Fort Lauderdale
- Dania Beach
- Oakland Park

A special thanks also to the Seminole
Tribe of Florida for your comments.

Comments responses are included in
the project report.





ALTERNATIVES COMPARISON AND OPTIMIZATION STRATEGY

Justification:

- Statistically significant observed trends – Water and Climate Metrics
- Ensures C&SF system remains robust and adaptive
- Addresses changing conditions: SLR, extreme rainfall, and flood risk
- Supports long-term performance

Policy framework:

- Aligns with federal and state mandates
- Guides long-term investment decisions
- Encourages adaptive management

Emerging Trends in Regional Resiliency

Latest trends identified from historical data and insights into evolving conditions.



Regional Rainfall

Changes in rainfall patterns will impact people and ecosystems by altering the amount of water in our region throughout the year.



Evapotranspiration Trends in South Florida

Evapotranspiration (ET) determines water exchanges between the land, plant communities, and the atmosphere.



Tidal Elevations at Coastal Structures and Sea Level

Flood control and the prevention of saltwater intrusion in South Florida relies heavily on the operation of coastal gravity structures.



Saltwater Intrusion in Coastal Aquifers

The inland migration of saltwater poses a threat to water supply and critical freshwater habitats.



Salinity in the Everglades

The salinization of previously freshwater systems poses threats to several factors.



Estuarine and Mangrove Inland Migration

Trends in Estuarine Inland Migration provide insights to the impacts of sea level rise in...



Soil Subsidence in South Florida

Maintaining soil elevations within coastal and intertidal habitats, as sea level changes is an...

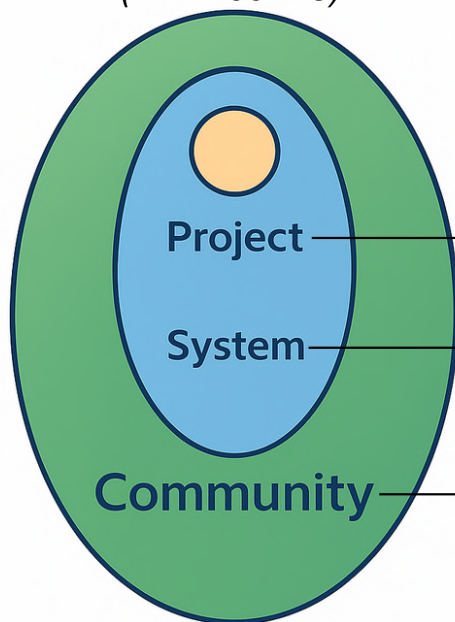




RESILIENCE ASSESSMENT OF FINAL ARRAY, INCLUDING ALTERNATIVE RO

Alternatives evaluated against the Four Principles of Resilience (EP 1100-1-5)

Types of Resilience
(EP 1100-1-5)



- *Project – Upstream Watersheds*
- *System – Action Area (All Upstream Watersheds)*
- *Community – Study Area (Upstream and Downstream Watersheds)*

Prepare	Absorb	Adapt	Recover
Improves pre-storm drawdown efficiency	Improves upstream stage management	Enhances operations to modernize drawdown and recovery time	Reduces O&M demands and improves operational flexibility
Promotes pre-storm water level lowering	Increases capacity to control peak water levels in primary canals in upstream watersheds	Reduces recovery time in the action area	Enhances performance in action area to adapt to changing conditions
Enhances monitoring within the study area	Evaluates capacity to control peak water levels in upstream watersheds with consideration of downstream effects	Enhances flexibility to recover from and reduce flood impacts	Reduces risk to downstream watersheds in changing conditions

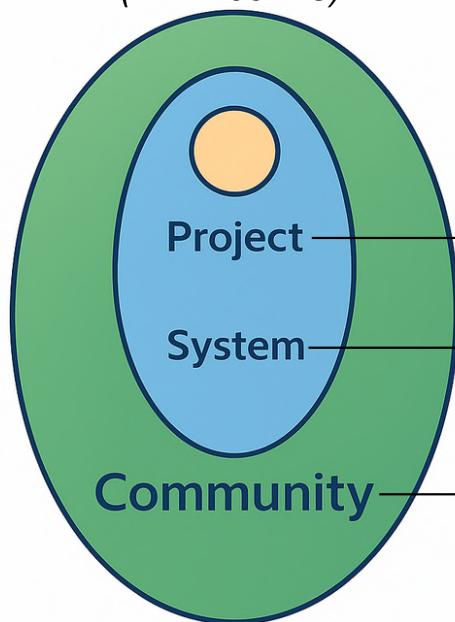




RESILIENCE ASSESSMENT OF FINAL ARRAY, INCLUDING ALTERNATIVE RO

Alternatives listed in order of highest to lowest performance ranking. Overall score out of 92 in each category.

Types of Resilience
(EP 1100-1-5)



- *Project – Upstream Watersheds*
- *System – Action Area (All Upstream Watersheds)*
- *Community – Study Area (Upstream and Downstream)*

Prepare	Absorb	Adapt	Recover
1) Alternative C 2) Alternative RO 3) Alternative B 4) Alternative A	1) Alternative C 2) Alternative RO 3) Alternative A/B (equal)	1) Alternative C 2) Alternative RO 3) Alternative B 4) Alternative A	1) Alternative C 2) Alternative RO 3) Alternative A/B (equal)
1) Alternative B/C/RO (equal) 2) Alternative A	1) Alternative B/C/RO (equal) 2) Alternative A	1) Alternative B/C/RO (equal) 2) Alternative A	1) Alternative B/C/RO (equal) 2) Alternative A
1) Alternative RO 2) Alternative A/B/C (equal)	1) Alternative RO 2) Alternative B/C (equal) 3) Alternative A	1) Alternative RO 2) Alternative C 3) Alternative A/B (equal)	1) Alternative RO 2) Alternative A/B/C (equal)
Alternative A – 42 Alternative B – 69 Alternative C – 75 Alternative RO – 85	Alternative A – 34 Alternative B – 64 Alternative C – 69 Alternative RO – 86	Alternative A – 40 Alternative B – 64 Alternative C – 78 Alternative RO – 86	Alternative A – 44 Alternative B – 64 Alternative C – 69 Alternative RO – 85



ALTERNATIVES OPTIMIZATION: TSP /ALT RO

Site	Canal	Alternate A				Alternate B				Alternate C			
		New Pump Sta.		New Gated Structure (nominal gate widths provided)	Local Canal Improvements / Storage & Nature Based Features	New Pump Sta.		New Gated Structure (nominal gate widths provided)	Local Canal Improvements / Storage & Nature Based Features	New Pump Sta.		New Gated Structure (nominal gate widths provided)	Local Canal Improvements / Storage & Nature Based Features
		Design Pumping Capacity (cfs)	Mix of Pumps			Design Pumping Capacity (cfs)	Mix of Pumps			Design Pumping Capacity (cfs)	Mix of Pumps		
G56	G-08 (Hillsboro)	N/A	N/A	N/A	N/A	N/A	N/A	Gated Spillway w/ (4) 25' wide roller gates	Hillsboro Canal Improvement	1,005	(3) 335 cfs pumps	Gated Spillway w/ (4) 25' wide roller gates	Hillsboro Canal Improvement Hillsboro Storage
G57	G-16 (Pompano)	N/A	N/A	U/S Culvert 10"	N/A	N/A	N/A	Gated Spillway w/ (2) 21' wide roller gates + U/S Culvert 10"	N/A	300	(3) 100 cfs pumps	Gated Spillway w/ (2) 21' wide roller gates + U/S Culvert 10"	
S37B	C-14 (Cypress Creek)	N/A	N/A	N/A	N/A	N/A	N/A	Gated Spillway w/ (2) 25' wide roller gates	C14 West Canal Improvement	N/A	N/A	N/A	C14 West Canal Improvement
S37A	C-14 (Cypress Creek)	1,200 (+ aux.)	(3) 400 cfs pumps (1) 400 cfs aux. pump	Gated Spillway w/ (3) 25' wide roller gates	N/A	1,500	(3) 500 cfs pumps	N/A	N/A	1,200	(3) 400 cfs pumps	Gated Spillway w/ (4) 25' wide roller gates	C14 East Canal Improvement
S36	C-13 (Middle River)	N/A	N/A	Gated Spillway w/ (2) 16' wide roller gates	N/A	510	(3) 170 cfs pumps	N/A	N/A	600	(3) 200 cfs pumps	Gated Spillway w/ (2) 25' wide roller gates	C13 West Canal Improvement
S33	C-12 (Plantation)	510 (+ aux.)	(3) 170 cfs pumps	N/A	N/A	510	(3) 170 cfs pumps	Gated Spillway w/ (2) 20' wide roller gates	N/A	705	(3) 235 cfs pumps	Gated Spillway w/ (2) 20' wide roller gates	C12 West Canal Improvement
			(1) 170 cfs aux. pump				(1) 170 cfs aux. pump				(1) 235 cfs aux. pump		
G54	G-15 (North New River)	N/A	N/A	N/A	N/A	N/A	N/A	Gated Spillway w/ (4) 20' wide roller gates	NNR West Storage	810	(3) 270 cfs pumps	Gated Spillway w/ (4) 20' wide roller gates	NNR Canal Improvement NNR West Storage
S13	C-11 (South New River)	700 (+ aux.)	(2) 115 cfs pumps	Gated Box Culvert w/ (1) 25' wide roller gate	N/A	1,080	(2) 180 cfs pumps	Gated Spillway w/ (2) 14' wide roller gate	C-11 West / C-11 East Canal Improvement	1,500	(2) 250 cfs pumps	Gated Box Culvert w/ (1) 25' wide roller gate	C-11 West / C-11 East Canal Improvement
			(2) 235 cfs pumps				(2) 360 cfs pumps				(2) 500 cfs pumps		
			(1) 235 cfs aux. pump				(1) 360 cfs aux. pump				(1) 500 cfs aux. pump		



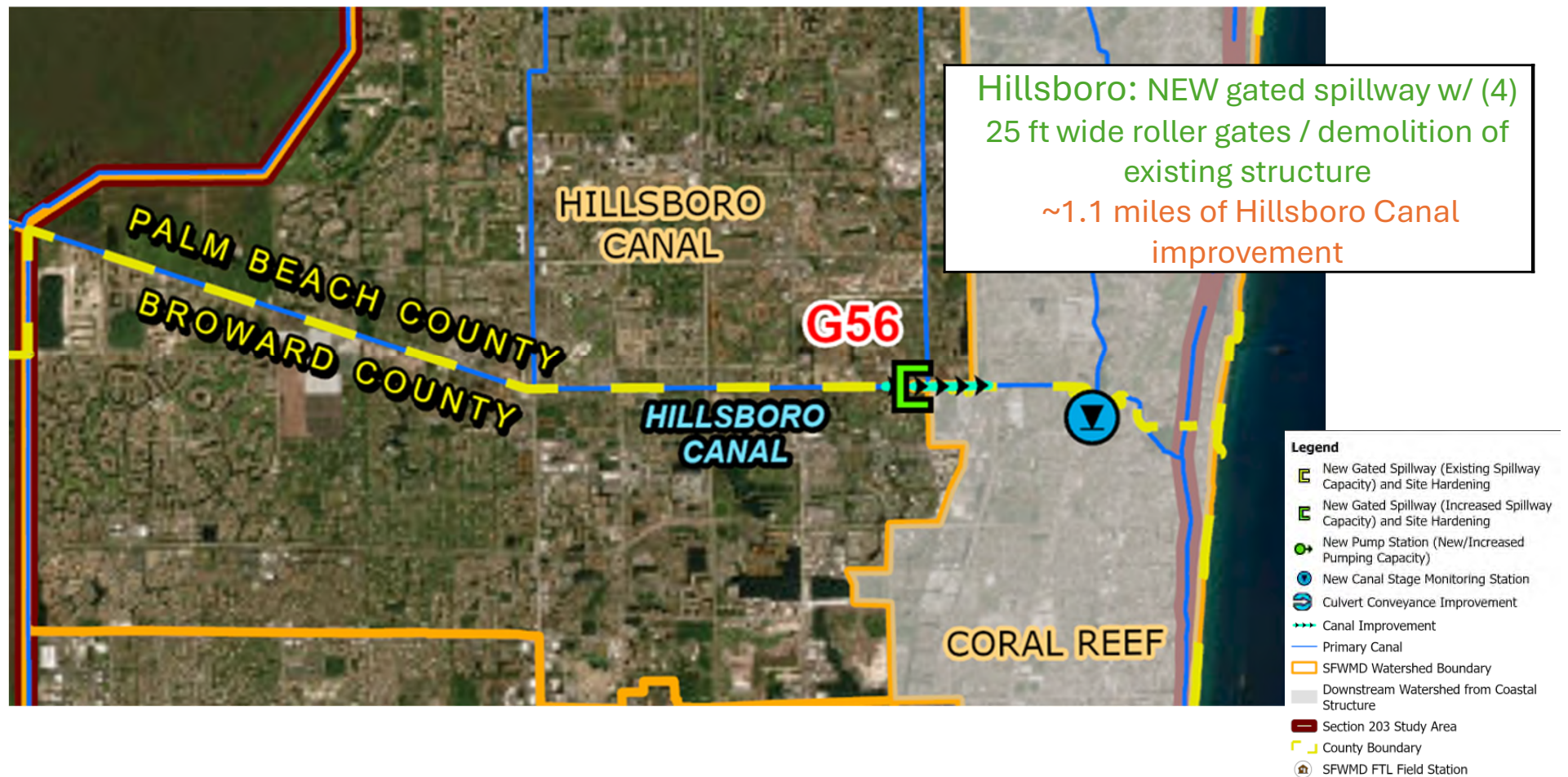


TENTATIVELY SELECTED PLAN (TSP / ALT RO)

Basin	Structure	Existing Condition	Final Array Alternative	Tentatively Selected Plan (TSP)
Hillsboro Canal	G-56 Gated Spillway	(3) 20 ft wide spillway gates	Alternative B	NEW gated spillway w/ (4) 25 ft wide roller gates / demolition of existing structure ~1.1 miles of Hillsboro Canal improvement
Pompano Canal	G-57 Gated Spillway	(2) 14 ft wide spillway gates (1) 1400 linear ft 10 ft diam. culvert (upstream of G-57)	Alternative B	NEW gated spillway w/ (2) 21 ft wide roller gates / demolition of existing structure 2 NEW 1400 linear ft 10 ft diam. culverts (upstream of G-57)
C-14 West Basin	S-37B Gated Spillway	(2) 25 ft wide spillway gates	Alternative A (modified)	NEW gated spillway w/ (2) 25 ft wide roller gates / demolition of existing structure ~1.2 miles of C-14 Canal improvement
C-14 East Basin	S-37A Gated Spillway	(2) 25 ft wide spillway gates	Alternative A (modified)	NEW gated spillway w/ (3) 25 ft wide roller gates / demolition of existing structure NEW 1200 CFS pump station w/ 400 CFS auxiliary pump
C-13 West Basin	S-36 Gated Spillway	(1) 25 ft wide spillway gate	Alternative B (modified)	NEW gated spillway w/ (2) 16 ft wide roller gates / demolition of existing structure NEW 510 CFS pump station
C-12 Basin	S-33 Gated Spillway	(1) 20 ft wide spillway gate	Alternative B	NEW gated spillway w/ (2) 20 ft wide roller gates / demolition of existing structure NEW 510 CFS pump station w/ 170 CFS auxiliary pump
North New River Canal West Basin	G-54 Gated Spillway	(3) 16 ft wide spillway gates	Alternative B (modified)	NEW gated spillway w/ (4) 20 ft wide roller gates / demolition of existing structure NEW 810 CFS pump station
C-11 East and West Basins	S-13 Pump Station and Gated Spillway	540 CFS pump station with (1) 16 ft wide spillway gate	Alternative B (modified)	NEW gated spillway w/ (2) 14 ft wide roller gates / demolition of existing structure NEW 1080 CFS pump station w/360 CFS auxiliary pump ~2.0 miles of C-11 Canal improvement (1.5 miles stabilized with riprap)

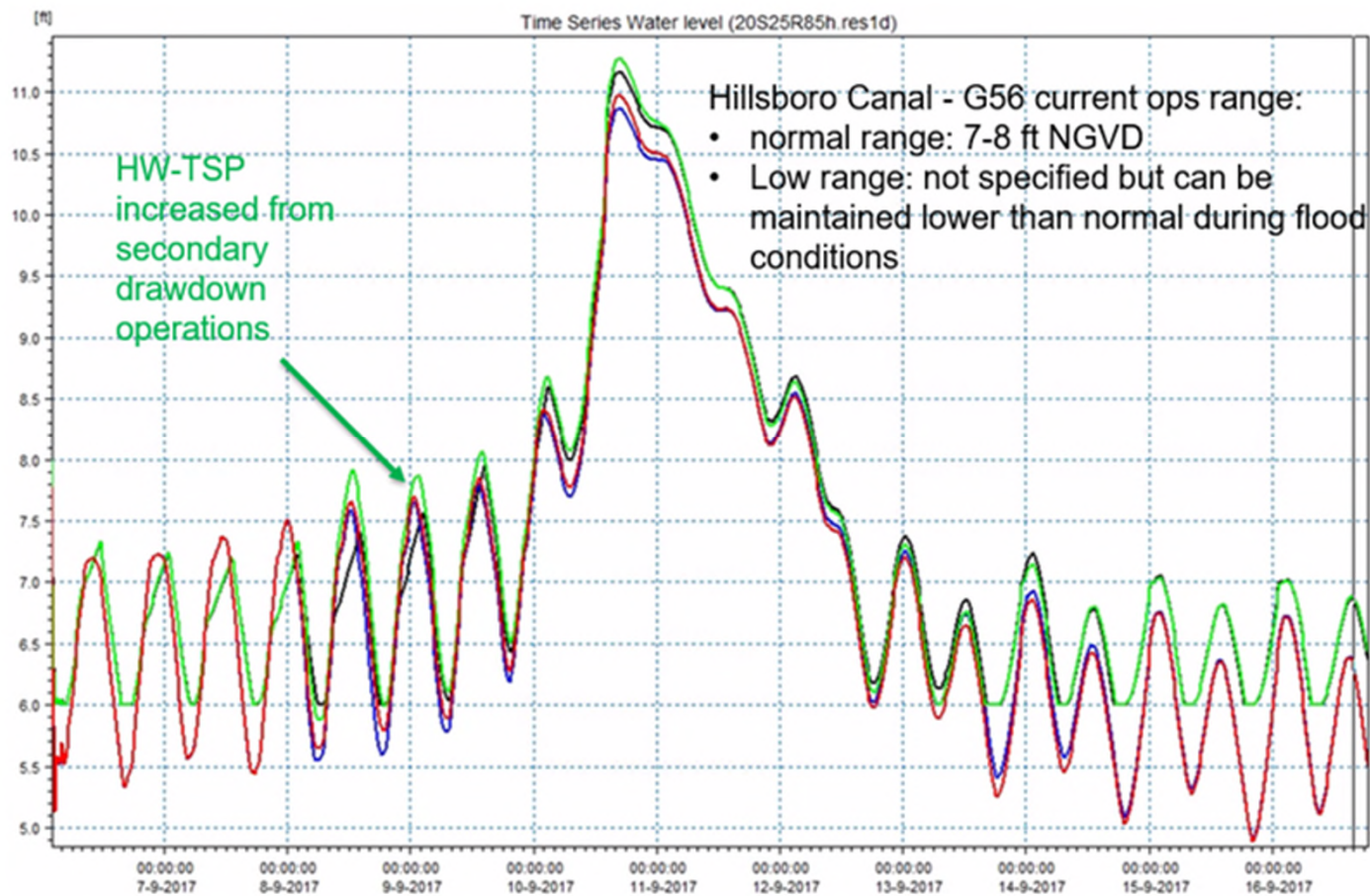


HILLSBORO



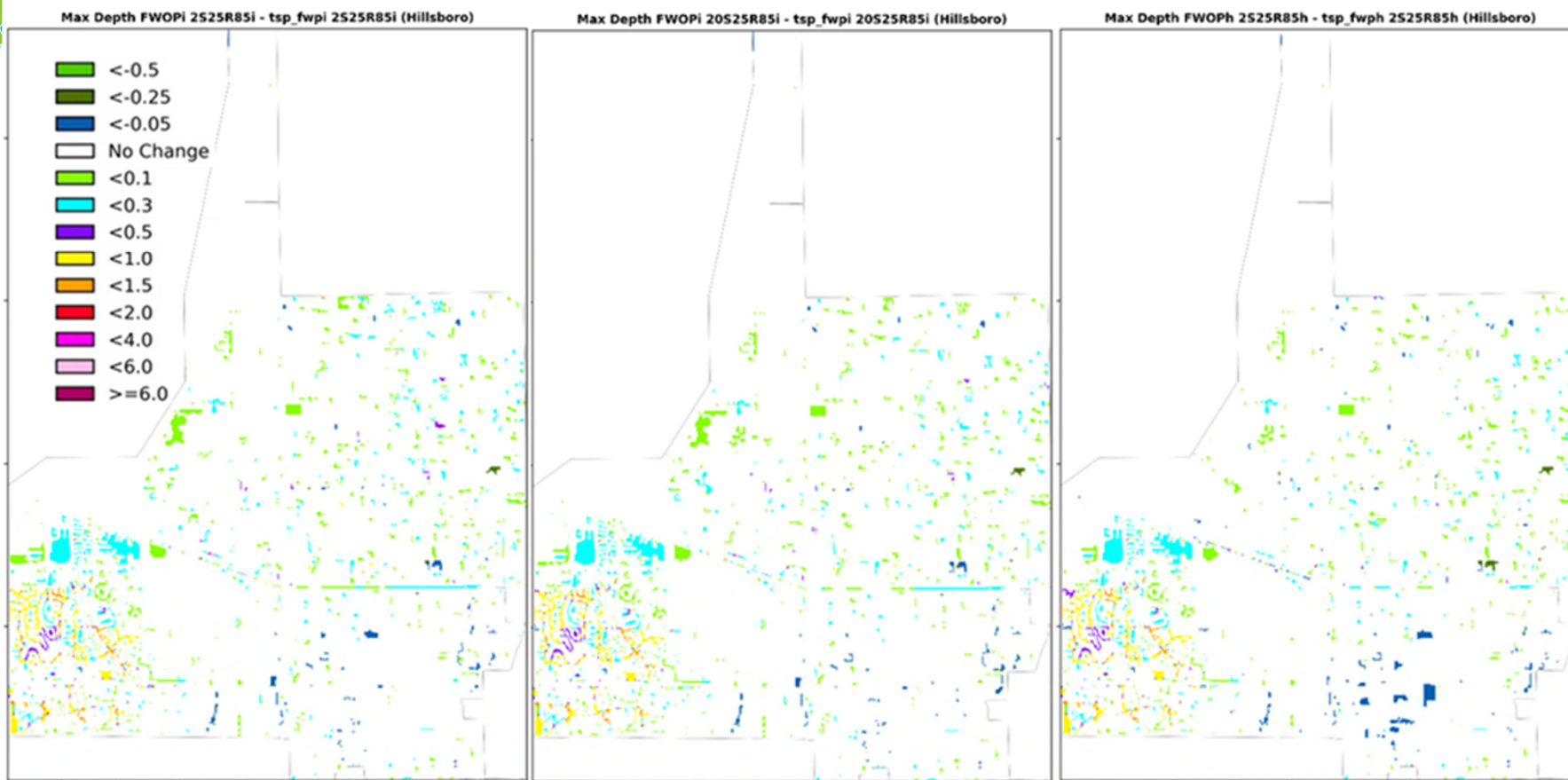


G-56



HW & TW at G54 for 20S25R85h (High Sea Level) – FWOP vs. TSP



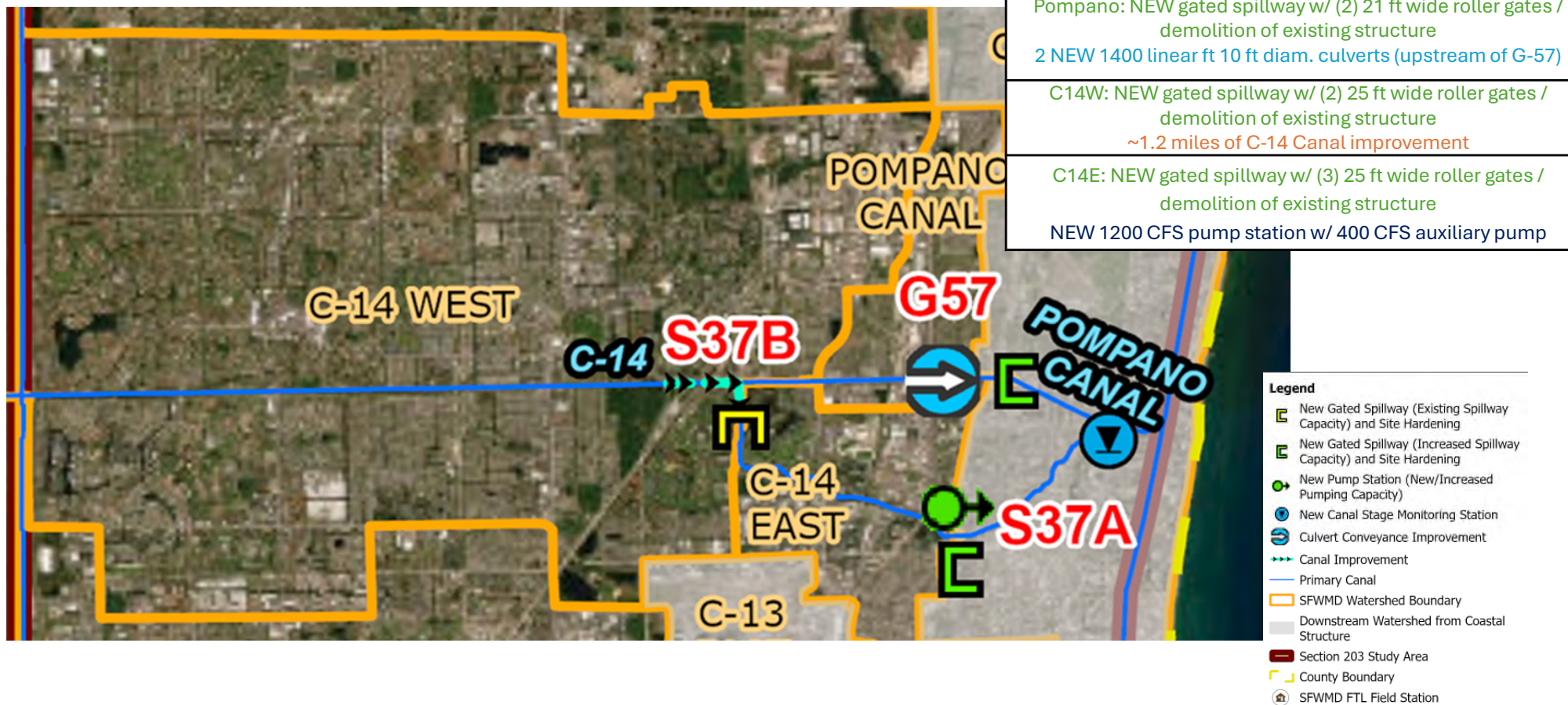


Hillsboro Watershed Flood Depth Difference Maps



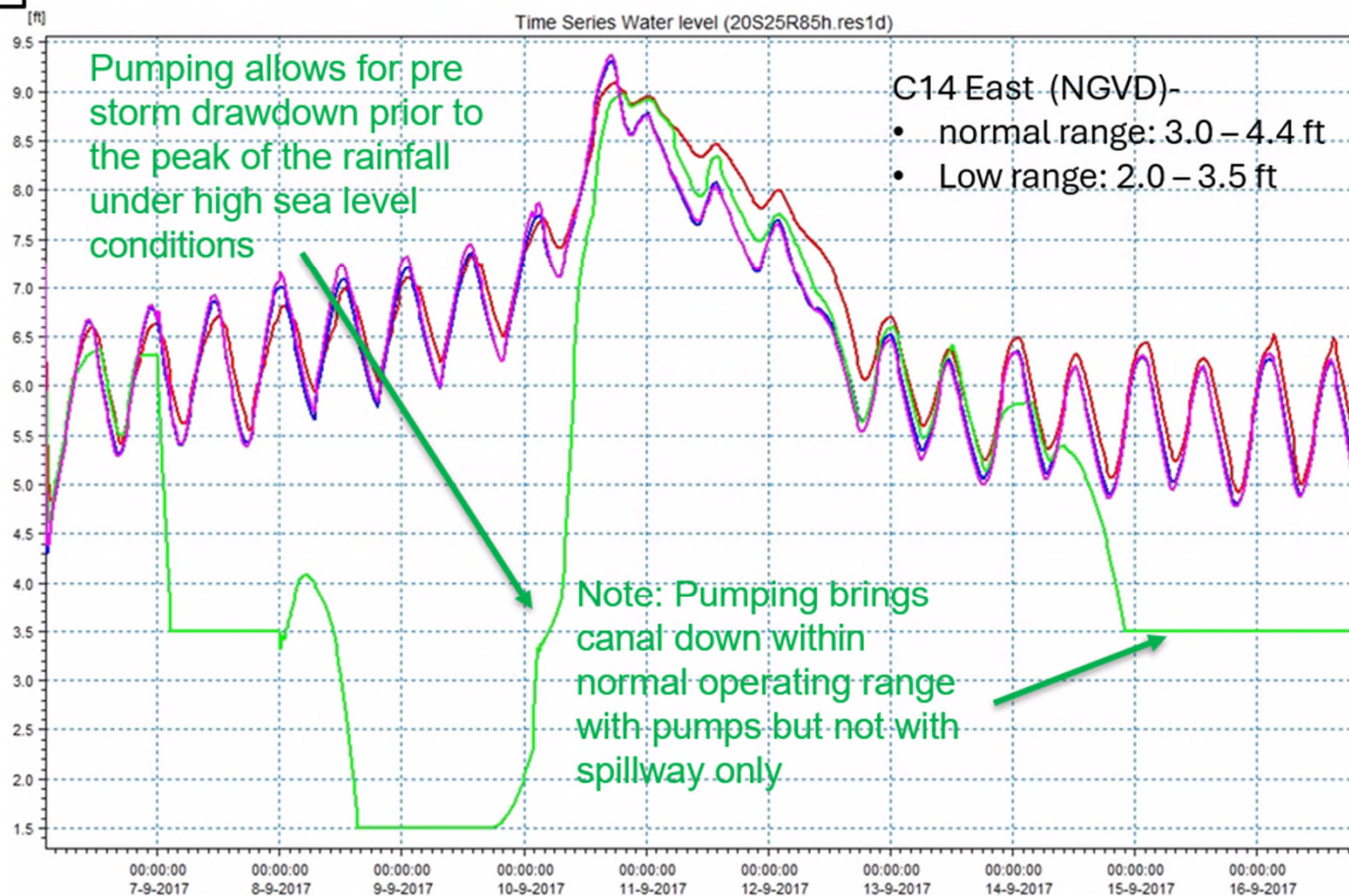


C-14, POMPANO CANAL / S-37A & S-37B AND G-57





S-37A

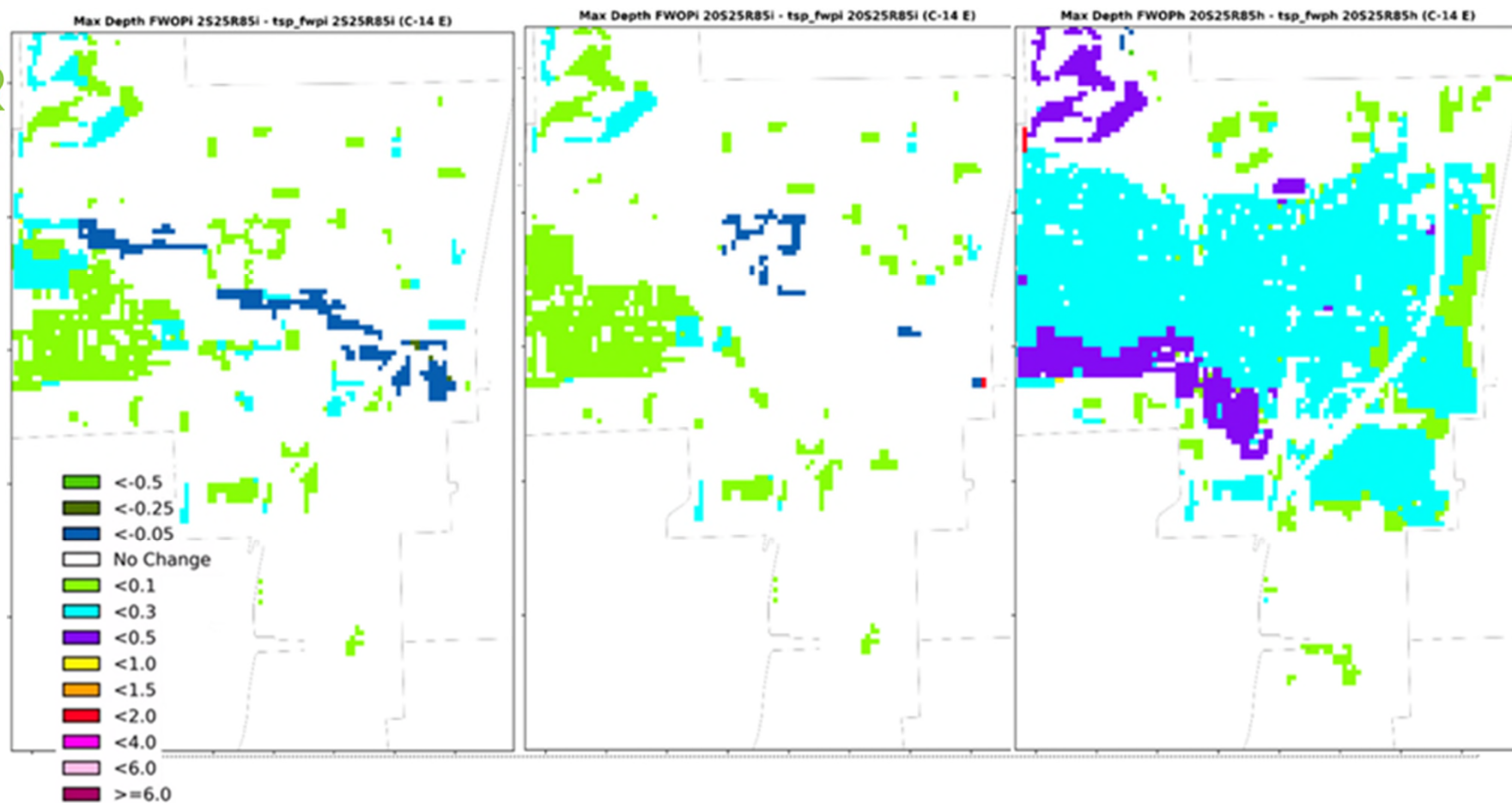


Water level

- S37A-HW-fwoph
- S37A-TW-fwoph
- S37A-HW-tsp
- S37A-TW-tsp

HW & TW at S-37A for 20S25R85h (High Sea Level) – FWOP vs. TSP



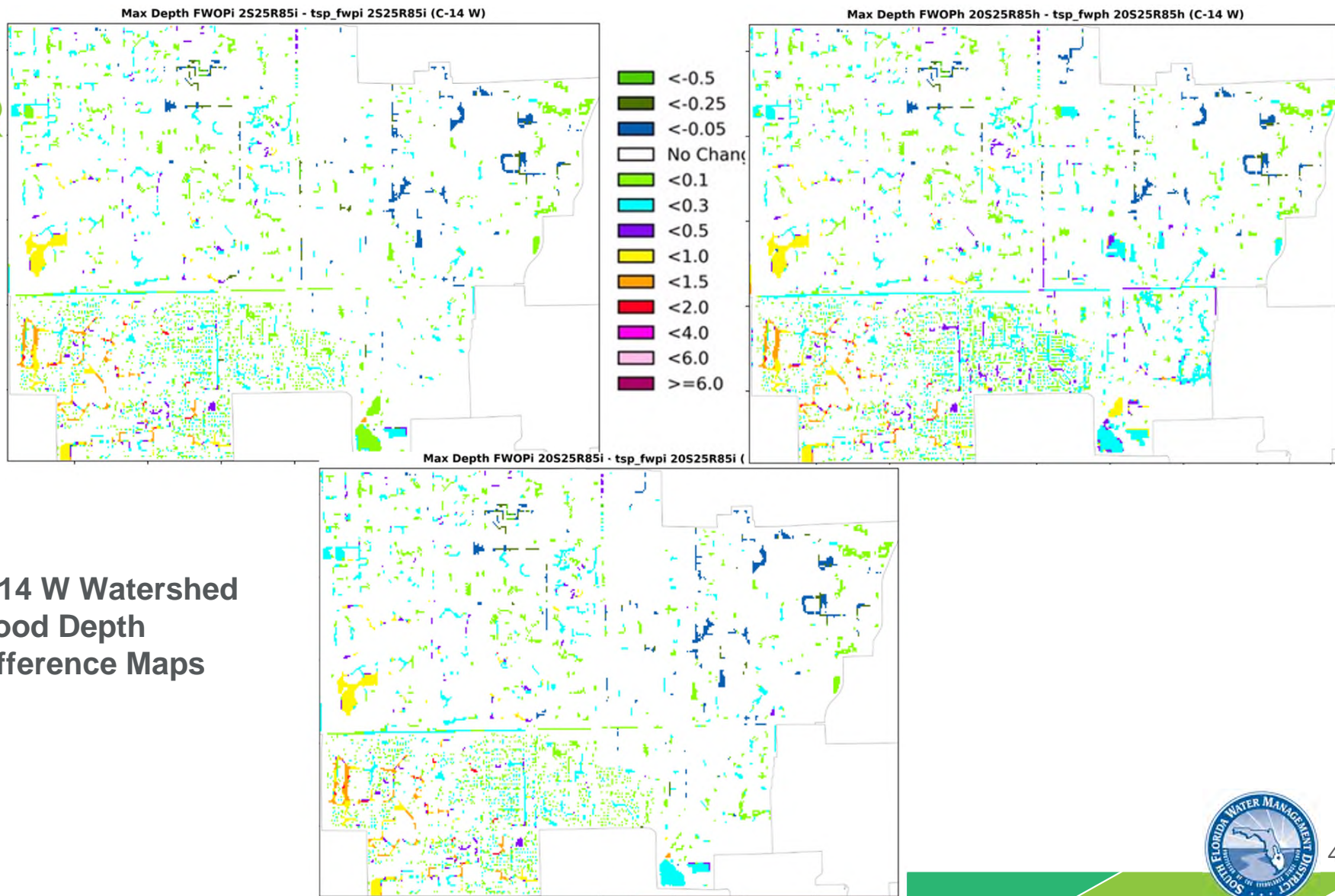


C-14 E Watershed Flood Depth Difference Maps



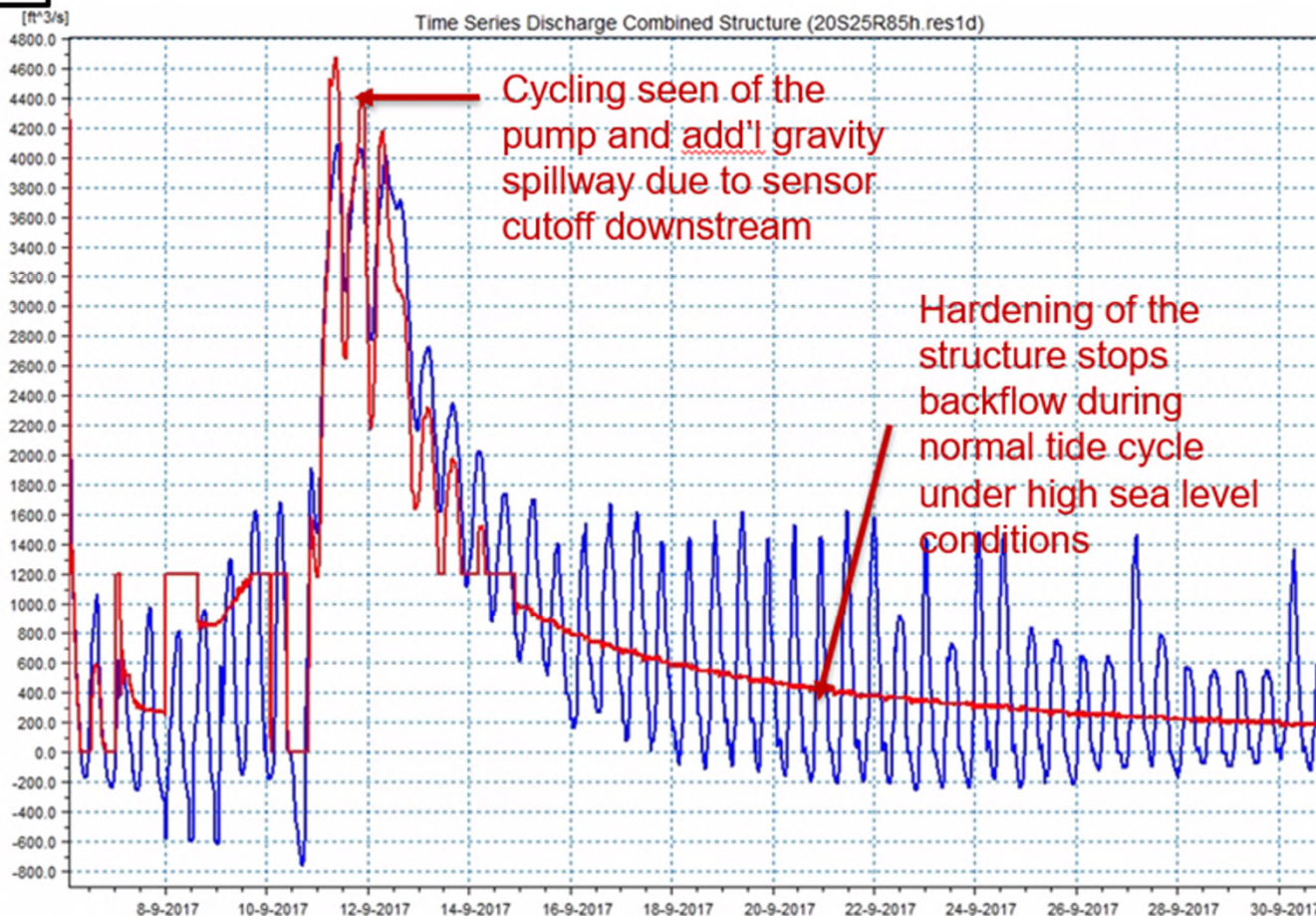


C-14 W Watershed Flood Depth Difference Maps





S-37A

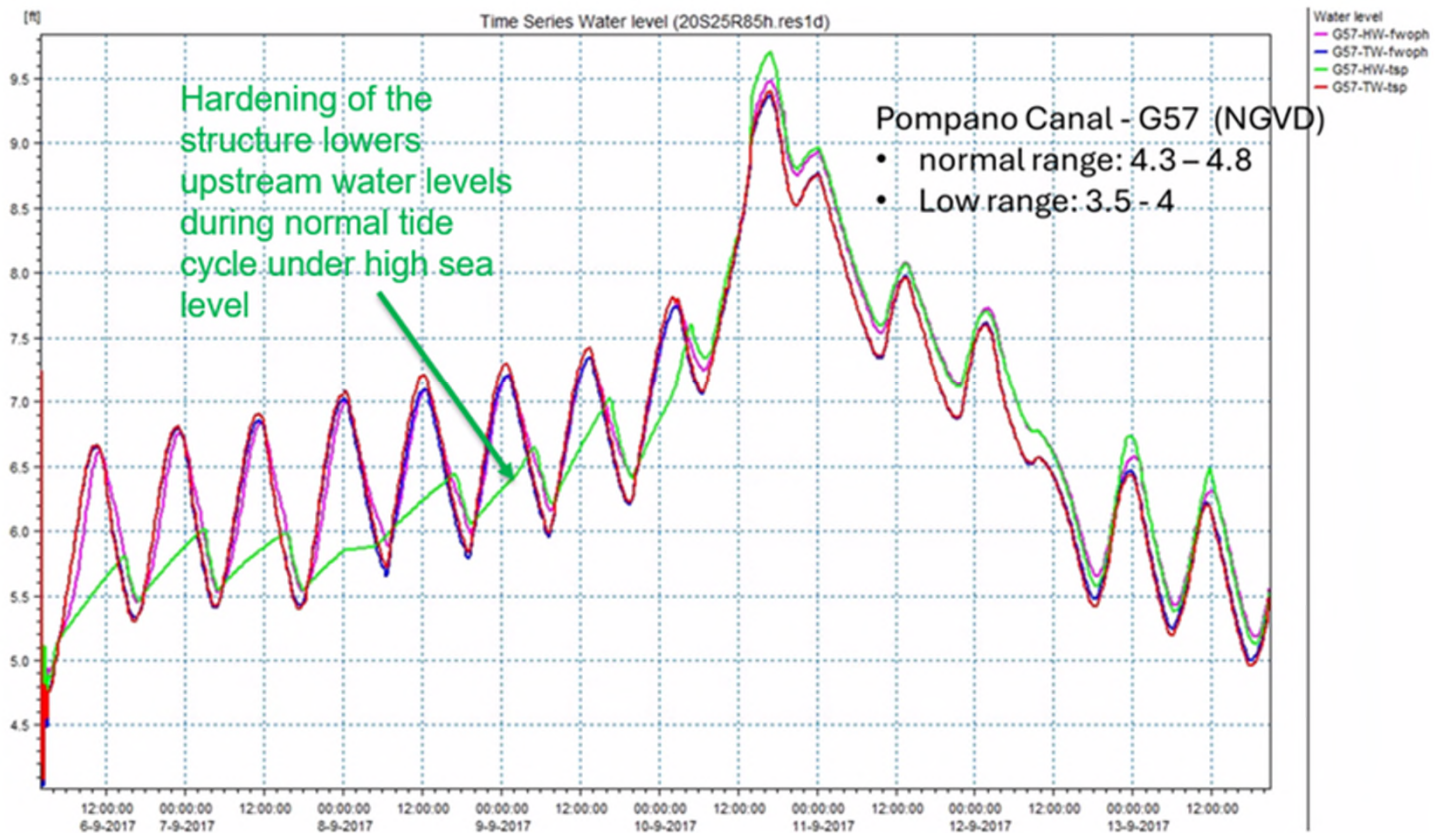


Flow at S-37A for 20S25R85h (High Sea Level) – FWOP vs. TSP



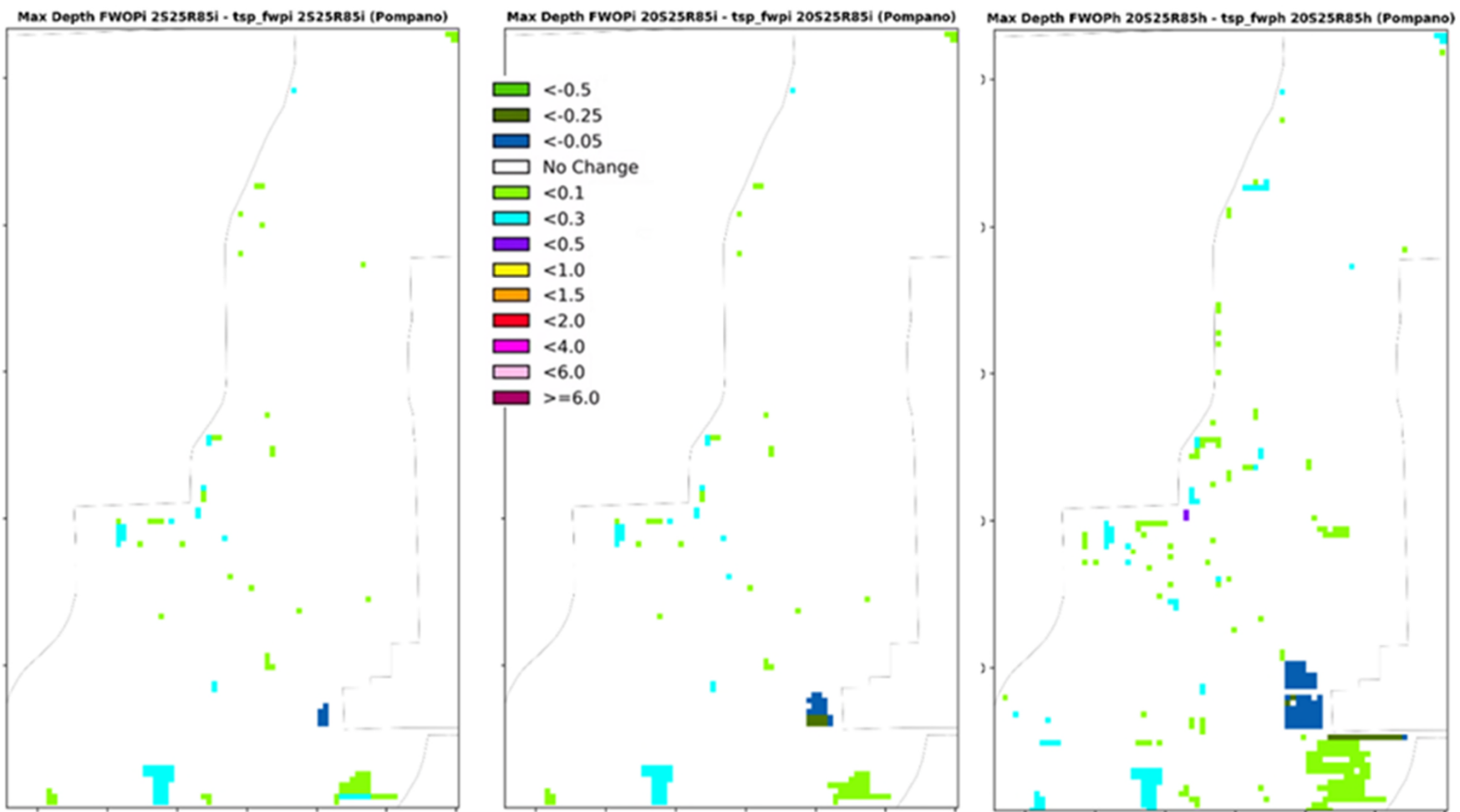


G-57



HW & TW at G57 for 20S25R85h (High Sea Level) – FWOP vs. TSP



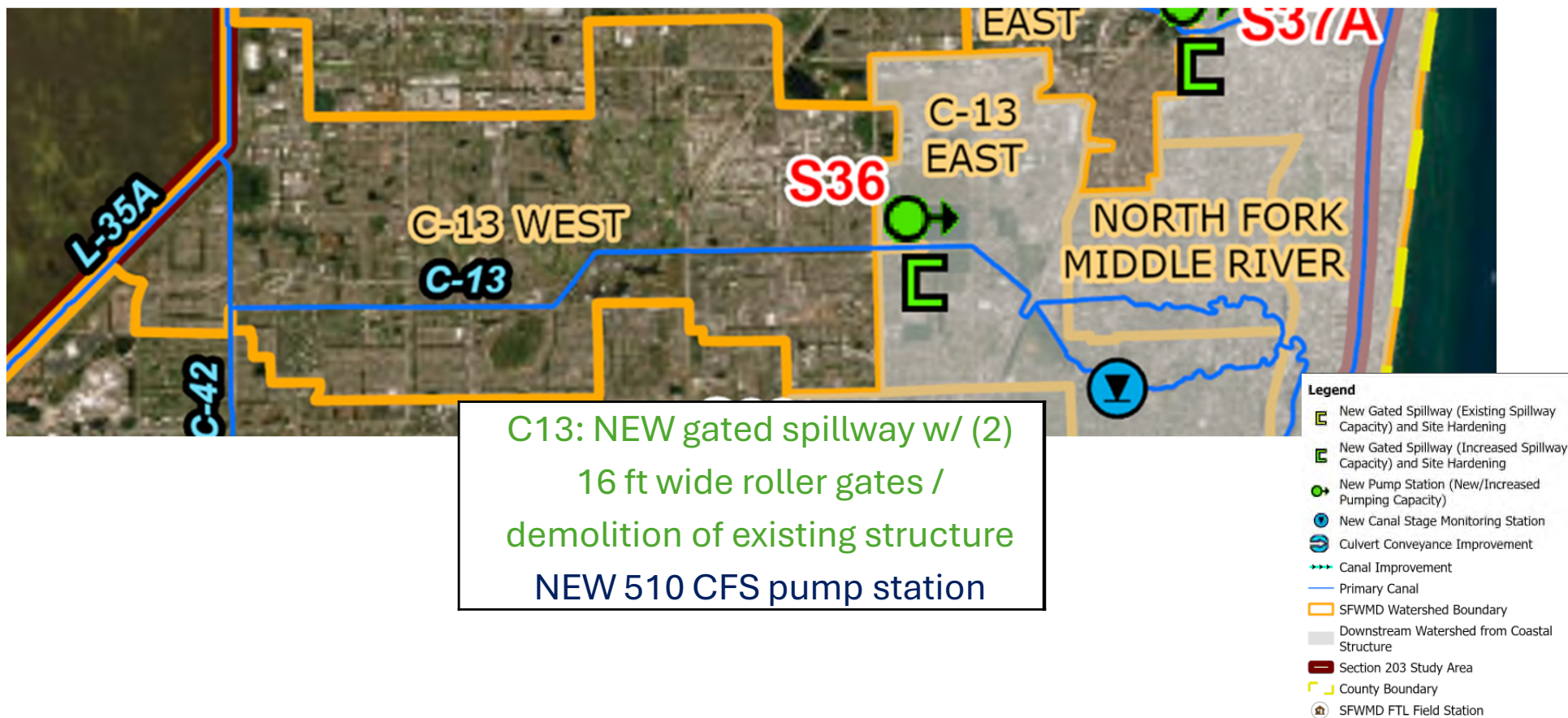


Pompano Watershed Flood Depth Difference Maps



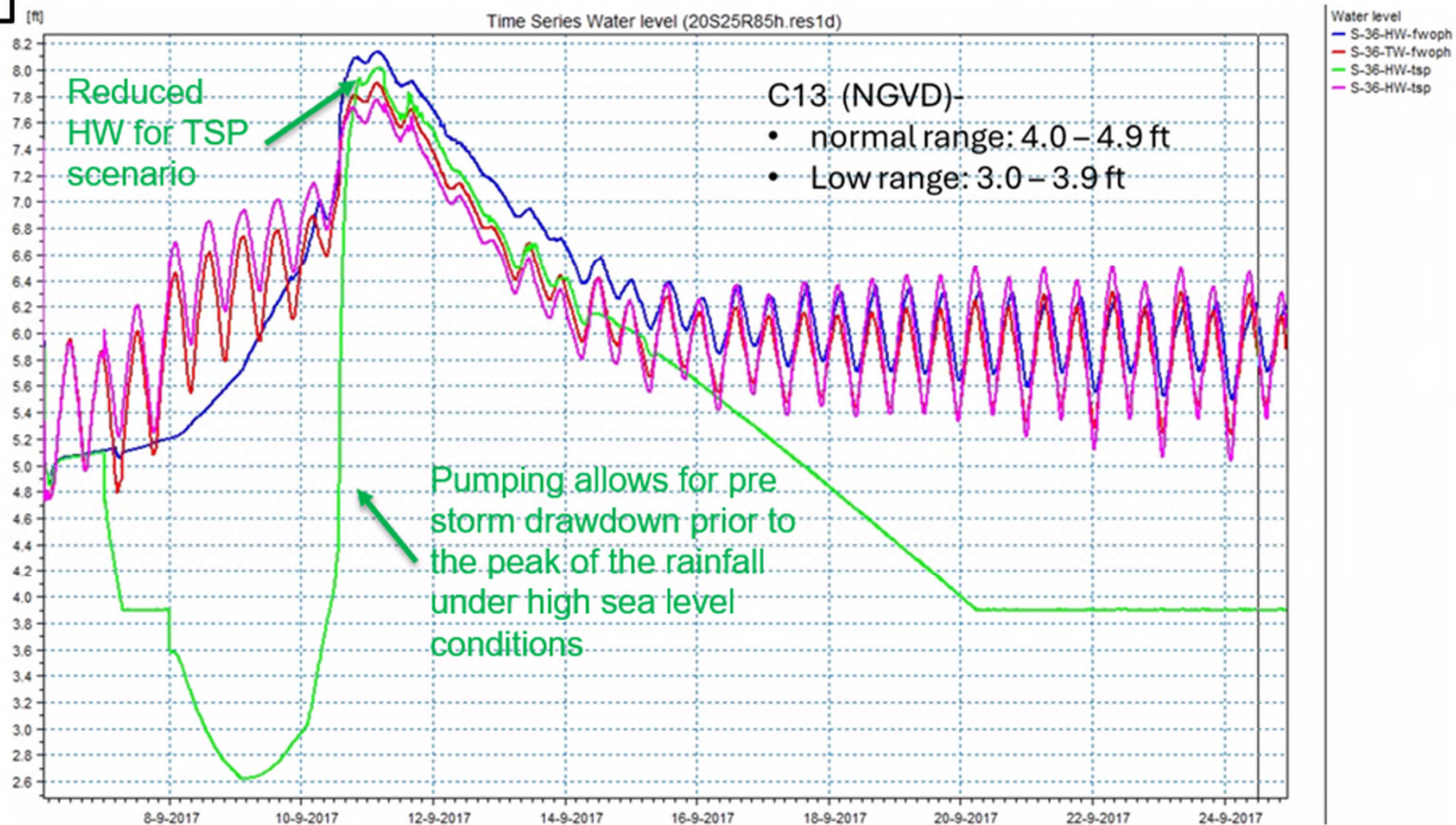


C-13 CANAL / S-36





S-36

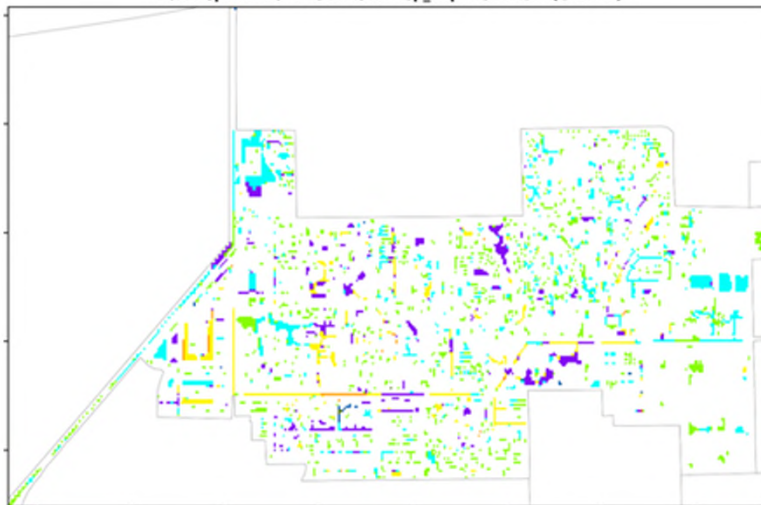


HW & TW at S36 for 20S25R85h (High Sea Level) – FWOP vs. TSP

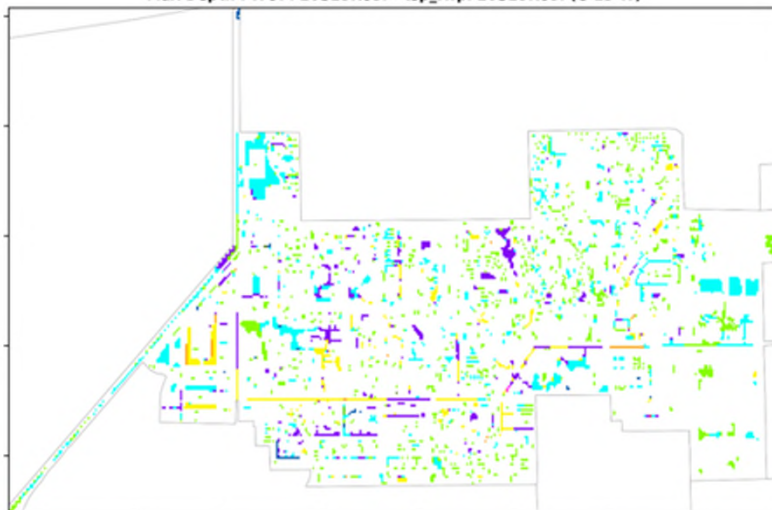




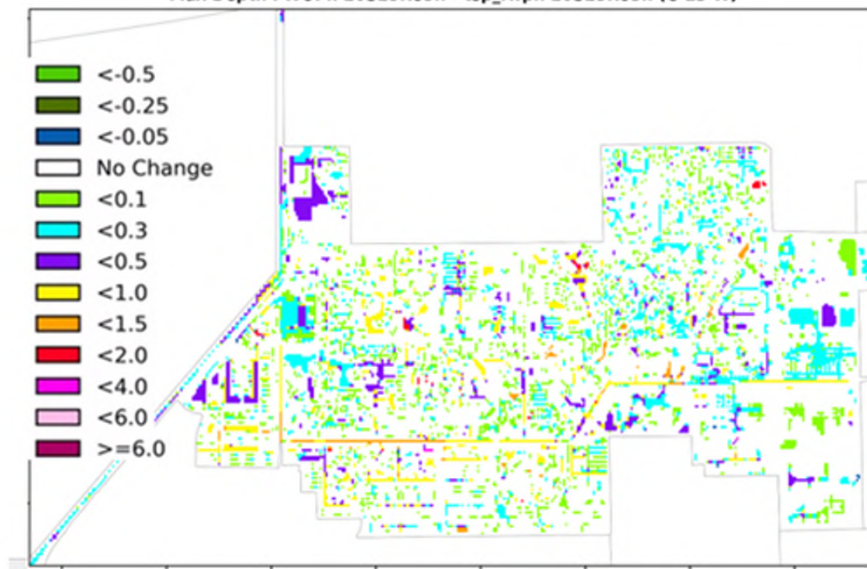
Max Depth FWOPi 2S25R85i - tsp_fwpi 2S25R85i (C-13 W)



Max Depth FWOPi 20S25R85i - tsp_fwpi 20S25R85i (C-13 W)



Max Depth FWOPh 20S25R85h - tsp_fwph 20S25R85h (C-13 W)

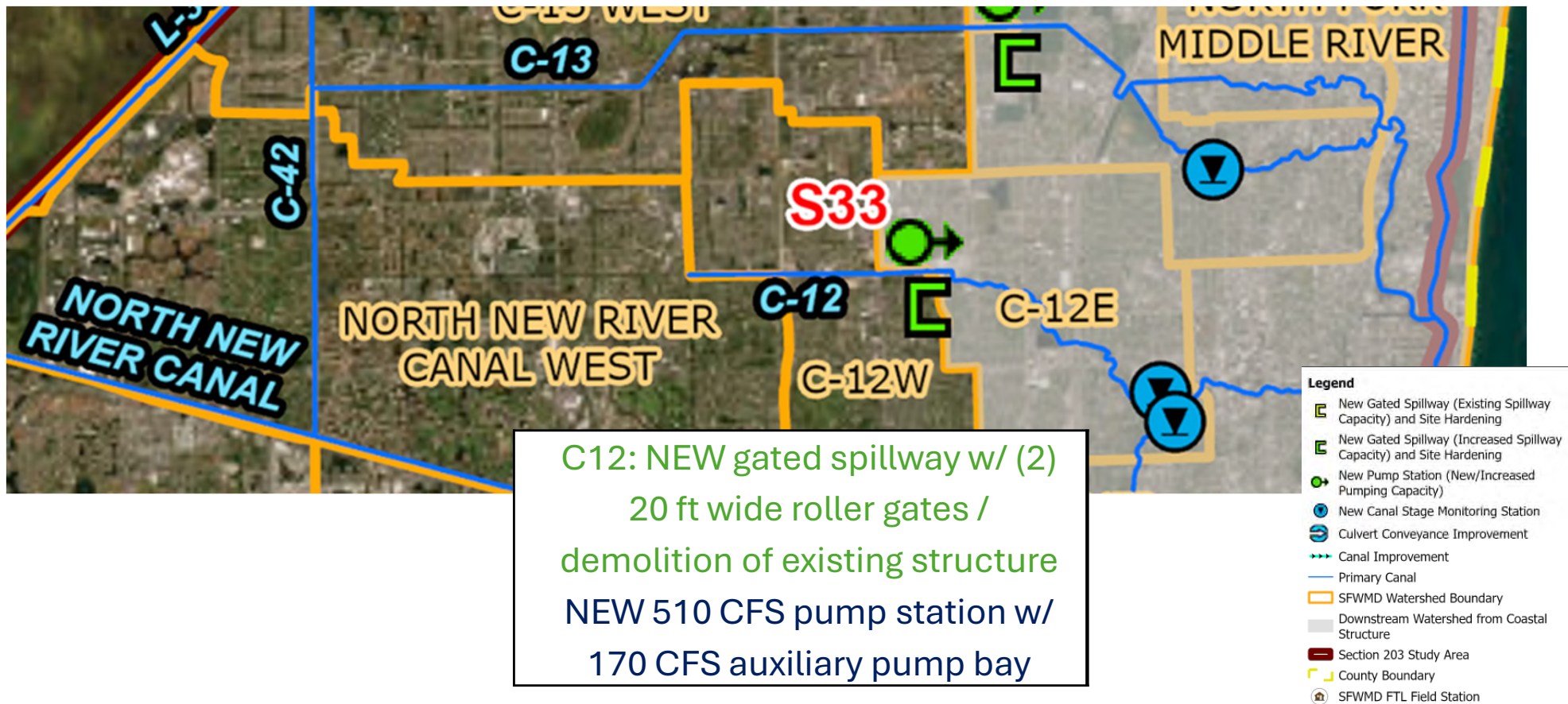


C-13 W Watershed Flood Depth Difference Maps



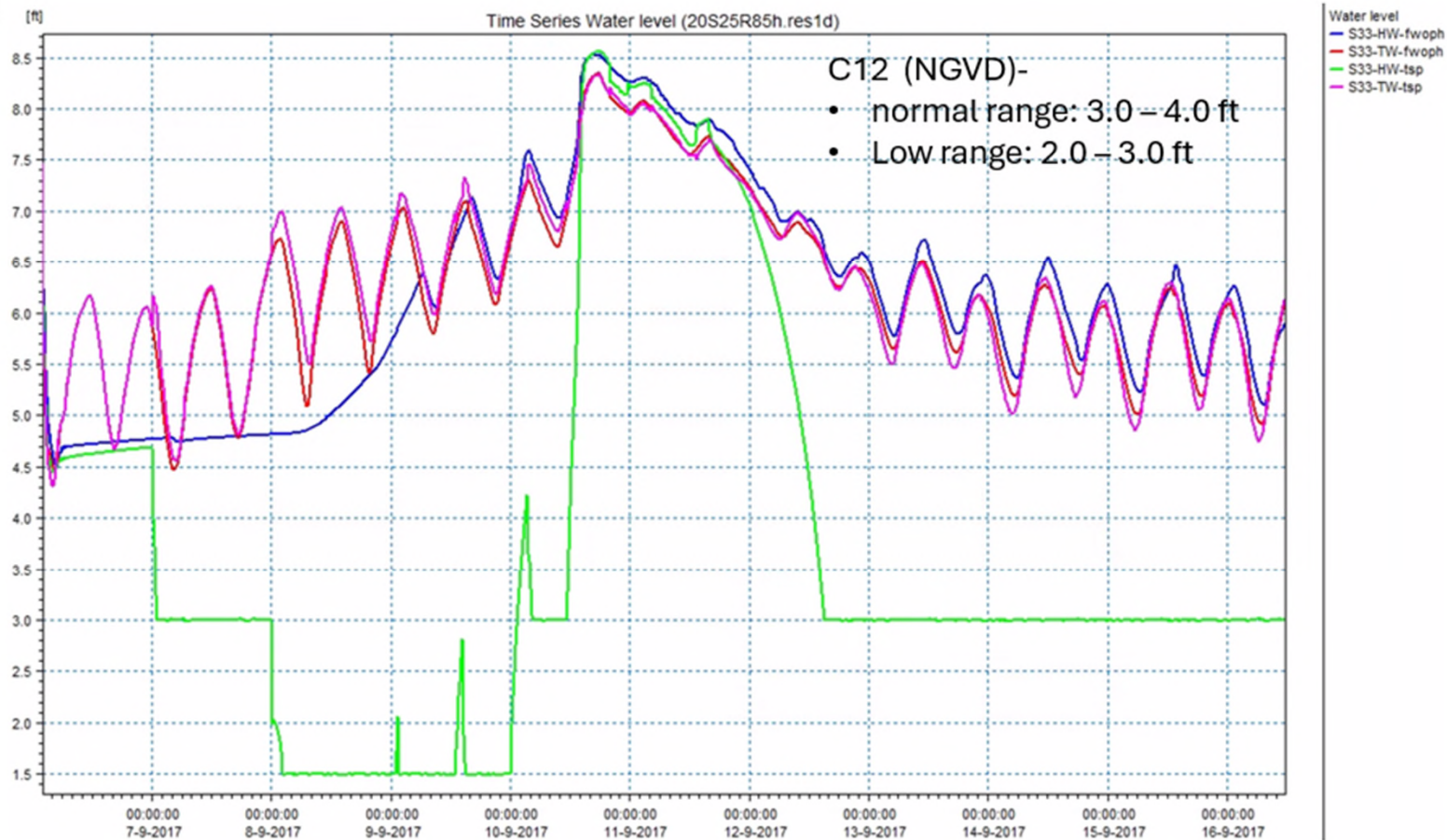


C-12, NORTH FORK NEW RIVER/ S-33



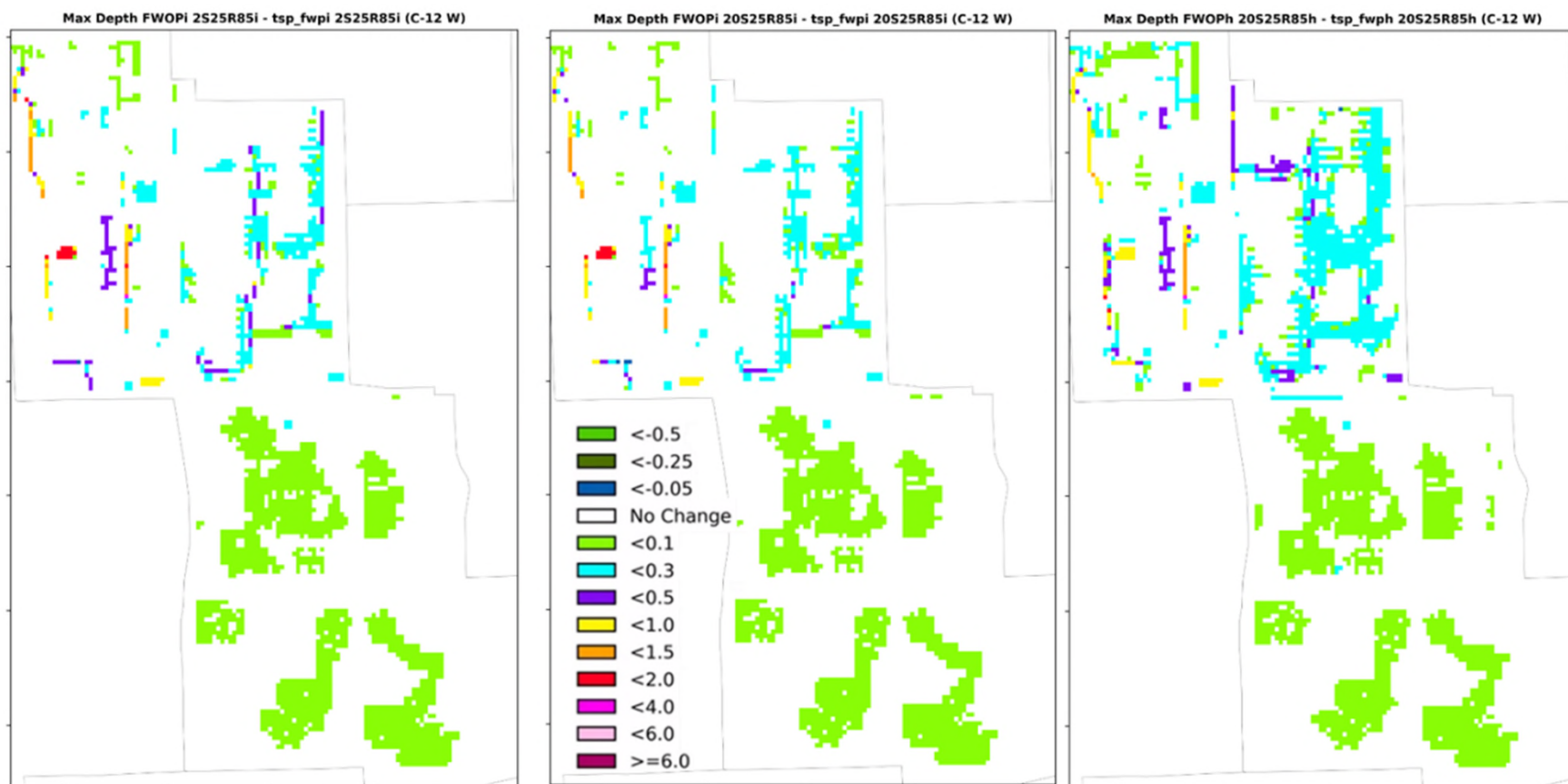


S-33



HW & TW at S33 for 20S25R85h (High Sea Level) – FWOP vs. TSP



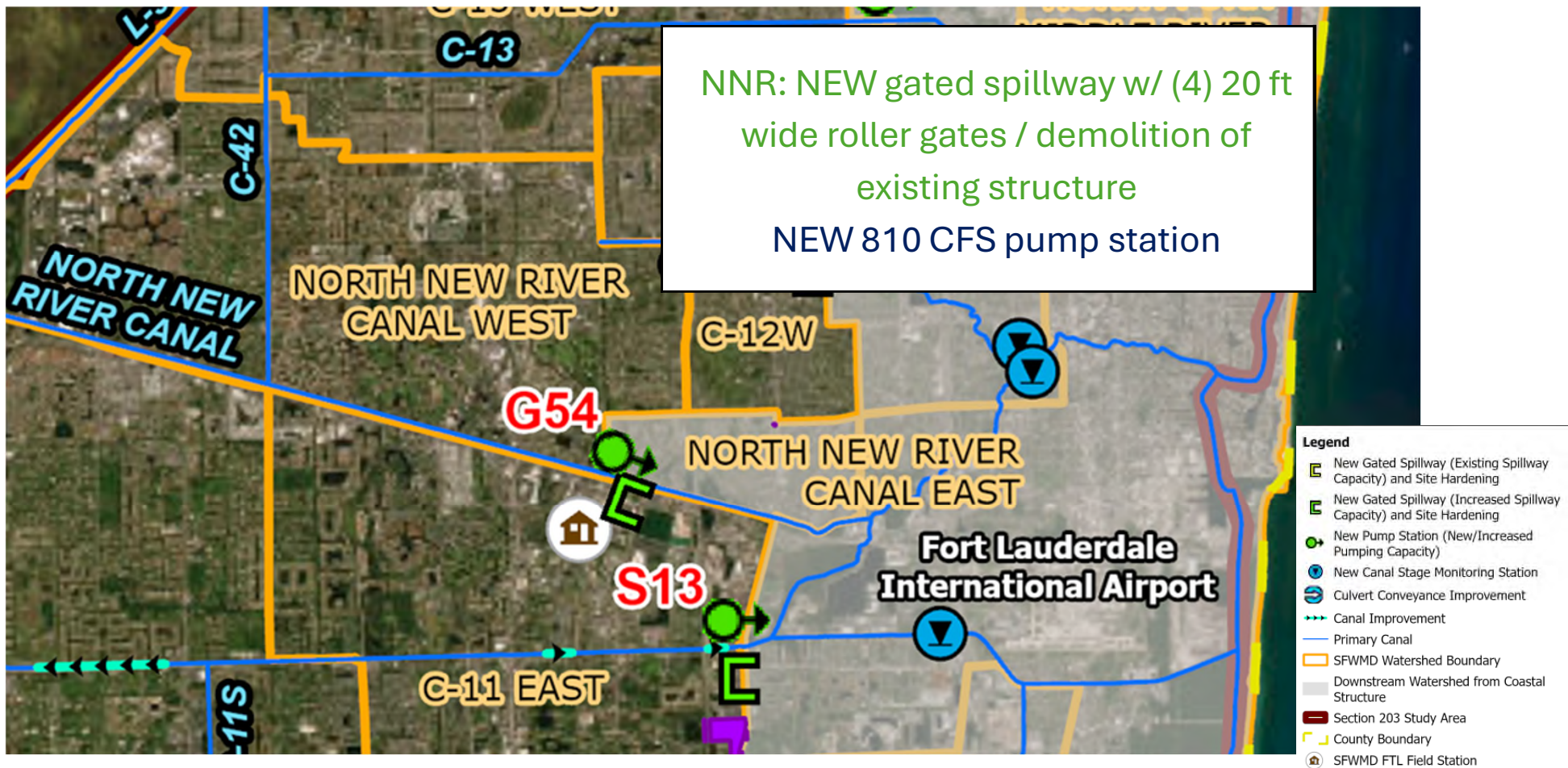


C-12 W Watershed Flood Depth Difference Maps



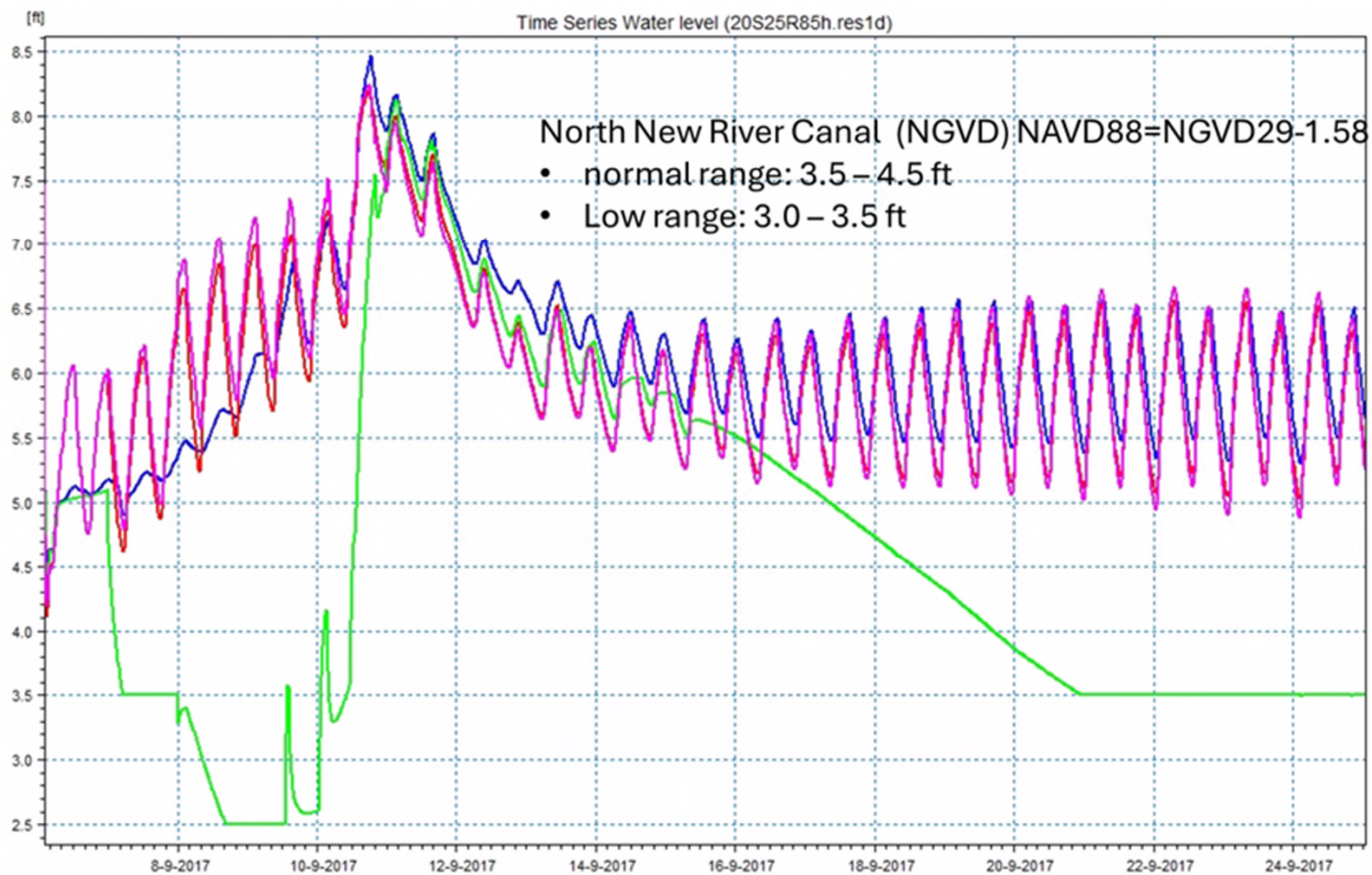


NORTH NEW RIVER CANAL /G-54





G-54

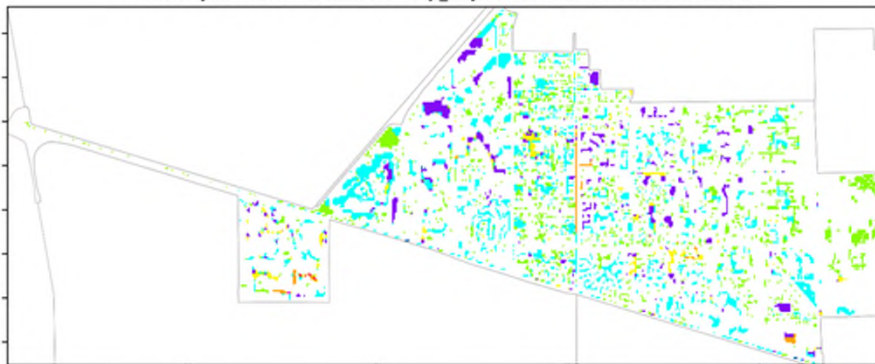


HW & TW at G54 for 20S25R85h (High Sea Level) – FWOP vs. TSP

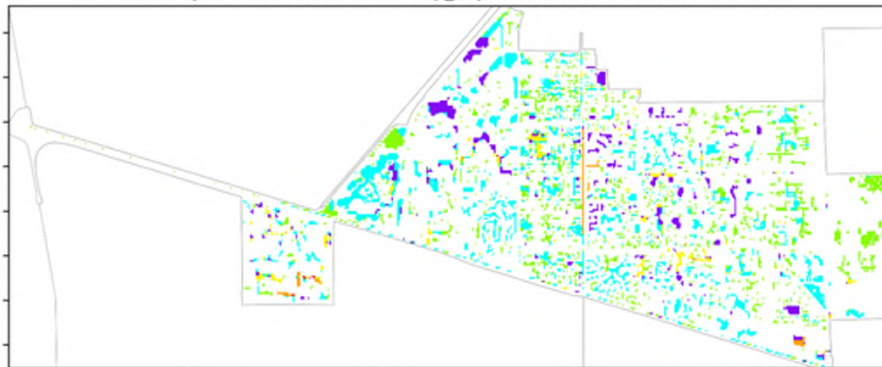




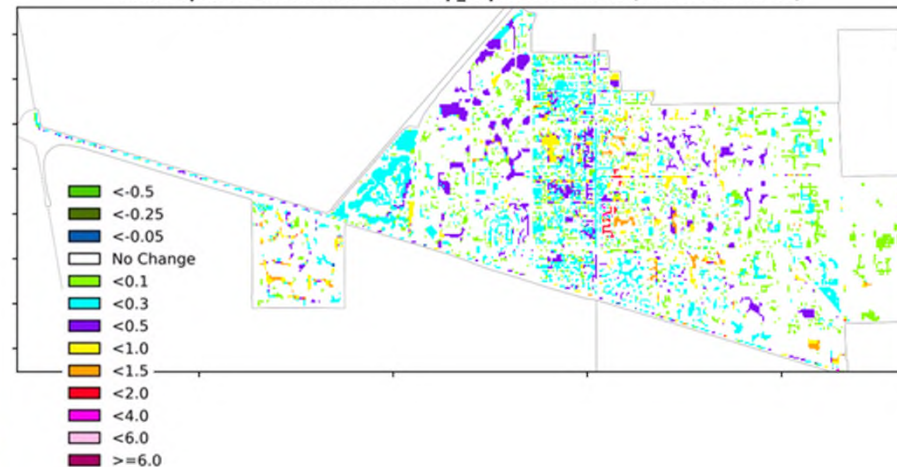
Max Depth FWOPi 2S25R85i - tsp_fwpi 2S25R85i (North New River)



Max Depth FWOPi 20S25R85i - tsp_fwpi 20S25R85i (North New River)



Max Depth FWOPh 20S25R85h - tsp_fwph 20S25R85h (North New River)



North New River Canal West Watershed Flood Depth Difference Maps





C-11 CANAL /S-13



- Legend**
- New Gated Spillway (Existing Spillway Capacity) and Site Hardening
 - New Gated Spillway (Increased Spillway Capacity) and Site Hardening
 - New Pump Station (New/Increased Pumping Capacity)
 - New Canal Stage Monitoring Station
 - Culvert Conveyance Improvement
 - Canal Improvement
 - Primary Canal
 - SFWMD Watershed Boundary
 - Downstream Watershed from Coastal Structure
 - Section 203 Study Area
 - County Boundary
 - SFWMD FTL Field Station

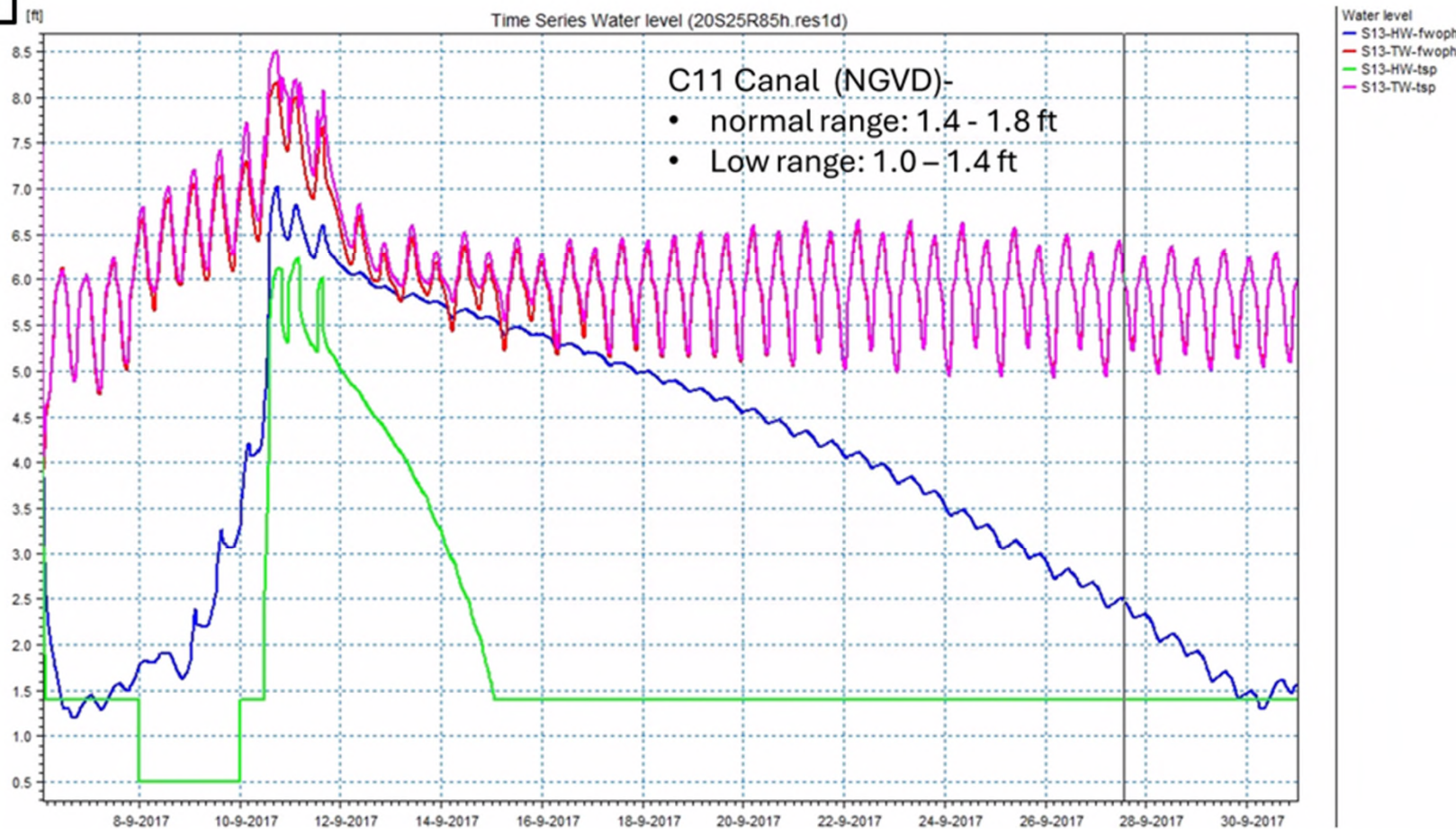
C11: NEW gated spillway w/ (2) 14 ft wide roller gates / demolition of existing structure

NEW 1080 CFS pump station w/360 CFS auxiliary pump bay

~2.0 miles of C-11 Canal improvement (1.5 miles stabilized with riprap)

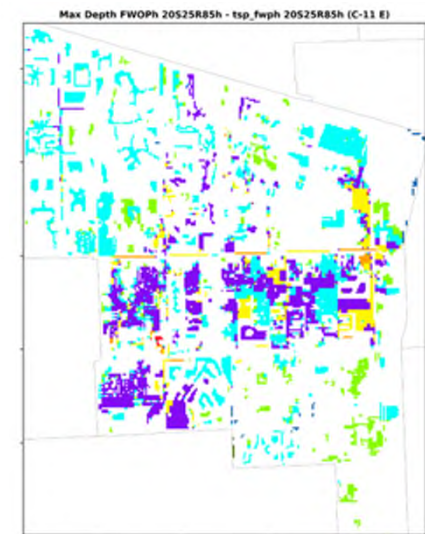
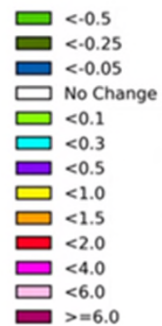
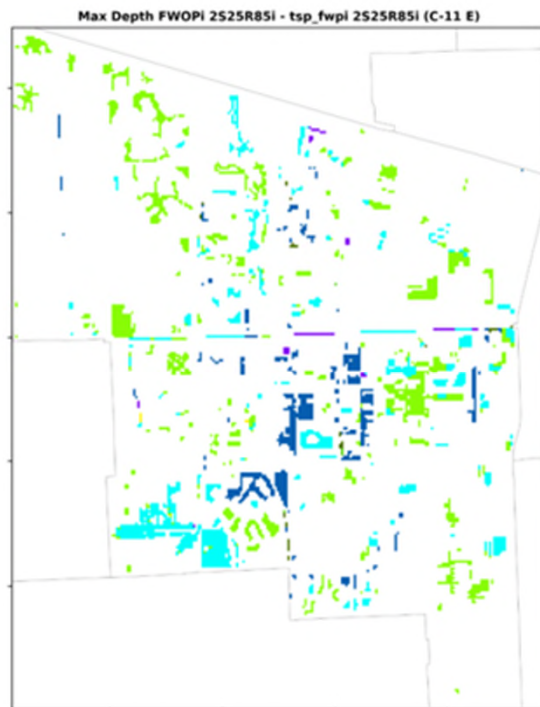


S-13



HW & TW at S13 for 20S25R85h (High Sea Level) – FWOP vs. TSP





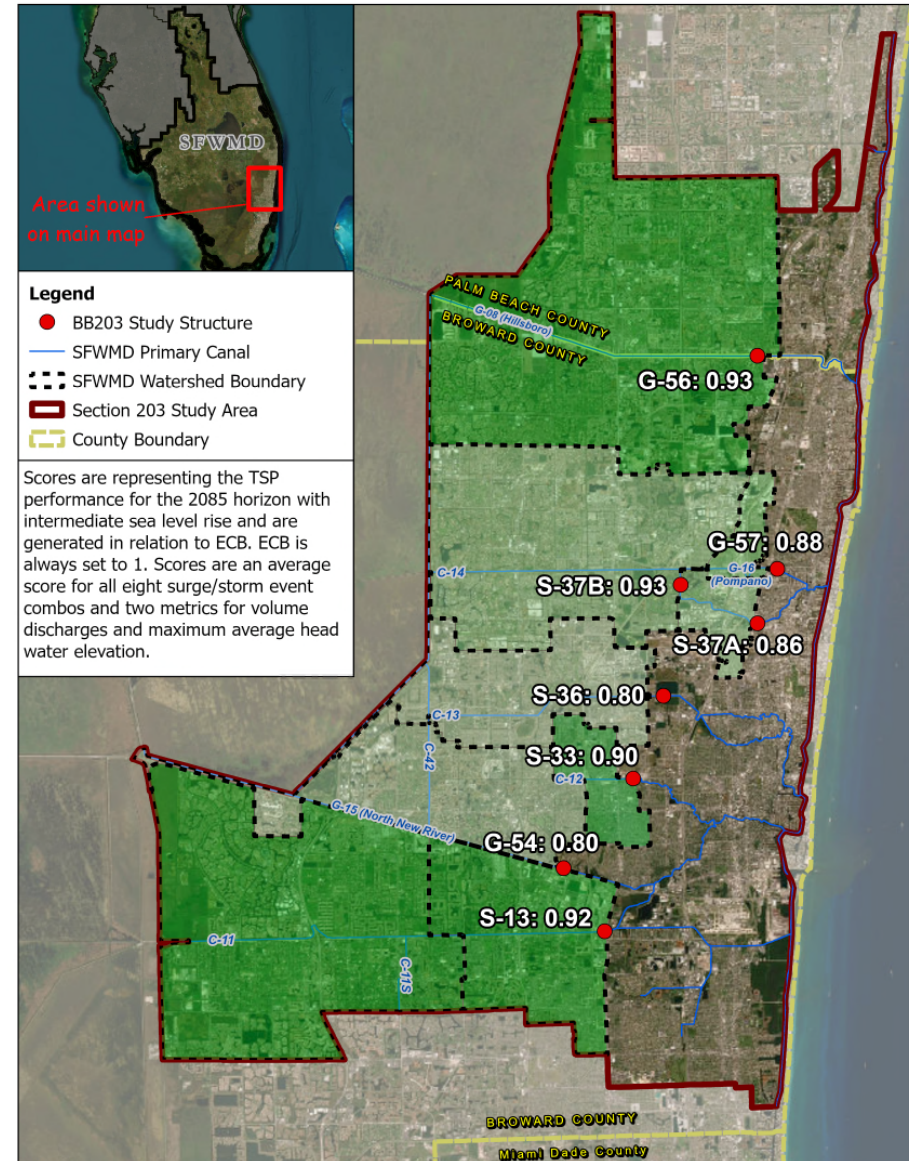
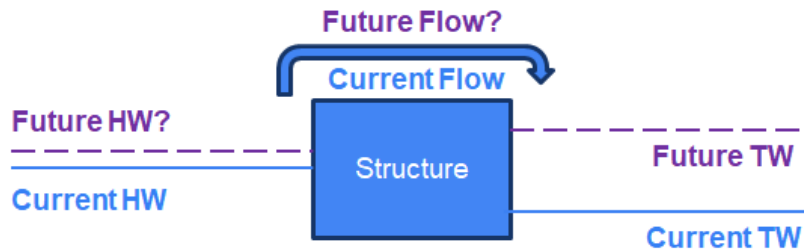
C-11 E Watershed Flood Depth Difference Maps





RESILIENCE OPTIMIZED TSP

- Returning to the evaluation of the hydraulic performance of the primary canal infrastructure, the TSP scores highly (i.e. ≥ 0.8 on a scale of 0 to 1) for every basin in the project area.
- This indicates that recommended infrastructure will be effective at maintaining current canal levels and discharge rates.
- Features in the TSP also have redundancy to help ensure reliable future operation.





TSP COMPREHENSIVE BENEFITS RESULTS:

NED

	Low SLR	Intermediate SLR	High SLR
Total Benefits	\$1,922 Million	\$2,630 Million	\$2,675 Million
Net Benefits	-\$359 Million	\$350 Million	\$394 Million
Benefit-to-Cost Ratio (BCR)	0.84	1.15	1.17



TSP COMPREHENSIVE BENEFITS RESULTS:

RED

Intermediate SLR

3.33% Probability
Event

0.91% Probability
Event

0.23% Probability
Event

\$0.4 Million Annual Reduction in Direct
Output Loss

\$0.8 Million

\$0.6 Million

\$0.2 Million

High SLR

3.33% Probability
Event

0.91% Probability
Event

0.23% Probability
Event

\$2.0 Million Annual Reduction in Direct
Output Loss

Total Employment Savings – 30+ Jobs
Total Labor Income Savings - \$2.1 Million
Total Value Added Savings - \$2.4 Million
Total Output Savings - \$3.3 Million

\$2.3 Million

\$1.5 Million

\$0.5 Million

Business
Interruption
Direct Output
Loss

Business
Interruption
Regional
Economic
Impacts

Temporary
Displacement
Annualized Net
Value Change
in Displacement
Days



TSP COMPREHENSIVE BENEFITS RESULTS:

RED

Temporary
Displacement
Regional
Economic
Impacts

NFIP
Perspective
% Change in
Structures with
Flood Values
Above FFE

Annual
Construction
Short-Term
Regional
Economic
Impacts

Intermediate SLR

3.33% Probability Event | 0.91% Probability Event | 0.23% Probability Event

Total Employment Savings – 30+ Jobs
Total Labor Income Savings - \$0.8 Million
Total Value Added Savings - \$1.6 Million
Total Output Savings - \$2.3 Million

Zone AO ↓12%
Zone AH ↓12%

Zone AO ↓17%
Zone AH ↓11%

Zone AO ↓12%
Zone AH ↓9%

Total Employment - 1,274 Jobs
Total Labor Income - \$87.4 Million
Total Value Added - \$145.8 Million
Total Output - \$246.8 Million

Annual
Operations
Short-Term
Regional
Economic
Impacts

High SLR

3.33% Probability Event | 0.91% Probability Event | 0.23% Probability Event

Total Employment Savings - 40 Jobs
Total Labor Income Savings - \$2.2 Million
Total Value Added Savings - \$4.5 Million
Total Output Savings - \$6.5 Million

Zone AO ↓51%
Zone AH ↓16%

Zone AO ↓35%
Zone AH ↓18%

Zone AO ↓22%
Zone AH ↓21%

Total Employment - 25 Jobs
Total Labor Income - \$1.7 Million
Total Value Added - \$3.0 Million
Total Output - \$5.6 Million



TSP COMPREHENSIVE BENEFITS RESULTS:

EQ

Number of
Septic Tanks
with Flood
Values
% Change

Flood
Depths in
Areas with
SSO
Occurrences
% Change

Headwater
Stage
Management
with Indirect
Benefits to
Wellfields

Intermediate SLR

3.33% Probability
Event

↓ 1%

0.91% Probability
Event

↓ 2%

0.23% Probability
Event

↓ 1%

↓ 2%

↓ 2%

↓ 2%

Greater headwater stage
management capacity than FWOP
or Alternative A

Threatened &
Endangered
Species
Effects

High SLR

3.33% Probability
Event

↓ 3%

0.91% Probability
Event

↓ 3%

0.23% Probability
Event

↓ 3%

↓ 2%

↓ 3%

↓ 5%

No Direct Effects



TSP COMPREHENSIVE BENEFITS RESULTS:

OSE

Critical Infrastructure
% Change in Flooded Structures

Cultural Resources Sites
% Change in Sites with Flood Values

Intermediate SLR

3.33% Probability Event

0%

0.91% Probability Event

↓ 10%

0.23% Probability Event

↓ 8%

High SLR

3.33% Probability Event

↓ 20%

0.91% Probability Event

↓ 7%

0.23% Probability Event

↓ 19%

↑ 1%

↓ 1%

0%

↓ 1%

↓ 3%

↓ 3%

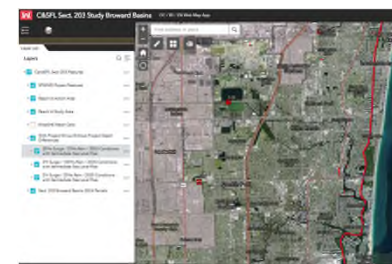
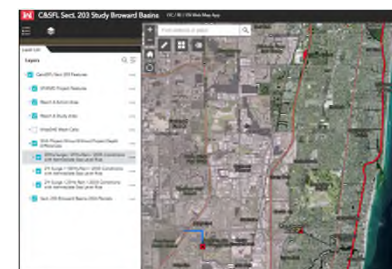
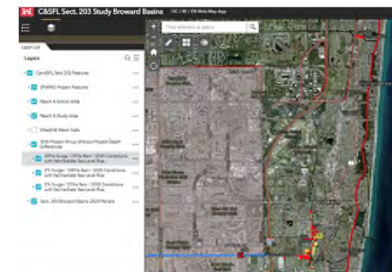
Watershed Approach – Maintains Integrity Across Subbasins

Moderate engineering complexity to reduce flooding in upstream watersheds; moderate tradeoffs in upstream and downstream watersheds.



DOWNSTREAM EFFECTS ANALYSIS

- Initial potential adverse effects, pending further analysis:
 - G-56: Increased peak depth south of Palmetto Park Road to Hillsboro Blvd
 - G-57 and S37A: Increased flood depths in Boulevard Park and Cypress Creek Canal
 - S-36: Increased peak depth in a retention pond and near the intracoastal
 - S-33 and G-54: Increased peak depth near South River Canal and North New River Canal
 - S-13: Increased peak depth along Dania Cut Off Canal and Hollywood Canal
- Total of 20 to 30 parcels with water stages exceeding finished floor elevation, ~600 parcels with adverse flooding impacts limited to yard areas and existing swales
- \$240M to \$330M estimated for real estate takings including 20% to 30% of land area for flowage easements
- Mitigation Alternative: \$250M to \$300M estimated for elevating properties potentially affected
- Detailed evaluation and further compensatory measures to be considered in the next steps





ENGINEERING STUDIES / CONCEPTUAL DESIGNS



AGENDA
 SFWMD/USACE HQ Coordination
 Flood Resiliency (Sec 203) Study Broward Basins
 July 29 - 31, 2025

Tuesday July 29, 2025

- 9:00 AM - 9:15 AM Meet-and-Greet in Bridge Conference Room 3A
- 9:15 AM - 10:00 AM Review 3-Day Meeting Agenda
- 10:00 AM - 4:00 PM Site Visits G-57, S-37A, S37B, S36 and G-54

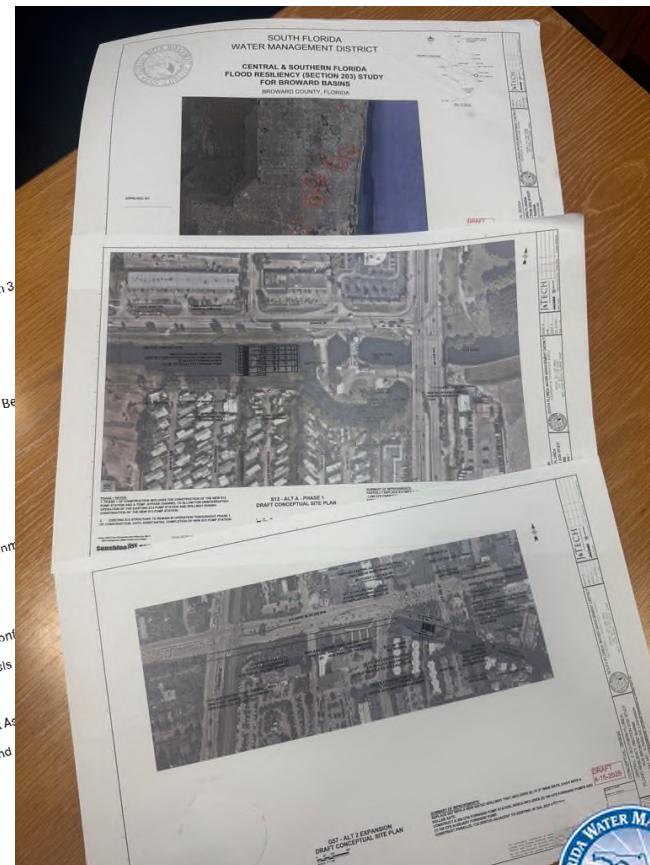
Wednesday July 30, 2025

- 9:00 AM - 9:10 AM Meet-and-Greet in Bridge Conference Room 3
- 9:10 AM - 9:30 AM Site Visit Debrief
- 9:30 AM - 9:45 AM Project Schedule Highlights
- 10:00 AM - 10:15 AM Final Array of Alternatives
- 10:15 AM Benefits Analysis, Table of Effects and Benefits
- 11:00 AM Lunch Break
- 11:30 AM Depth and Duration
- 12:00 PM Meeting Break
- 1:00 PM Depth and Duration Analysis
- 2:00 PM Closing Discussions and Adjournment



Thursday July 31, 2025

- 9:00 AM - 9:15 AM Meet-and-Greet in Bridge Conference Room 3
- 9:15 AM - 11:30 AM Depth and Duration Analysis
- 11:30 AM Lunch Break
- 1:00 PM Open Discussions, Task Assignments
- 2:30 PM Closing Discussions and Adjournment
- 3:00 PM - 2:40 PM





STATUS OF ENGINEERING STUDIES /CONCEPTUAL DESIGN

	S33	S36	S37A	G57A	S13	S37B	G54	S56
Geotechnical								
Phase I Cultural and Historic *								
Hazardous, Toxic & Radioactive Waste								
Final Site Plans								
Survey								



Completed



30% complete in January 2026

* Ongoing coordination with SAJ USACE for consultation (Site G-54 Lock)





SUMMARY – BBFR TENTATIVELY SELECTED PLAN

- TSP (ALTRO) meets the project objectives and is cost effective
- **Ensuring Flood Resilience:** Every basin in the study contains project elements and all primary structures in the study are replaced or improved with hardening; canal modifications are also proposed
 - 5 new or expanded pump stations
 - Significant improvements in gravity conveyance
 - Redundancy in pump bays and gates ensures operation even during maintenance or offline periods
- Adverse impacts on nearby areas are minimized and/or mitigated
- This project is focused on improving the primary system infrastructure, and these actions will be complemented by other efforts at the regional, county or local level





December 18, 2025

Public Meeting – Draft Integrated Feasibility Report and Environmental Evaluation

Draft Feasibility Report and Environmental Evaluation

David Griffin, CFM, PWS, Resiliency Project Manager, SFWMD

Central & Southern Florida System
Flood Resiliency Study (Section 203) for Broward Basins



DRAFT INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL EVALUATION

Main Report: Draft Integrated Feasibility Report and Environmental Evaluation

Appendix A: Annex A-2.1 Model Documentation Report

Appendix B: Environmental Resources

Appendix C: Plan Formulation

Appendix D: Benefits Analyses

Appendix E: Cost Engineering & Risk Analysis

Appendix F: Real Estate Plan

Appendix L: Hazardous, Toxic & Radioactive Waste

Appendix N: Public Involvement

Appendix Q: Air Quality Supporting Information





ENVIRONMENTAL ASSESSMENT, NEPA ACTIVITIES

Federal activities currently under completion by USACE Jacksonville District:

- Consultation with Tribes and State and Federal Agencies
- Publication of standalone Draft Environmental Assessment (EA) (Late 2025 or Early 2026)
- Public Notification and 30-Day Public Comment Period for the Draft EA

Disclosure note: "This document is a Draft Integrated Feasibility Report and Environmental Evaluation for the SFWMD Section 203 Study. A separate NEPA analysis will be released by the US Army Corps of Engineers evaluating the environmental effects of this SFWMD Section 203 Study."





December 18, 2025

Public Meeting – Draft Integrated Feasibility Report and Environmental Evaluation

Next Steps

David Griffin, CFM, PWS, Resiliency Project Manager, SFWMD

Central & Southern Florida System
Flood Resiliency Study (Section 203) for Broward Basins



SFWMD NEXT STEPS

- Collect public comments on Integrated Feasibility Report and Environmental Evaluation (EE) Report (published Nov. 21)
- Incorporate environmental analysis from SAJ's Draft EA into Report
- Address public comments received on both Draft FR/EE and Draft EA
- Ensure effective communication with project stakeholders throughout the parallel review process (FR/EE and EA)
- Publish Final Integrated Feasibility Report and Environmental Assessment





AGENCY TECHNICAL AND INDEPENDENT REVIEWS (ATR AND IEPR)

Agency Technical Review (ATR)

- Mandatory process within USACE that ensures the quality and credibility of USACE decision documents and supporting data.
- ATR Teams will be comprised of senior USACE personnel who have been vetted and certified by their respective Community of Practice (CoP) for their specific areas of expertise.

Independent External Peer Review (IEPR)

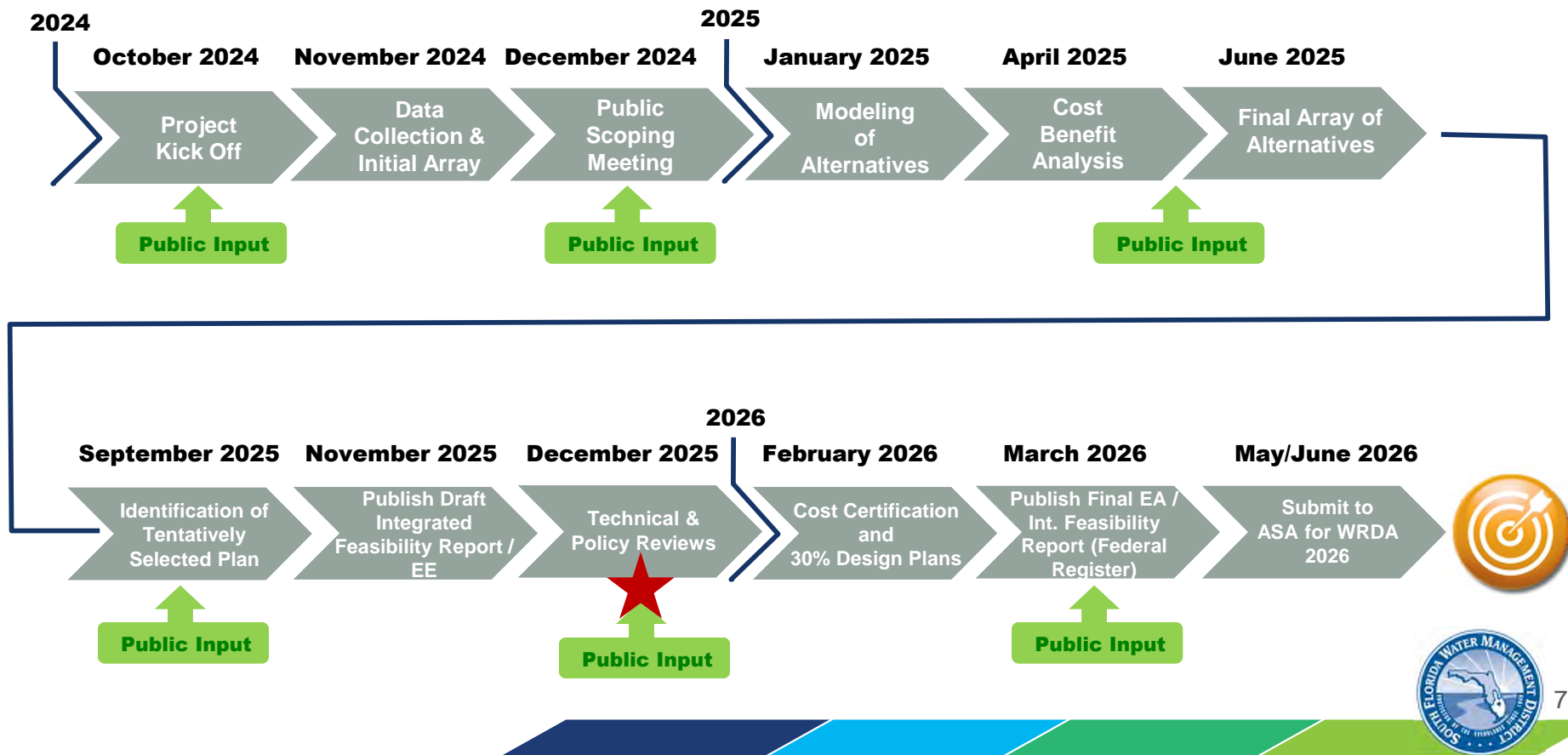
- The Planning Centers of Expertise (PCX) produced Standard Operating Procedures for Districts to use in the conduct of IEPR.
- Involves an independent review conducted by a team of experts outside the project's home district to verify adherence to regulations, guidance, and best practices.





BB-203 PROJECT SCHEDULE

Targeting June 2026 - Deliver Final Integrated Feasibility Report and Environmental Assessment (EA) to ASA Civil Works





December 18, 2025

Public Meeting – Draft Integrated Feasibility Report and Environmental Evaluation

Public Comment

Central & Southern Florida System
Flood Resiliency Study (Section 203) for Broward Basins



Central & Southern Florida
Broward Basins Flood Resiliency Study

AROUND THE ROOM COMMENTS:

Please use the mic

ZOOM COMMENTS:

Please raise your hand





Central & Southern Florida
Broward Basins Flood Resiliency Study

DRAFT REPORT CAN BE ACCESSED HERE:

<https://www.sfwmd.gov/our-work/central-and-southern-florida-flood-resiliency-study>





Central & Southern Florida
Broward Basins Flood Resiliency Study

COMMENT OPPORTUNITIES

Comment Period Extended Until December 29

Please email: resiliency@sfwmd.gov

(additional upcoming opportunity to comment as part of
Draft EA)





December 18, 2025

Public Meeting – Draft Integrated Feasibility Report and Environmental Evaluation

Closing Remarks

Carolina Maran, Division Director – Flood Control and Water Supply Planning, Chief of Resiliency, SFWMD

Central & Southern Florida System
Flood Resiliency Study (Section 203) for Broward Basins



RESILIENCY INITIATIVES COORDINATION

INTEGRATING INLAND AND COASTAL FLOOD MITIGATION STRATEGIES

Counties
Studies/
Projects

Water Control
Districts and
Municipalities
Projects

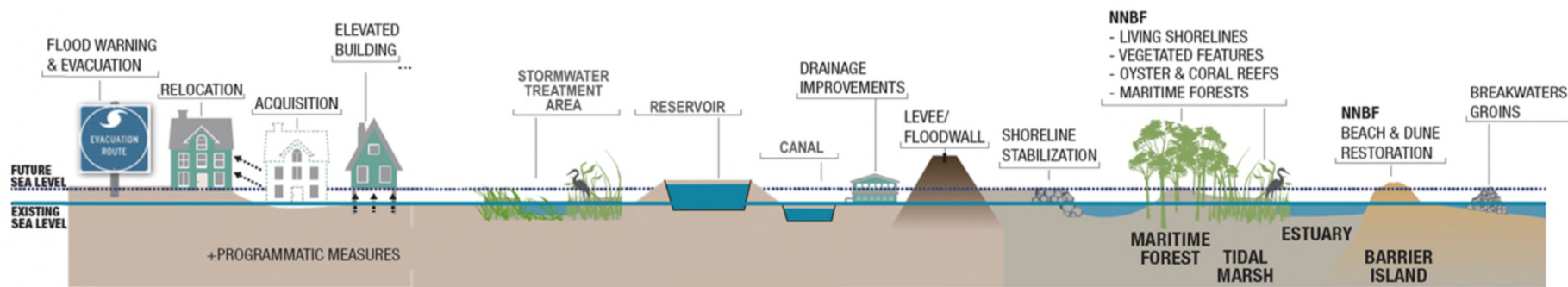
USACE
Studies/
Projects

Regional
Climate
Compacts

Other Partners

POTENTIAL MEASURES TO IMPROVE RESILIENCE AND SUSTAINABILITY

Graphic modified from https://ewn.el.erdc.dren.mil/nmbf/other/5_ERDC-NMBF_Brochure.pdf





C&SF FLOOD RESILIENCE: INTEGRATED PATH FORWARD

Planning Reach A – Broward County Basins

- Section 203 Feasibility Study: Target WRDA 26
- Funding support from FDEP and Broward County

Planning Reach B – C-7, C-8, C-9 Basins

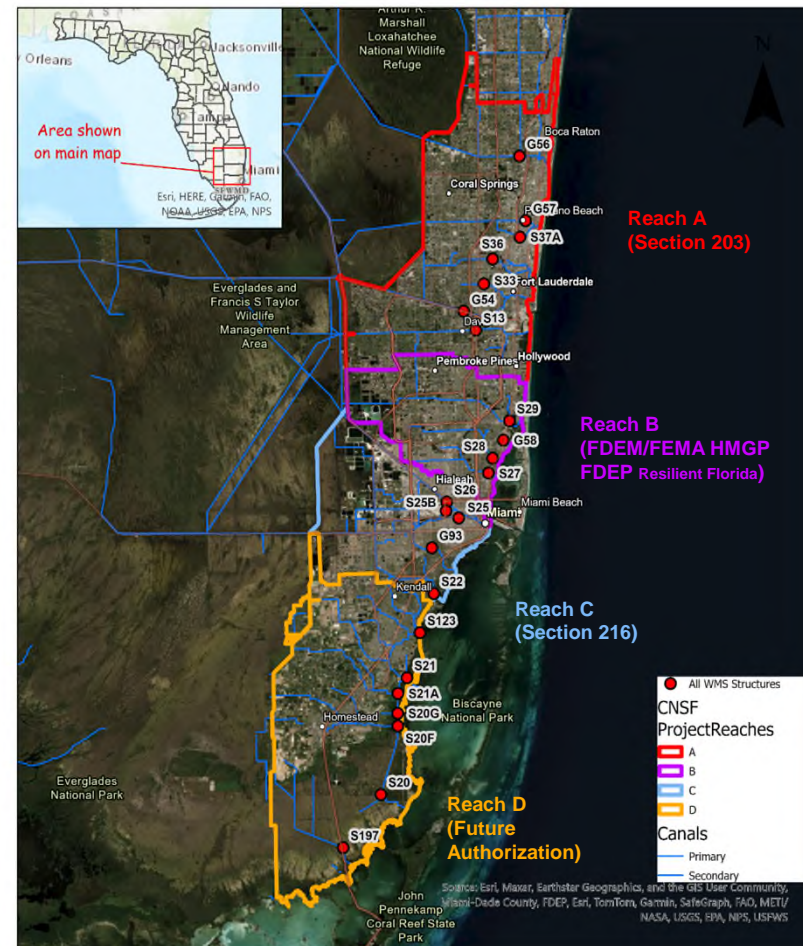
- FDEM / FEMA Hazard Mitigation
- Resilient Florida Grant
- Support from Miami Dade County

Planning Reach C – Miami River Basins

- C&SF Flood Resiliency Study – Section 216 Authorization – Final VTAM Approval
- Feasibility Study: Target WRDA 28 or WRDA 30

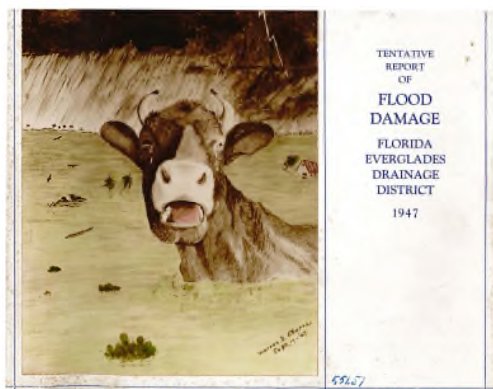
Planning Reach D – South Dade Basins

- C&SF Comprehensive Study or future planning studies



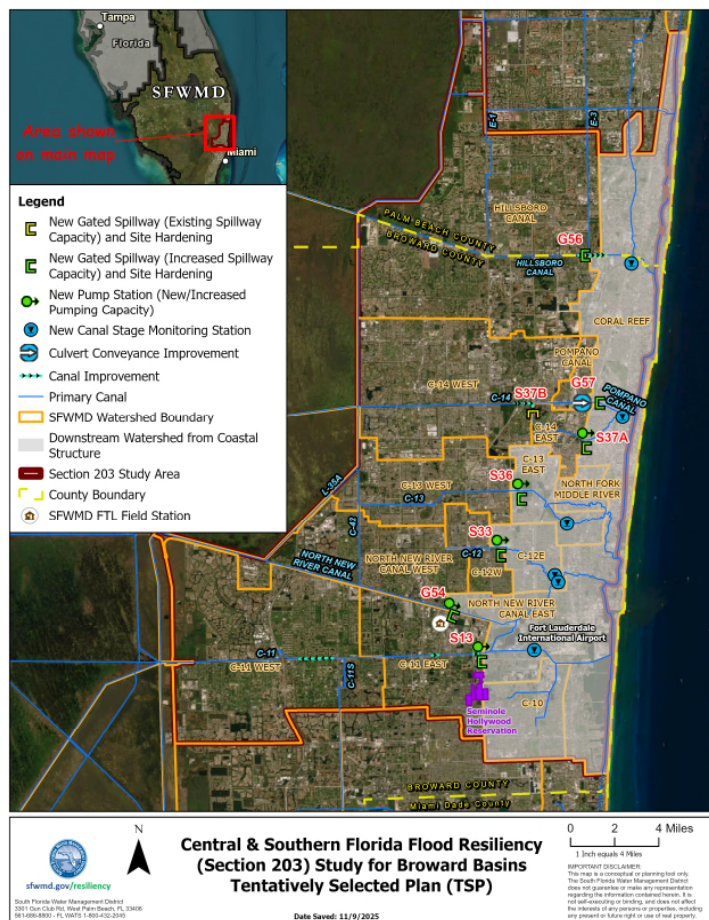


PAST: CENTRAL & SOUTHERN FLORIDA PROJECT



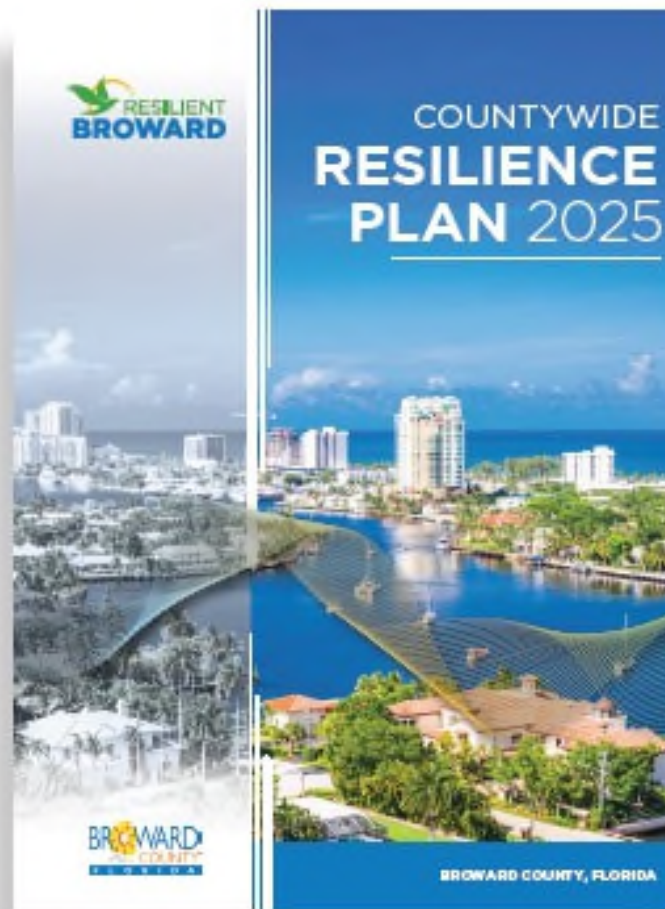


FUTURE: LOCAL AND OTHER STEPS TO COME



User Name: advanced

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Visit sfwmd.gov/C&SF for more information

Thanks for your participation!

Central & Southern Florida System
Flood Resiliency Study (Section 203) for Broward Basins

Happy Holidays!