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## South Florida Water Management District

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### **BIG CYPRESS BASIN BOARD MEETING AGENDA FINAL**

July 8, 2024

11:00 AM

Collier County Government Center  
Commission Chambers, 3rd Floor  
3299 Tamiami Trail East, Naples, FL 34112

Zoom Registration Link: <https://sfwmd.link/475Qgdj>

1. Call to Order - Charlette Roman, Chair, Big Cypress Basin Board
2. Pledge of Allegiance
3. Agenda Revisions - Lisa Koehler
4. Agenda Item Abstentions by Board Members
5. Consider Approval of the Minutes for the April 26, 2024 Meeting
6. Basin Administrator's Report - Lisa Koehler
7. General Public Comment
8. Factors Affecting Oyster Health and Distribution in Southwest Florida (Staff contact, Melanie Parker, Ph.D.)
9. Benefits of Prescribed Fire for the Picayune Strand Restoration Project - Michael Joel, Caloosahatchee Forestry Center Manager, Florida Forest Service, Florida Department of Agriculture and Consumer Services (Staff contact, Lisa Koehler)
10. Fiscal Year 2024-2025 Proposed Tentative Budget and Submission of Proposed Millage Rate (Staff contact, Candida Heater)

11. Board Comment

**Technical Reports**

12. Field Station Activity Report - Andrew Wolf
13. Water Conditions Report - Brad Jackson

**Staff Reports**

14. Monthly Financial Report - Candida Heater
15. General Public Comment
16. Board Comment
17. Adjourn

Draft Presentations:

**Agenda Item Background:**

[Item 08 - Oyster Health](#)

[Item 09 - Prescribed Fire](#)

[Item 10 - BCB FY2024-25 Proposed Tentative Millage & Budget](#)

[Item 12 - Field Station Activity July](#)

[Item 13 - Water Conditions Report July](#)

# Factors Affecting Oyster Health and Distribution in Southwest Florida

Big Cypress Basin Board Meeting  
July 8, 2024



**Melanie Parker**  
Science Supervisor  
Applied Sciences Bureau  
Coastal Ecosystem Section

# Eastern Oyster (*Crassostrea virginica*)



Oyster shells - [jaxshells.org](http://jaxshells.org)

- Dominant species in SW Florida
- Bivalve mollusc (two shells)
- Average size 3-5 inches
- Inhabits shallow bays, lagoons and estuaries
- Individuals fuse together to form clumps and reefs



Oyster reef with clumps



Oyster clump



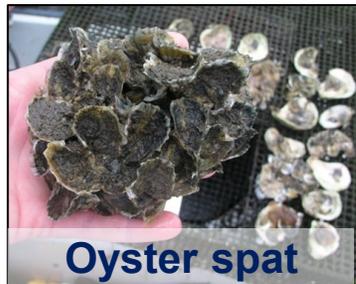
Oyster reef

[americanoceans.org/species/eastern-oyster](http://americanoceans.org/species/eastern-oyster)

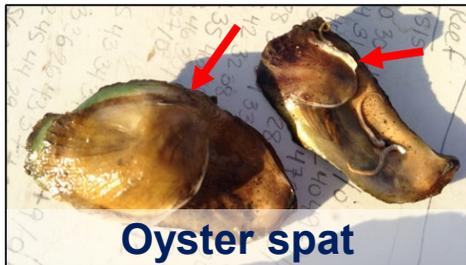
# Oyster Reproduction and Growth

**Temperature** important factor in determining timing of reproduction and growth

- Begin spawning when temperatures warm
- Broadcast spawners – release millions of eggs into water column
- Fertilized larvae (veligers) planktonic for 2-3 weeks
- Settle on oyster reef as “spat”



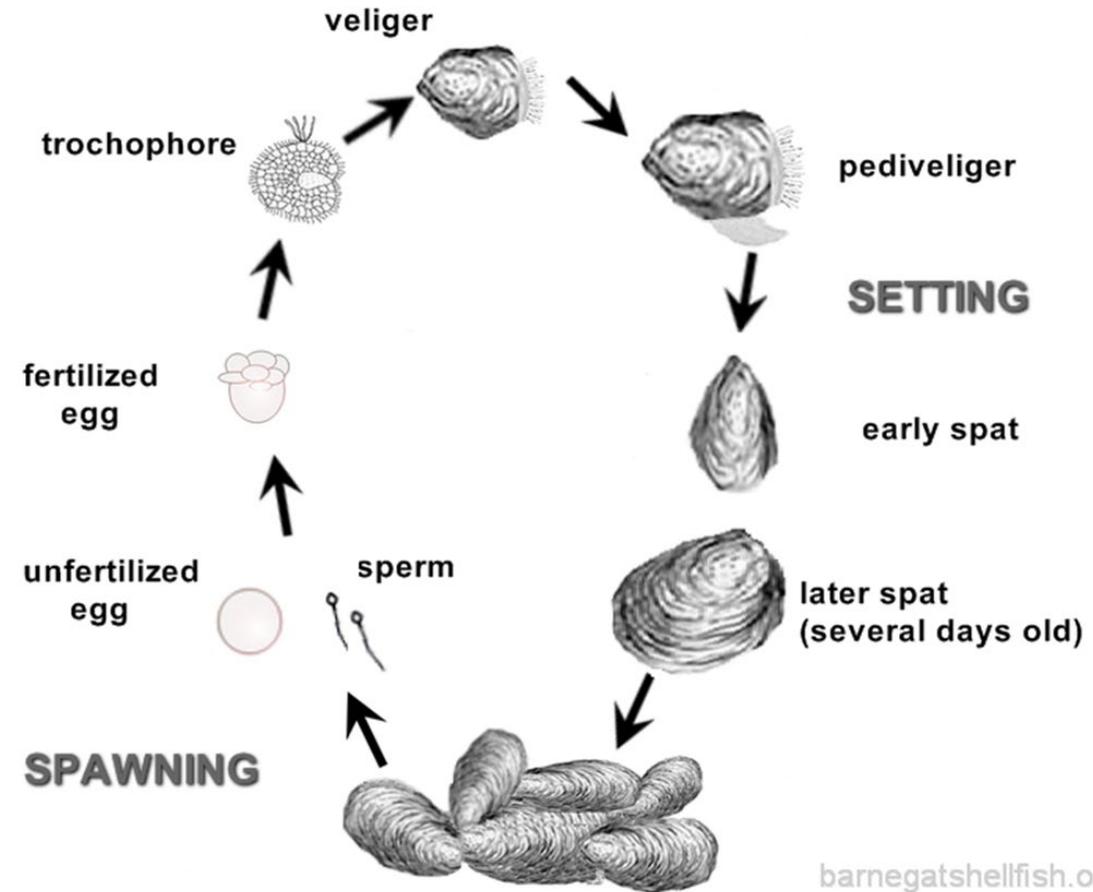
Oyster spat



Oyster spat

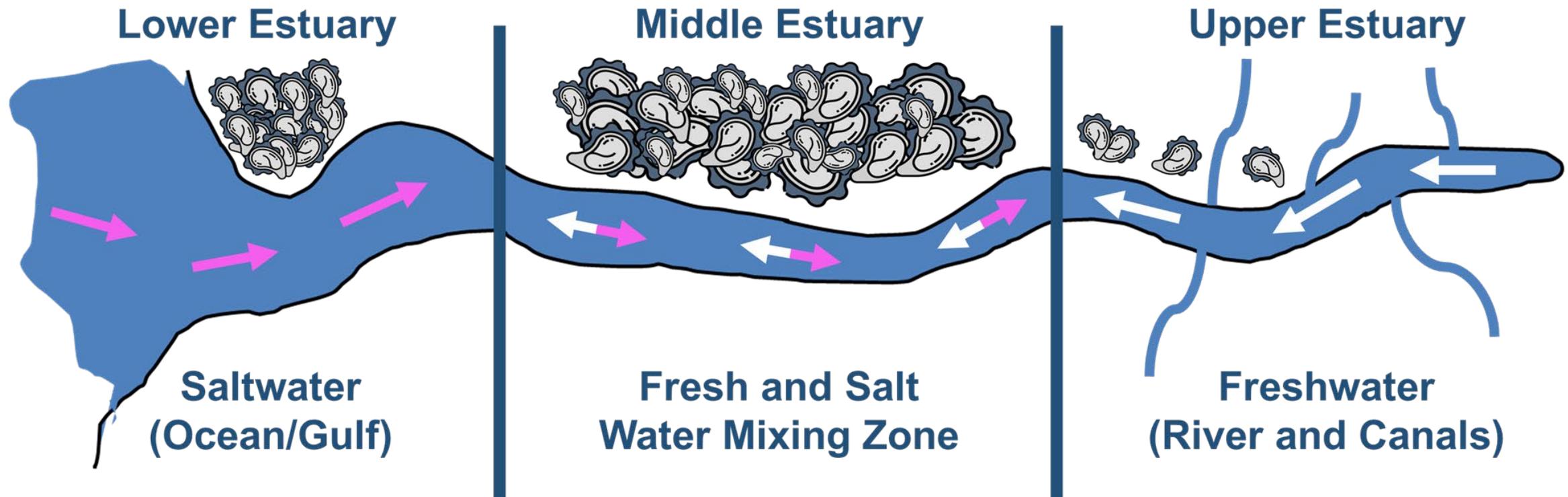


Oyster spat



# Oyster Distribution

**Substrate** and **Salinity** important factors in determining distribution of oyster populations



\*Arrows indicate flow of saltwater (pink) and freshwater (white).

# Oyster Health

**Salinity** most important factor in determining health of oyster populations in SW Florida

- **Low salinity** → acute physiological stress and death
- Timing and duration determines severity of low salinity effects
  - If stress too great, oysters will close shells which stops feeding and respiration
  - Adult oysters tolerate low salinities longer than larvae and spat



# Oyster Health

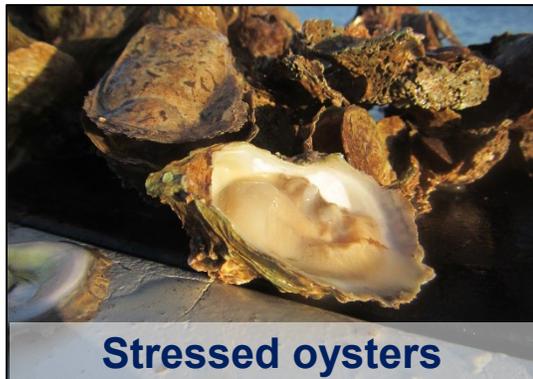
## Interaction of salinity and temperature

- Thermal stress reduces capacity to deal with additional stresses (such as low salinity)
- Low salinity stress more severe at high temperatures (> 30°C/86°F) for adults and spat (2021 FGCU study)



DRAFT

Exposed reef in the Caloosahatchee River Estuary



Stressed oysters

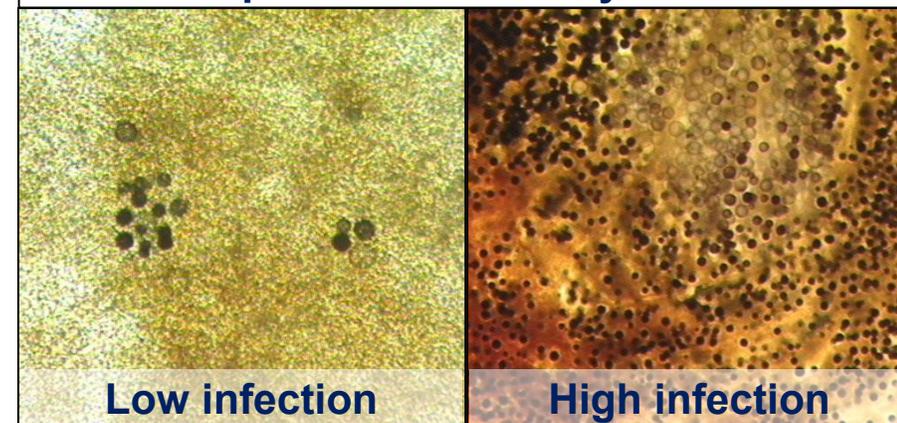
2020 RECOVER Salinity Performance Measure Ranges			
Species	Optimum	Stress	Damaging
<i>Crassostrea virginica</i> (Adult Eastern Oyster)	10–25	5–9; >25	<5

# Oyster Health

**Salinity** most important factor in determining health of oyster population in SW Florida

- **High salinity** → high disease and predation rates
- Oysters weakened by disease more susceptible to predators and shell pests

Dermo parasite cells in oyster tissue



Low infection

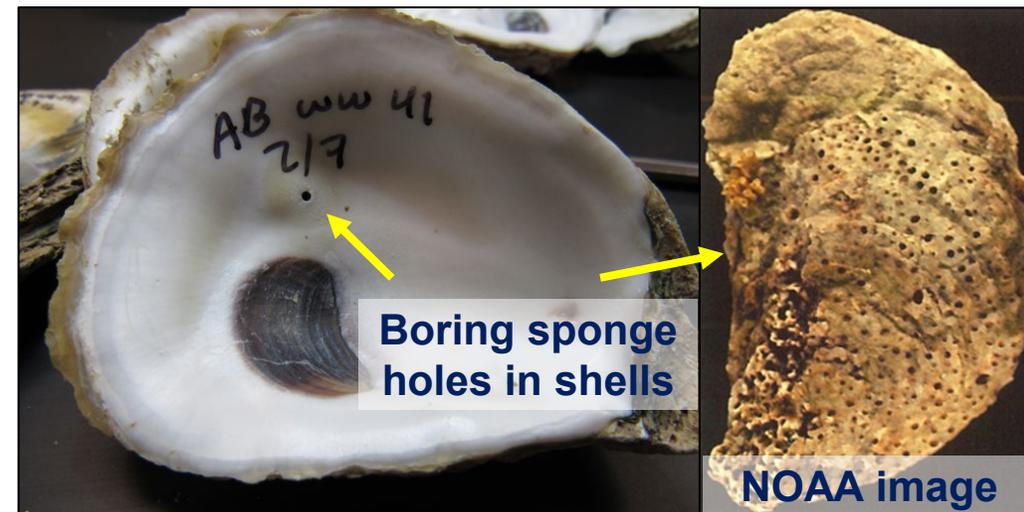
High infection



Crab predator



Oyster drill (snail) predator



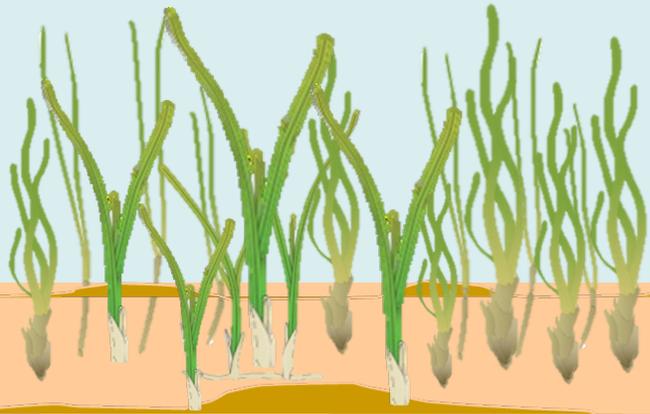
Boring sponge holes in shells

NOAA image

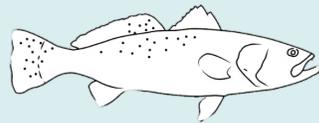
# Oyster Importance

Oysters provide valuable **ecosystem services** and serve as an important **indicator species** for estuary health

Improved water quality



Sediment stabilization

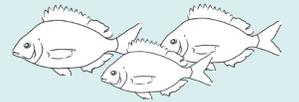


Habitat and refuge



Hard settlement substrate

Food



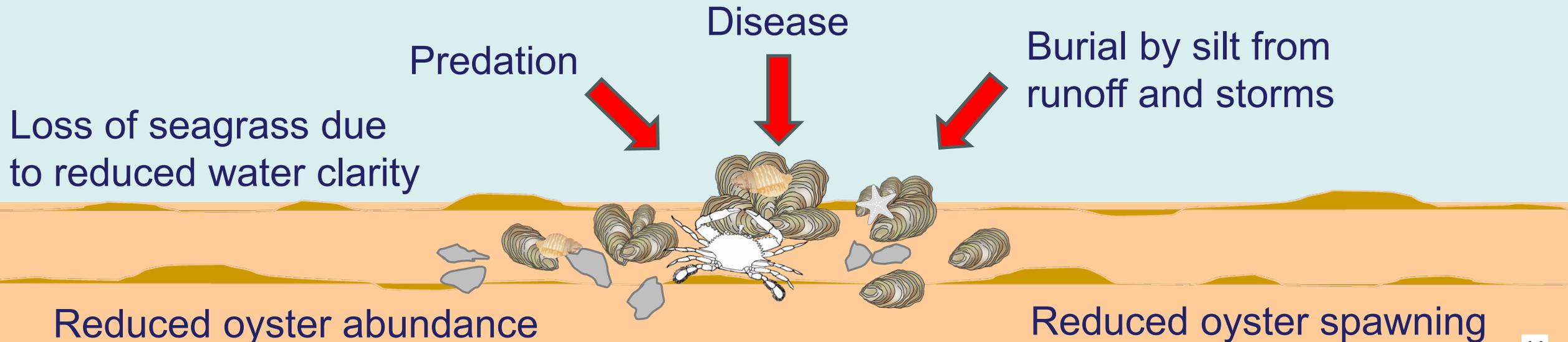
# Oyster Stressors

Poor environmental conditions lead to loss of oysters and reduced larval settlement

Salinity too high or low

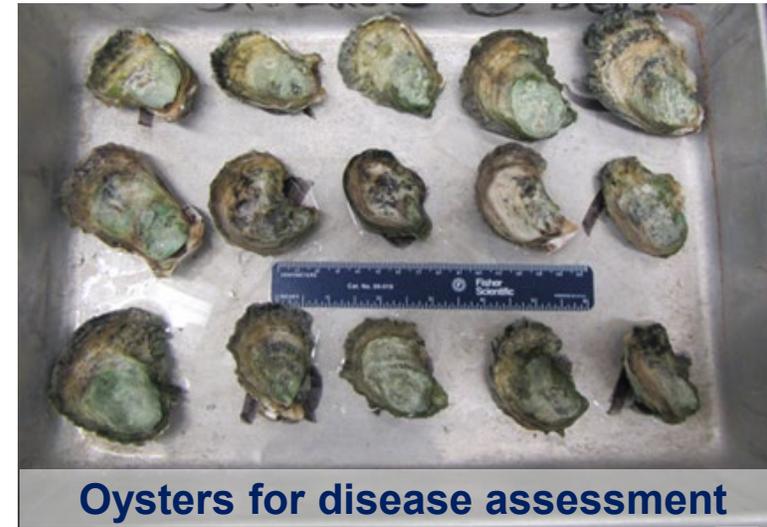
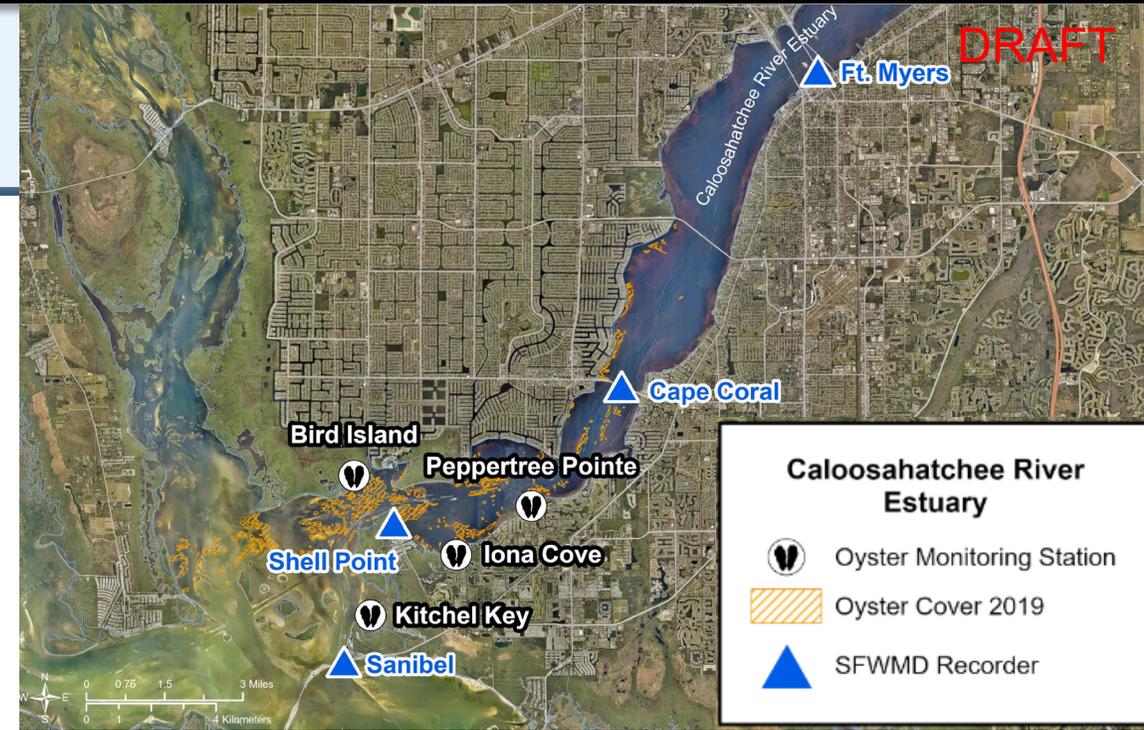
High temperature

Low dissolved oxygen



# Oyster Monitoring

- Supported by CERP RECOVER program
- Long-term monitoring to measure effects of restoration efforts on oyster populations
- Informs adaptive management of freshwater inflows to the Caloosahatchee Estuary



# Oyster Monitoring Efforts

- City of Naples currently conducting restoration and monitoring in Naples Bay
- CERP pre-restoration baseline monitoring for PSRP in early 2000s
  - Planned post-restoration monitoring in Blackwater Bay, Pumpkin Bay, Faka Union and Fakahatchee
  - 10 years post-restoration monitoring at same frequency as baseline
  - Reduced monitoring frequency for 10-50 years post-restoration



# Questions



# Prescribed Fire 2023/2024 Picayune Strand Forest



**Michael Joel**

**Florida Forest Service**

**Forestry Center Manager**



*Presenter: Michael Joel*



# Prescribed Fire In Florida



- The Florida Forest Service oversees one of the most active prescribed fire programs in the country. In an average year, the Service issues approximately 88,000 authorizations allowing landowners and agencies to prescribe burn over 2.1 million acres.

*Presenter: Michael Joel*

# Prescribed Fire Benefits

DRAFT

- Prescribed fire is one of the most versatile and cost-effective tools land managers use.
- Reduces hazardous fuel buildups, providing increased protection to people, their homes and the forest.
- Other uses include disease control in young pines, wildlife habitat improvement, range management, preservation of endangered plant and animal species and the maintenance of fire-dependent ecosystems.



*Presenter: Michael Joel*



DRAFT

# Prescribed Fire in Picayune Strand State Forest

## 2023-2024

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## *12,928 Acres*

**Faka Union Canal  
April 2024**



*Presenter: Michael Joel*

# Site Preparation & Determination

DRAFT



*Presenter: Michael Joel*

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES  
COMMISSIONER WILTON SIMPSON



*Presenter: Michael Joel*

**FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES  
COMMISSIONER WILTON SIMPSON**

# Restoring Fire to the Ecosystem Benefitting Endangered Species

DRAFT



**Calusa Pines RX**  
**March 2024**



*Presenter: Michael Joel*

**FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES**  
**COMMISSIONER WILTON SIMPSON**

# Prescribed Fire Tools



**Helicopter  
Utilized  
To Ignite Prescribed  
Fire**



*Presenter: Michael Joel*

# Prescribed Fire Tools

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## *Communications*

A huge “Thank You” is due to the South Florida Water Management District for your support in accomplishing this monumental step forward in communication capabilities.



*Presenter: Michael Joel*

**Faka Union  
Pump  
Tower Site**



# High Water Access UTV

DRAFT



**Funding Provided By  
SFWMD**



*Presenter: Michael Joel*

**FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES  
COMMISSIONER WILTON SIMPSON**

# Swamp Buggies

DRAFT



*Presenter: Michael Joel*

# Coordinating with Resources Is a Vital Tool



*Presenter: Michael Joel*

# Prescribed Burning Reduces High-Intensity Burning



*Presenter: Michael Joel*

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**Restoration  
Is Helping  
To Minimize  
Fire Intensity  
and  
Overall Fuel  
Consumption**



*Presenter: Michael Joel*



*Presenter: Michael Joel*



Big Cypress Basin Field Station



Henderson Creek Structure 2



Faka Union Pump Station



Golden Gate Structure 3  
(GG3)

# Big Cypress Basin Budget Establish Fiscal Year 2024-25 Proposed Tentative Millage & Budget



Candida Heater  
Administrative Services Division Director  
July 8, 2024

# Today's Presentation

DRAFT

- Budget Development Next Steps Timeline
- July Proposed Tentative Budget Status
  - Proposed Millage Rate
  - Budget in Brief
  - Revenue Sources & Uses Pie Chart Comparisons
- Motion to approve a request to the District Governing Board of proposed Fiscal Year 2024-25 Millage Rate and Tentative Budget.



Henderson Creek

# Budget Development Milestones

DRAFT

## ➤ July

- ✓ **July 8** -- Big Cypress Basin Meeting for Proposed Millage Rate and Tentative Budget
- **July 11** -- Governing Board meeting - Fiscal Year 2024-25 Tentative Budget update and Proposed Millage Rates approval.
  - Request Governing Board approval of proposed millage rates for certification to property appraisers.
  - In compliance with Sections 200.065, & 373.536 Florida Statutes.
- **Mid July** -- Submission of the District's Fiscal Year 2024-25 Draft Tentative Budget to Department of Environmental Protection.

## ➤ August

- **August 1** -- Submission of the District's Fiscal Year 2024-25 Tentative Budget for Governor and Legislative review.
- **August 23** -- Basin Board meeting to approve the Final Millage Rate and Fiscal Year 2024-25 budget.

## ➤ September

- September 5 – Consideration of Legislative comments on Tentative Budget
- September 12 – Governing Board Business Meeting
  - 5:15pm Governing Board Special Meeting First Public Hearing pursuant to Section 200.065, Florida Statutes
    - Consider for adoption, the Fiscal Year 2024-2025 Tentative Millage Rates and Budget and the Non Ad Valorem Agricultural Privilege Tax Roll
- September 17 – Governor & Legislative Budget Commission comments due 5 business days before Final Public Budget Hearing
- September 24 – 5:15pm Governing Board Special Meeting Second Budget Public Hearing pursuant to Section 200.065, Florida Statutes
  - Consider for adoption, the Fiscal Year 2024-2025 Final Millage Rates and Budget

# Fiscal Year 2024-25 Proposed Millage Rate

DRAFT

- FY2024-25 Proposed Millage Rate is 0.0978 mills
- \$9.78 per \$100,000 of Taxable Value
- A Homeowner in Collier County with an Average Home Valued at \$500,000 Would Pay an Estimated \$48.90 for the Year.
- Examples of Services Received for the \$48.90 Per Year:
  - Flood Control Protection
  - Capital Infrastructure Improvements in Support of Flood Control
  - Canal Maintenance and Vegetation Removal
  - Future Water Supply
  - Land Management Activities
  - Ecosystem Restoration
  - Modeling for Ecosystem Restoration



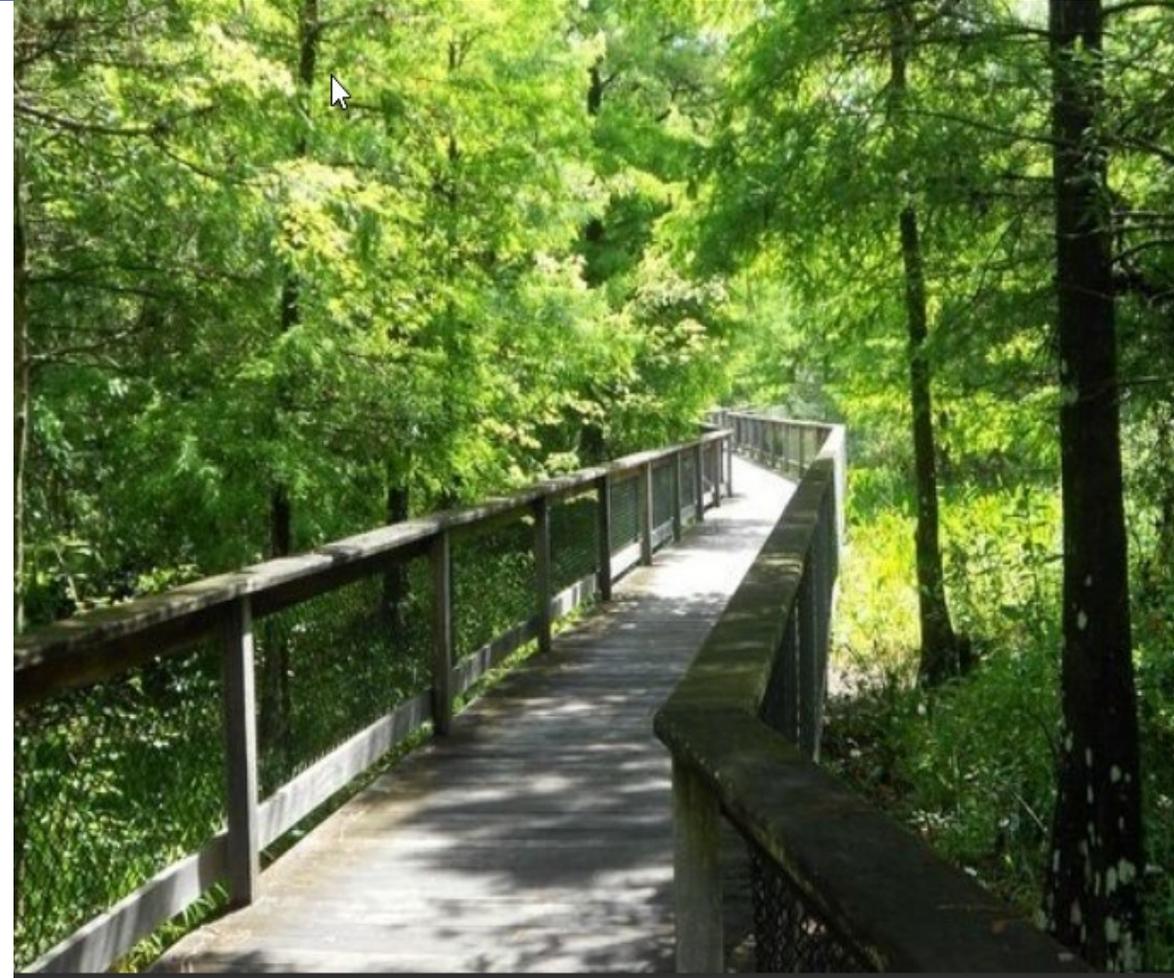
*Cypress Canal Structure Ribbon Cutting*

*The Millage Rate is applied to the Taxable Value of the Property as Determined by the Property Appraiser Annually (Assessed Value – Exemptions = Taxable Value)*

# Budget in Brief Highlights

DRAFT

- **Proposed Tentative Fiscal Year 2024-25  
Budget \$22,006,945**
- **\$6,882,130 Increase from the Fiscal Year  
2023-24 Adopted Budget of \$15,124,815**
  - Design and Construction for Communication System Improvements, Golden Gate Canal Weir #5, Henderson Creek HC1 & HC1A and I-75 #2 Weir Replacements Projects
  - Bird Rookery Boardwalk Design/Build, Parking Lot and Facilities Projects
  - Design of Gordon and Palm River Structure Replacements Projects
    - Funded by the Collier County Agreement

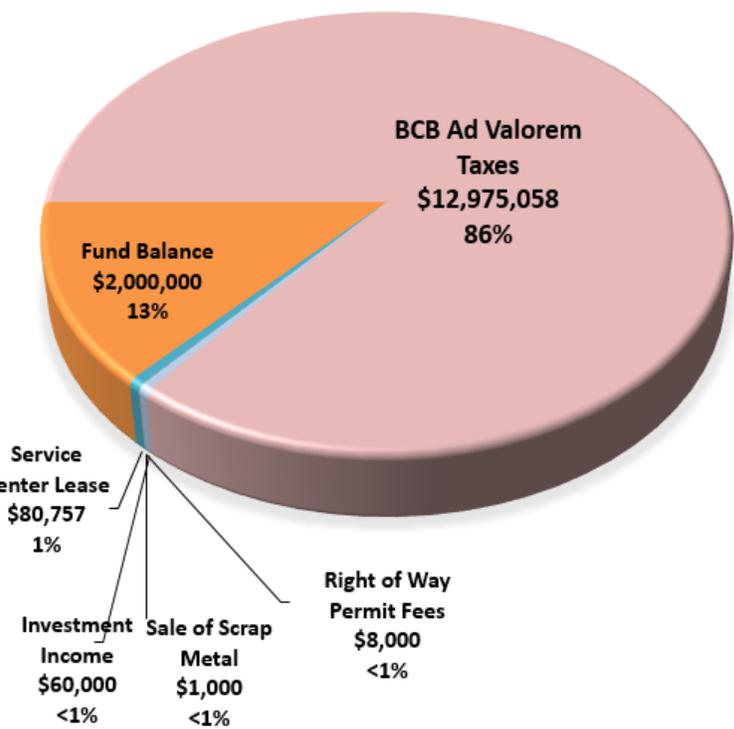


*Bird Rookery Boardwalk*

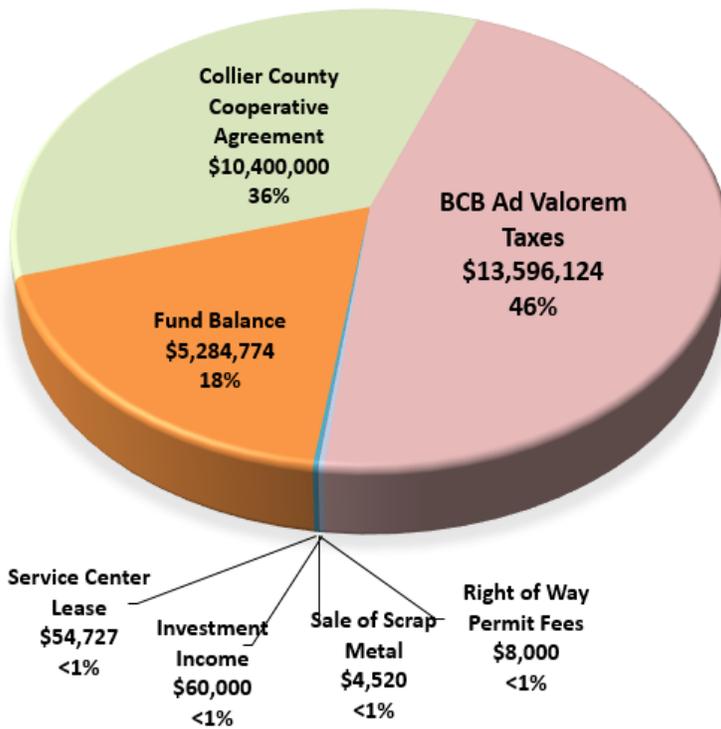
# Revenue Sources Overview / Comparison

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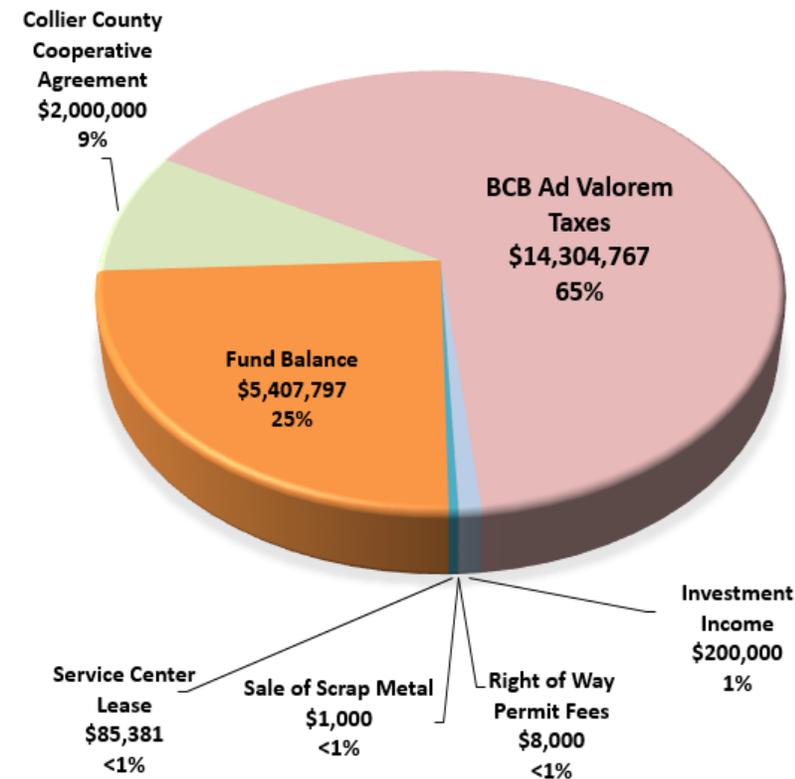
**FISCAL YEAR 2023-24 ADOPTED**  
**\$15,124,815 MILLION**



**FISCAL YEAR 2024-25 PRELIMINARY**  
**\$29,408,145 MILLION**



**FISCAL YEAR 2024-25 TENTATIVE**  
**\$22,006,945 MILLION**

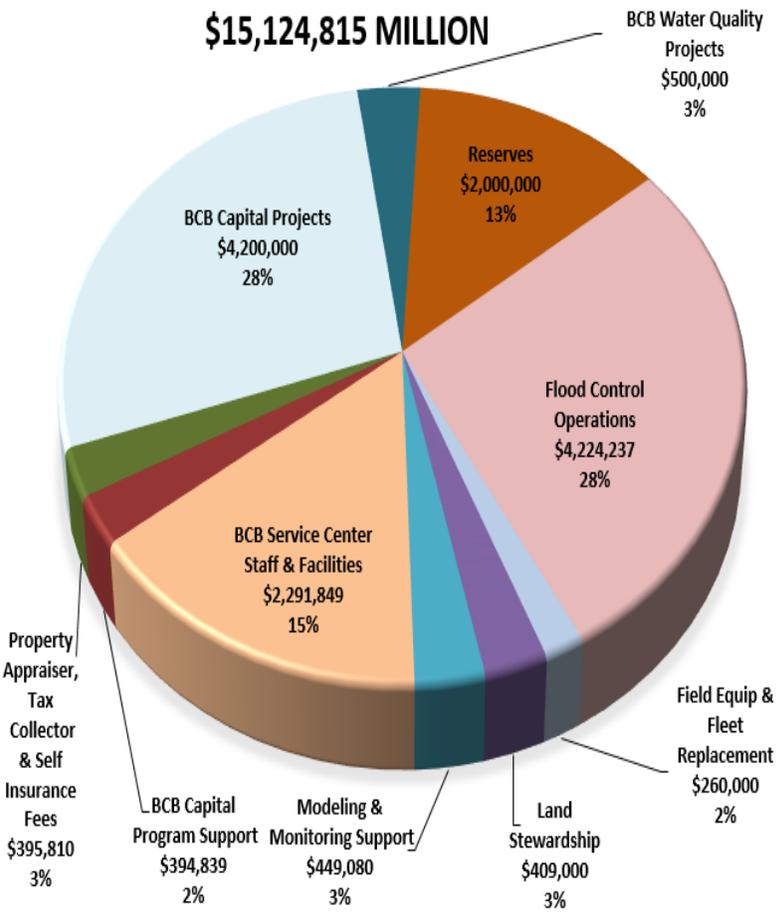


# Where the Money Goes (Forecast Categories) Comparison

DRAFT

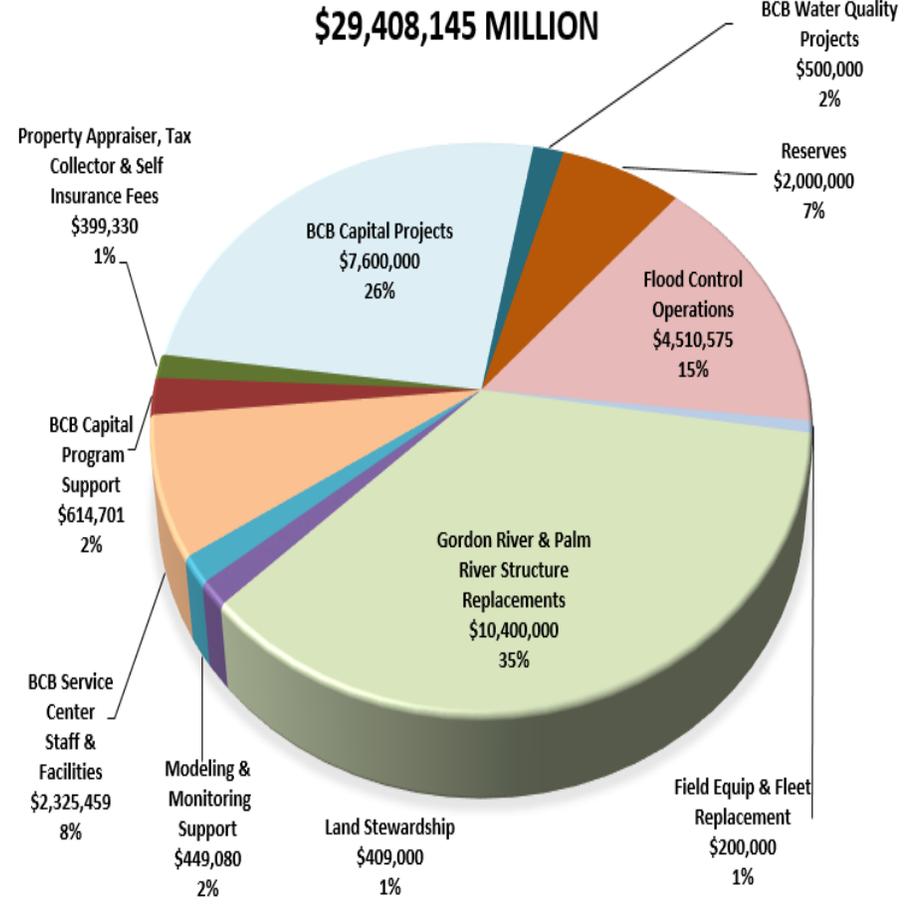
FISCAL YEAR 2023-24 ADOPTED

\$15,124,815 MILLION



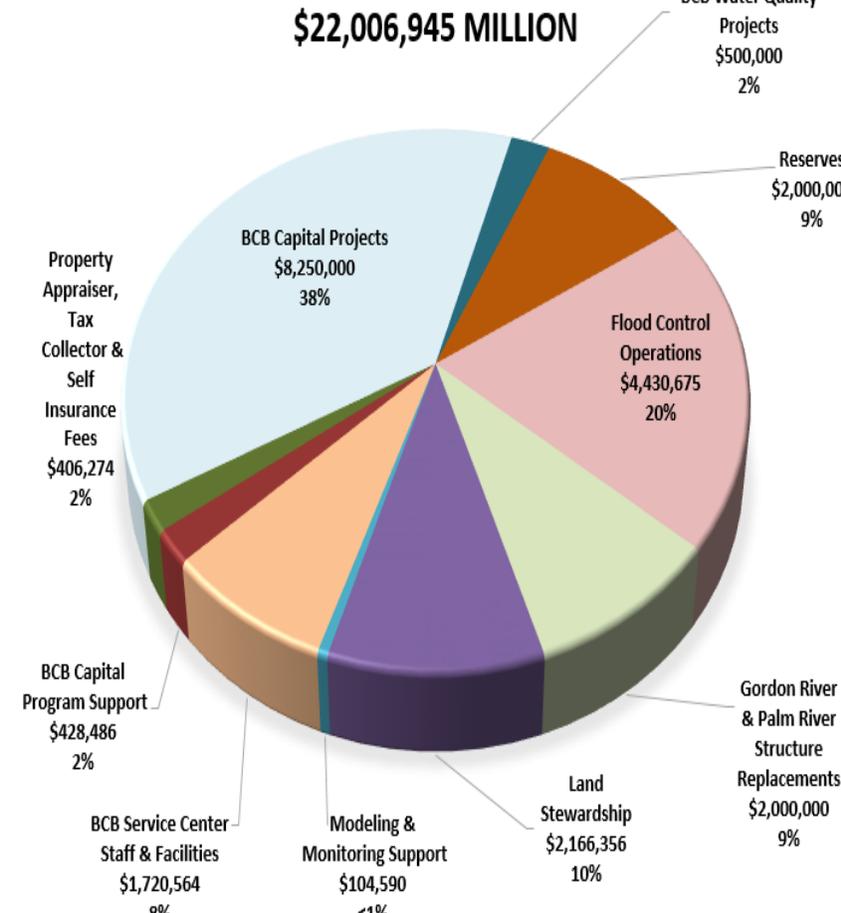
FISCAL YEAR 2024-25 PRELIMINARY

\$29,408,145 MILLION



FISCAL YEAR 2024-25 TENTATIVE

\$22,006,945 MILLION



# Motion to Approve

DRAFT

- Approve a Request to the District Governing Board to Establish a Proposed Millage Rate of 0.0978 mills per One Thousand Dollars of Taxable Value and Proposed FY2024-25 Tentative Budget of \$22,006,945.



*Corkscrew Swamp*



Big Cypress Basin Field Station



Henderson Creek Structure 2



Faka Union Pump Station



Golden Gate Structure 3  
(GG3)

# Discussion

# Big Cypress Basin Field Station Activity Report



**Andrew Wolf**  
**Superintendent BCB Field Station**  
**July 8, 2024**

# Overview

- Field Station Operations
- Maintenance Activities
- Three Month Outlook



# New Gradall Arrived in May



# New Ford Lightning Arrives



# Structure Inspection Program Repairs

Contractor and Divers making some repairs, 75% completed



# Structure Inspection Program Repairs

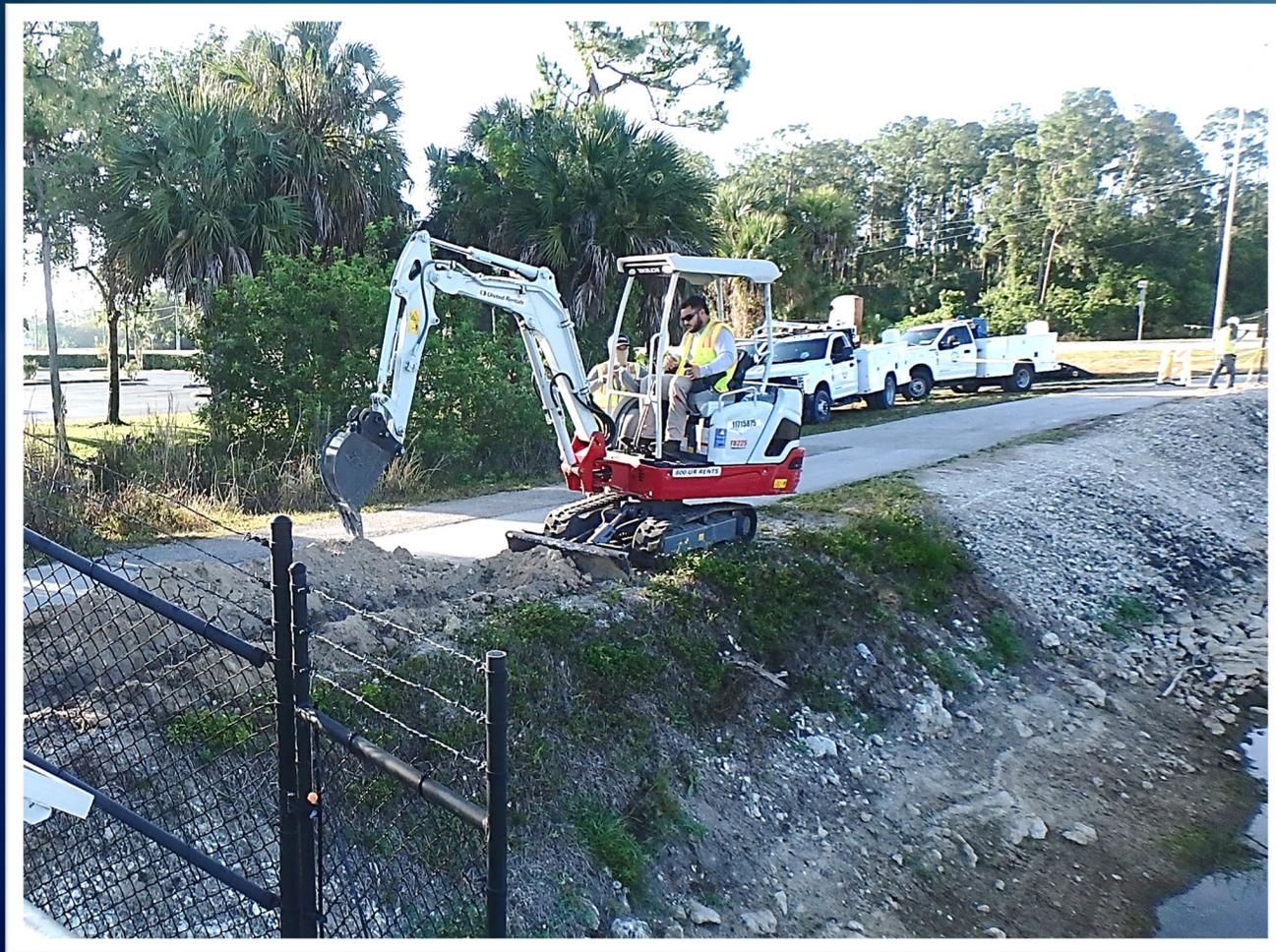
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# Automation of 951 North Structure

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## Conduit was buried from Structure to Stilling Well



# Vegetation Removal



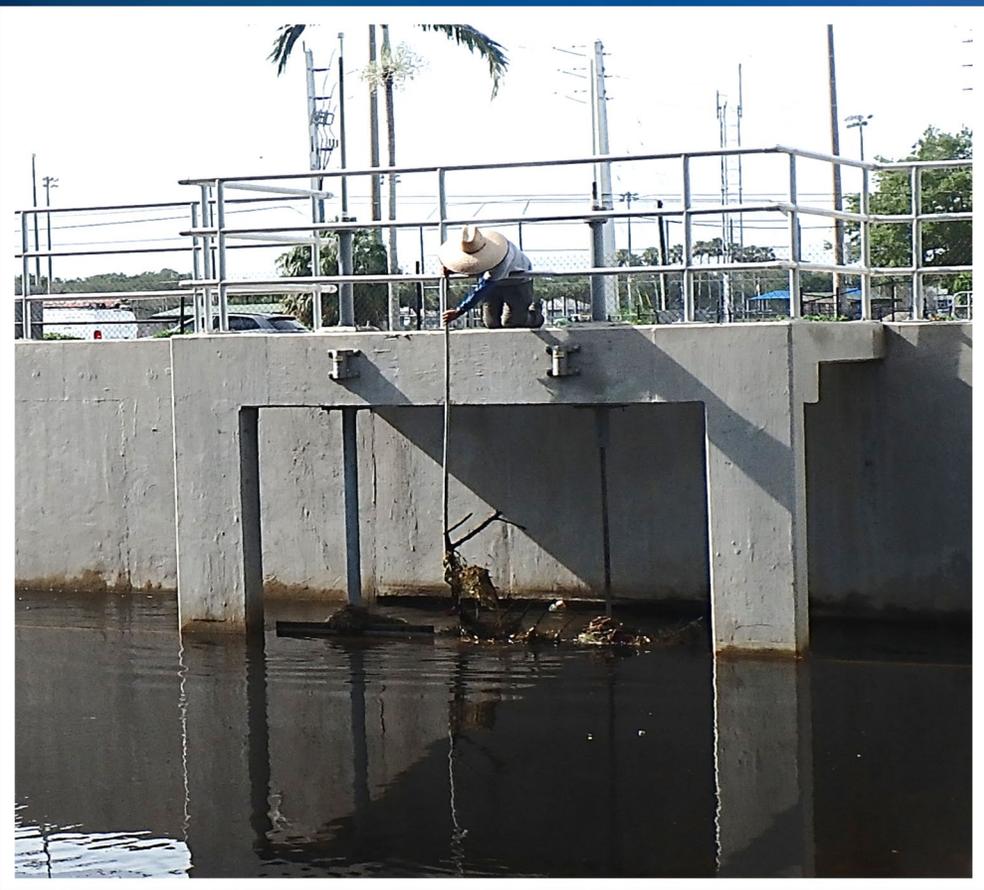
# Rain Event Preparation

V Notches were removed from Miller-2 and Faka Union 6 and 7



# Rain Event Preparation

## Gate Changes Before, During and After Rain Event



DAY	DATE	OCC (AUTO)	BCB (FS)	TOTAL (DAILY)
SUN	6/9/2024	15		15
MON	6/10/2024	12	12	24
TUE	6/11/2024	21	2	23
WED	6/12/2024	10	1	11
THU	6/13/2024	6	17	23
FRI	6/14/2024		9	9
SAT	6/15/2024	16	5	21
SUN	6/16/2024			0
MON	6/17/2024	7	6	13
<b>TOTAL (AL-90)</b>		<b>87</b>	<b>52</b>	<b>139</b>

# Rain Event

## Performing Manual Gate Changes



# Rain Event Washouts



# Three Month Outlook

- Continuing SIP (Structure Inspection Program) repairs.
- Start Henderson Creek Tree Project July 8.
- Complete the automation of 951 north structure.
- Respond to wet season gate changes.





MERRITT Pump Station  
PS-488



FAKA Union Pump Station  
PS-487



MILLER Pump Station  
PS-486

# Comprehensive Everglades Restoration Projects (CERP) Activity Report

# Pump Station Maintenance Merritt #2

DRAFT

Pump #2 reassembled, vibration tested and back in service



# Pump Station Maintenance

SIP repairs Merritt, contractors painting fuel farm pipes



# Pump Station Maintenance

## New shaft seals installed at Merritt and Miller



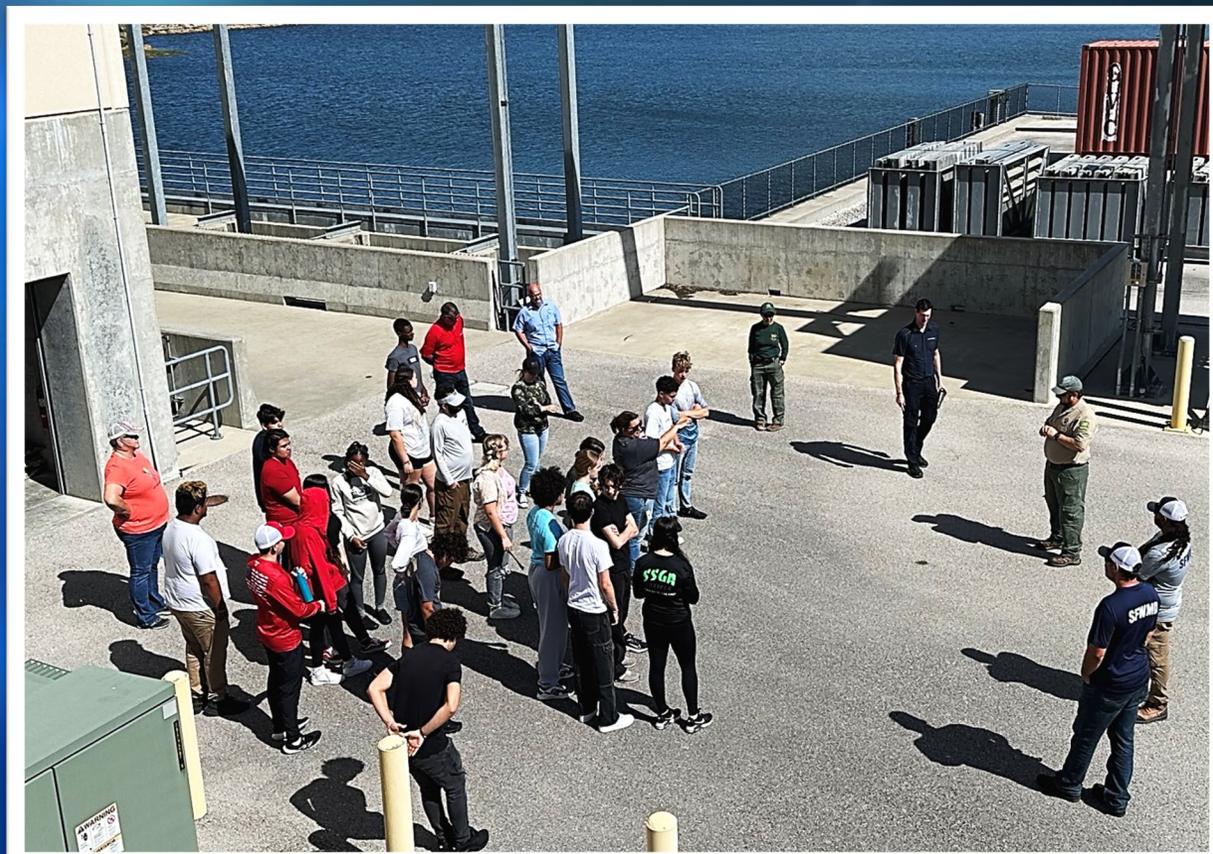
Older  
Steel  
Design

New  
Stainless  
Steel  
Design



# Tour at Faka Union Pump Station

Environmental Science Students from Palmetto Ridge High School.



# Three Month Outlook

- Respond to wet season pump orders and issues.
- Replace broken pump shaft in low flow pump at Merritt
- Continue SIP (Structure Inspection Program) repairs
- Continue training new employees on pumping operations.





# Hazards at Pump Station

DRAFT





# Questions



# Big Cypress Basin Water Conditions Report

DRAFT

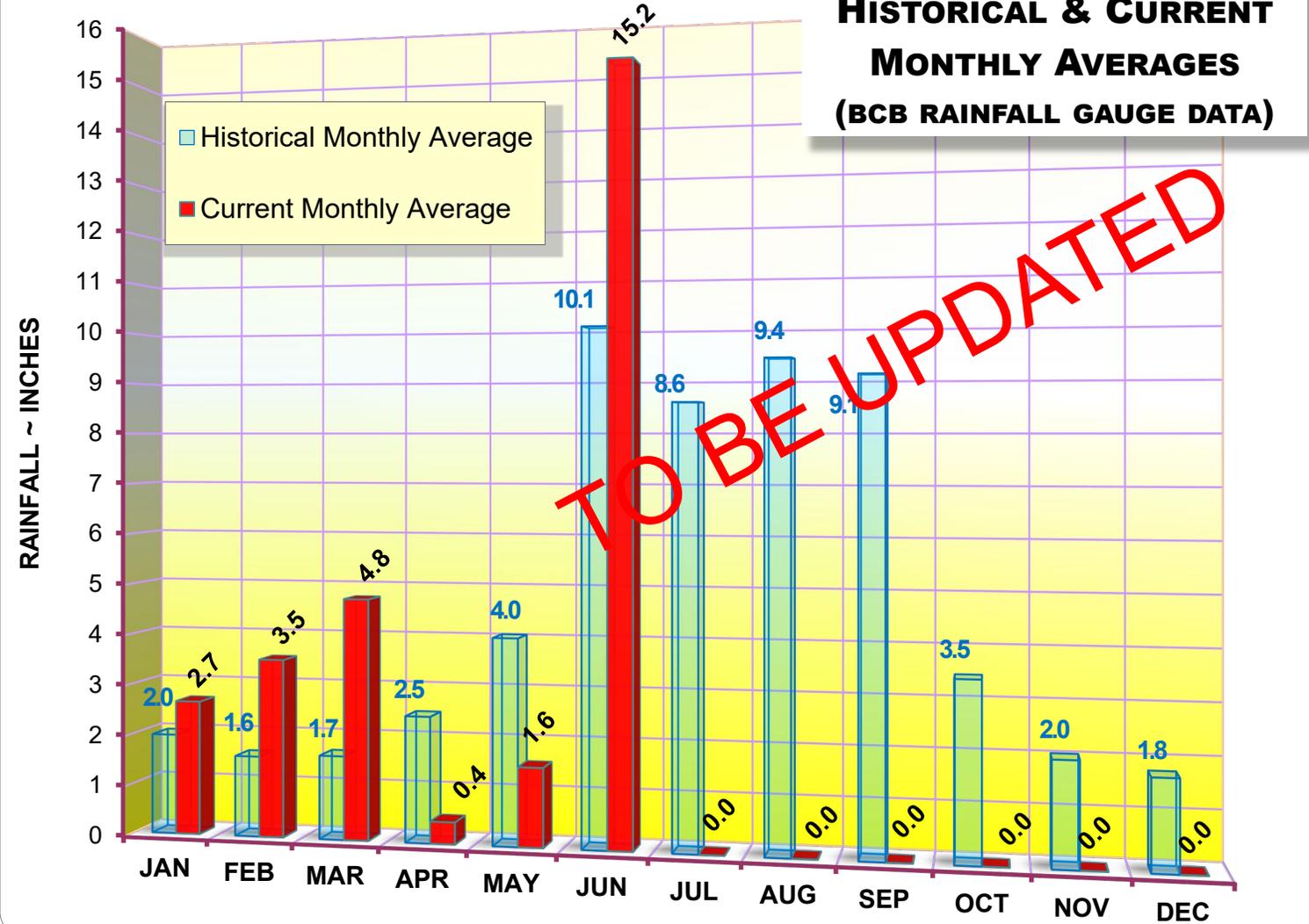
Big Cypress Basin Board Meeting  
July 8, 2024

Brad J Jackson, P.E., CFM  
Big Cypress Basin – Principal Engineer



# 2024 Rainfall Summary

**BCB ANNUAL RAINFALL  
HISTORICAL & CURRENT  
MONTHLY AVERAGES  
(BCB RAINFALL GAUGE DATA)**



- 2024 YTD TOTAL = 28.1”
- HISTORICAL AVERAGE TOTAL = 21.8”
- 130% OF NORMAL RAINFALL
- 6.3-INCH SURPLUS YTD
- WET SEASON – MAY 13TH



# April & May 2024 - Rainfall

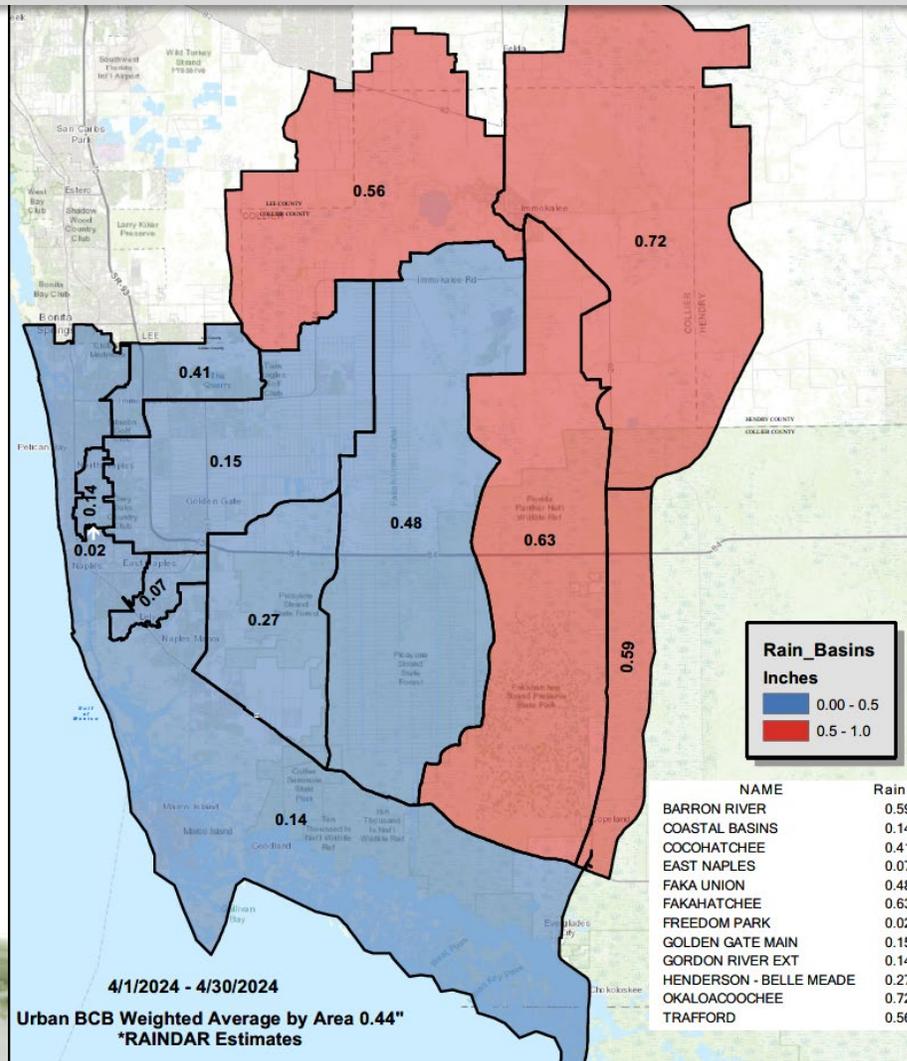
## APRIL

- 2024: 0.4" (16% OF NORMAL)
- HISTORICAL AVG: 2.5"
- 2ND DRIEST APRIL
- HIGH: 6.2" (2010)
- LOW: 0.3" (1998)

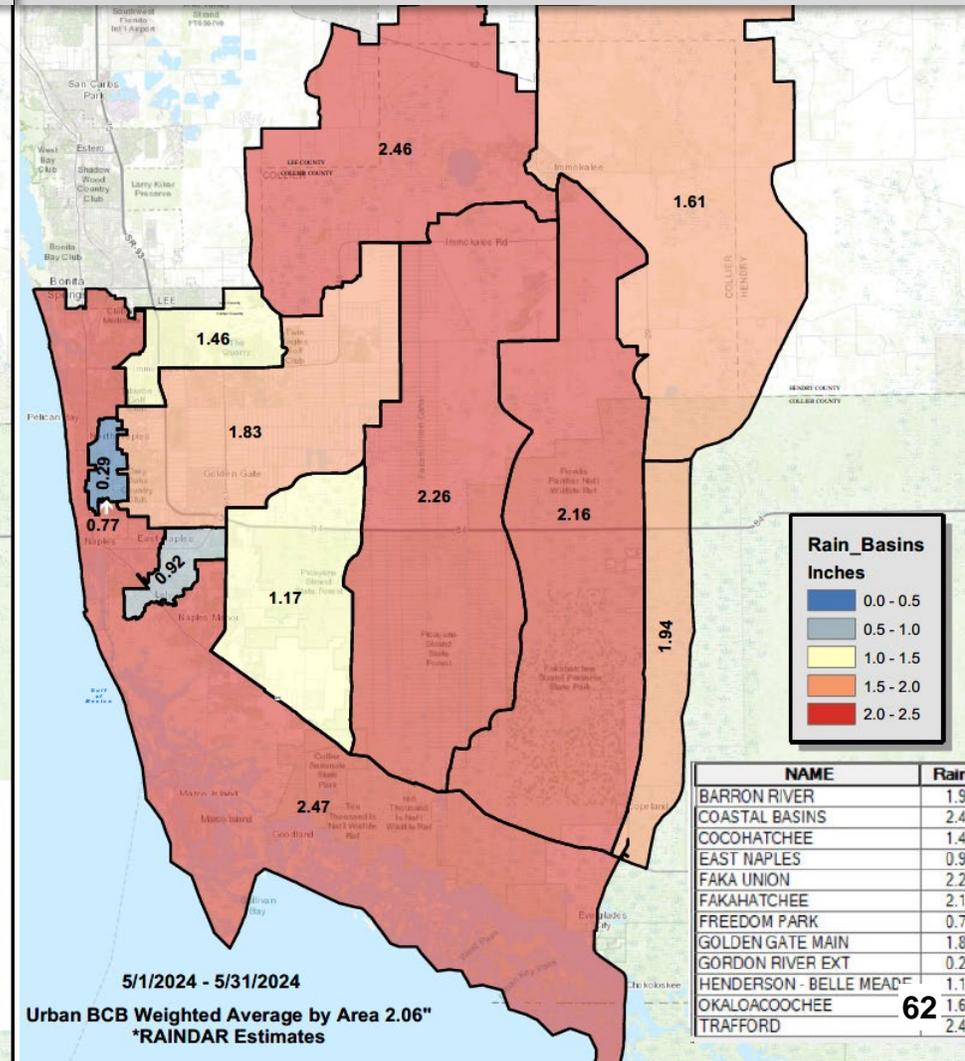
## MAY

- 2024: 1.6" (40% OF NORMAL)
- HISTORICAL AVG: 4.0"
- HIGH: 9.1" (2018)
- LOW: 0.5" (1992)

### APRIL 2024 BY BASIN



### MAY 2024 BY BASIN



Presenter: Brad Jackson

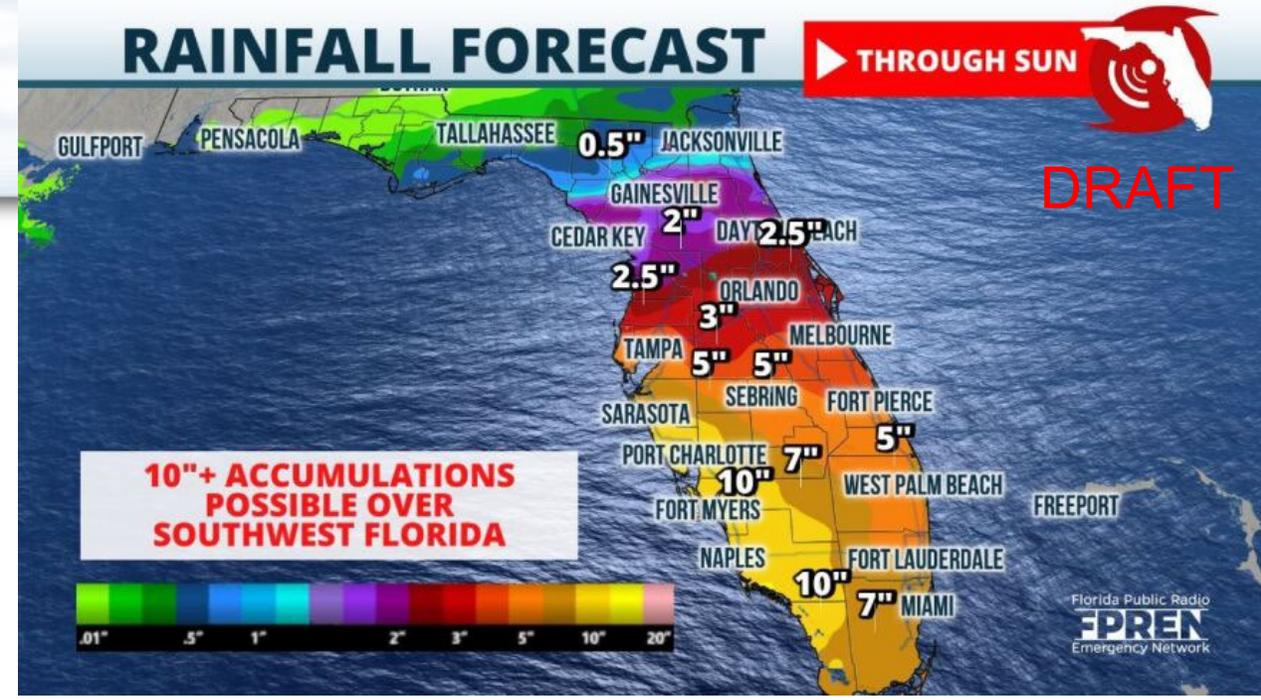
# June 2024 Rainfall

## JUNE 10 – 14, 2024 RAIN EVENT

- SURGE OF TROPICAL MOISTURE
- MULTIPLE DAYS OF HEAVY RAINFALL PREDICTED
- PREDICTED RAINFALL TOTALS 10-15 INCHES

## BCB PRE-STORM CONDITIONS

- VERY DRY CONDITIONS & LOW CANAL/LAKE LEVELS PRIOR TO EVENT
- PRE-STORM DRAWDOWN ACTIVITIES
- ALL MANUAL & REMOTE STRUCTURES OPENED
- ALL STRUCTURES & CANALS INSPECTED



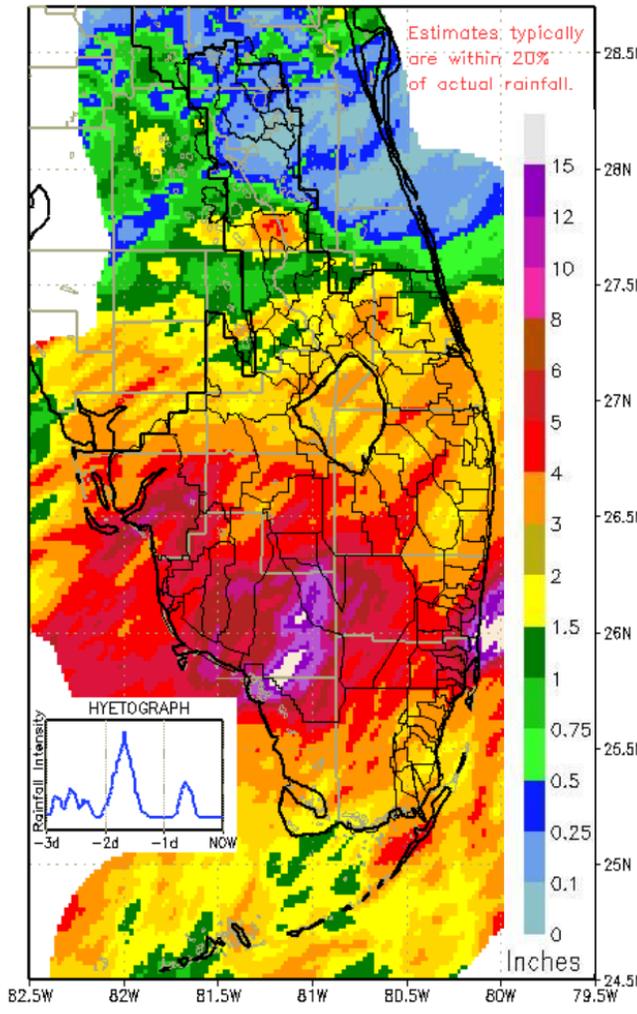
**GG2 PRE-STORM CONDITION**

# June 2024 Rainfall

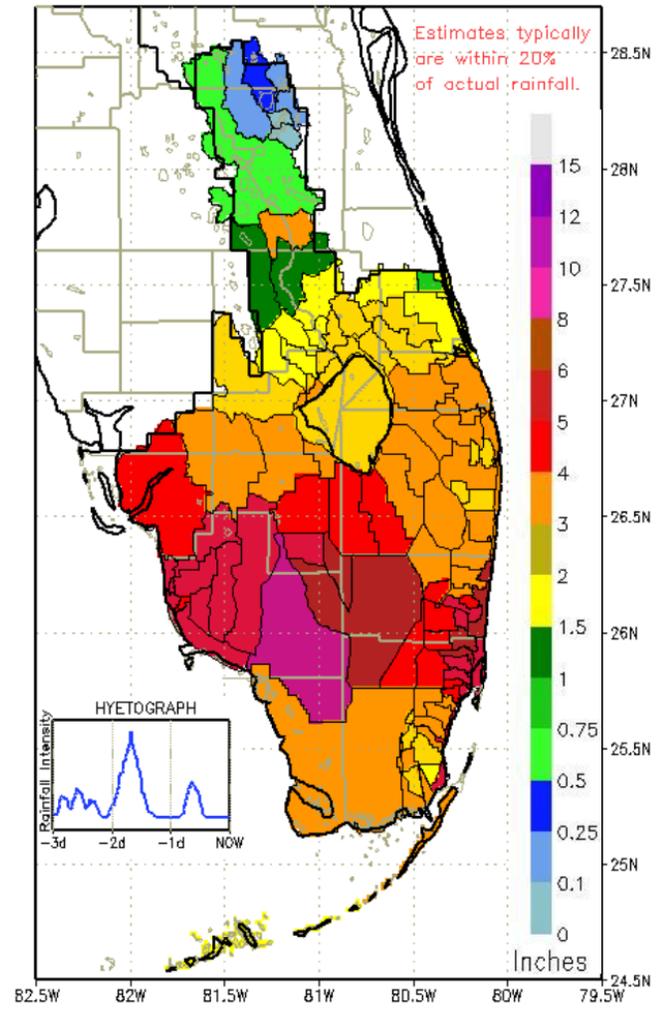
SFWM DISTRICT-WIDE PROVISIONAL RAINFALL 3-DAY RAINFALL ESTIMATES FROM: 0430 EST, 06/11/2024 THROUGH: 0430 EST, 06/14/2024  
 MD PROVISIONAL RAINFALL 3-DAY BASIN RAINFALL ESTIMATE FROM: 0430 EST, 06/11/2024 THROUGH: 0430 EST, 06/14/2024

## JUNE 10 – 14, 2024 RAIN TOTALS

- BCB GAUGE AVERAGE: 11.5"
- FORECAST VERY CLOSE TO ACTUAL RAINFALL
- LOWEST – IMMOKALEE 6 INCHES
- HIGHEST – BIG CYPRESS NATIONAL PRESERVE 22 INCHES
- AVERAGE JUNE RAIN TOTAL – 10.5 INCHES
- 110% OF JUNE RAINFALL RECEIVED OVER 3 DAYS



DISTRICT-WIDE RAINFALL ESTIMATE: 7.547"



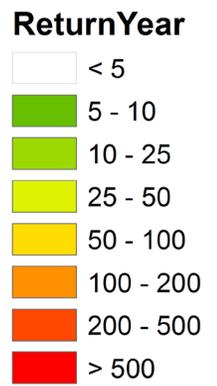
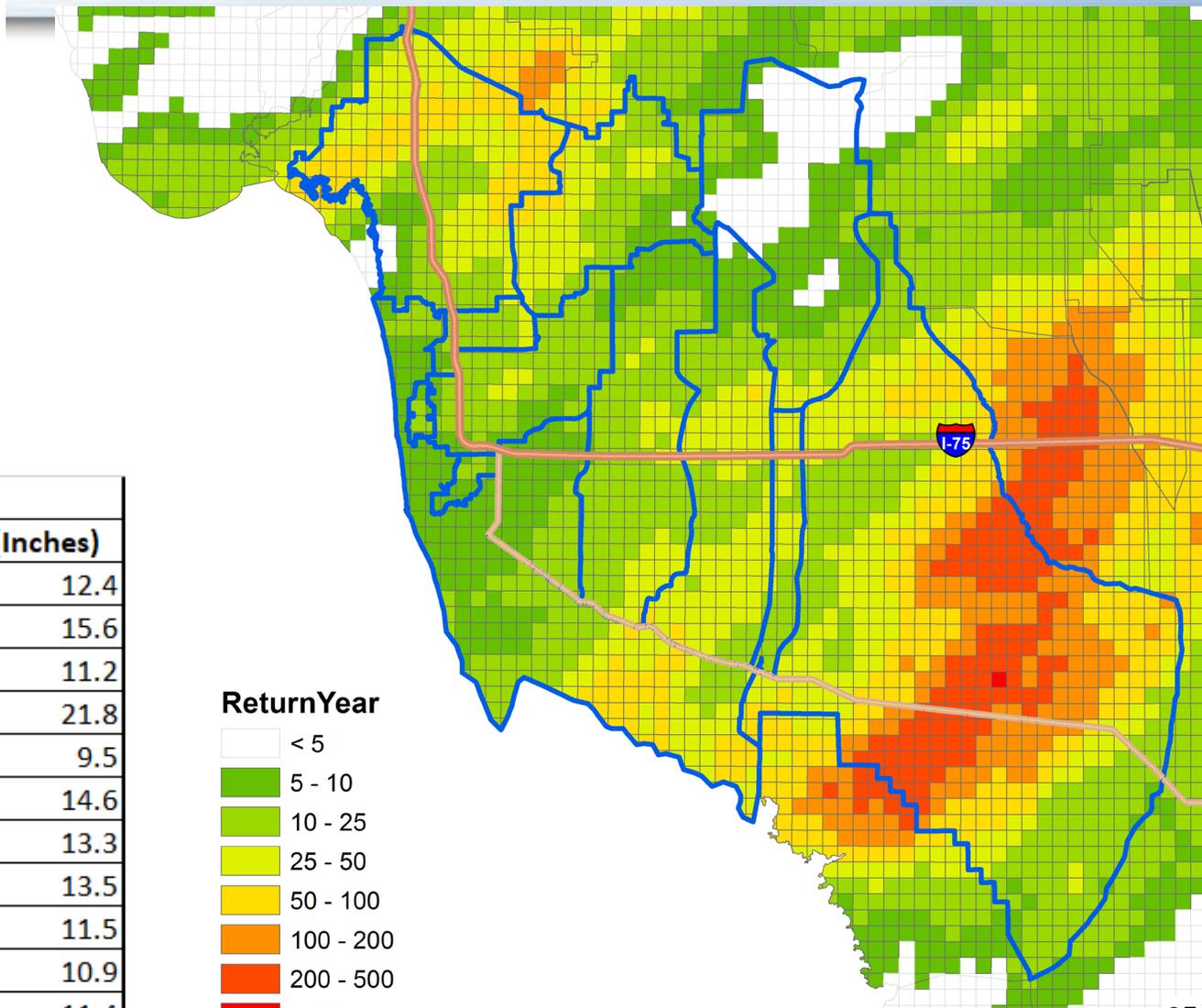
DISTRICT-WIDE RAINFALL ESTIMATE: 7.547"

DRAFT

# June 10-14 Rainfall Analysis

## 3 DAY (72 HOUR) RAIN EVENT

- **25-YEAR RAINFALL (4% CHANCE OCCURRENCE)**
  - GOLDEN GATE MAIN, COCOHATCHEE, HENDERSON
- **50-YEAR RAINFALL (2% CHANCE OCCURRENCE)**
  - FAKA UNION, FAKAHATCHEE
- **100-YEAR RAINFALL (1% CHANCE OCCURRENCE)**
  - PORTIONS OF CORKSCREW SWAMP, TEN THOUSAND ISLANDS
- **500-YEAR RAINFALL (0.2% CHANCE OCCURRENCE)**
  - PORTIONS OF BIG CYPRESS NATIONAL PRESERVE



Watershed	June 10-14, 2024 Rain Event Summary	
	Approximate Return Year	Max Rainfall Amount (Inches)
BARRON RIVER	50	12.4
COASTAL BASINS	100	15.6
COCOHATCHEE	25	11.2
EAST COLLIER	500	21.8
EAST NAPLES	10	9.5
ESTERO BAY	100	14.6
FAKA UNION	50	13.3
FAKAHATCHEE	50	13.5
GOLDEN GATE MAIN	25	11.5
HENDERSON - BELLE MEADE	25	10.9
OKALOACOOCHEE	50	11.4
TRAFFORD	100	13.7

Presenter: Brad Jackson

# Canal Performance June 10-14 Rainfall

- ALL CANAL SEGMENTS BUT ONE (GG2) STAYED IN NORMAL OPERATIONAL RANGE DURING EVENT
- GG2 CRESTED 6 INCHES ABOVE NORMAL OPERATION
- JUNE RAIN PEAK 7.6 NGVD
- HC IRMA 9.8 NGVD (FOR COMPARISON)
- NO MAJOR OPERATIONAL ISSUES
- SYSTEM PERFORMED EXCEPTIONALLY WELL



**COCO1 – JUNE 14TH**

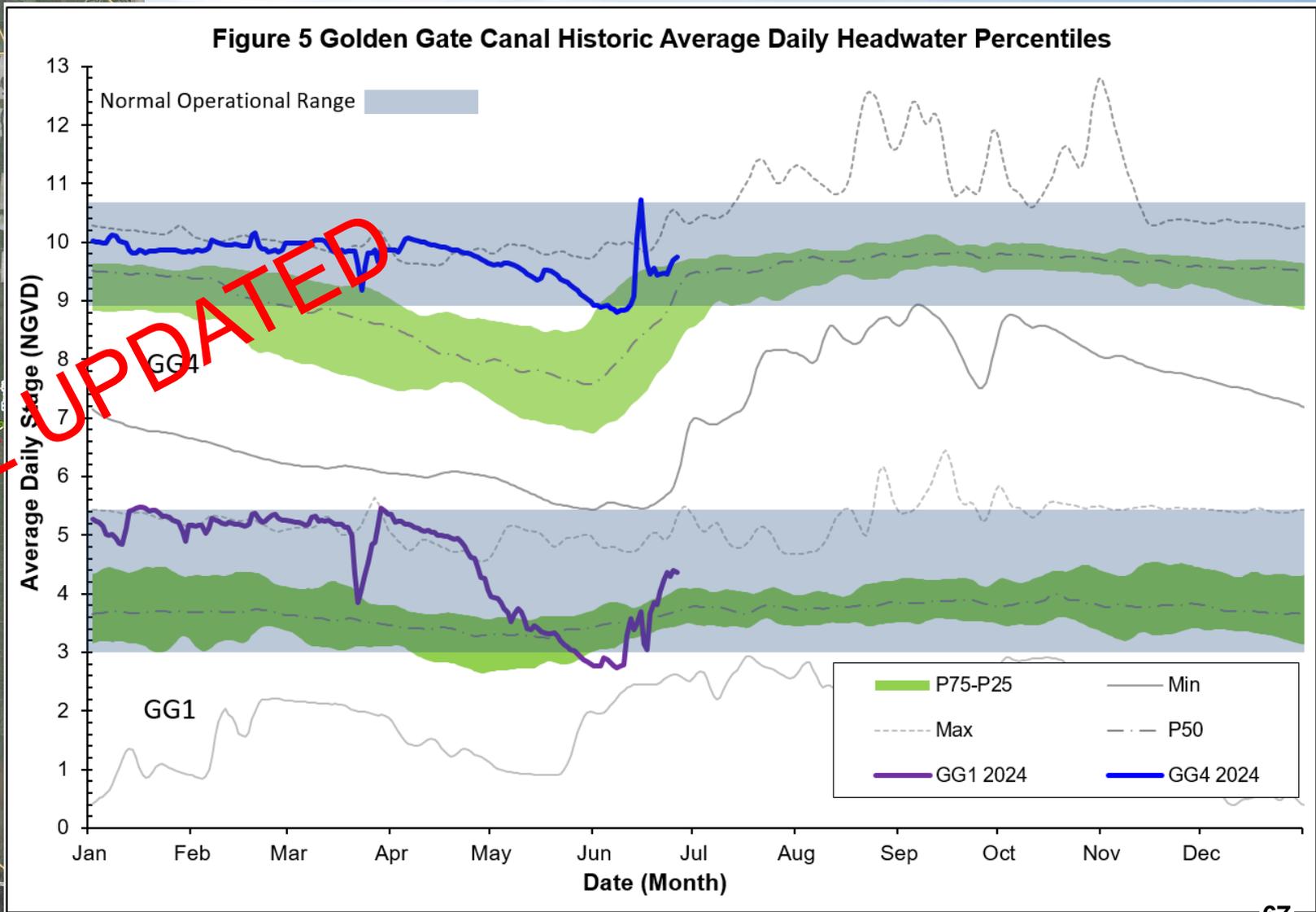
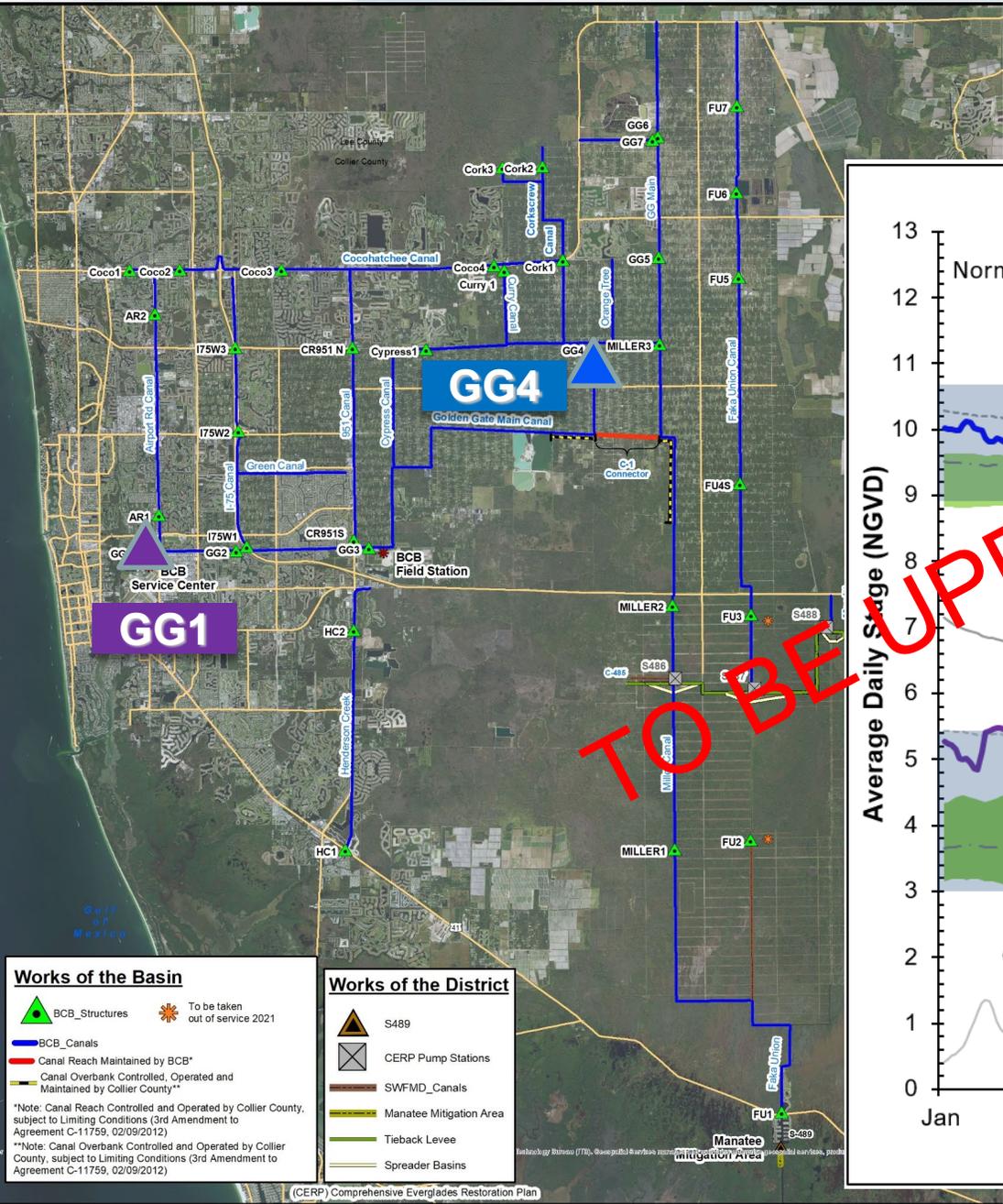


**GG2 PEAK STAGE – JUNE 14TH**



DRAFT

# BCB Golden Gate Canal



**Works of the Basin**

- BCB\_Structures
- To be taken out of service 2021
- BCB\_Canals
- Canal Reach Maintained by BCB\*
- Canal Overbank Controlled, Operated and Maintained by Collier County\*\*

\*Note: Canal Reach Controlled and Operated by Collier County, subject to Limiting Conditions (3rd Amendment to Agreement C-11759, 02/09/2012)  
\*\*Note: Canal Overbank Controlled and Operated by Collier County, subject to Limiting Conditions (3rd Amendment to Agreement C-11759, 02/09/2012)

**Works of the District**

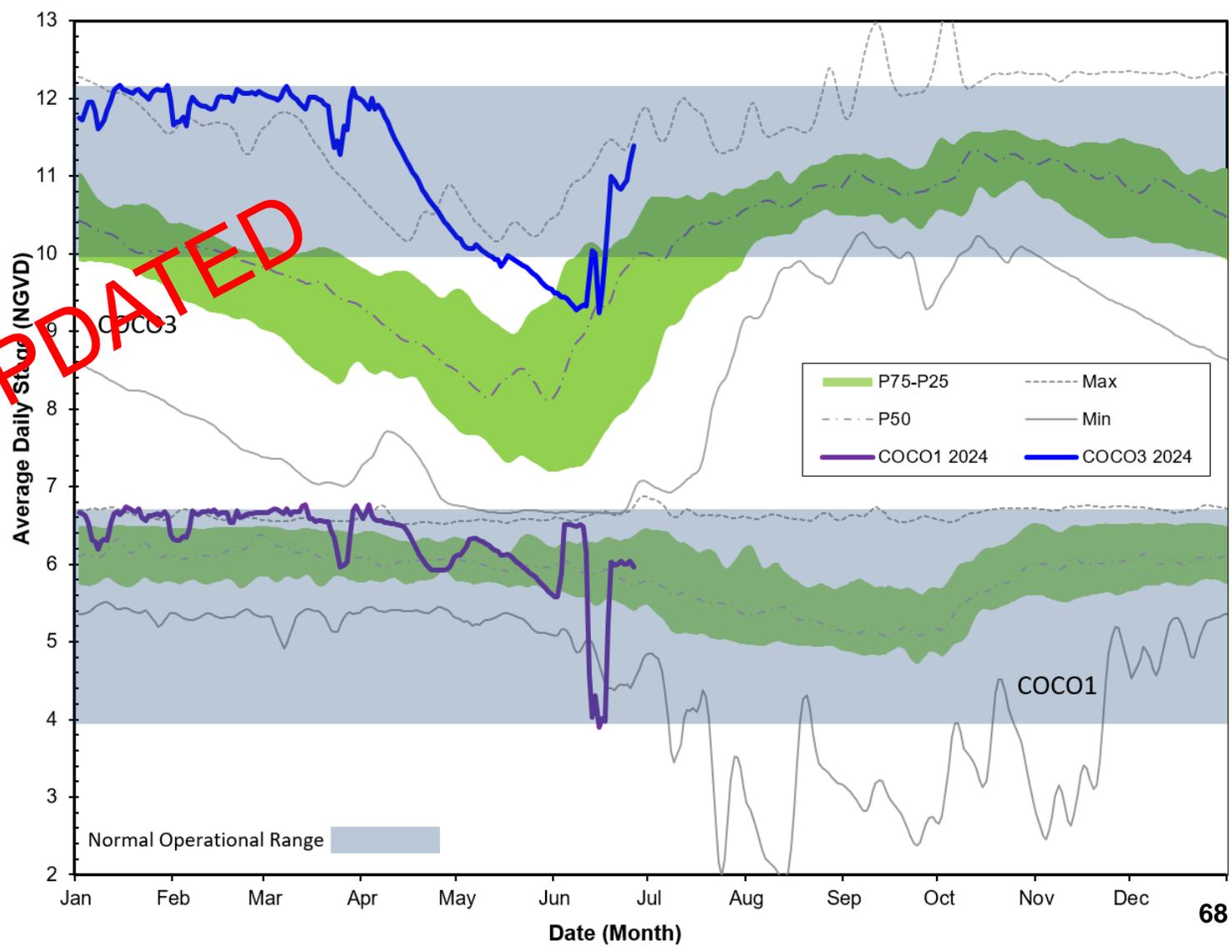
- S489
- CERP Pump Stations
- SWFMD\_Canals
- Manatee Mitigation Area
- Tieback Levee
- Spreader Basins

# BCB Cocohatchee Canal

DRAFT



Figure 6A Cocohatchee Canal Historic Average Daily Headwater Percentiles



TO BE UPDATED

# BCB Faka Union Canal DRAFT

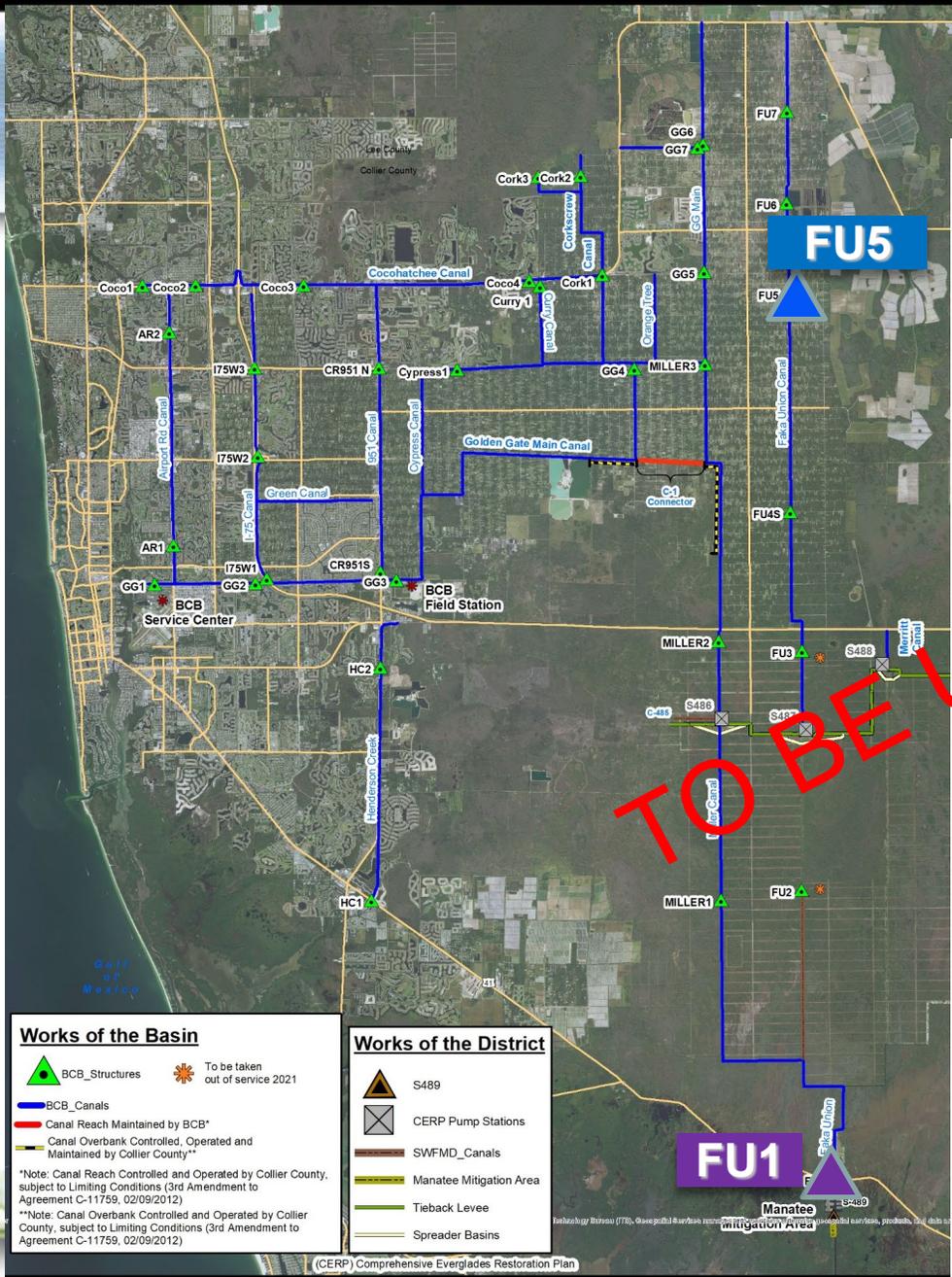
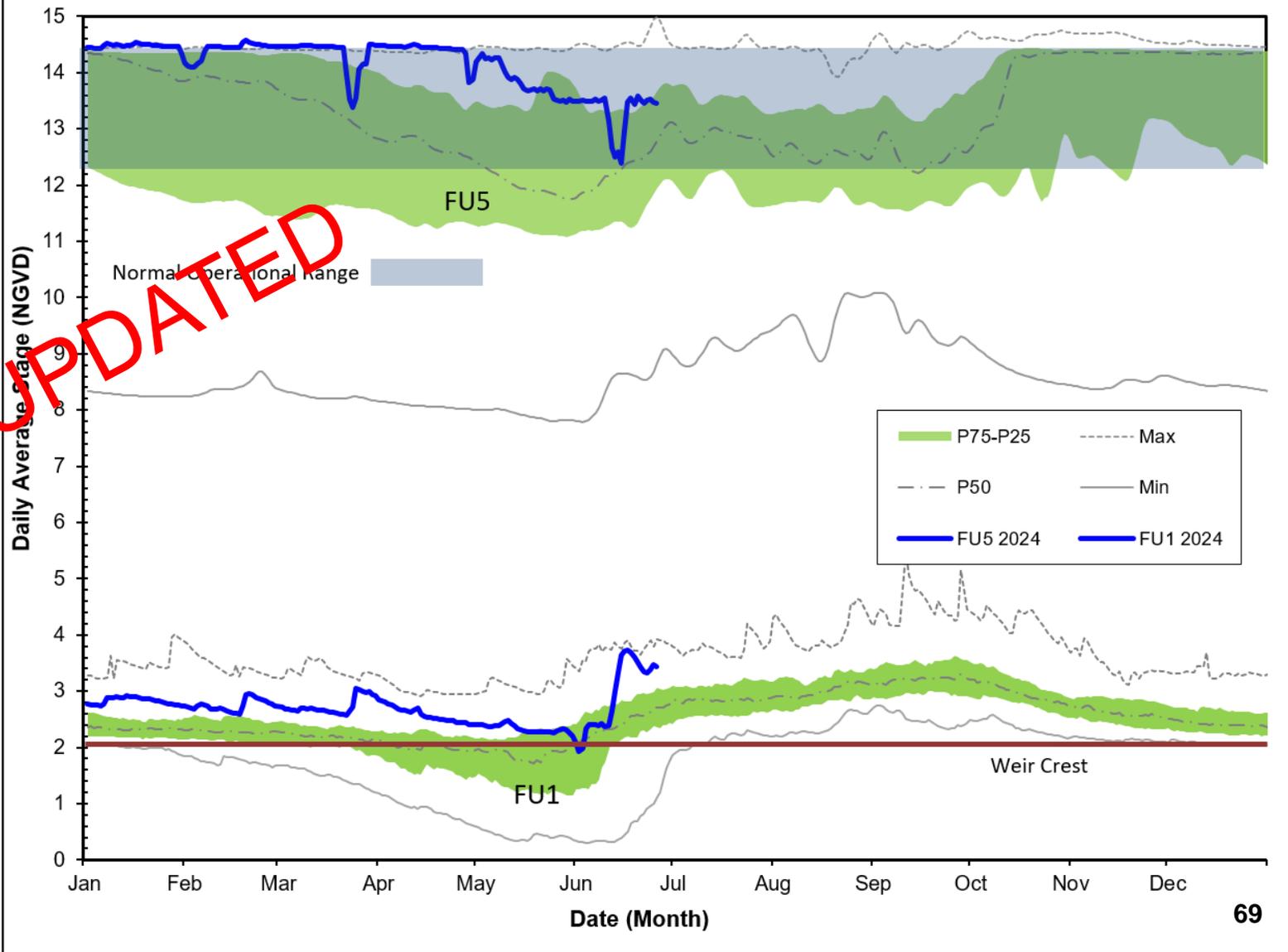


Figure 7A Faka Union Canal Historic Average Daily Headwater Percentiles



TO BE UPDATED

**Works of the Basin**

- BCB Structures
- To be taken out of service 2021
- BCB Canals
- Canal Reach Maintained by BCB\*
- Canal Overbank Controlled, Operated and Maintained by Collier County\*\*

\*Note: Canal Reach Controlled and Operated by Collier County, subject to Limiting Conditions (3rd Amendment to Agreement C-11759, 02/09/2012)  
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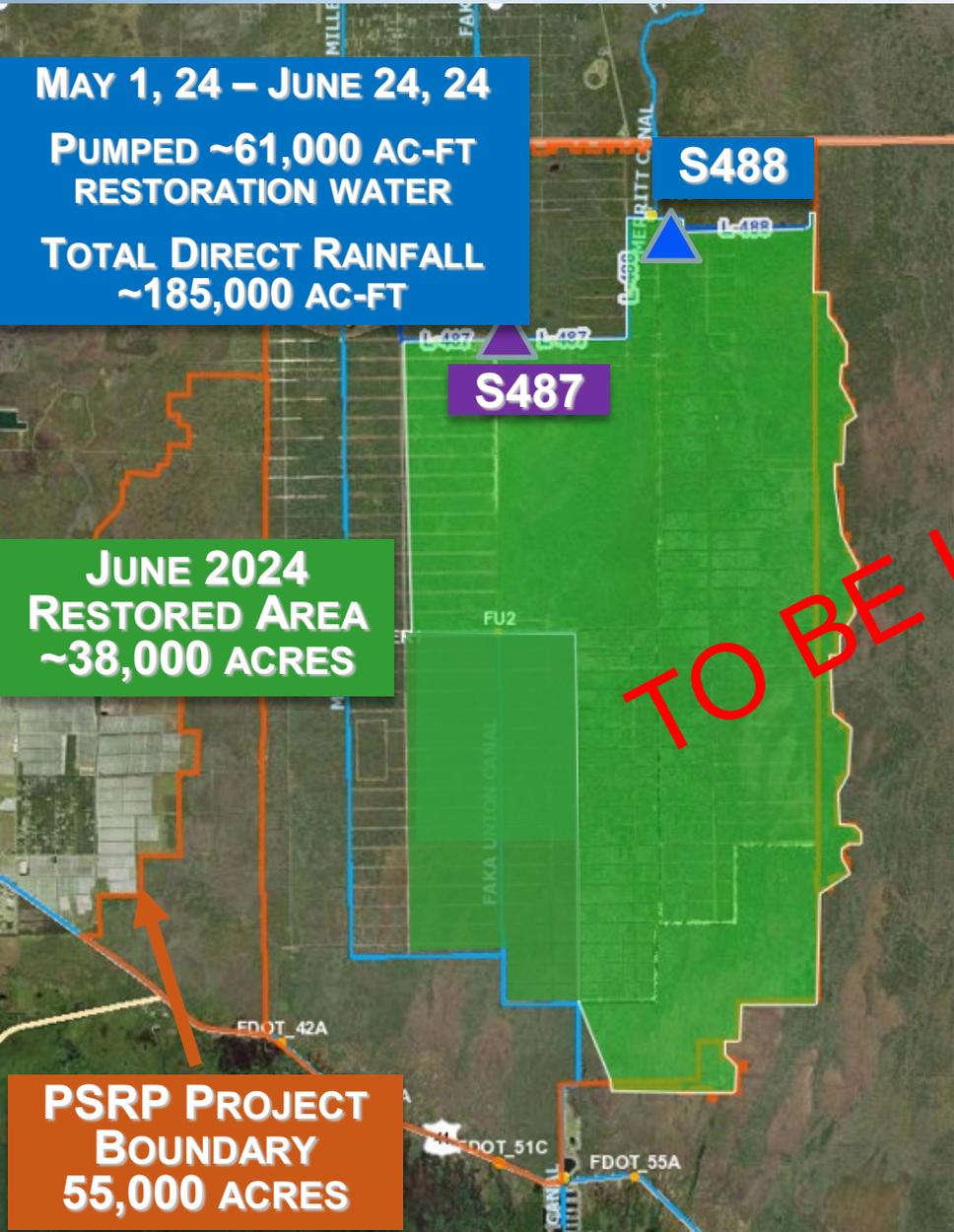
**Works of the District**

- S489
- CERP Pump Stations
- SWFMD Canals
- Manatee Mitigation Area
- Tieback Levee
- Spreader Basins

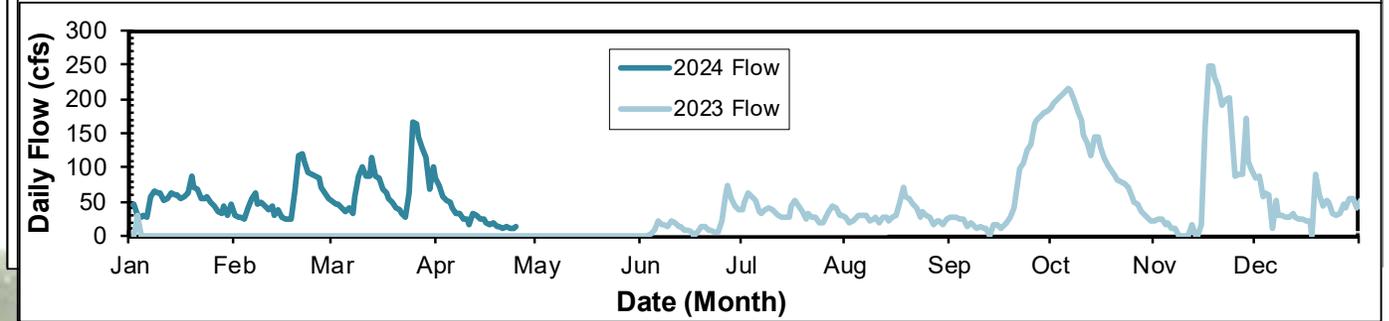
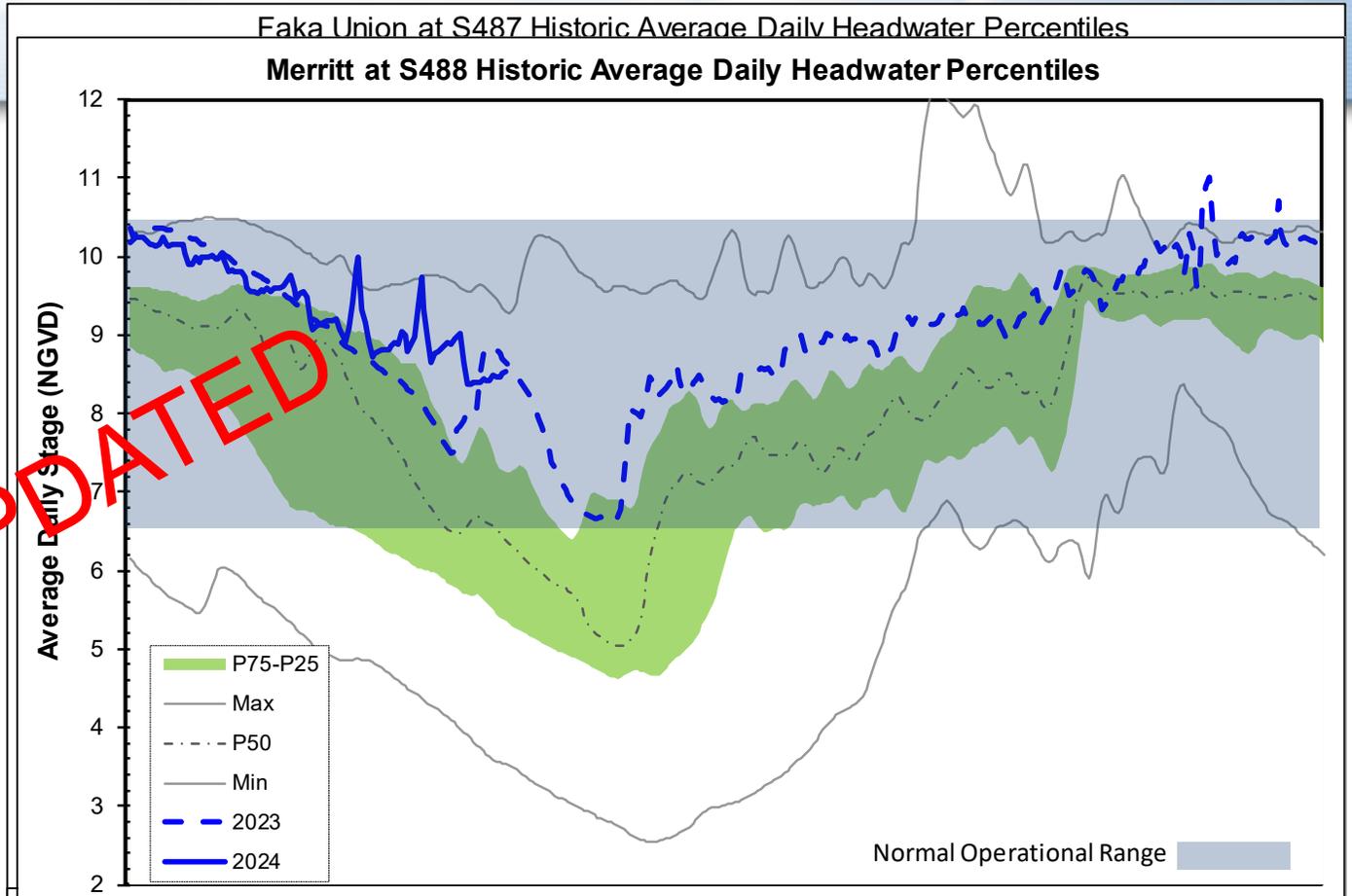


# Picayune Strand Restoration Project Operations

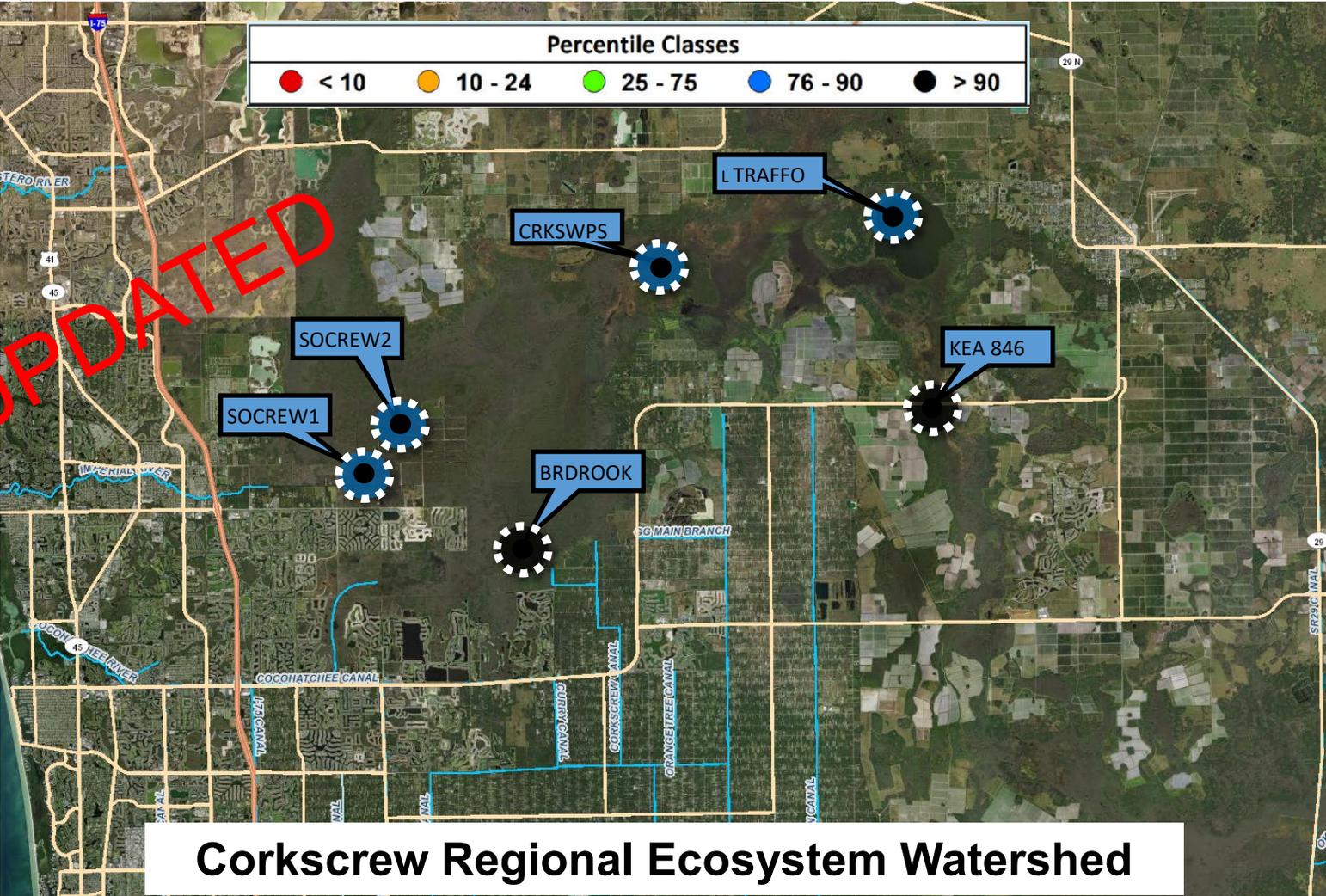
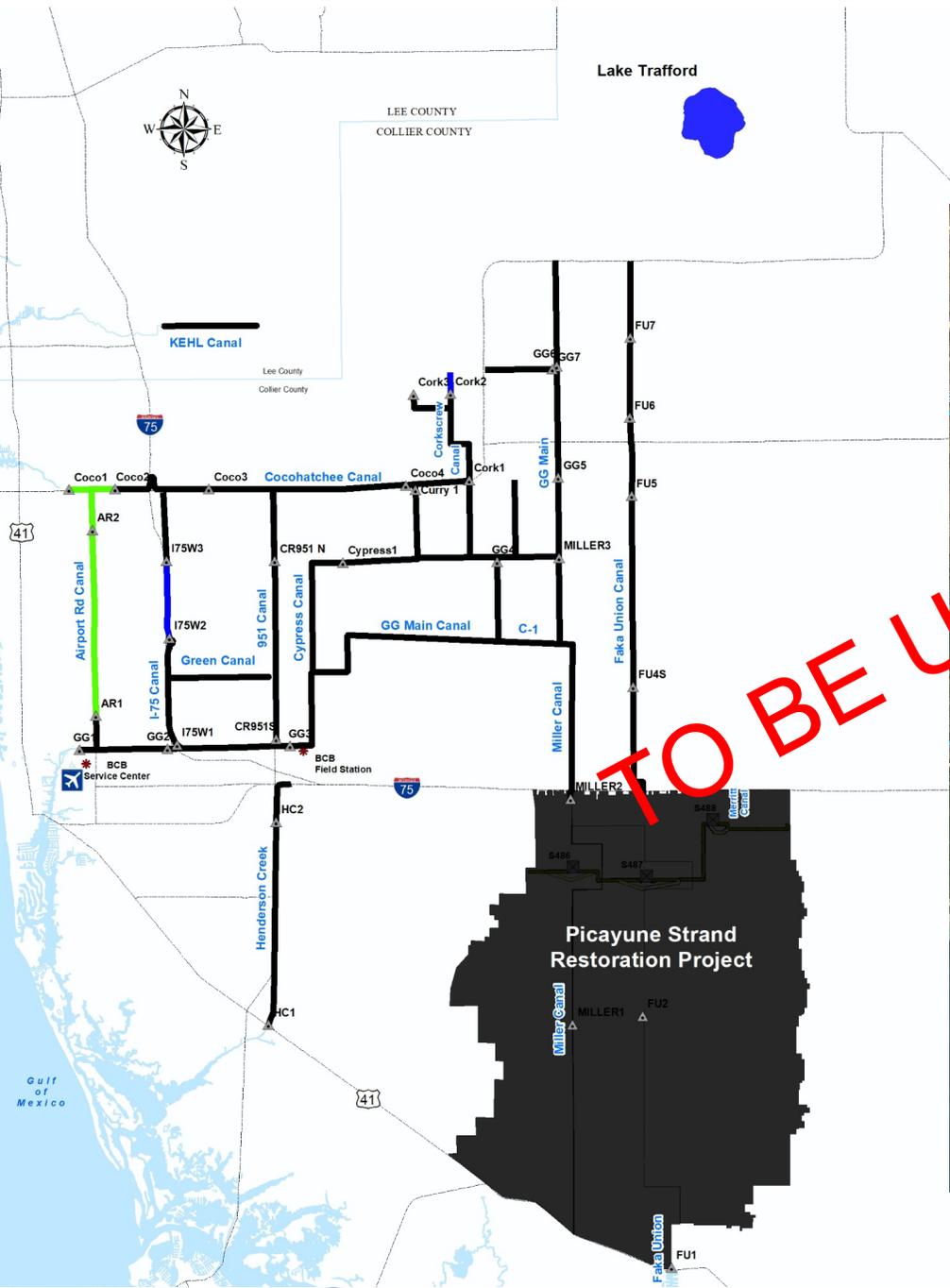
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TO BE UPDATED



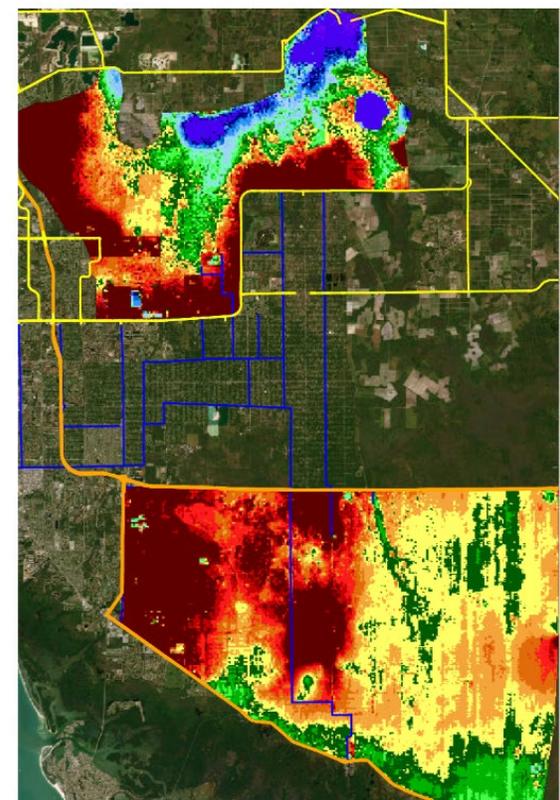
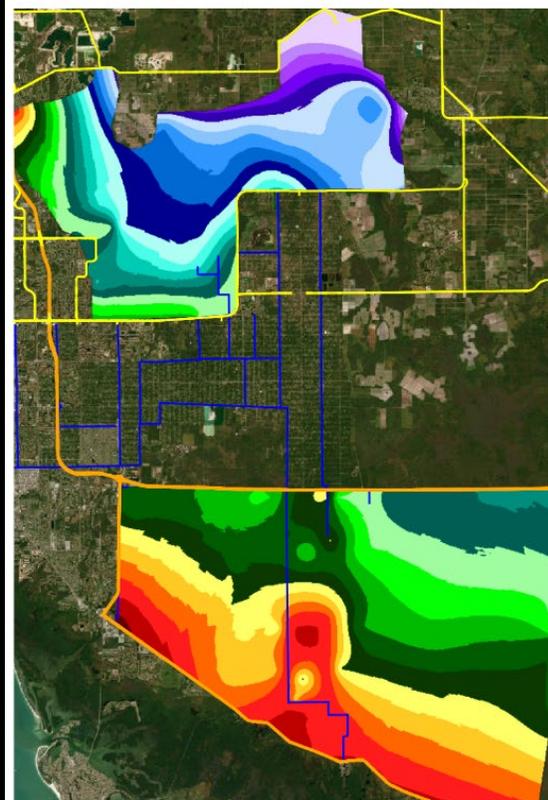
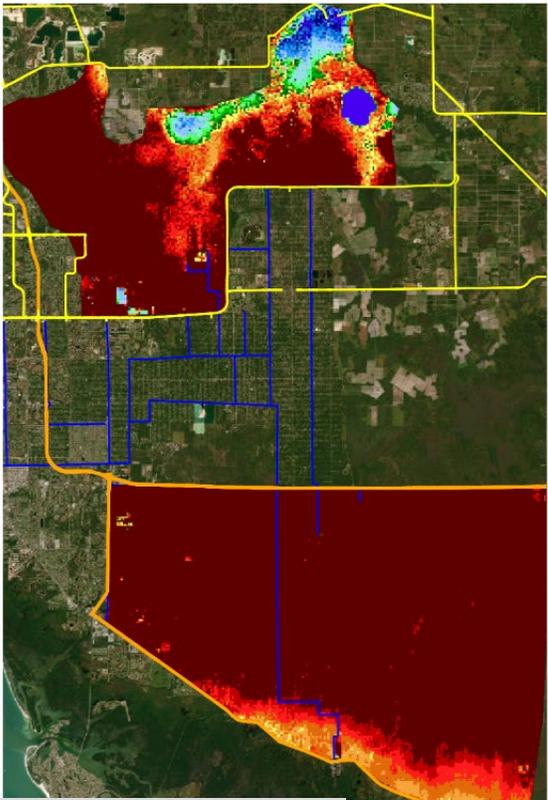
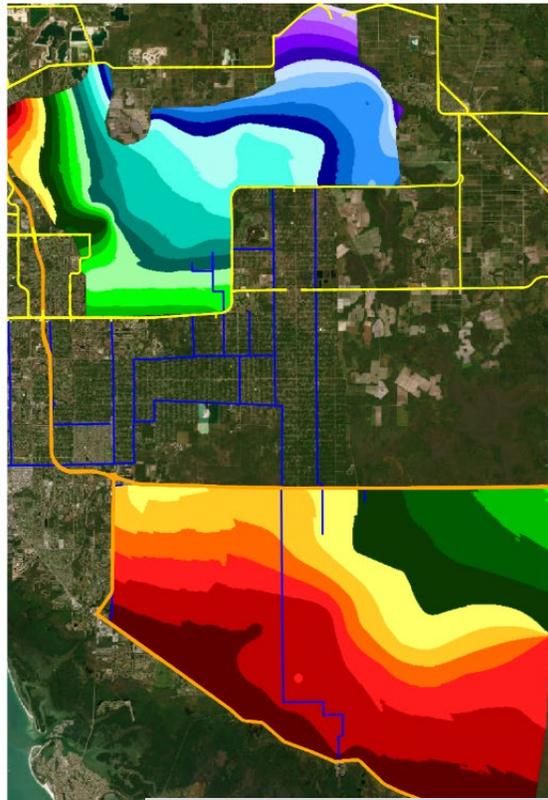
# BCB Hydrologic Conditions DRAFT as of 07/02/24



TO BE UPDATED

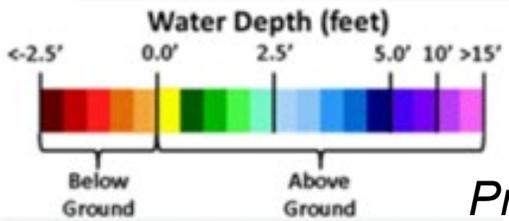
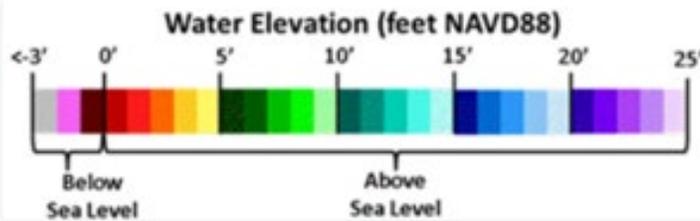
**Corkscrew Regional Ecosystem Watershed**

# BCB Water Depth June 2024 Comparison

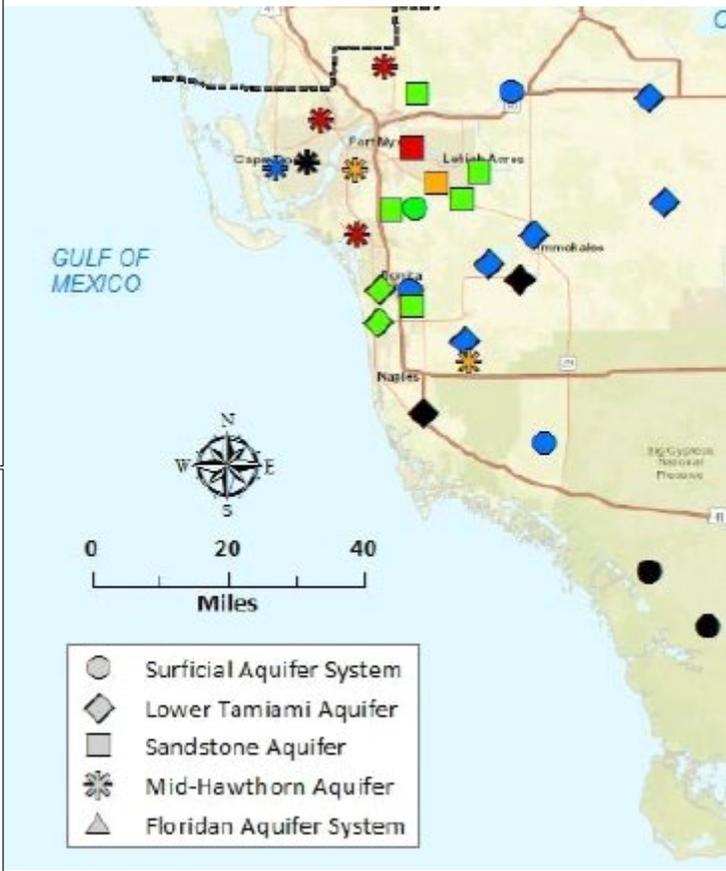
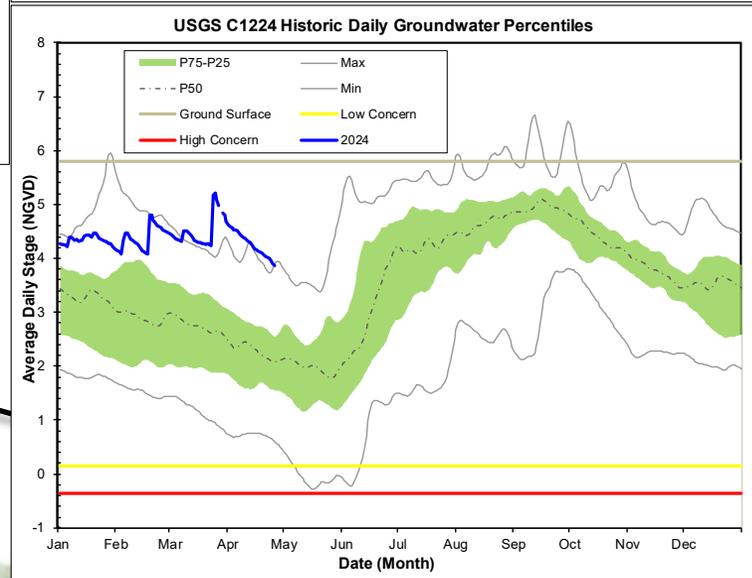
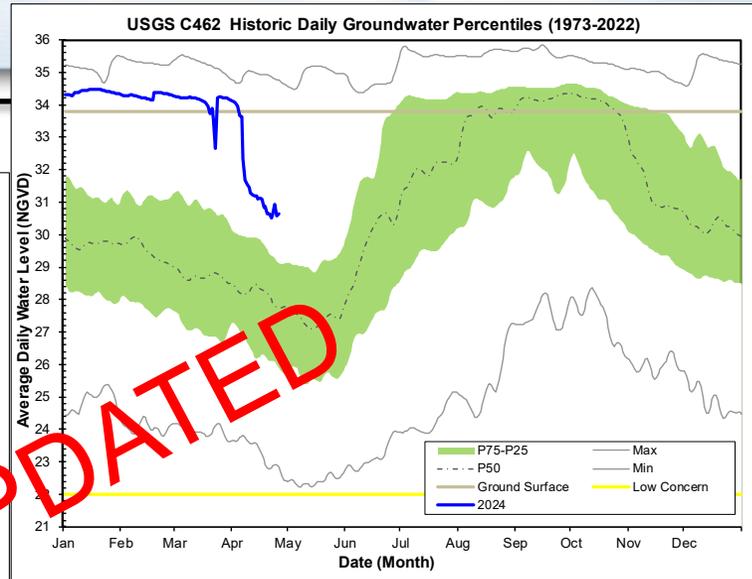
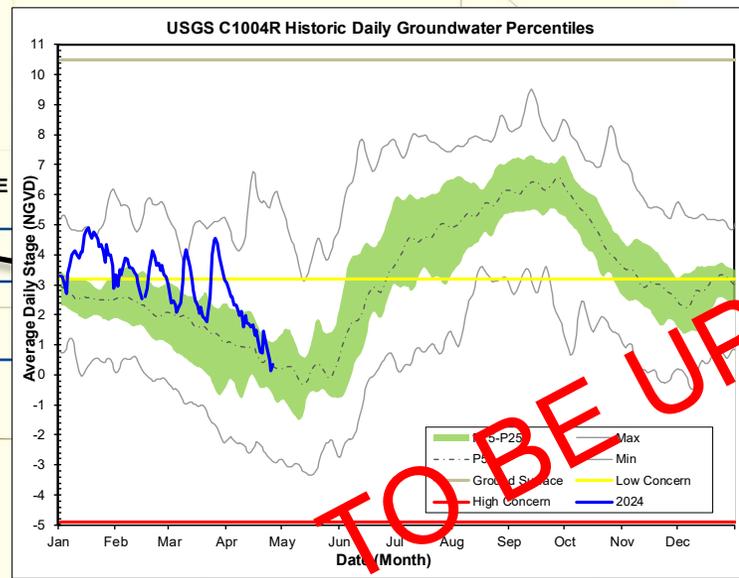
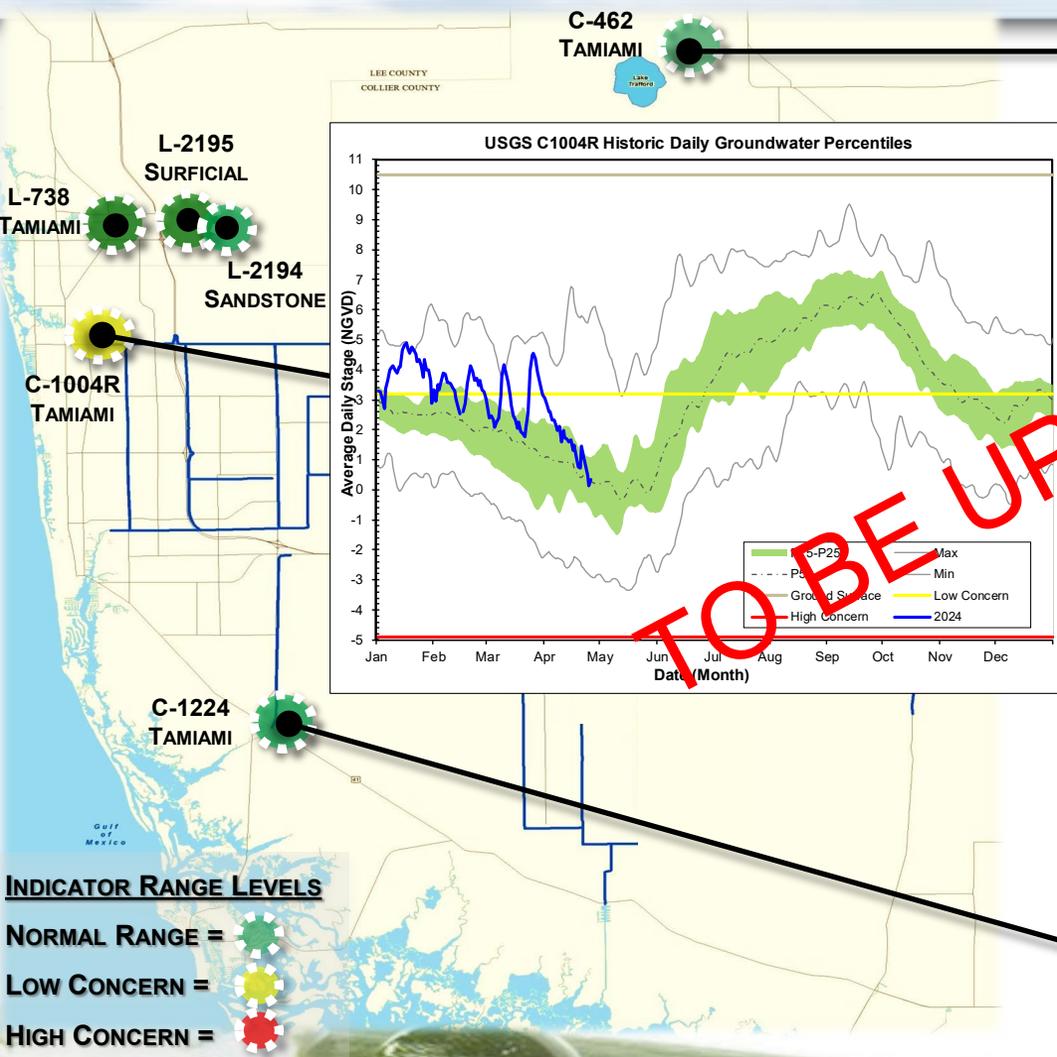


**PRE-STORM – JUNE 7TH**

**POST-STORM – JUNE 15TH**



# Groundwater Level Trends



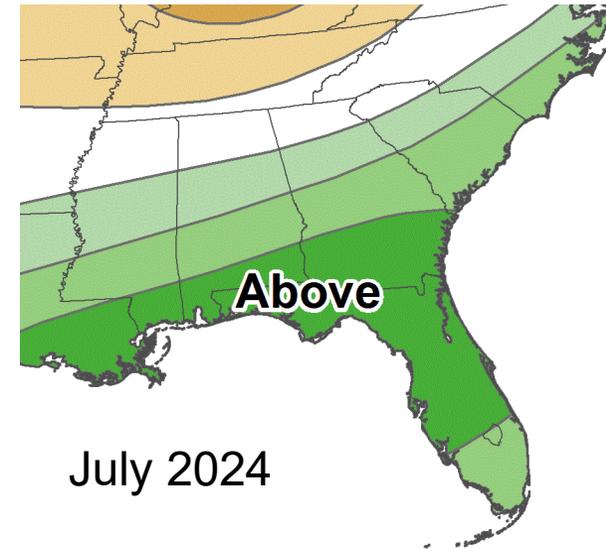
TO BE UPDATED

# Seasonal Precipitation Outlook

## Atlantic Basin Seasonal Hurricane Forecast (June 2024)

- Extremely active season expected
- Transition to La Niña – lower wind shear (favors hurricane development)
- Atlantic sea temperatures already at record warm levels
- CSU predicts 23 named storms, 11 hurricanes

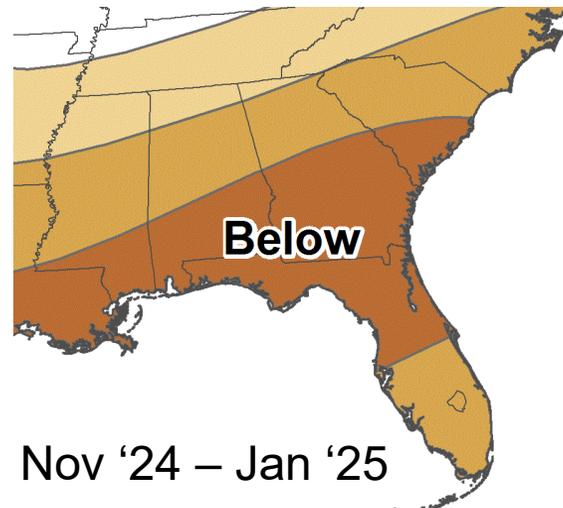
\*Source: Colorado State University



July 2024

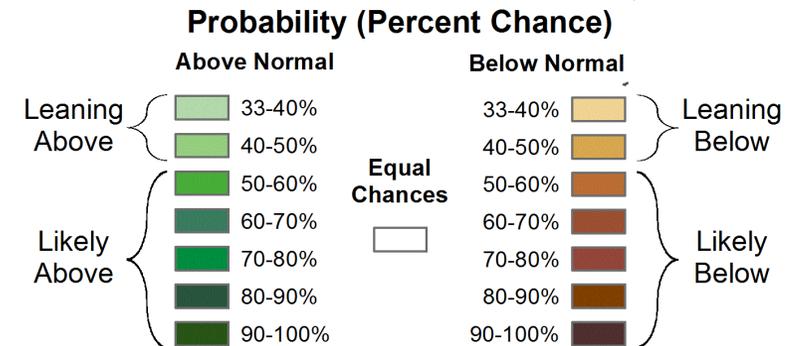


Aug – Oct 2024



Nov '24 – Jan '25

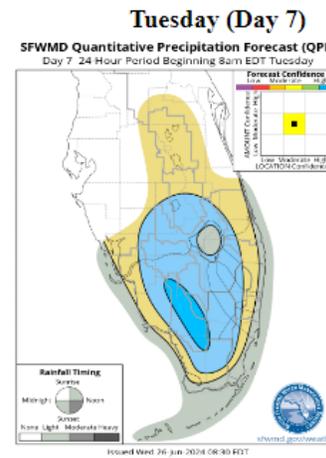
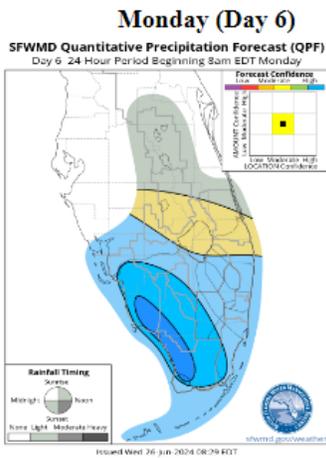
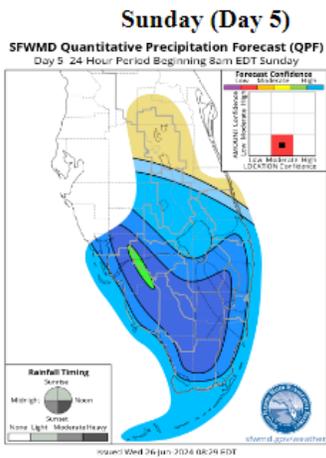
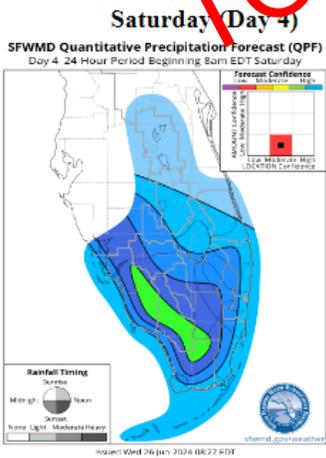
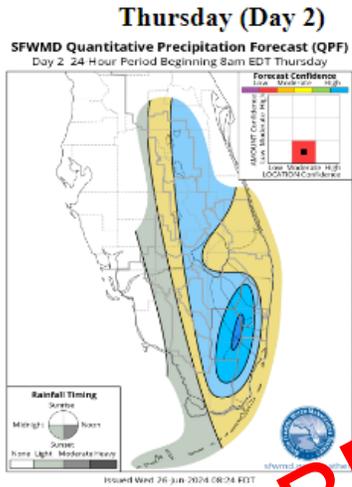
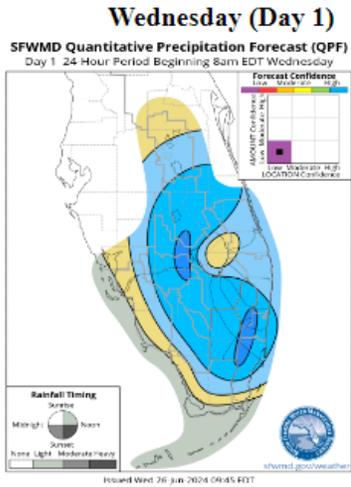
## Long Range Outlook



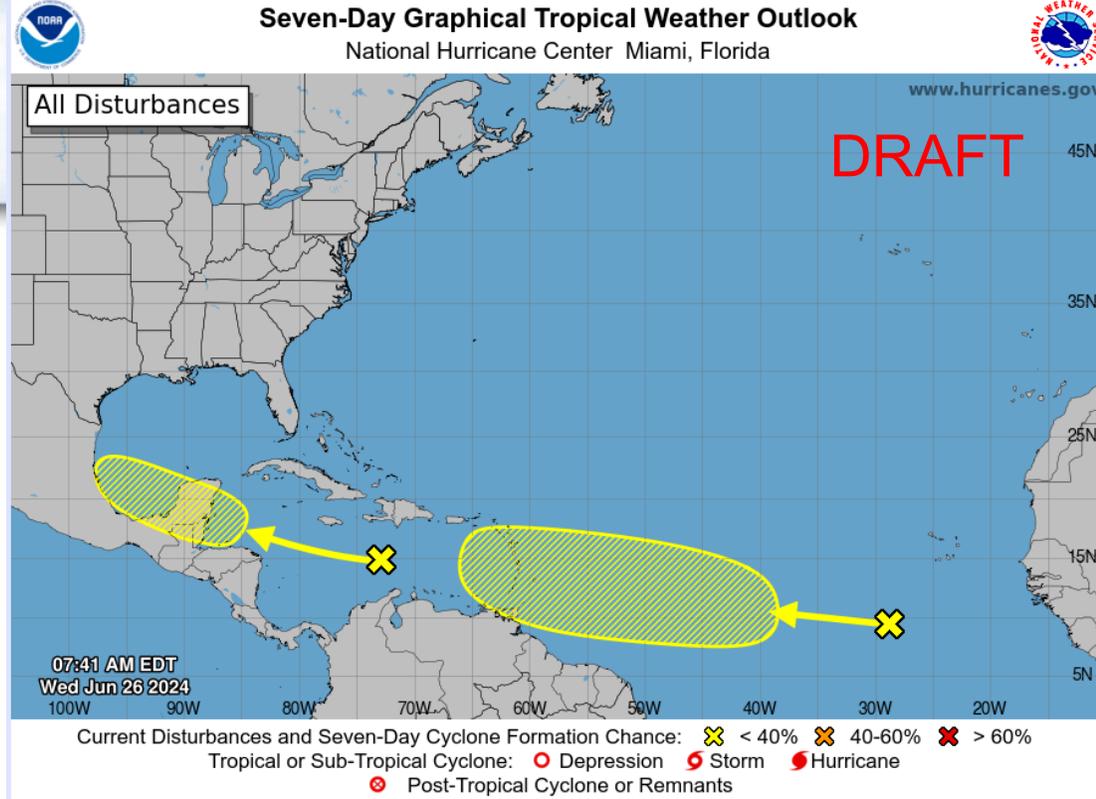
Presenter: Brad Jackson



# Short Term Forecast



TO BE UPDATED



# BCB Water Conditions Report



QUESTIONS ?