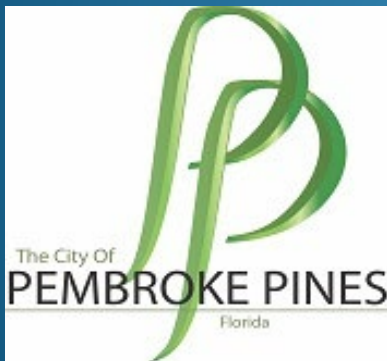


CITY OF PEMBROKE PINES COMMISSION MEETING

THE ROLE OF SOUTH BROWARD DRAINAGE DISTRICT



PRESENTED BY:

LUIS OCHOA, P.E.,
DISTRICT DIRECTOR
SOUTH BROWARD DRAINAGE DISTRICT



June 4, 2025

SOUTH BROWARD DRAINAGE DISTRICT

Atlantic Hurricane Season

- On Average we can expect
 - +/- 14 Named Storms
 - +/- 7 Hurricanes
 - +/- 3 Major Hurricanes
- Forecasted Predictions for 2025
 - 10 – 19 Named Storms
 - 6 – 10 Hurricanes
 - 2 – 5 Major Hurricanes

2025 HURRICANE &
EMERGENCY PREPAREDNESS &
RESPONSE PROCEDURES
MANUAL



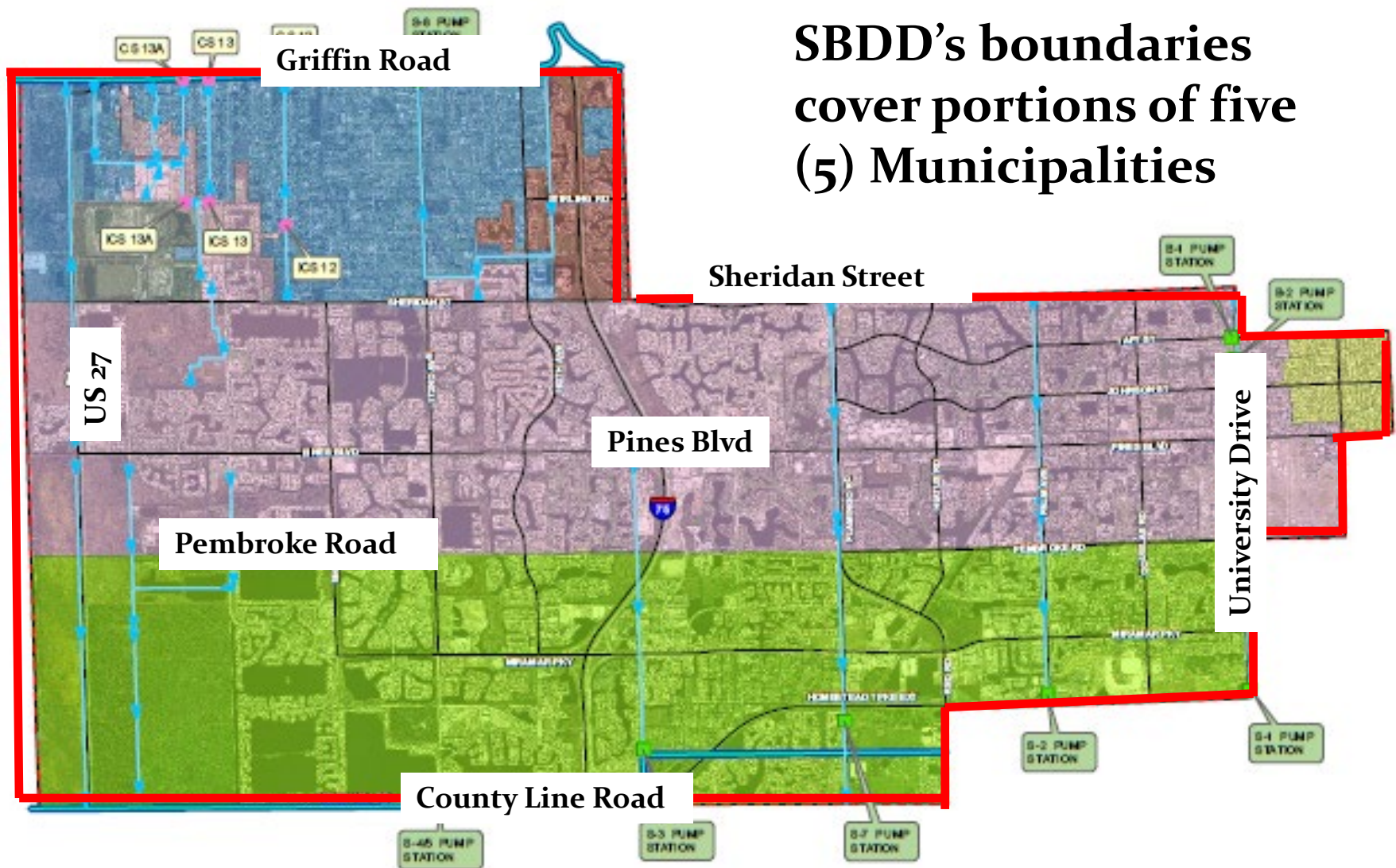
SOUTH BROWARD DRAINAGE DISTRICT

Independent Special Taxing District

- Established and Authorized by the State Legislature in 1927 by Chapter 12049
- Florida Statutes – Chapter 298
Provides Statutory Authority and Requirements for “Water Control” Districts
- Originally Known as the Hollywood Reclamation District (1986)
- 7 Member Elected Board of Commissioners

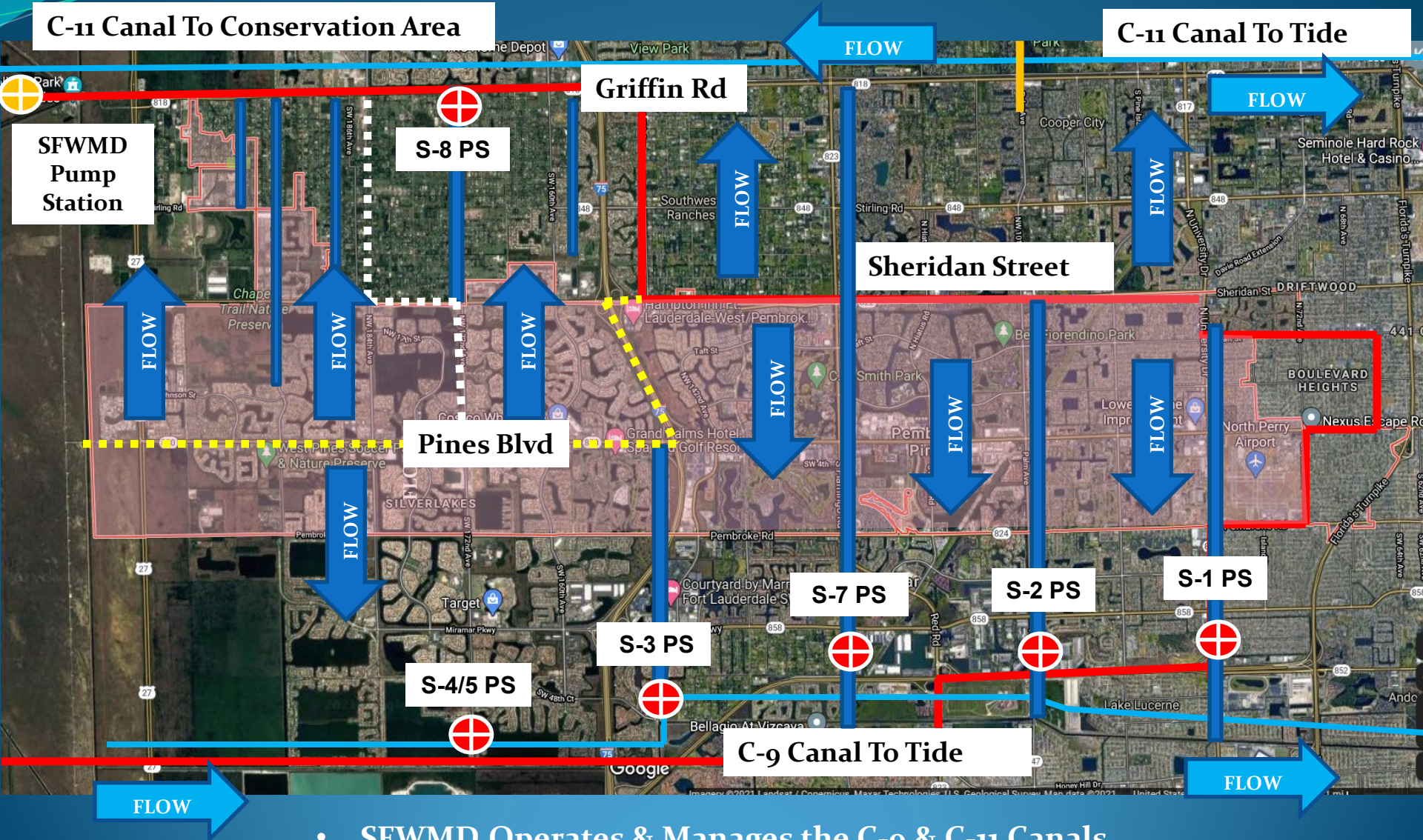
SOUTH BROWARD DRAINAGE DISTRICT

**SBDD's boundaries
cover portions of five
(5) Municipalities**



SBDD Boundary Map

SOUTH BROWARD DRAINAGE DISTRICT

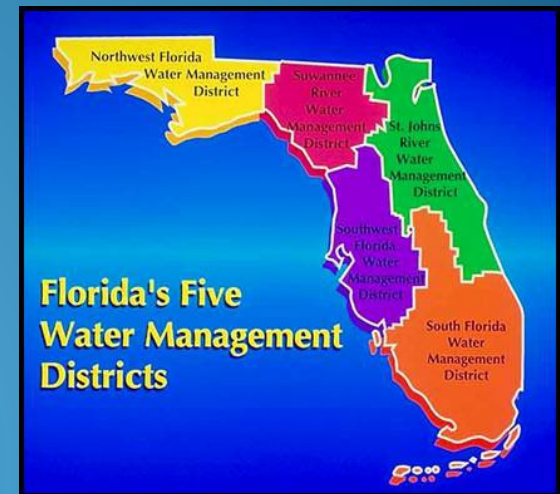


- **SFWMD Operates & Manages the C-9 & C-11 Canals**
- **SBDD Operates & Manages the Internal Canals**

SOUTH BROWARD DRAINAGE DISTRICT

Three Tiered System

- **Primary - SFWMD**
 - **Monitoring of Meteorological Conditions**
 - **Coordination with Local Drainage Districts and Municipalities**
- **Secondary – SBDD**
- **Tertiary – City and HOAs**



SOUTH BROWARD DRAINAGE DISTRICT

Role of SBDD (Secondary)

- Maintain & Operate the Secondary Drainage System
- Provide Water Quality & Discharge Control
- Permitting & Inspections
- Monitoring and Operation of Local Facilities
- Coordination with SFWMD
- Respond to Resident Concerns
- Pre-Storm and Post-Storm Activities



SOUTH BROWARD DRAINAGE DISTRICT

Role of HOA/City (Tertiary)

- Inspect your drainage system
 - HOAs, Property Managers, etc.
- Clean all drainage inlets of debris
- Verify all drainage pipes are open and fully functional
- Get to know your drainage system
- The Operation and Maintenance Permit shall be renewed every five (5) years.



SOUTH BROWARD DRAINAGE DISTRICT

- The District's main function is storm-water management. Along those lines, our goal is to keep the stormwater flow patterns always open and operational.

- 7 Stormwater Pump Stations – Automated All Serving Pembroke Pines

- 27 Gravity Fed Flood Gates- 25 of Which Serve Parts of Pembroke Pines



- Aquatics & Vegetation Removal of District owned water bodies and at Pump Stations and Control Structures
- Culvert inspections
- 5-Year Operation & Maintenance Program

Primary Pump Stations

- Automated 24/7
- Redundant System
- SCADA System
- Water Levels
- Rainfall

- Pumps
- Gear Drives
- Diesel Engines
- Emergency Backup Generators



SOUTH BROWARD DRAINAGE DISTRICT

Pump Station Flow Capacity

Pump Station	Capacity (GPM)	# of Pumps
S-1	47,500	4
S-2	45,000	3
S-3	45,000	3
S-4	31,000	2
S-5	40,000	3
S-7	47,500	3
S-8	75,000	3



Total Pump Capacity into C-9 Canal 628,650 GPM
Total Pump Capacity into C-11 Canal 150,000 GPM

SBDD On-going Maintenance Program

Pumps are re-built on a 7 -year cycle



SOUTH BROWARD DRAINAGE DISTRICT

Pump Station Maintenance

- On going maintenance of SBDD facilities
 - Routine start-ups/Testing
 - Maintenance inspections
 - Updates to pump station facilities
 - roof, exhaust, control panels, engine re-builds, etc.





Automated
Flood Gates

Gravity Fed System
Upstream vs
Downstream



SOUTH BROWARD DRAINAGE DISTRICT



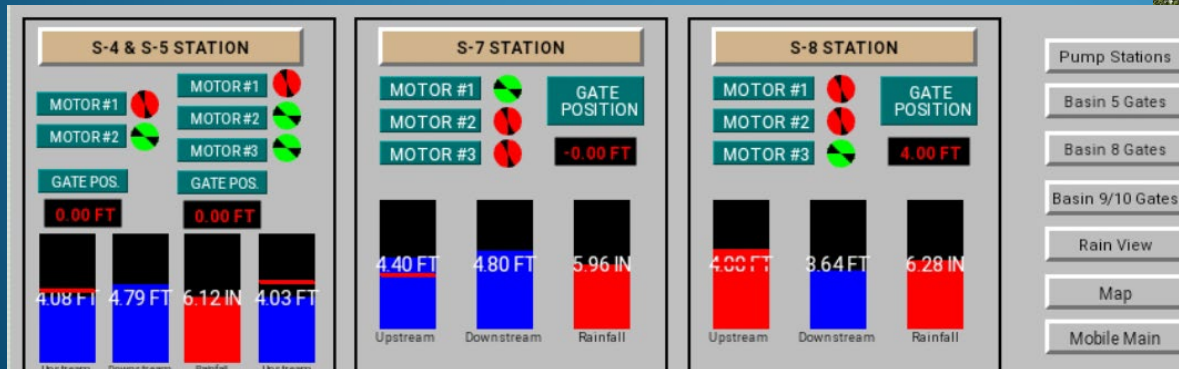
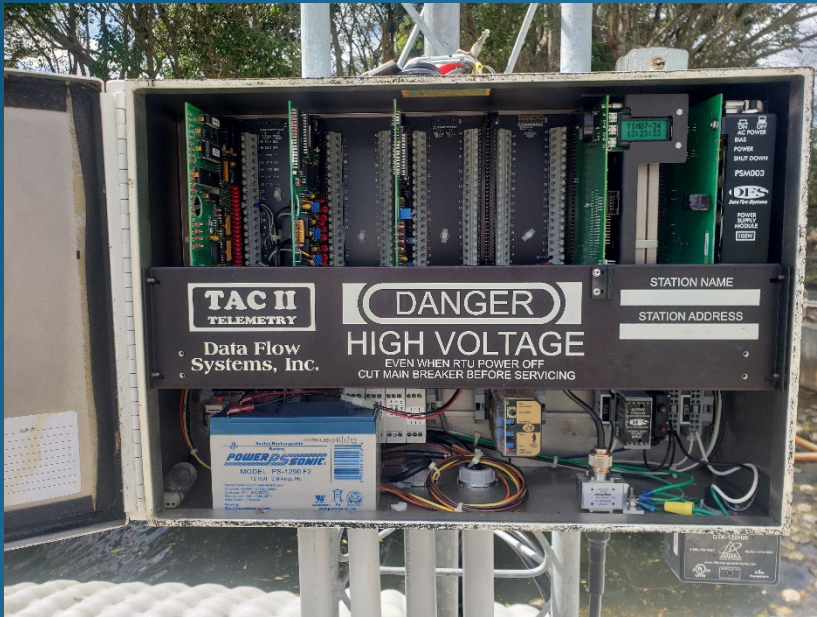
Normal Conditions



Tropical Storm Eta

SCADA System -

On Call 24/7, Realtime Updates, Water Levels,
Pump / Gate Operations, Rainfall



Water Level Recorders – 44 Total

Realtime Water Levels at 15 locations +
Position Analog Transmitters at each Pump Station and
Control Structure (29 locations)



WATER LEVEL



SOUTH BROWARD DRAINAGE DISTRICT

SBDD Resiliency

- Emergency back-up mobile pumps purchased in 2023:
 - 16,000 – 18,000 GPM (24")
 - 10,000 – 12,000 GPM (20")
- Pump pad installation for potential deployment locations

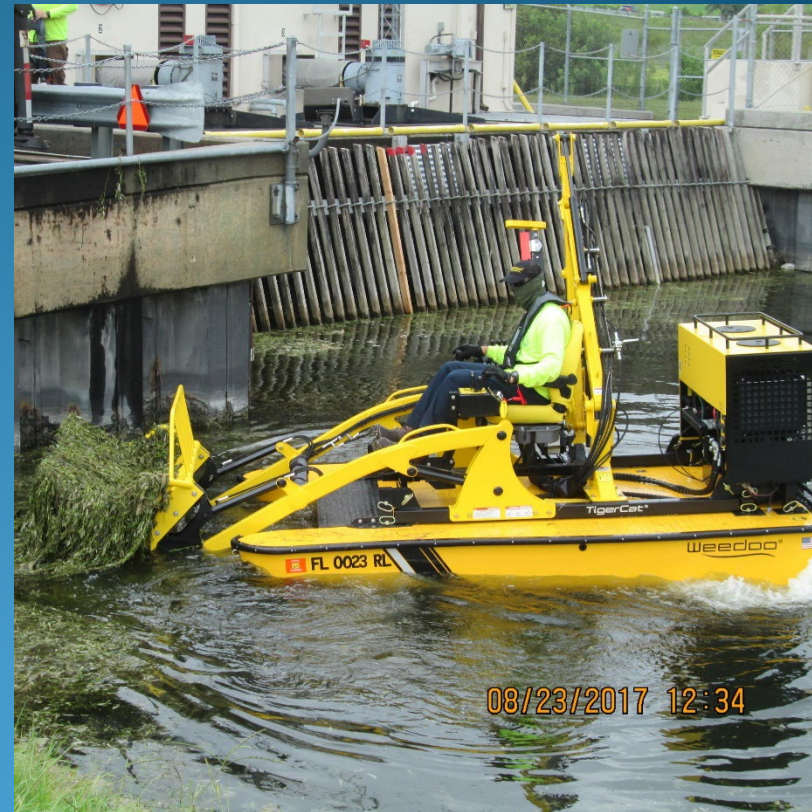


SOUTH BROWARD DRAINAGE DISTRICT

Aquatics and Vegetation Control



Trash Rack Rakes



Weedo

SOUTH BROWARD DRAINAGE DISTRICT

Aquatics and Vegetation Control



On Call Maintenance of Trash Rack



Grapple Truck

SOUTH BROWARD DRAINAGE DISTRICT

Culvert Inspections – Primary System

City Center on 7th - Entrance



Pembroke Rd. & C-4 Canal



- Network of over 950 culverts

SOUTH BROWARD DRAINAGE DISTRICT

SBDD Slip-Liner



September 2023 - 84" HDPE Slip-Liner into 96" CMP at Riviera Blvd and University Dr.

SOUTH BROWARD DRAINAGE DISTRICT

SBDD Projects

- Identifying choke points
- Installation of new culverts, flood gates and improving flow channels



SOUTH BROWARD DRAINAGE DISTRICT

STORM MODE



SOUTH BROWARD DRAINAGE DISTRICT

SBDD Pre-Storm Preparations

- Draw Down Water Levels
- On-Going Maintenance, Inspection, and Testing of All SBDD Facilities
 - Pump Stations
 - Engines
 - Flood Gates
 - Primary Canals
 - Major Culverts
- Coordination With SFWMD on System Conditions and Weather
- Continuous Monitoring of the Storm

SOUTH BROWARD DRAINAGE DISTRICT

SBDD Post-Storm Operations

- Constant Monitoring and Operation of SBDD Facilities
- Inspect primary canals for any debris or blockage
- Coordination with SFWMD and local municipalities (COPP)
- Respond to Resident Concerns
- Post-Storm Drawdowns (Back to Control)



QUESTIONS?

ADDITIONAL INFORMATION CAN BE FOUND AT
WWW.SBDD.ORG

OR WE CAN BE REACHED AT (954) 680-3337

LUIS OCHOA, P.E.,
DISTRICT DIRECTOR

