MONITORING, PROJECTS, AND PRIORITIES FOR COASTAL RESOURCES

DARLENE VELEZ
WATER RESOURCES CHIEF
District at a Glance

- Smallest of 5 water management districts
- Population 340,000
- 7,640 square miles
- 15 counties
- 13 river basins
- 641 river miles
- Over 450 Springs
- 1,075 miles of coastline
District Core Missions

**Water Supply**
- 20-year Water Supply Assessment
- Regional Water Supply Planning
- Annual Water Use Report
- Water Use Permit Program
- Alternative Water Supply, Conservation, and Water Recharge Projects
- Salt Water Intrusion Implications

**Flood Protection**
- Real-time monitoring of river and lake levels for flood forecasting
- Implement regional and local flood protection and flood control projects
- Partners with FEMA for updating floodplain maps
- Environmental Resource Permitting Program
- Sea-Level Rise Implications to Coastal Communities

**Natural Systems**
- Minimum Flows and Minimum Water Levels (MFL)
- Recovery and Prevention Strategies
- Land Acquisition and Management Program
- Hydrologic restoration projects

**Water Quality**
- Monitoring water quality to identify trends and areas of concern
- Water Quality Improvement Projects supporting FDEP’s TMDL and BMAP efforts
- Surface Water Improvement and Management (SWIM) plans
Water Quality and Hydrologic Monitoring Networks
Water Quality Network

2021 Stations
• 78 Groundwater
• 69 Springs
• 72 Surface Water

Varying frequencies for total of 664 Water Chemistry Samples

Photo Credit: Wood Environment and Infrastructure Solutions Inc.
Hydrology Network (Level and Discharge)

2021 Stations
- 262 Groundwater
- 81 Springs
- 74 Surface Water

Partnership with USGS for major river gages
Real-Time Conductivity River Gages

2 New Gages
- Econfina at State Park
- Fenholloway at Fish Camp

6 Enhanced Gages
- Aucilla at Nutall Rise
- Steinhatchee at Steinhatchee
- Suwannee at Ellaville
- Suwannee at Luraville
- Suwannee at Bell
- Suwannee above Gopher River

Partial funding from RESTORE and FDEP Improved Water Quality Monitoring Grant
10 Wells

- Quarterly Water Chemistry with Conductivity profile
- Real-Time Level and Conductivity sensors installed

Future plans:
- filling in spatial gaps
- additional conductivity sensors
- Partial funding from FDEP Improved Water Quality Monitoring Grant
Planning and Projects
Minimum Flows and Minimum Water Levels

Adopted:
- All Coastal Rivers
- Lower Suwannee River
- Upper Santa Fe River

Re-evaluated:
- Lower Santa Fe River in Prevention
- Ichetucknee in Recovery
- Working on new prevention and recovery plan with SJRWMD and FDEP
- FL legislature approval needed before replacing existing MFL
USDA-NRCS Lower Suwannee River Watershed Nutrient Reduction Project

Natural Resource Conservation Service
- Deepwater Horizon Funds
- Monitoring and Adaptive Management Plan
- Approving and implementing nutrient reduction projects

Suwannee River WMD
- Developing sampling plan
- Managing Water Quality and Discharge Data Collection
- Data analysis and reporting
Hydrologic restoration of legacy logging roads and ditches no longer in use by the National Wildlife Refuge

Deepwater Horizon Funds
Coastal Zone Mapping Imaging Lidar (CZMIL)

Florida Coastal Mapping Program: initiative between Federal and Florida State agencies facilitate mapping

Opportunity this year to expand SWFWMD Lidar collection to fly Lone Cabbage Reef area (yellow)

Letter of interest sent for potential NOAA 2022 and 2023 funding for expanding efforts along District coast
Coastal Priorities

Enhance and Expand Coastal Monitoring

- Surface Water Improvement and Management (SWIM) Plan Update
- Sea Level Rise and Saltwater Intrusion Assessment and Implications
- Water Quality Improvement and Hydrologic Restoration Projects
- Climate Change and Implications of Tropicalization
- Water Supply Planning and Improvement Projects
- Coastal Resiliency for Flood Protection and Flood Control