Watershed Assessment
2015 Strategic Monitoring in the Florida Keys

DEAR- Water Quality Assessment Program
South Regional Operation Center (ROC)
**Watershed Management Approach**

- DEP implements TMDL Program as part of Watershed Management Approach
  - Started in July, 2000
  - Assessment
  - TMDL Development
  - Implementation - BMAP
  - Watershed Restoration

- Watershed Approach established five-phase cycle that rotates through all basins in the state over five-year period
  - Divided state’s basins into groups
303(d) Listing Requirements

- Section 303(d) of the Federal CWA requires states to:
  - Submit lists of waters that do not meet applicable water quality standards, including designated uses
    - “impaired waters”
  - Identify pollutant causing or expected to cause impairment
  - Establish/implement TMDLs for these waters on a prioritized schedule
Basin Contacts

Northeast District:
Basin Coordinator: Charles Gauthier (850) 245-8555
Suwannee - Terry Hansen (850) 245-8561
STORET Coordinator: Siteria Gregory (850) 245-8510
WAS Team Lead: Paul Kunisko (850) 245-8462
District Contact: Brad Hartshorn (850) 596-0591 Ext. 10591

Central District:
Basin Coordinator: Indian River Lagoon - Mary Paulic (850) 245-8560
Middle St. Johns/Upper St. Johns - Charles Gauthier (850) 245-8555
Ocklawaha - Mary Paulic (850) 245-8590
Kissimmee River - Katie Hallas (850) 245-8432
STORET Coordinator: Vilma Quant (850) 245-8544
WAS Team Lead: Jessica Rich-Zeisler (850) 245-8441
District Contact: Terry Riordan (407) 897-2959 Ext. 32959

South District:
Basin Coordinator: Kim Dinkins (850) 245-8825
STORET Coordinator: Kyle Faheem (850) 245-8549
WAS Team Lead: David Tyler (850) 245-8458
District Contact: Erin Rasnake (813) 470-5767 Ext. 45767

Southeast District:
Basin Coordinator: Katie Hallas (850) 245-8432
STORET Coordinator: Vilma Quant (850) 245-8544
WAS Team Lead: David Tyler (850) 245-8458
District Contact: Erin Rasnake (813) 470-5767 Ext. 45767

Northwest District:
Basin Coordinator: Stephen Cioccia (850) 245-8618
STORET Coordinator: Siteria Gregory (850) 245-8510
WAS Team Lead: Paul Kunisko (850) 245-8462
District Contact: Brad Hartshorn (850) 596-0591 Ext. 10591

Southwest District:
Basin Coordinator: Terry Hansen (850) 245-8561
STORET Coordinator: Lisa Schwenning (850) 245-8509
WAS Team Lead: Jessica Rich-Zeisler (850) 245-8441
District Contact: Erin Rasnake (813) 470-5767 Ext. 45767

Statewide STORET Coordinator:
Amanda Dorsaitt (850) 245-8467
GIS Team:
Janis Morrow (Team Lead) (850) 245-8543
Davis Groves (850) 245-8594
Ronald Hughes (850) 245-8541
Andrew Morris (850) 245-8428

Map prepared January 17, 1996 by the Florida Department of Environmental Regulation / District of Water Resources Management. This map is provided as a tool to assist in planning and is not intended for enforcement of regulations or standards of the facilities shown. For more information or details, contact Todd J. Tannous, GIS Manager, 904-493-5667.
South District Basins

- Fisheating Creek
- Charlotte Harbor
- Sarasota-Peace-Myakka
- Caloosahatchee
- Everglades West Coast
- Florida Keys
Uses Addressed by Assessment Methods

- Aquatic Life
  - Metals, Turbidity, Pesticides, Biological assessment

- Primary Contact and Recreation
  - Bacteria, Beach advisories

- Fish and Shellfish Consumption
  - Pathogenic bacteria, Mercury, Shellfish Classification

- Drinking Water
  - Metals, Pesticides, Bacteria

Water Quality Standards 62-302 F.A.C.
Impaired Waters Rule 62-303 F.A.C.
Watershed Management Cycle

Phase 1 - Preliminary Assessment
  • Produce Planning List, Study List

Phase 2 - Targeted Monitoring and Listing
  • Monitor, Verify impairment, and Adopt Verified List by Secretarial Order

Phase 3 - Develop and Adopt TMDLs

Phase 4 – Implement TMDLs
  • Basin Management Action Plan or
  • Other Implementation Option

Phase 5 – TMDL/BMAP Implementation
Watershed Management Cycle

Each basin group is assessed every 5 years
- Cycle 1 = 2002 for Group 1 w/ revisions adopted in 2003
- Cycle 2 = 2009
- Cycle 3 = 2013

<table>
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<th>Cycle Rotation</th>
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<th>Planning Period</th>
<th>Verified Period</th>
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<td>5</td>
<td>2005 - 2014</td>
<td>1/1/2010 - 6/30/2017</td>
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Assessment Units aka WBIDs

• WBID = Waterbody Identification

• WBID boundaries change based on local stakeholders who are most knowledgeable about their local watersheds

• Other reasons for WBID changes include delineation of freshwater & salt water and control structures, delineation of nutrient criteria boundaries

• We may reassign stations to other WBIDs if the Lat/Long is incorrect or the station is not representative of the WBID
Strategic Monitoring Plan Development
Strategic Monitoring Plan Development

- Coordination with other data providers
  - WBID-parameters needing additional data to allow assessment for attainment of the numeric nutrient criteria
  - Any areas we can remove sampling duplication, collaborate
  - Areas we shouldn’t be monitoring; Areas we should
Monitoring and Assessment Considerations
Representative Stations

- Data are collected for a variety of reasons
  - Ambient monitoring
  - Effects studies

- Waterbodies can be inappropriately classified (gradients between wetlands, lakes, streams, tidal creeks and estuary)

- Evaluate site information
Spatial Considerations

• Sampling site location is critical in determining what the water quality data actually represent
  • Proper system type (wetland vs. stream, etc.)

• Channelization, obstructions (improperly placed culvert, bridges), canopy cover, etc. can influence water quality results

• Focus on pollutant loading
2015 Strategic Monitoring Plans: Florida Keys
Contacts

Julie Espy
Program Administrator
Water Quality Assessment Program
Watershed Assessment Section
Julie.Espy@dep.state.fl.us
850.245.8416

Erin Rasnake
Environmental Manager
Water Quality Assessment Program
So and Southwest Districts
Erin.Rasnake@dep.state.fl.us
813-470-5767

Kevin O’Donnell
Environmental Administrator
Water Quality Assessment Program
Watershed Assessment Section
Kevin.ODonnell@dep.state.fl.us
850.245.8469

Alan Punshon
Environmental Manager
Watershed Assessment Section
Strategic Monitoring - Statewide
Alan.Punshon@dep.state.fl.us
850.245.8538

FDEP Websites:
WAS Program: http://www.dep.state.fl.us/water/watersheds/assessment/index.htm
Basins 411: http://www.dep.state.fl.us/water/basin411/default.htm
FTP site: http://publicfiles.dep.state.fl.us/DEAR