Current Strategies

Reasonable Assurance Plan

Canal Restoration Projects

Water Quality Improvement
How did we get here?

• DEP’s responsibility
  • assess the water quality of the state’s waters
  • identify those that need a Total Maximum Daily Load

• FL Keys were determined to be impaired for nutrients in 1998

• Keys assessed in 2006 and 2011
  • Next assessment in 2017
Designated Uses Addressed by Assessment

- **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

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Water Quality Standards 62-302 F.A.C.  
Impaired Waters Rule 62-303 F.A.C  
NNC Implementation Document
Waterbody Identification Number - WBID

Assessment Unit (waterbody)

WBID Boundary Line

Unnamed Tributary
Assessment of Compliance

• Two different types
  1) RA targets
     • Supersede water quality standards, because they are established based on site-specific conditions
  2) Water quality standards
     • Dissolved oxygen and other parameters

Could be measured here

Could be measured here
Assessment Example

• Assessment performed using data within a WBID boundary (assessment unit)

• Water Quality Standard for DO = > 42%

• Data are collected from 4 different locations at different times

• All data are evaluated
  • Waterbody is “impaired” for DO because >10% of the samples are above the standard
## Dissolved Oxygen (DO) Data for Assessment

<table>
<thead>
<tr>
<th>Sampling Locations</th>
<th># of Samples</th>
<th>Marine/Estuarine DO Criterion (% saturation)</th>
<th>Sample Collection Method</th>
<th>Sample Type</th>
<th># of samples below 42% saturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station 1</td>
<td>5</td>
<td>42%</td>
<td>Grab</td>
<td>5 single measurements</td>
<td>1/5</td>
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<tr>
<td>Station 2</td>
<td>10</td>
<td>42%</td>
<td>Diel - five, 2-day deployments</td>
<td>10 daily averages</td>
<td>8/10</td>
</tr>
<tr>
<td>Station 3</td>
<td>4</td>
<td>42%</td>
<td>Grab</td>
<td>4 single measurements</td>
<td>4/4</td>
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<tr>
<td>Station 4</td>
<td>36</td>
<td>42%</td>
<td>Diel - twelve, 3-day deployments</td>
<td>36 daily averages</td>
<td>20/36</td>
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</tbody>
</table>

**Total** 33/55

**Exceedance rate** 60%

**Impaired**
What does the DEP QA Rule require?

- Use DEP SOPs
- Pre-approval for alternative field procedures
- Create and retain mandatory documentation
- Follow preservation & holding times
- Submit to audits

http://www.dep.state.fl.us/water/sas/sop/sops.htm
• Why are we sampling?
  • Purpose, study design, Data Quality Objectives

• What does a sample represent?
  • Where and when to sample
DEP Assistance

• Funding Opportunities
  • EPA 319(h) Nonpoint Source Grant
  • TMDL Water Quality Restoration Grant
  • Monitoring funds

• Monitoring Assistance
  • Provide training
  • Staff to perform some monitoring
  • Lab analyses
• **WIN is the replacement for Florida STORET**
  - Data providers will upload to WIN instead
  - Old data in Florida STORET will still be accessible

• **WIN will be open for uploads in spring 2017**
  - New data can still be uploaded to Florida STORET through December 2017
  - After that, all data will need to come to WIN

• **WIN data must meet minimum quality standards**
  - Providers should be making necessary changes now
  - Contact your WIN coordinator for assistance
Getting Ready for WIN

• Information for mapping to WIN is provided at [ftp://ftp.dep.state.fl.us/pub/outgoing/STORET/WIN_Communication/](ftp://ftp.dep.state.fl.us/pub/outgoing/STORET/WIN_Communication/)
  • Includes MDQS, Standard Values Lists (SVLs), example data files, FAQs and a flow diagram

• Contact your STORET/WIN Coordinators with questions on WIN implementation

<table>
<thead>
<tr>
<th>District</th>
<th>Coordinator</th>
<th>Phone</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central &amp; Statewide</td>
<td>Tommy Adams</td>
<td>850-245-8467</td>
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Questions?

• Contact Information

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