



**Florida Department of Environmental Protection**  
**Division of Water Resource Management**

# **Fifth Year Inspection Process Overview for Compliance Inspectors**

**01/28/2016**





# Overview

- Definitions
- Sampling Locations
- Planning and Preparation
- Sampling
- Report Writing



# What is a FYI?

- Fifth Year Inspection=FYI5 and FYI
- An investigation to determine the discharge's effects on the biota of receiving waters
- Performed in conjunction with the compliance inspection at both industrial and domestic wastewater facilities
- Consists of 5 inspection types
- Performed during the fifth year of the permit cycle\*
- Written report issued



# Why do FYIs?

- Perform an independent verification of the facility's self monitoring data
- Provide permit writers with information about the characteristics of the effluent and downstream effects when they are issuing a new permit
- Assist with generating data and developing limits for a facility to comply with Numeric Nutrient Criteria (NNC)
- Collect data to be used in the Department's future criteria and method development



# Selected Facilities for FYIs

- The facilities that will be receiving FYI inspections are selected during the Inspection Schedule Development beginning in May and finalized in July preceding the federal fiscal year.
- Florida “commits” to performing wastewater inspections to EPA.
- All facilities with permits expiring during the coming fiscal year or the following fiscal year are scheduled to receive an FYI5.
- Rely on District knowledge to determine if FYI is appropriate.



# Selected Facilities for FYIs <sup>(2)</sup>

| Facility ID | Name                                                       | Type | Office | Major-Minor | Inspection Type | EPA Commitment | SSO Component | Inspection Date     |        |
|-------------|------------------------------------------------------------|------|--------|-------------|-----------------|----------------|---------------|---------------------|--------|
| FL0001961   | U S Agri-Chemicals Corporation - Bartow Chemical Plant     | IW   | SWPM   | MA          | FYI5            | Y              |               | 10/5/2015           |        |
| FL0036366   | Duke Energy Florida - Crystal River 4 & 5                  | IW   | SWD    | MA          | FYI3            | Y              |               | 10/19/2015          |        |
| FL0433365   | East Putnam County RO WTP                                  | IW   | NED    | MI          | FYI3            | Y              |               | 10/19/2015          | GRAB   |
| FL0702820   | University of South Florida                                | IW   | SWD    | MI          | FYI3            | Y              |               | 11/2/2015           |        |
| FL0027880   | Jasper WWTF                                                | DW   | NED    | MA          | FYI5/SSO        | Y              | Y             | 11/2/2015           | NO TO  |
| FL0000701   | Rayonier, Inc                                              | IW   | NED    | MA          | FYI3            | Y              |               | 11/16/2015          | 24HR 1 |
| FL0026271   | City of Naples WWTP I                                      | DW   | SD     | MA          | FYI3/SSO        | Y              | Y             | 11/30/2015          |        |
| FL0040215   | Brittany Estates Mobile Home Park WWTF                     | DW   | NED    | MI          | FYI5/SSO        | Y              | Y             | 11/30/2015          | NO TO  |
| FL0131474   | Florida's Natural Growers -Lake Wales Plant                | IW   | SWD    | MI          | FYI5            | Y              |               | 12/7/2015           |        |
| FL0122904   | Kinder Morgan Port Sutton Terminal, LLC (Formerly Pakhoed) | IW   | SWD    | MI          | FYI3            | Y              |               | 1/4/2016            |        |
| FL0020907   | Bunnell, City of WWTF                                      | DW   | NED    | MI          | FYI5/SSO        | Y              | Y             | 1/4/2016            | GRAB   |
| FL0119644   | Lake Suzy Utility WWTP                                     | DW   | SD     | MI          | FYI3/SSO        | Y              | Y             | 1/18/2016           | NO TO  |
| FL0032174   | Florida Power & Light Co - Manatee Plant                   | IW   | SWD    | MA          | FYI3            | Y              |               | 1/25/2016           |        |
| FL0000035   | Florida Mine - Highland                                    | IW   | NED    | MA          | FYI5            | Y              |               | 1/25/2016           | NO TO  |
| FL0031402   | Florida State Hospital WWTP                                | DW   | NWDT   | MA          | FYI5            | Y              |               | 1/25/2016 proposing |        |
| FL0031801   | Bayou Marcus Water Reclamation Facility                    | DW   | NWD    | MA          | FYI5/SSO        | Y              | Y             | 1/25/2016           |        |
| FL0026298   | Lakeland Larson Memorial Plant                             | IW   | SWD    | MA          | FYI3            | N              |               | 2/15/2016           |        |



# Difference between FYI5 and FYI3

|                              | FYI5                                                   | FYI3                                                                            |
|------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>What</b>                  | Fifth Year Inspection                                  | Abbreviated Fifth Year Inspection                                               |
| <b>When</b>                  | 5 <sup>th</sup> year of the permit cycle               | 5 <sup>th</sup> year of the permit cycle                                        |
| <b>Where</b>                 | Effluent and Study Sites                               | Effluent Only                                                                   |
| <b>Why</b>                   | Receiving waters are conducive to biological sampling. | Receiving waters CANNOT be sampled for biology or full FYI5 data is not needed. |
| <b># of Inspection Types</b> | 5                                                      | 3                                                                               |



# Difference between FYI5 and FYI3 <sup>(2)</sup>

|          | FYI5                                       | FYI3                                       |
|----------|--------------------------------------------|--------------------------------------------|
| Sampling | Permit Effluent Requirements               | Permit Effluent Requirements               |
|          | Pesticides      Toxicity                   | Pesticides      Toxicity                   |
|          | Base Neutral/Acid Extractables             | Base Neutral/Acid Extractables             |
|          | Polycyclic Aromatic Hydrocarbons (PAH)     | Polycyclic Aromatic Hydrocarbons (PAH)     |
|          | Metals      Nutrients      Chloride        | Metals      Nutrients      Chloride        |
|          | Chlorophyll      Turbidity      Color      | Chlorophyll      Turbidity      Color      |
|          | Fluoride      Fecal Coliforms      Sulfate | Fluoride      Fecal Coliforms      Sulfate |
|          | Dioxane      Sucralose                     | Sucralose                                  |
|          | Biochemical Oxygen Demand                  | Biochemical Oxygen Demand                  |
|          | Alkalinity                                 | Alkalinity                                 |
|          | Algal Growth Potential                     | Algal Growth Potential                     |
|          | Acetaminophen/Carbamazepine                |                                            |
|          | Qualitative Periphyton                     |                                            |
|          | Stream Condition Index                     |                                            |
|          | Hester Dendy Samplers                      |                                            |
|          | Rapid Periphyton Survey                    |                                            |
|          | Linear Vegetation Survey                   |                                            |
|          | Wetland Condition Index                    |                                            |
|          | Ponar Grabs (Marine)                       |                                            |





# COMET Coding

- **CSI = Compliance Sampling Inspection**
  - Facility inspection with sampling
- **XSI = Toxic Sampling Inspection**
  - Metals, pesticides, base neutral/acid extractables
- **CBI= Compliance Biomonitoring Inspection**
  - Toxicity Testing
- **IBI= Impact Bioassessment Inspection**
  - Impacts on the biota in receiving waters
- **WQI= Water Quality Inspection**
  - Nutrients, fecals, oxygen demand, and physical/chemical parameters such as pH and conductivity

**FYI5**

**FYI3**

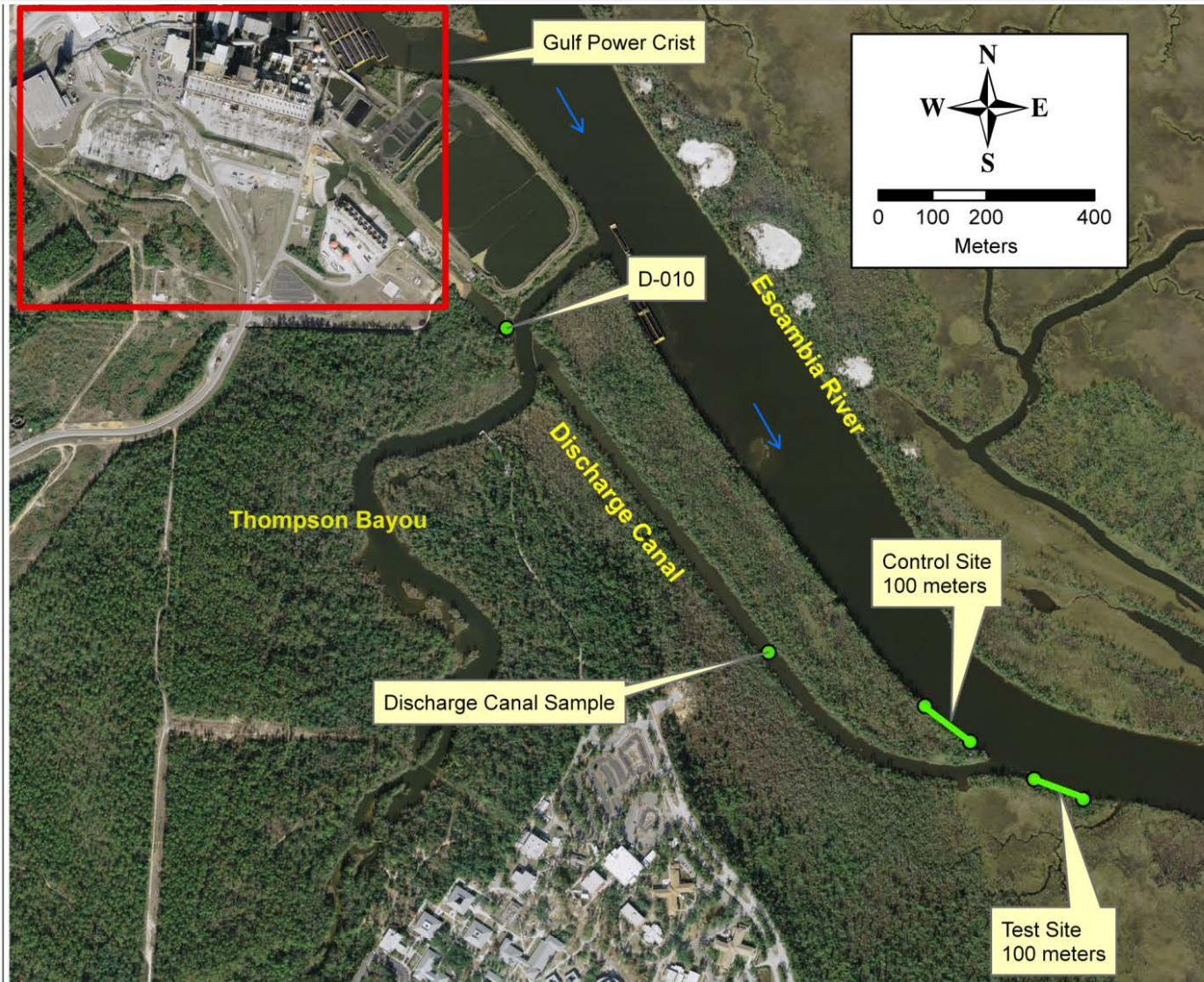
**Codes**

CSI, XSI, CBI, IBI, WQI

CSI, XSI, CBI



# Sampling Locations





# Sampling Locations <sup>(2)</sup>

- The facility may discharge to an ocean outfall or conditions in the receiving water may not be conducive to biological sampling or the data generated by an FYI5 is not needed.
- In this case, an abbreviated fifth year inspection(FYI3) is conducted and only the effluent is sampled.
- An FYI3 still provides:
  - An independent verification of the facility's self monitoring data
  - Information to the permit writers about the characteristics of the effluent before permit renewal





# Selecting Instream Sites



Often, a facility may have monitoring requirements in the receiving water body. This site may NOT be the best location to conduct biological sampling. We are not required to use the facility's receiving water compliance point for a FYI5 study site.





# Selecting Instream Sites <sup>(2)</sup>



Hester Dendy Macroinvertebrate Samplers at a Study Site



Control and Test Site Selection



# Instream Biological Testing

## Algae

## Macroinvertebrate

## Plant

Periphyton

Stream Condition Index

Wetland Condition  
Index

Phytoplankton

Hester Dendy Samplers

Linear Vegetation  
Survey\*

Rapid Periphyton  
Survey

Ponar Grabs (Marine)

Most of the analytes sampled in the effluent will also be sampled in the instream sites as well. If the biological communities reflect effluent impact, the chemistry results will demonstrate which analytes from the effluent are present.





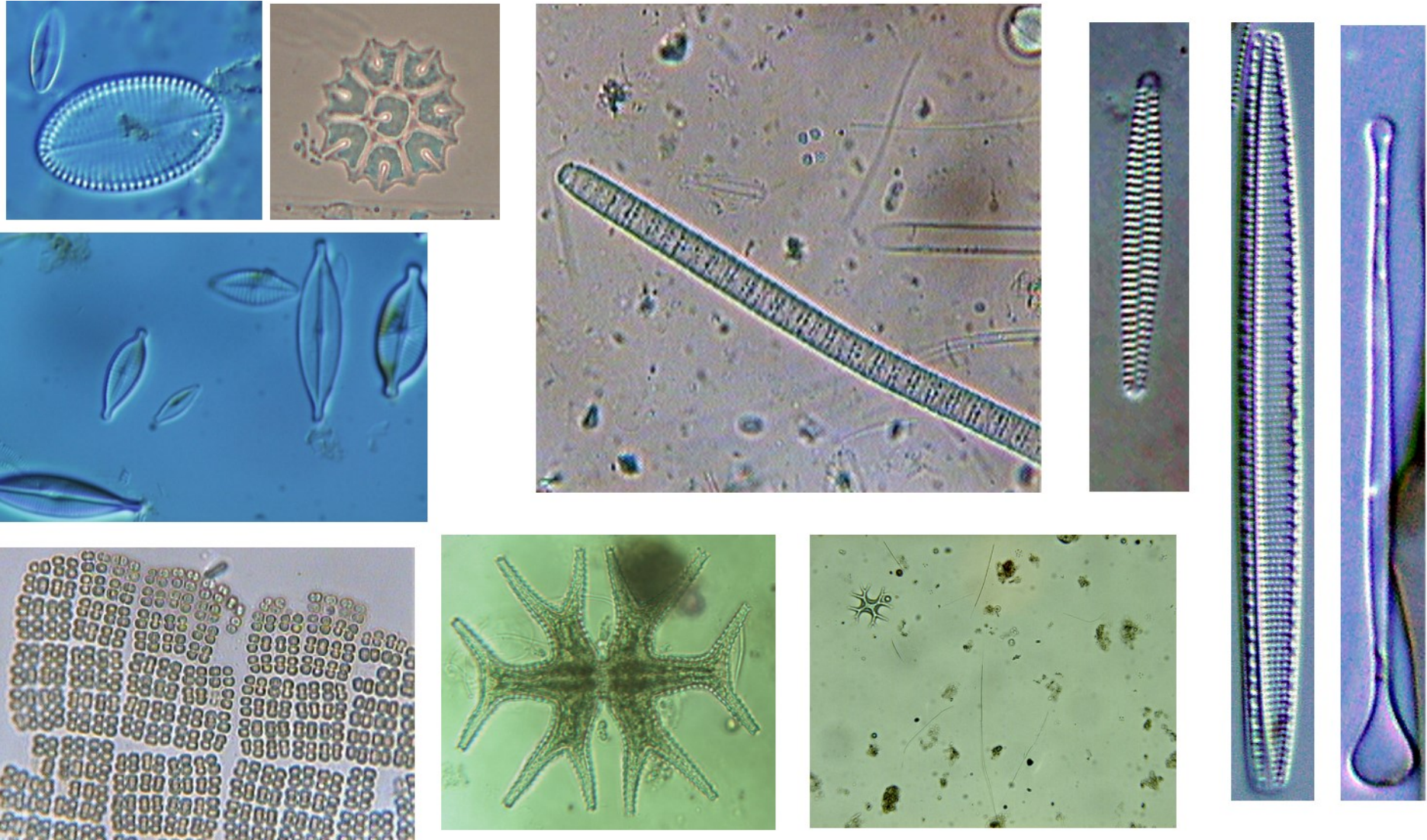
# Instream Biological Testing <sup>(2)</sup>







# Instream Biological Testing <sup>(3)</sup>







# DEAR Regional Operation Center Contacts for FYI5s

| District | Staff Name                      |
|----------|---------------------------------|
| NWD      | Nathan Mulkey/Rick Abad         |
| NED      | Patrick O'Conner/Jann Gruentzel |
| CD       | Natalie Ayala                   |
| SWD      | Matthew Bearden                 |
| SED      | Jordan Skaggs                   |
| SD       | Kirby Wolfe                     |



# Primary Permitting Contacts for FYIs

| District               | Staff Name                                                         |
|------------------------|--------------------------------------------------------------------|
| NWD                    | Bill Evans                                                         |
| NED                    | Jeff Martin/Kim Pearce                                             |
| CD                     | Denise Judy/Chris Ferraro                                          |
| SWD DW/IW<br>Phosphate | Jacki Champion/Cindy Zhang Torres<br>George Sharrock/Vishwas Sathe |
| SED                    | Brad Akers                                                         |
| SD                     | Gary Maier                                                         |



# Coordination with DEAR

- DEAR staff have input into the development of the inspection schedule on FYI3s and FYI5s and will be provided a final copy of the inspection schedule in July preceding the federal fiscal year in which the sampling takes place.
- DEAR staff are responsible for performing advance reconnaissance and study design, if applicable.
- Compliance and DEAR staff should communicate frequently about upcoming FYI5s, including the need to postpone inspections due to field conditions such as flooding.
- The sample kit requisition number and scheduled tests will be sent to DEAR staff involved in FYI5s in addition to compliance staff for modification and approval.





# Numeric Nutrient Criteria

- Additional sampling may be conducted in conjunction with the FYI5 sampling to determine Numeric Nutrient Criteria (NNC) compliance.
- Permit writers, inspectors and DEAR staff decide if sampling is needed for the NNC when a facility receives a FYI5.
- The responsibility of the inspector along with the permit writers is to provide info on the Facility Summary detailing the following:
  - Has the facility conducted or does the facility plan to conduct any biological monitoring?
  - Has the facility conducted or does the facility plan to conduct an analysis of how far downstream their effluent has reasonable potential to cause NNC impairment (include results of any dye studies)?



# Effluent Sampling

- In [slide 8](#), we covered what would be sampled from the effluent.
- Effluent sampling should be independently conducted by compliance staff or with assistance from DEAR staff.
- Special analytes specific to the facility:
  - Mercury
  - Radium 226 + Radium 228
  - Adsorbable Organic Halides
  - Dioxin
  - Hexavalent Chromium
  - Volatile Organic Compounds
- Composite samples
- Grab samples
- The compliance inspection should occur on the same day as the sampling. If there is an issue with operations, the inspection report lists it and the samples confirm it.





# FYI5 Blanks

- Every FYI5 sampling event is scheduled with blanks.
- Typically, the blanks are collected at the effluent.
- Either field blanks or equipment blanks are collected.
- Collect equipment blanks if an intermediate device is used to collect the samples.
- Trip blanks (prefilled sampling containers) are sent with certain tests, e.g. VOCs and methyl mercury.
- All information is contained within FQ 1000 Quality Control SOP.



# Standard Operating Procedures for Sampling

- <http://www.dep.state.fl.us/water/sas/sop/sops.htm>
- FD 1000 Documentation
- FS 1000 General Sampling
- FS 2000 General Water Sampling
- FS 2400 Wastewater Sampling





# Facility Summary – Part I

- [Facility Summary Document](#)
- Description of the facility to be sampled
- Prepared by the compliance inspector
- Document is inserted into the final report
- Aids DEAR staff in selecting appropriate sites and determining the correct type of biological sampling
- Lists prior exceedances from the past year and ongoing enforcement issues
- Facility Summary is the responsibility of the inspector or compliance staff familiar with the facility.



# Sample Kits

- The sample kits, multiple coolers, are shipped from the lab in Tallahassee to the district offices at least a week before the sampling event.
- Upon receipt:
  - Unpack all the coolers and rearrange the bottles by site- Control Site, Test Site, Effluent Grab, Effluent Composites and Field Blank.
  - Check for the necessary preservatives and split those among the coolers by site as well.
  - Inspect the containers for damage during shipping.
  - Match each bottle to the packing list to ensure none are missing.
  - Pre-label the containers with meaningful site names and field identifiers.
  - Repack the bottles/containers into coolers based on the site.



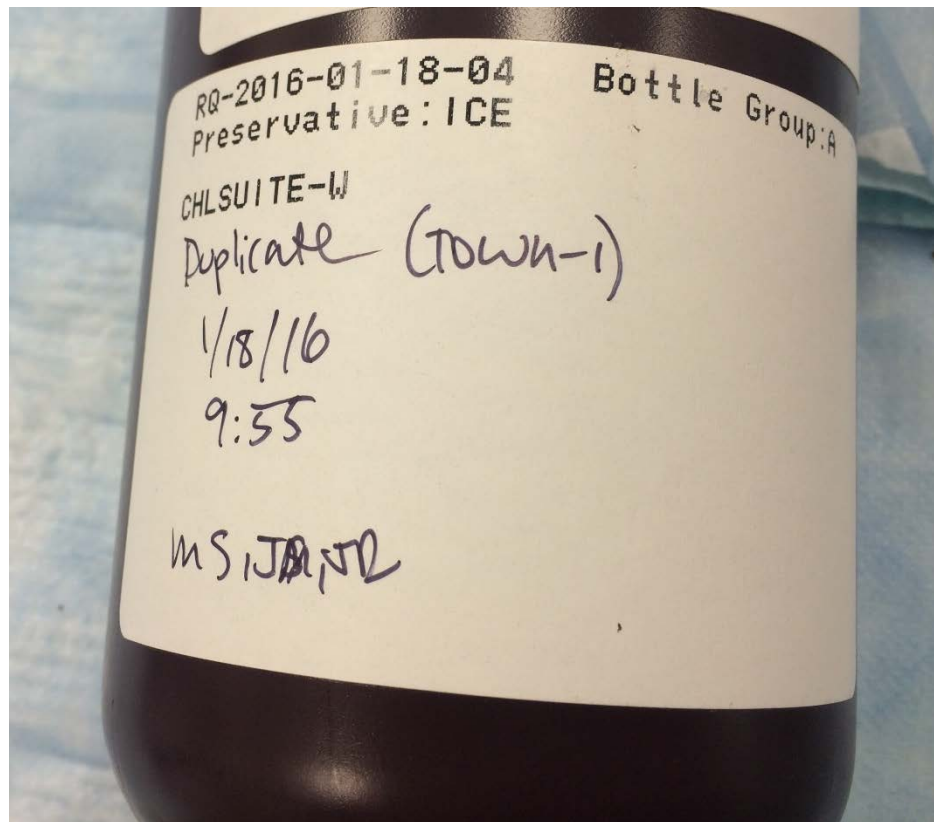
# Bottle Groups

| Bottle Groups | FY15                   | FY13               |
|---------------|------------------------|--------------------|
| <b>A</b>      | EFFLUENT GRAB          | EFFLUENT GRAB      |
| <b>B</b>      | EFFLUENT COMPOSITE     | EFFLUENT COMPOSITE |
| <b>C</b>      | CONTROL & TEST SITES   | FIELD BLANK        |
| <b>D</b>      | BIOLOGICAL COMMUNITIES | EQUIPMENT BLANK    |
| <b>E</b>      | FIELD BLANK            | N/A                |
| <b>F</b>      | EQUIPMENT BLANK        | N/A                |



# Bottle Labels

- The bottles come pre-labeled with the following information:
  1. Requisition (RQ) Number
  2. Bottle Group within that RQ
  3. Preservative
  4. Laboratory Information Management System (LIMS) Test Code
- The following info should be added to the label:
  1. Facility Name
  2. Field ID-CONTROL SITE/TEST SITE/EFFLUENT GRAB/EFFLUENT COMPOSITE 24-16-8 HOUR/FIELD BLANK/EQUIPMENT BLANK
  3. Date
  4. Time
  5. Sampler's Initials







# Preservation

- Preservation methods are detailed in the Sampling SOPs. <http://www.dep.state.fl.us/water/sas/sop/sops.htm>
- Some preservation methods are very complex. Use the [Complex Preservation Techniques for FYI Sampling Document](#) as a reminder.
- A record of the preservation lot numbers must be documented in field notes/sheets.



# Preservation (2)

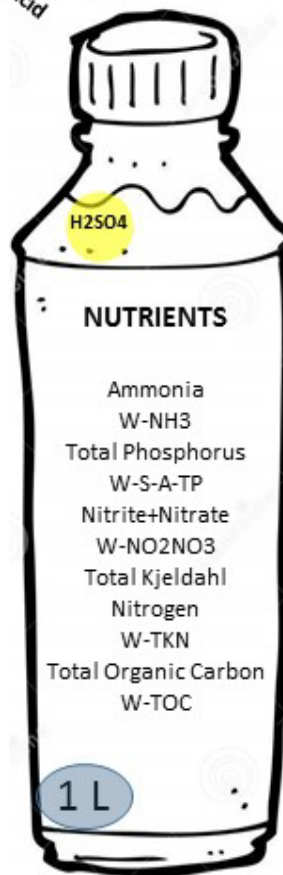
1 mL HNO<sub>3</sub>  
Nitric Acid



Preservative Vial Addition  
December 2014

- For every metals or nutrients sample scheduled, make a note in the comments block on the first screen of the scheduler to include 1 vial of acid for each type.
- If the kit contains more than 6 samples, schedule an extra vial to account for spillage or breakage.
- Each vial contains 1 milliliter of acid and is enough to preserve 1 liter of water sample.
- Note: Mercury (a metal) and Ortho-phosphate (a nutrient) are collected in a separate bottles and are preserved differently without sulfuric and nitric acid.

1 mL H<sub>2</sub>SO<sub>4</sub>  
Sulfuric Acid





# Field Sheets

| Parameter Suite                 | Parameter(s)/Method                                                                                                                                                                                                                                                                                      | Matrix Code <sup>1</sup> | Preservation**                                                                                             | Preservative Lot # | pH Check                               | # Bottles *** |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------|---------------|
| Preserved Nutrients             | <input checked="" type="checkbox"/> TKN <input checked="" type="checkbox"/> TP <input checked="" type="checkbox"/> NO <sub>x</sub> <input checked="" type="checkbox"/> NH <sub>3</sub> <input checked="" type="checkbox"/> TOC <input type="checkbox"/> Total N<br><input type="checkbox"/> Other: _____ | SW                       | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> |                    | <input checked="" type="checkbox"/> <2 | 1             |
| Filtered Nutrients              | <input checked="" type="checkbox"/> Qp <input type="checkbox"/> Other: _____                                                                                                                                                                                                                             | SW                       | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> .45 um Filter                  |                    |                                        | 1             |
| Unpreserved Nutrients           | <input type="checkbox"/> NO <sub>2</sub> <input type="checkbox"/> NO <sub>3</sub> <input checked="" type="checkbox"/> SO <sub>4</sub> <input type="checkbox"/> Other: _____                                                                                                                              | SW                       | <input checked="" type="checkbox"/> Ice                                                                    |                    |                                        | 1             |
| Physical/Aggregate Properties   | <input type="checkbox"/> TDS <input checked="" type="checkbox"/> SS <input type="checkbox"/> TS <input checked="" type="checkbox"/> Turbidity <input checked="" type="checkbox"/> Alk <input checked="" type="checkbox"/> Color<br><input checked="" type="checkbox"/> Other: <u>CL, F</u>               | SW                       | <input checked="" type="checkbox"/> Ice                                                                    |                    |                                        | 1             |
| Chlorophyll                     | <input type="checkbox"/> CHL-PPTN-W <input checked="" type="checkbox"/> CHL-CORR-W                                                                                                                                                                                                                       | SW                       | <input checked="" type="checkbox"/> Ice                                                                    |                    |                                        | 1             |
| BOD                             | <input checked="" type="checkbox"/> BOD-INHB <input type="checkbox"/> BOD-UNIN                                                                                                                                                                                                                           | SW                       | <input checked="" type="checkbox"/> Ice                                                                    |                    |                                        | 1             |
| Microbiology                    | MF: <input type="checkbox"/> E coli <input type="checkbox"/> T Coli <input checked="" type="checkbox"/> F Coli <input type="checkbox"/> Enteroc <input type="checkbox"/> F Strep                                                                                                                         | SW                       | <input checked="" type="checkbox"/> Ice                                                                    |                    |                                        | 1             |
| Macroinvertebrates              | <input type="checkbox"/> MI-FW-QLDC <input type="checkbox"/> MI-FW-QLBR <input type="checkbox"/> MI-FW-QNCC<br><input type="checkbox"/> MI-MN-QNCC <input checked="" type="checkbox"/> MI-FW-QNAC                                                                                                        | SW                       | <input checked="" type="checkbox"/> Formalin                                                               |                    |                                        | 2             |
| Phytoplankton                   | <input type="checkbox"/> PKD-QN-C <input type="checkbox"/> DTY-QN-C                                                                                                                                                                                                                                      | W                        | <input type="checkbox"/> Lugol's                                                                           |                    |                                        |               |
| Periphyton                      | <input checked="" type="checkbox"/> PRN-QL-C <input checked="" type="checkbox"/> DTM-QL-C <input type="checkbox"/> PRN-QN-C <input type="checkbox"/> DTM-QN-C                                                                                                                                            | SW                       | <input checked="" type="checkbox"/> Formalin                                                               |                    |                                        | 1             |
| AGP                             | <input checked="" type="checkbox"/> AA-AGP <input type="checkbox"/> AA-LIM-NUT                                                                                                                                                                                                                           | SW                       | <input checked="" type="checkbox"/> Ice                                                                    |                    |                                        |               |
| Metals                          | <input checked="" type="checkbox"/> W-ICP <input type="checkbox"/> W-FIAS <input checked="" type="checkbox"/> W-ICPMS <input type="checkbox"/> W-ICP-Tr                                                                                                                                                  | SW                       | <input checked="" type="checkbox"/> HNO <sub>3</sub>                                                       |                    | <input checked="" type="checkbox"/> <2 |               |
| Filtered Metals                 | <input type="checkbox"/> W-ICP-F <input type="checkbox"/> W-FIAS-F <input type="checkbox"/> W-ICPMS-F <input type="checkbox"/> W-ICP-Tr-F                                                                                                                                                                | W                        | <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> .45 um Filter                           |                    | <input type="checkbox"/> <2            |               |
| Mercury                         | <input type="checkbox"/> W-HG-AF                                                                                                                                                                                                                                                                         | W                        |                                                                                                            |                    |                                        |               |
| Base/Neutral / Acid Extractable | <input checked="" type="checkbox"/> W-BNA <input type="checkbox"/> W-AE <input type="checkbox"/> W-BN <input type="checkbox"/> W-PAH<br><input type="checkbox"/> W-FL-PRO <input type="checkbox"/> W <input type="checkbox"/> Other: _____                                                               | SW                       | <input checked="" type="checkbox"/> Ice                                                                    |                    |                                        |               |
| Pesticides                      | <input type="checkbox"/> W-PEST-CL <input type="checkbox"/> W-PCB <input type="checkbox"/> W-PEST-NP <input type="checkbox"/> W-PSCL-PCB                                                                                                                                                                 | W                        | <input type="checkbox"/> Ice                                                                               |                    |                                        |               |
|                                 | <input type="checkbox"/> W-NP-AA-SF <input type="checkbox"/> W-PC-AA-SF <input type="checkbox"/> W-PSHRB-NP                                                                                                                                                                                              | W                        | <input type="checkbox"/> Ice                                                                               |                    |                                        |               |
|                                 | <input type="checkbox"/> W-SLFN-UREA <input type="checkbox"/> W-SULFN-LC <input type="checkbox"/> Other: _____                                                                                                                                                                                           | W                        | <input type="checkbox"/> Ice <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub>                       |                    | <input type="checkbox"/> <2            |               |
|                                 | <input type="checkbox"/> W-ACIDHERB                                                                                                                                                                                                                                                                      | W                        | <input type="checkbox"/> Ice <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub>                       |                    |                                        |               |
|                                 | <input type="checkbox"/> W-CARB                                                                                                                                                                                                                                                                          | W                        | <input type="checkbox"/> Ice <input type="checkbox"/> MCAA                                                 |                    |                                        |               |



# Water Quality Parameters

Collect effluent measurements of the following during an FYI5:

1. Dissolved Oxygen
2. Conductivity
3. pH
4. Temperature
5. Total Residual Chlorine (if applicable)





# Sample Submittal Sheets

**Request Number:** RQ-2014-08-11-12  
FY13 City of Sarasota AWWTF Sampling Inspection

**Customer:** SO-DIST  
**Project ID:** FY13  
**PMAS:** 1143

## Florida Department of Environmental Protection Central Laboratory Sample Submittal Form

**Requester:** Adrienne E. Pennington

**Field Report Prepared By:** A. Sampler

**Collected By:** A. Sampler

**Send Final Report To:** Deanna Newburg

**Sampling Agency:** FDEP - SD WCAP

Event ID \*

|                                             |                                                             |                                                                                      |                                                             |                                                                        |                                                                                                          |                           |                           |
|---------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|
| Lab ID *                                    | Location<br>City of Sarasota AWWTF                          | <input checked="" type="checkbox"/> Comp<br><input checked="" type="checkbox"/> Grab | Collection (comp begin or grab)<br>Date 08/13/14 Time 1345  | Eastern<br>Central                                                     | Composite end<br>Date Time                                                                               | Eastern<br>Central        | Bottle<br>Group(s)**<br>A |
| Field ID                                    | Effluent D-001 Grab                                         | Tot Res Chlorine (mg/L)<br>0.01                                                      | Diss Oxygen (mg/L)<br>6.03                                  | Storet Station Number                                                  |                                                                                                          |                           |                           |
| Matrix (include type e.g. Salt, Fresh, etc) | Fresh (effluent)                                            | Temp (C)<br>35.17                                                                    | pH<br>7.34                                                  | Sample Depth <input type="checkbox"/> m<br>5.19 ft                     | <input type="checkbox"/> Salinity (PPTH)<br><input checked="" type="checkbox"/> Sp Conductance (umho/cm) | NPDES Number<br>FL0040771 |                           |
| Latitude                                    | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Longitude                                                                            | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Comments                                                               |                                                                                                          |                           |                           |
| Lab ID *                                    | Location<br>City of Sarasota AWWTF                          | <input checked="" type="checkbox"/> Comp<br><input type="checkbox"/> Grab            | Collection (comp begin or grab)<br>Date 08/17/14 Time 0800  | Eastern<br>Central                                                     | Composite end<br>Date 08/18/14 Time 0500                                                                 | Eastern<br>Central        | Bottle<br>Group(s)**<br>B |
| Field ID                                    | Effluent D-001 Comp                                         | Tot Res Chlorine (mg/L)<br>20.01                                                     | Diss Oxygen (mg/L)<br>5.95                                  | Storet Station Number                                                  |                                                                                                          |                           |                           |
| Matrix (include type e.g. Salt, Fresh, etc) | Fresh (effluent)                                            | Temp (C)<br>40.0                                                                     | pH<br>7.01                                                  | Sample Depth <input type="checkbox"/> m<br>comp. n/a                   | <input type="checkbox"/> Salinity (PPTH)<br><input checked="" type="checkbox"/> Sp Conductance (umho/cm) | NPDES Number<br>FL0040771 |                           |
| Latitude                                    | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Longitude                                                                            | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Comments<br>Used facilities' composite sampler                         |                                                                                                          |                           |                           |
| Lab ID *                                    | Location<br>City of Sarasota AWWTF                          | <input type="checkbox"/> Comp<br><input checked="" type="checkbox"/> Grab            | Collection (comp begin or grab)<br>Date 08/18/14 Time 1000  | Eastern<br>Central                                                     | Composite end<br>Date 10/1 Time                                                                          | Eastern<br>Central        | Bottle<br>Group(s)**<br>C |
| Field ID                                    | Field Blank                                                 | Tot Res Chlorine (mg/L)                                                              | Diss Oxygen (mg/L)                                          | Storet Station Number                                                  |                                                                                                          |                           |                           |
| Matrix (include type e.g. Salt, Fresh, etc) | Analyte Free H <sub>2</sub> O                               | Temp (C)                                                                             | pH                                                          | Sample Depth <input type="checkbox"/> m<br><input type="checkbox"/> ft | <input type="checkbox"/> Salinity (PPTH)<br><input type="checkbox"/> Sp Conductance (umho/cm)            | NPDES Number              |                           |
| Latitude                                    | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Longitude                                                                            | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Comments                                                               |                                                                                                          |                           |                           |
| Lab ID *                                    | Location                                                    | <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab                       | Collection (comp begin or grab)<br>Date Time                | Eastern<br>Central                                                     | Composite end<br>Date Time                                                                               | Eastern<br>Central        | Bottle<br>Group(s)**      |
| Field ID                                    |                                                             | Tot Res Chlorine (mg/L)                                                              | Diss Oxygen (mg/L)                                          | Storet Station Number                                                  |                                                                                                          |                           |                           |
| Matrix (include type e.g. Salt, Fresh, etc) |                                                             | Temp (C)                                                                             | pH                                                          | Sample Depth <input type="checkbox"/> m<br><input type="checkbox"/> ft | <input type="checkbox"/> Salinity (PPTH)<br><input type="checkbox"/> Sp Conductance (umho/cm)            | NPDES Number              |                           |
| Latitude                                    | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Longitude                                                                            | <input type="checkbox"/> dd<br><input type="checkbox"/> dms | Comments                                                               |                                                                                                          |                           |                           |
| Relinquished By:                            | Date/Time                                                   | Shipping Method:                                                                     | Received By:                                                | Date/Time                                                              | Relinquished By:                                                                                         | Date/Time                 | Received By:              |
| A. Sampler                                  | 08/13/14                                                    | FED-EX                                                                               |                                                             |                                                                        |                                                                                                          |                           |                           |

\* Shaded Areas for Lab use only.

\*\* Please see reverse side for Bottle Group information.

last revised October 1, 2003

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# Sample Submittal Sheets (2)

|                                                             |                             |                 |                             |                                     |                                                 |
|-------------------------------------------------------------|-----------------------------|-----------------|-----------------------------|-------------------------------------|-------------------------------------------------|
| Group: A                                                    | Bottle Type: OP-500ML       | # of Bottles: 1 | Preservative: ICE           | Enter Number of Bottles Sent to Lab | 1                                               |
| AA-AGP                                                      |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: BP-1L          | # of Bottles: 1 | Preservative: ICE           | Enter Number of Bottles Sent to Lab | 1                                               |
| CHL-CORR-W                                                  |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: P-120ML-WC-THI | # of Bottles: 2 | Preservative: ICE           | Enter Number of Bottles Sent to Lab | 0 - sent to Contract lab Ft. Myers Sanders Lab. |
| SD-SND-ENT<br>SD-SND-FC                                     |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: P-1L           | # of Bottles: 1 | Preservative: ICE           | Enter Number of Bottles Sent to Lab | 1                                               |
| TURBIDITY<br>W-ALK<br>W-CL-IC<br>W-COLOR<br>W-F<br>W-SO4-IC |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: BG-1L          | # of Bottles: 4 | Preservative: ICE           | Enter Number of Bottles Sent to Lab | 4                                               |
| W-BNA                                                       |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: P-500ML        | # of Bottles: 1 | Preservative: HNO3          | Enter Number of Bottles Sent to Lab | 1                                               |
| W-ICP<br>W-ICPMS                                            |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: P-500ML        | # of Bottles: 1 | Preservative: ICE And H2SO4 | Enter Number of Bottles Sent to Lab | 1                                               |
| W-NH3<br>W-NO2NO3<br>W-S-A-TP<br>W-TKN<br>W-TOC             |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: BG-1L          | # of Bottles: 4 | Preservative: ICE           | Enter Number of Bottles Sent to Lab | 4                                               |
| W-NP-AA-SF                                                  |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: P-125ML        | # of Bottles: 1 | Preservative: ICE-FLTR      | Enter Number of Bottles Sent to Lab | 1                                               |
| W-PO4-F                                                     |                             |                 |                             |                                     |                                                 |
| Group: A                                                    | Bottle Type: BG-1L          | # of Bottles: 2 | Preservative: ICE           | Enter Number of Bottles Sent to Lab | 2                                               |
| W-SUC-AA-R<br>W-UHB-AA-R                                    |                             |                 |                             |                                     |                                                 |



# Shipping

- Tightly tape garbage bags containing ample ice and the samples.
- Microbiology samples will be sent to a local contract lab in order to analyze within the holding times. These will not be shipped to Tallahassee.
- Place the sample submittal sheets in the ziplock bags provided and place on top of the samples before taping the coolers shut.
- Keep in mind Fed-Ex Center closing times.
- Please follow [these instructions](#) when shipping the 3<sup>rd</sup> set of chronic toxicity samples that will be delivered on Saturday.



# Facility Summary Part II

| PART II: Sampling Event Information                                                                                                                                                                                                                     |                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Date(s) sample collected:                                                                                                                                                                                                                               | Sampler(s):                                          |
| Temperature (Deg C):                                                                                                                                                                                                                                    | pH (SU):                                             |
| Dissolved Oxygen (mg/L):                                                                                                                                                                                                                                | Conductivity (umhos/cm):                             |
| Total Residual Chlorine (mg/L):                                                                                                                                                                                                                         | Total Residual Chlorine - after Disinfection (mg/L): |
| Method of Chlorination:                                                                                                                                                                                                                                 | Method of De-chlorination:                           |
| Flow During Sample Collection for each outfall(MGD):                                                                                                                                                                                                    |                                                      |
| Mean Flow for each outfall for previous 12 months based on sampling date (If samples are taken on more than one day, indicate Mean Flow for each day):                                                                                                  |                                                      |
| Describe Discharge during Sampling Event:<br><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal <input type="checkbox"/> Rainfall Dependent<br><input type="checkbox"/> Other, please specify: |                                                      |
| Describe any conditions, difficulties or abnormal events that occurred during the sample collection and any other additional comments here:                                                                                                             |                                                      |



# FYI5 Report Checklist

- [FYI5 Report Checklist](#)
- Checklist can be used as a timeline for when items are due to the biology laboratory.
- Contains items for DEAR staff as well as compliance staff
- Can be modified to include more items



# Report Writing

- All results are compiled and final information is received from the District staff.
- Report is drafted in the Biology Section of the Lab.
- The Biology Lab holds internal meetings to review the draft.
- The draft is then sent to the WCAP staff for review and an External Review Meeting is held. Inspectors, permitting, DEAR and compliance staff are encouraged to attend and make comments on the report.
- All edits are made and a final version of the report is posted here:

<http://www.dep.state.fl.us/labs/cgi-bin/reports/search.asp>





# Questions?

- Jennifer Walters (850) 245-8639
- Adrienne Pennington (850) 245-8572
- Michael Tanski (850) 245-8583