

The background of the slide is a light gray gradient, decorated with numerous realistic water droplets of various sizes. The droplets are rendered with soft shadows and highlights, giving them a three-dimensional appearance. They are scattered across the page, with a higher concentration in the top-left and bottom-right corners.

FINDING COMMON GROUND THROUGH IMPROVING THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT'S SURFACE WATER QUALITY MONITORING AND SAMPLING NETWORK

MARGARET GUYETTE
WATER RESOURCE DATA MANAGER
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT



Mission/Vision

"To protect our natural resources and support Florida's growth by ensuring the sustainable use of Florida's water for the benefit of the people of the district and the state."

Core missions



Water supply

To implement a regional strategy to provide sufficient water for users and the environment



Flood protection

To prevent increases in flooding and operate and maintain the district's regional flood control projects



Water quality

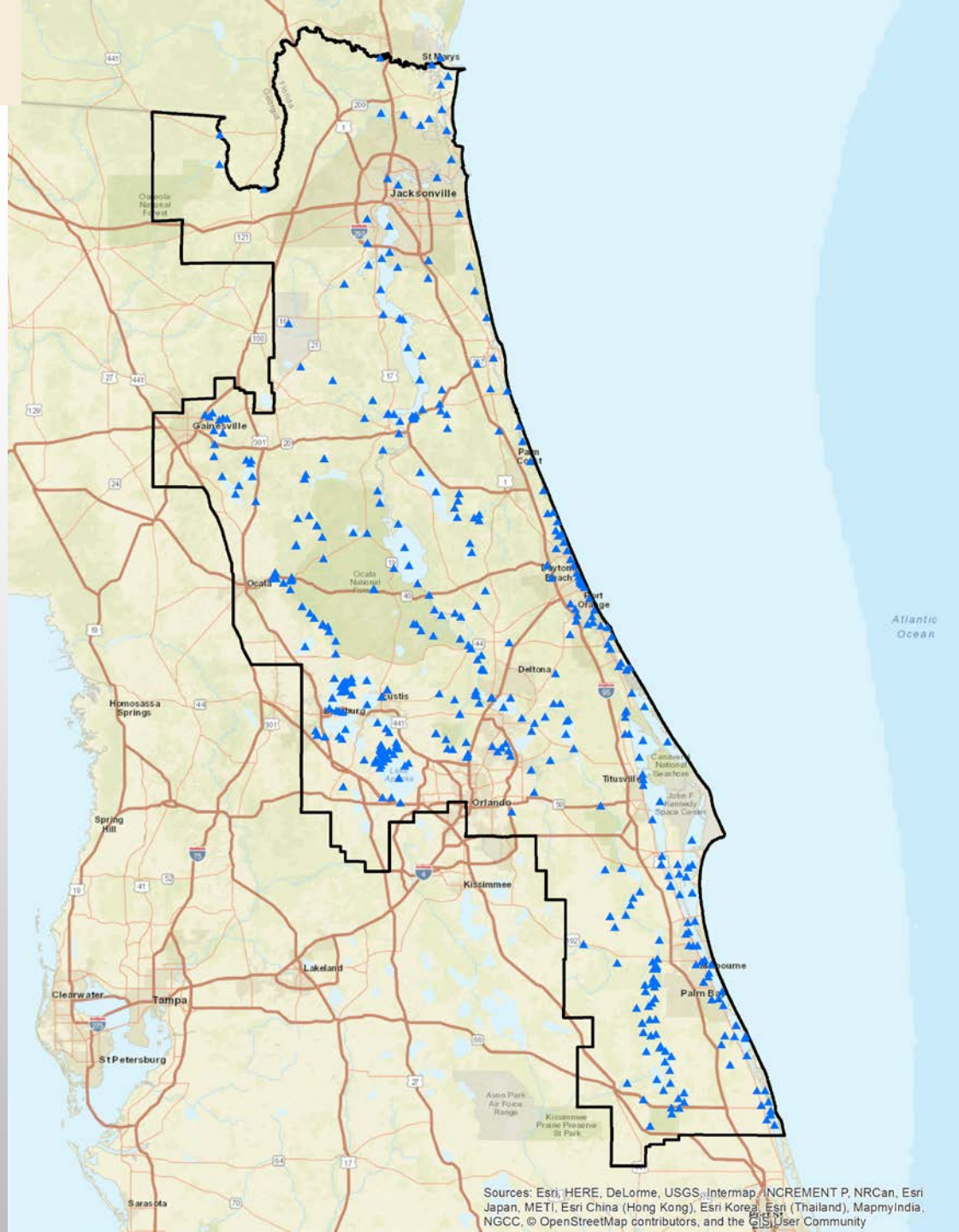
To protect and improve water quality within the district



Natural systems

To protect and improve natural systems within the district

SITUATION



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

STAKEHOLDERS

BUREAU OF
WATER RESOURCES
(ENVIRONMENTAL SCIENCES - ES)

Research Scientists Requesting WQ
Data Collection for Specific
Management Goals

BUREAU OF
WATER RESOURCE
INFORMATION (WRI)

Data & Sample Collection, Lab
Analysis, QA

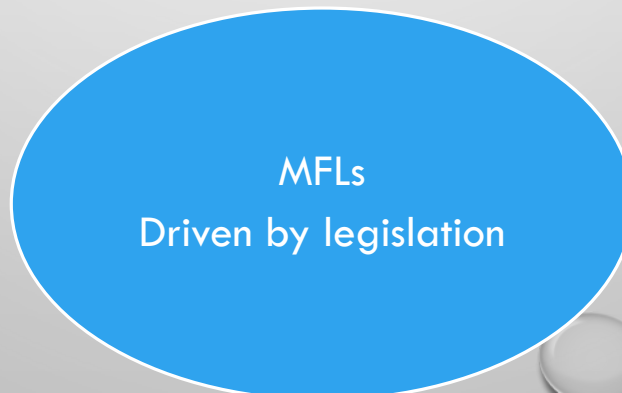
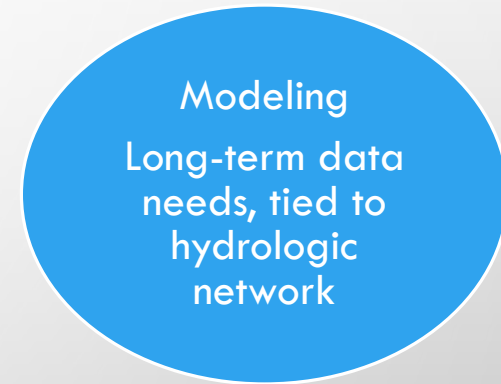
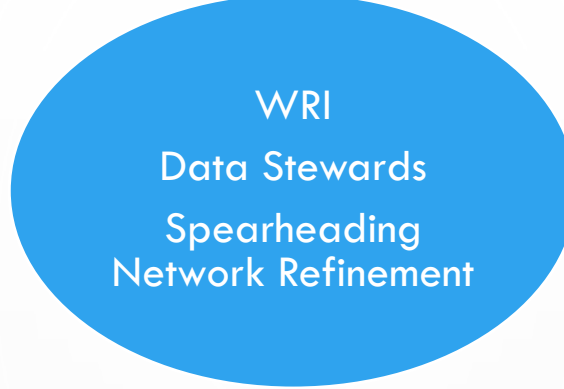
BUREAU OF
RESOURCE EVALUATION AND
MODELING

Minimum Flows and Levels
Districtwide

BUREAU OF
WATERSHED MANAGEMENT AND
MODELING

Surface Water Modeling to
Support District Projects

STAKEHOLDERS



TECHNIQUES

WRI

Steering the process

Justification for Surface WQ Network

1 supervisor meeting
Received station needs within the month

Modeling

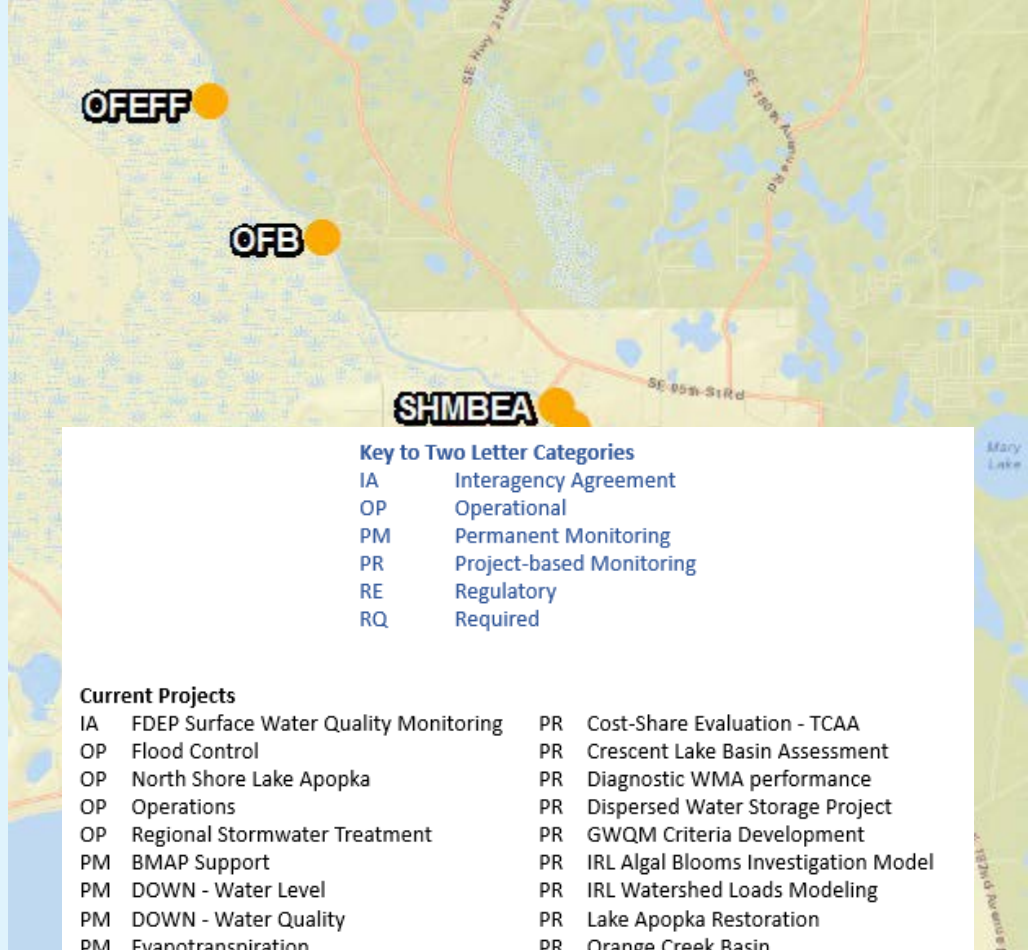
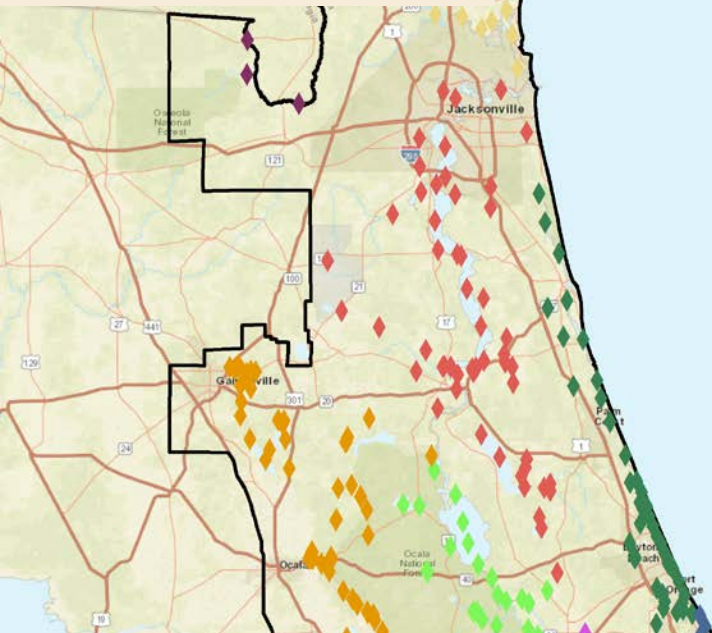
1 brief hallway meeting
Received station needs within the week

MFLs

ES

2 supervisor meetings
9 small-group meetings with basin-level teams
6 + 2 weeks of ES station review

TECHNIQUES



Station Review Agenda

Monday, February 27, 2017 12:48 PM

- Summarize overall goals and current targets for this station review
- Provide background on new Project Naming conventions
- Basin or region-specific station review with maps
 - Identify any and all projects associated with each station
 - Determine whether existing project names will work or whether we need to develop new project names
 - Provide a brief (one-sentence) description of any new projects
 - Identify project managers for each project name

Key to Two Letter Categories

- IA Interagency Agreement
- OP Operational
- PM Permanent Monitoring
- PR Project-based Monitoring
- RE Regulatory
- RQ Required

Current Projects

- | | |
|--|--|
| IA FDEP Surface Water Quality Monitoring | PR Cost-Share Evaluation - TCAA |
| OP Flood Control | PR Crescent Lake Basin Assessment |
| OP North Shore Lake Apopka | PR Diagnostic WMA performance |
| OP Operations | PR Dispersed Water Storage Project |
| OP Regional Stormwater Treatment | PR GWQM Criteria Development |
| PM BMAP Support | PR IRL Algal Blooms Investigation Model |
| PM DOWN - Water Level | PR IRL Watershed Loads Modeling |
| PM DOWN - Water Quality | PR Lake Apopka Restoration |
| PM Evapotranspiration | PR Orange Creek Basin |
| PM Hydrologic Data Collection non-DOWN | PR Silver Springs Forest Conservation Area |
| PM Radar Rainfall | PR Special Projects |
| PM Surface WQ Monitoring | PR Springs Initiative |
| PM SWQM Indian River Lagoon | PR SJMCA Restoration |
| PM SWQM Lower Ocklawaha River Basin | PR St. Johns River Model |
| PM SWQM Lower St. Johns River Basin | PR SWQM Criteria Development |
| PM SWQM Middle St. Johns River Basin | PR Upper Basin Hydrologic Effects - WQ |
| PM SWQM Northern Coastal Basins | RE Central Florida Water Initiative |
| PM SWQM Springs | RE Minimum Flows and Levels |
| PM SWQM Upper Ocklawaha River Basin | RE Regulatory - other |
| PM SWQM Upper St. Johns River Basin | RQ Biological Assessment |
| PM Telemetry Support | RQ Cultural Resources |
| PM Validation Rainfall | RQ Outstanding Florida Springs |

PR UORB Restoration

OUTCOMES

WRI

Justification for Surface WQ Network

A stronger understanding of the complexity and value of the network

A better system for future (annual) reviews

Greater trust between parties

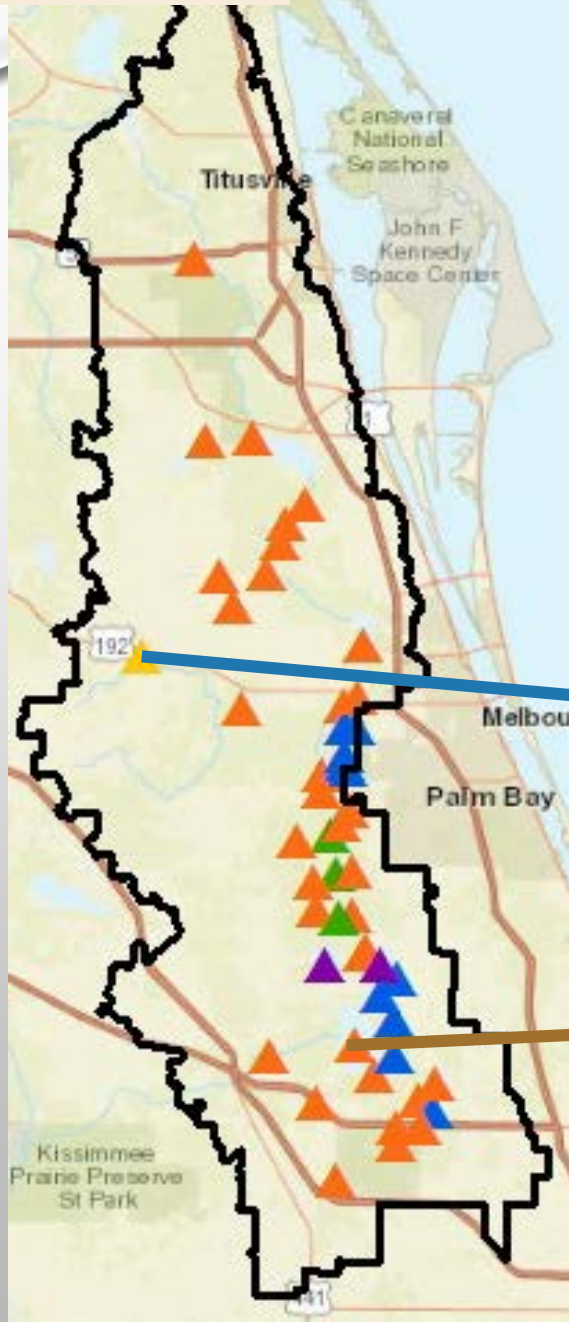
A greater appreciation for/understanding of the needs of the people involved

ES

Modeling

MFLs

OUTCOMES



Total Stations	457
Permanent Stations	230
Non-Permanent Stations	207
Project-based Stations	395
MFLs Stations	121
Modeling Stations	270
Slated for Removal	27

IA FDEP Surface WQ Monitoring

PM Surface WQ Monitoring
PM SWQM Upper St. Johns River Basin
PR USJRB Project Areas
PR Upper Basin Hydrologic Effects
PR St. Johns River Model
PR Special Projects – Fisheries

LESSONS LEARNED

Flexibility is key

Even if the first 8 meetings go as planned, that doesn't mean the 9th will

Excessive preparation can be incredibly helpful

It's hard to break away from old habits and perceptions

Creating last-minute PowerPoints without bullets is challenging

Results are feeding
directly into our budget
process right now

SJRWMD Sampling Request Data Quality Objectives

This form should be used for any new or existing water quality sampling or monitoring projects or programs. The purpose of this form is to document the need for monitoring, as well as the intended use of the data, through the use of data quality objectives. Please complete all sections.

Person Completing this Form: Margaret Guyette

Date: February 20, 2017

Project Information

What project is the requested monitoring associated with?

*(Note: IA = Interagency Agreement; OP = Operational; PM = Permanent Monitoring;
PR = Project-based Monitoring; RE = Regulatory; RQ = Regulatory; TM = Time-limited monitoring)*

PR Special Projects

If you do not see your project listed above, please briefly summarize it here.

Which project-specific management actions require the requested monitoring data?

We as an agency need to understand more about the impacts of reuse water on water quality. The spray field adjacent to DHQ is a perfect test case.

Which District staff need to be involved in the project?

Margaret Guyette, David Hornsby, Chris Mundy, Lauren Peacock, Palatka Field Staff