



Status Network Reconnaissance

Lana Neff / DEAR / March 2024



Recon Topics to Cover

- **Your Role (Reconnaissance)**
- **Process Steps**
- **Exclusions**
- **Sampling Order**
- **Public Interaction**



Watershed Monitoring Information Center

<https://publicfiles.dep.state.fl.us/dear/Watershed%20Monitoring/Info%20Center/>

Florida Department of Environmental Protection Watershed Monitoring Information Center

Sampling Information

The information presented below is intended for use by staff who collect environmental data for the Florida Department of Environmental Protection (DEP) Status Network and Trend Network projects. The information presented below is not intended to be used for other monitoring projects. Please visit the [DEP Quality Assurance website](#) for general guidelines for other monitoring projects.

Status & Trend - Sampling Information Sections

- [Standard Operating Procedures \(SOPs\) & Manuals](#)
- [Sampling Schedule](#)
- [Data Entry Applications](#)
- [Trimble GNSS / GPS Unit Resources](#)
- [Field Sheets and Sampling Resources](#)
- [Map Direct Resources](#)
- [Sampling Training Workshop Presentations](#)
- [Status Network & Trend Network Reports](#)

Standard Operating Procedures (SOPs) & Manuals

- [Sampling Manual \(full version\) \(January 2016, plus October 2017 Revision\)](#)
- [Sampling Manual Revision \(October 2017 Revision only\)](#)
- [Status Network Reconnaissance Manual](#) (September 2018)
- [GWIS Database Utilities Manual](#) (December 2018)
- [GPS Basics Manual](#) (February 2017)
- [Project Manager Manual](#) (July 2013)
- [Data Management Protocols](#) (July 2016)
- [Monitoring Design Document](#) (2019)
- [Quality Manual](#) (June 2018)
- [Field Sample Database Data Dictionary, Version 2.7](#)
- [GWIS Database Data Dictionary, Version 1.6](#)
- [Groundwater Well Definitions](#)

Sampling Schedule

- [Status Network 2019](#)
- [Trend Network, October 2018 - September 2019](#)

Data Entry Applications

- [Generalized Water Information System \(GWIS\) Database Utilities](#) (password required)
- [Trend Network Field Data Entry Application](#)

Updated 6/26/2019
Page 1 of 4



**Please review your
Status Network Reconnaissance Manual**

https://publicfiles.dep.state.fl.us/dear/DEARweb/WMS/Reports_Docs_SOPs/Standard%20Operating%20Procedures/Status%20Network%20Recon%20Manual/WMS-ReconManual.pdf



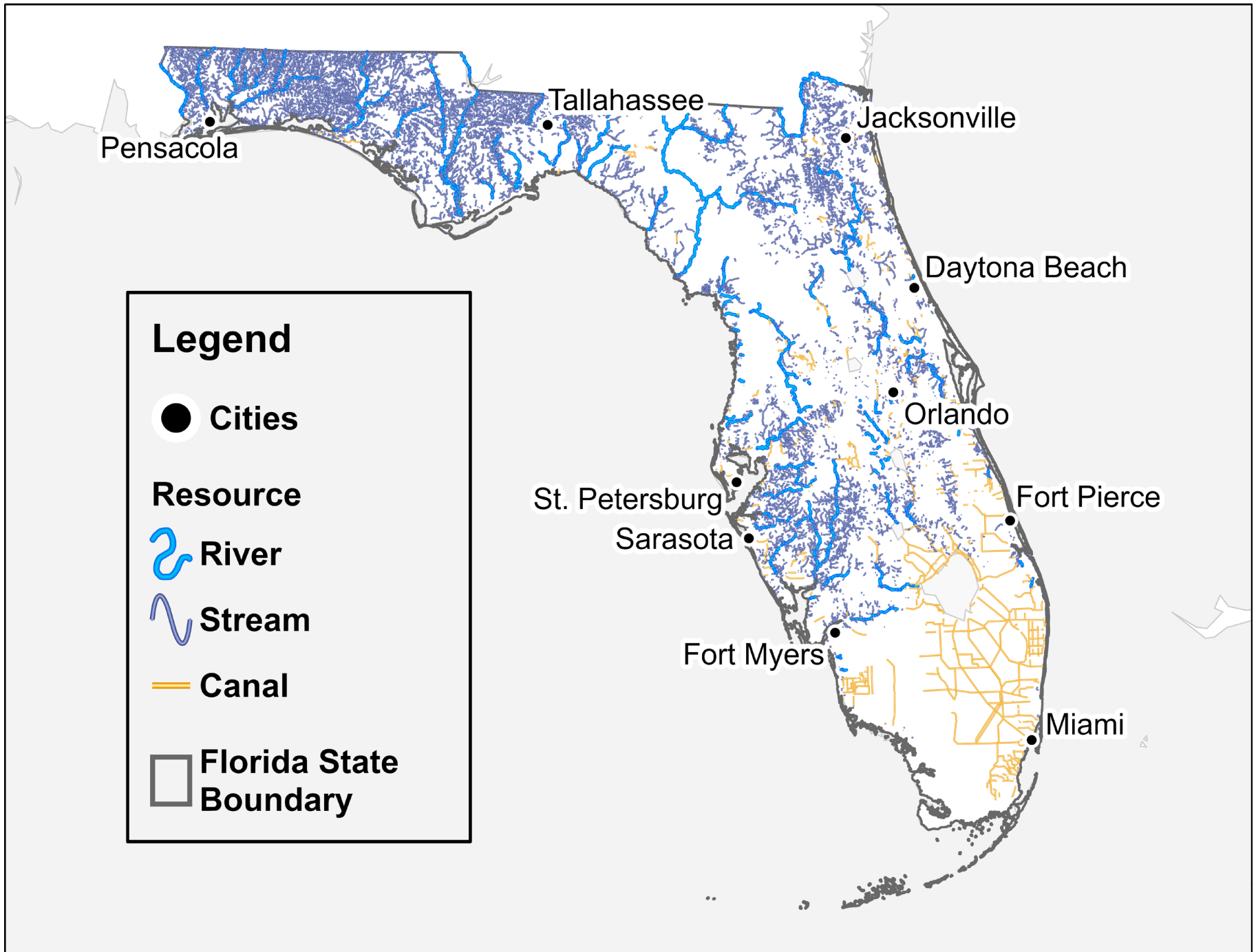
Recon Process

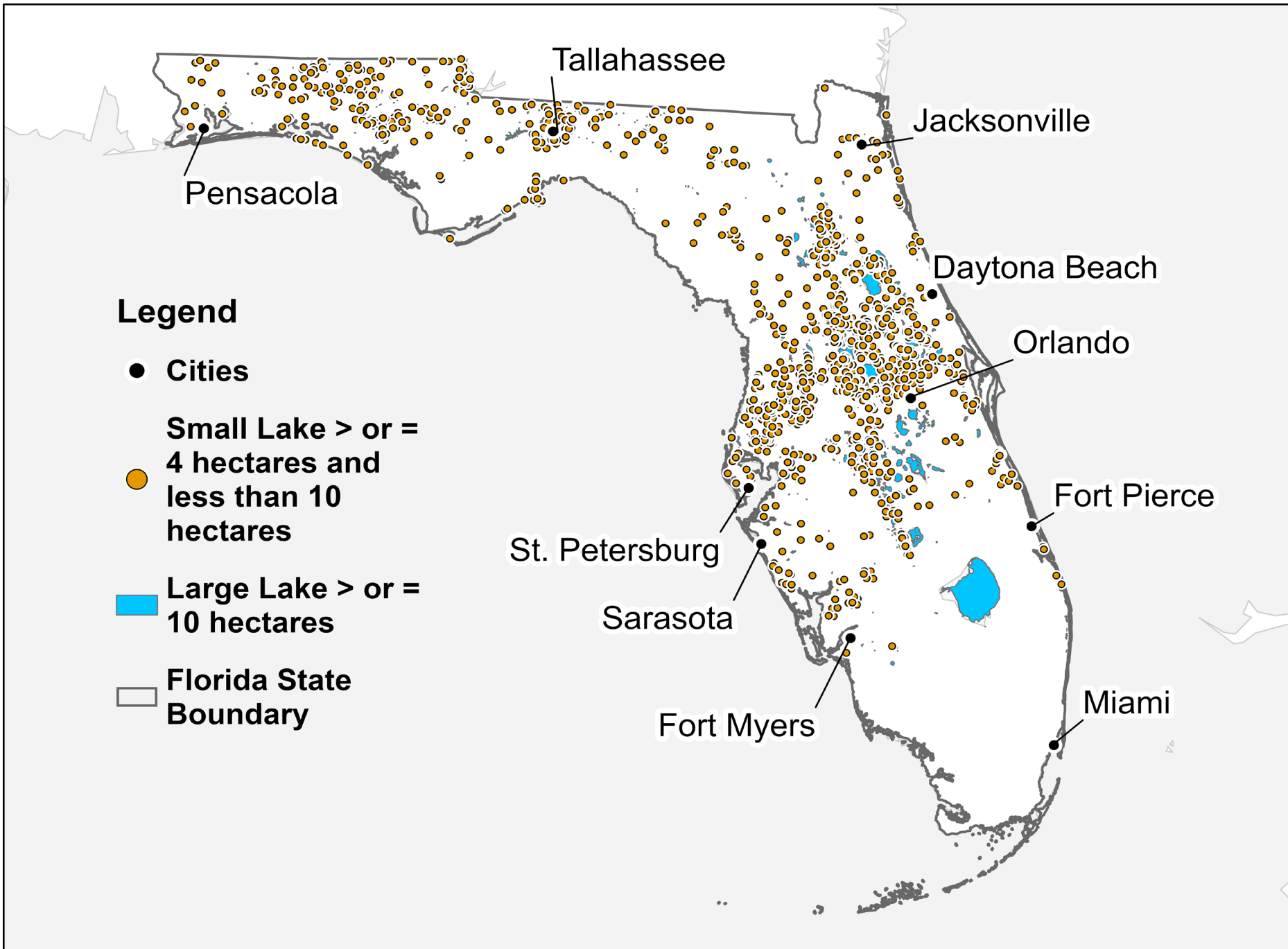


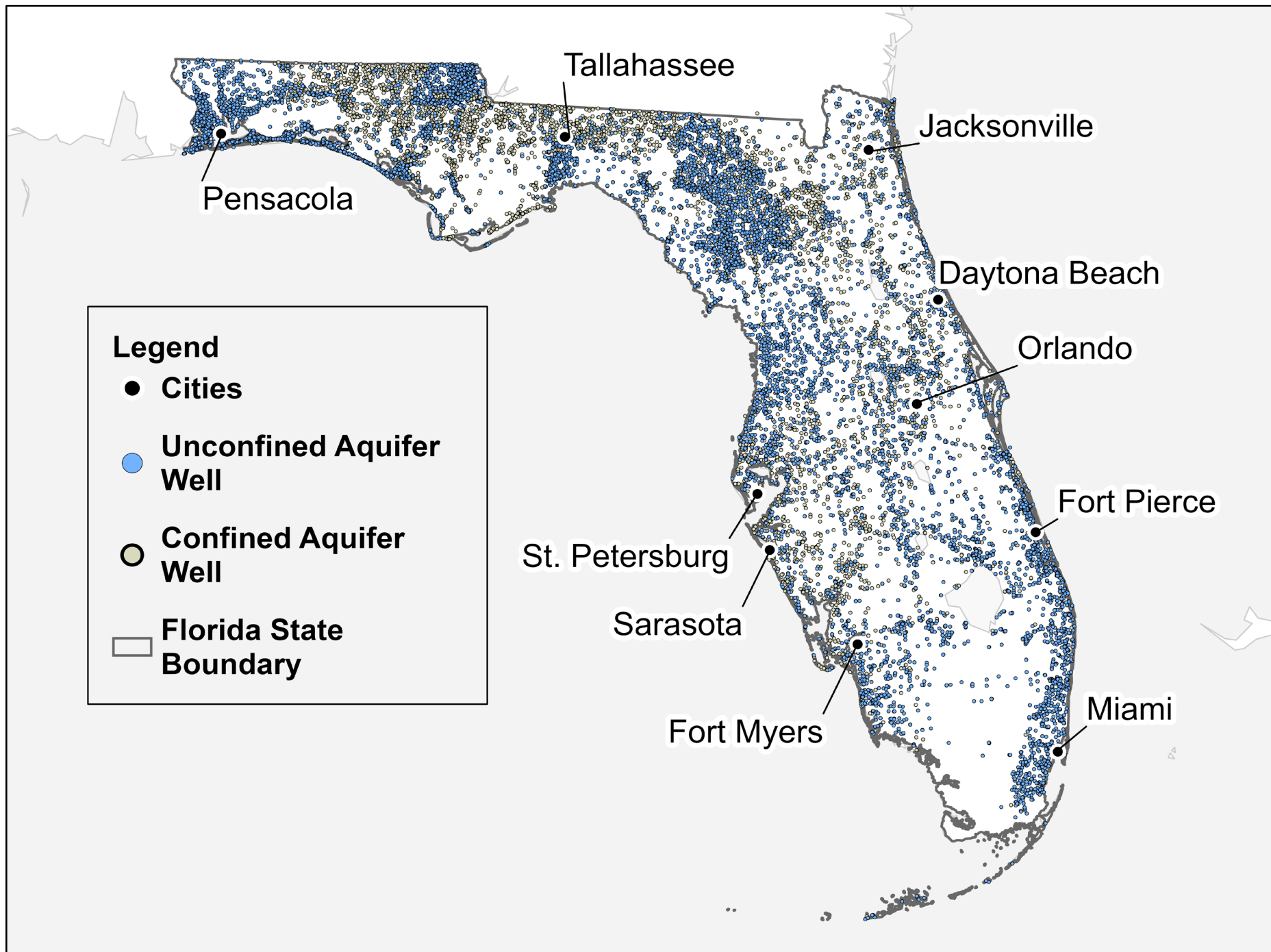


Why Recon? Your Role

- **Verify the correct resource is sampled**
- **Ensure sampling can be performed safely**
- **Assist resource analysts in improving coverages**







Resource Acronyms

- CN – Canals
- SS – Streams
- LR – Rivers
- SL – Small Lakes
- LL – Large Lakes
- CA – Confined Aquifers
- UA – Unconfined Aquifers

ZONE 3

RIVER

CYCLE 17 (2023)

Z3-LR-17001

SAMPLE #

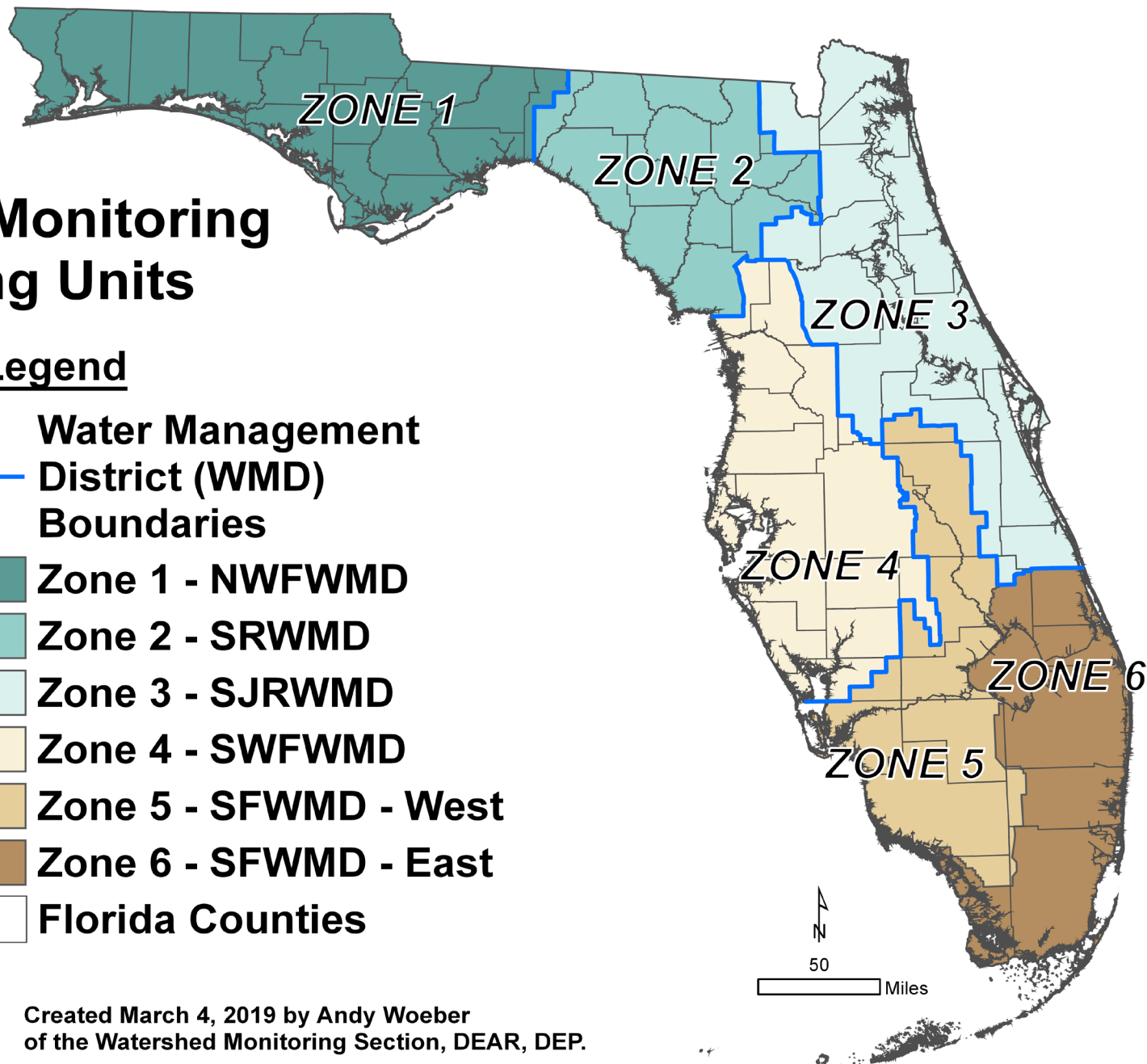
Watershed Monitoring Reporting Units

Legend

- Water Management District (WMD) Boundaries**
- Zone 1 - NFWWMD
 - Zone 2 - SRWMD
 - Zone 3 - SJRWMD
 - Zone 4 - SWFWMD
 - Zone 5 - SFWMD - West
 - Zone 6 - SFWMD - East
 - Florida Counties



Created March 4, 2019 by Andy Woeber
of the Watershed Monitoring Section, DEAR, DEP.





Typical Process Steps for Office Recon

*Ideally, Office Recon is completed
one month prior to the sampling
index period.*



Typical Process Steps for Office Recon

- ☐ Get list of sites – GWIS Database Utilities.
- ☐ Launch Map Direct from GWIS Database Utilities to view sites.



Access GWIS Database Utilities

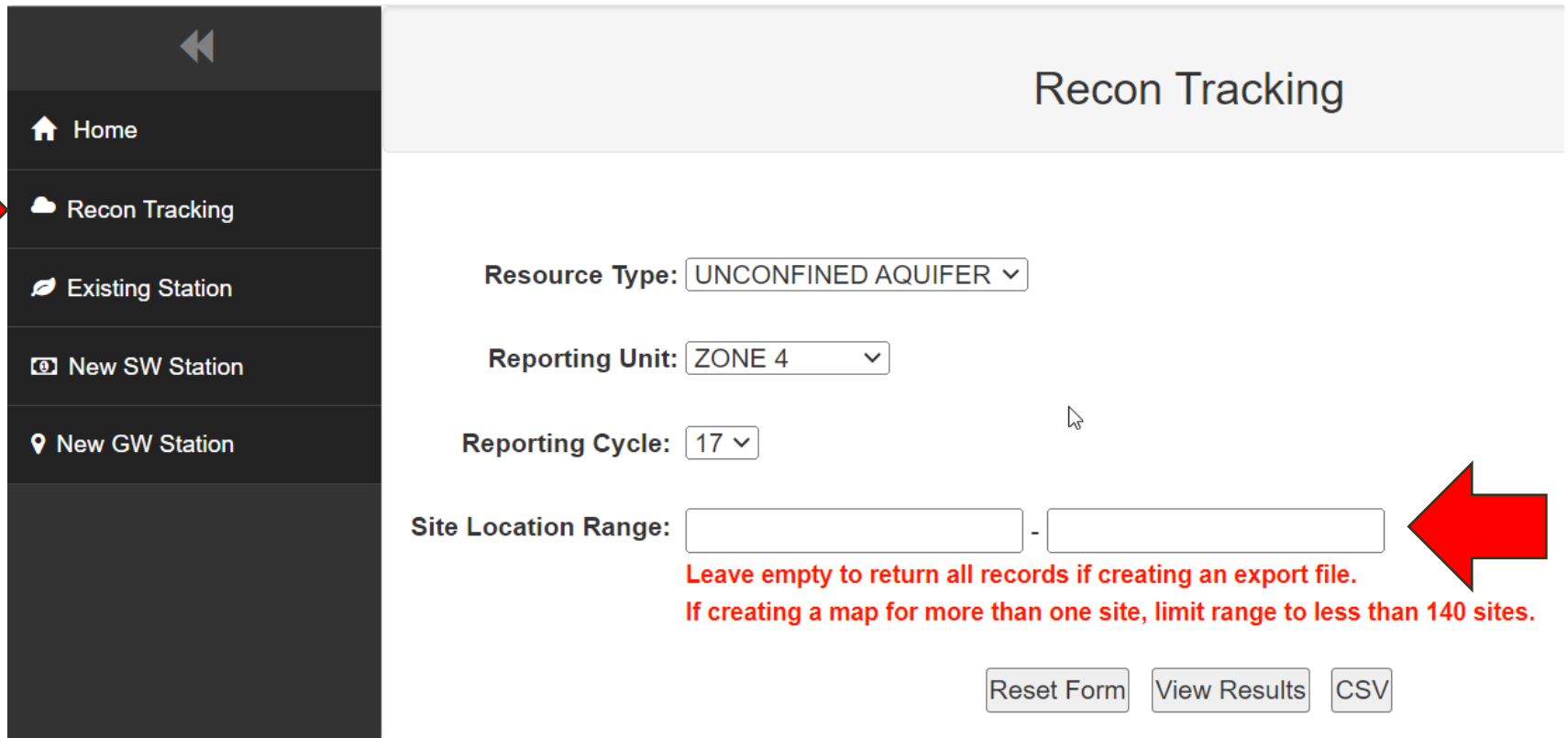
GWIS Database Utilities : <https://prodapps.dep.state.fl.us/gwis/>

- External staff (e.g., NFWFMD) contact:
Tommy Adams, WMS Data Coordinator
850-245-8512
email: Thomas.L.Adams@FloridaDEP.gov
- DEP staff
 - Use DEP username and password.
 - Contact Tommy Adams if you need permissions updated to enter recon information.



Recon Tracking

Use search tool to obtain list of sites



The screenshot shows the Recon Tracking web application interface. On the left is a dark sidebar with navigation links: Home, Recon Tracking (highlighted with a red arrow), Existing Station, New SW Station, and New GW Station. The main content area has a light gray header with the title "Recon Tracking". Below the header are three dropdown menus: "Resource Type" set to "UNCONFINED AQUIFER", "Reporting Unit" set to "ZONE 4", and "Reporting Cycle" set to "17". Below these is a "Site Location Range" section with two empty input boxes separated by a hyphen. A red arrow points to these input boxes. Below the input boxes is red text: "Leave empty to return all records if creating an export file. If creating a map for more than one site, limit range to less than 140 sites." At the bottom right are three buttons: "Reset Form", "View Results", and "CSV".

Recon Tracking

Resource Type: UNCONFINED AQUIFER ▾

Reporting Unit: ZONE 4 ▾

Reporting Cycle: 17 ▾

Site Location Range: -

Leave empty to return all records if creating an export file.
If creating a map for more than one site, limit range to less than 140 sites.

Reset Form View Results CSV

**Leave “Site Location Range” blank
to retrieve all sites in the Zone.**



Recon Tracking

Download Site Information & Save as CSV File

[Home](#)[Recon Tracking](#)[Existing Station](#)[New SW Station](#)[New GW Station](#)

Recon Tracking Results

Selection Criteria:
Resource Type = UNCONFINED AQUIFER; Reporting Unit = Zone 4; Reporting Cycle = 17;

[Show Map](#)[CSV](#)

RANDOM SAMPLE LOCATION	LATITUDE	LONGITUDE	SAMPLEABLE	STATION ID
Z4-UA-17001	28° 22' 46.021"	81° 49' 25.014"	N/A	1074
Z4-UA-17002	27° 21' 58.97"	82° 0' 25.447"	N/A	7898
Z4-UA-17003	27° 53' 19.799"	82° 41' 50.113"	N/A	884



Recon Tracking

- Open CSV file with Excel
- Document Recon Progress
- WMS Project Manager will review your comments and exclusions

	A	B	C	D	E	F
1	Color Key	Sampled	Ready to Sample	In Progress of getting permission	Excluded	
2	SITE	COUNTY	STATION_NAME	ALIAS	FLUWID	COMMENTS
3	Z3-CA-7001	OSCEOLA	OS0229			AIRMENS RANCH/ YEEHAW JUNCTION, LB B, UN new jn 10/98
4	Z3-CA-7002	DUVAL	D-1342	City of Win at watertower	AAE1234	TMAN WATER WORKS, LB A, AC Status sampled 2/6/11 and 1/12 301802081585001
5	Z3-CA-7003	LAKE	L-0591		AAE0001	SOMEWHERE IN THE HILLS PS #9, MB B, AC
6	Z3-CA-7004	BREVARD	BR1932	Frank Burbanks	AA56789	STILL WAITING ON PERMISSION
7	Z3-CA-7005	NASSAU	N-0304			Fort Clinch State Park

Team



Recon

You may be part of a recon team for a specific resource

- 1) Communicate with each team member
- 2) Track completion of assigned tasks
- 3) Work Efficiently



Status Network Recon

Presents unique challenges for site access logistics & obtaining permission from property owners

Sites often have not been previously visited.

Sites are only sampled once.

Target
Population?

Site Accessible?

Site Wet?

Owner
contacted?

Owner gave
permission to
access site?

Office Recon for
Surface Water

if **NO** to any question
complete GWIS
exclusions/comments

Go to the
site!

**Target
Population?**

Well Accessible?

Well owner contacted?

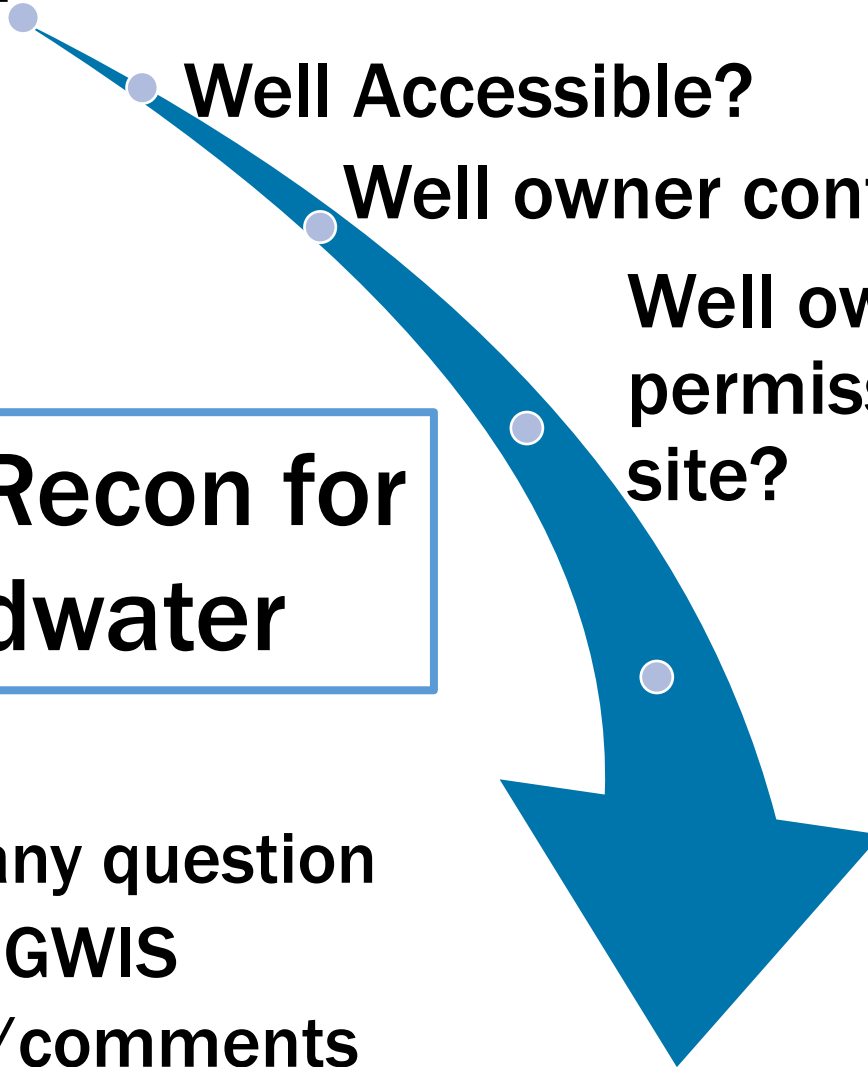
**Well owner gave
permission to access
site?**

**Office Recon for
Groundwater**

**Sampling point
available prior to
softener/
chlorinator/or
filter?**

if **NO** to any question
complete GWIS
exclusion/comments

Go to the well!





Status Network Recon

Find your site and its owner

- **Open Map Direct from GWIS Database Utilities**
 - **Previously sampled sites**
 - **Cadastral Layer (property owner info.)**
- Search for property owner contact info.
 - Spokeo
 - Sunbiz
 - Internet Search
 - Large Landowners



Recon with Map Direct

Home

Recon Tracking

Existing Station

New SW Station

New GW Station

Recon Tracking Results

Selection Criteria:

Resource Type = SMALL LAKE; Reporting Unit = Zone 4; Reporting Cycle = 17;

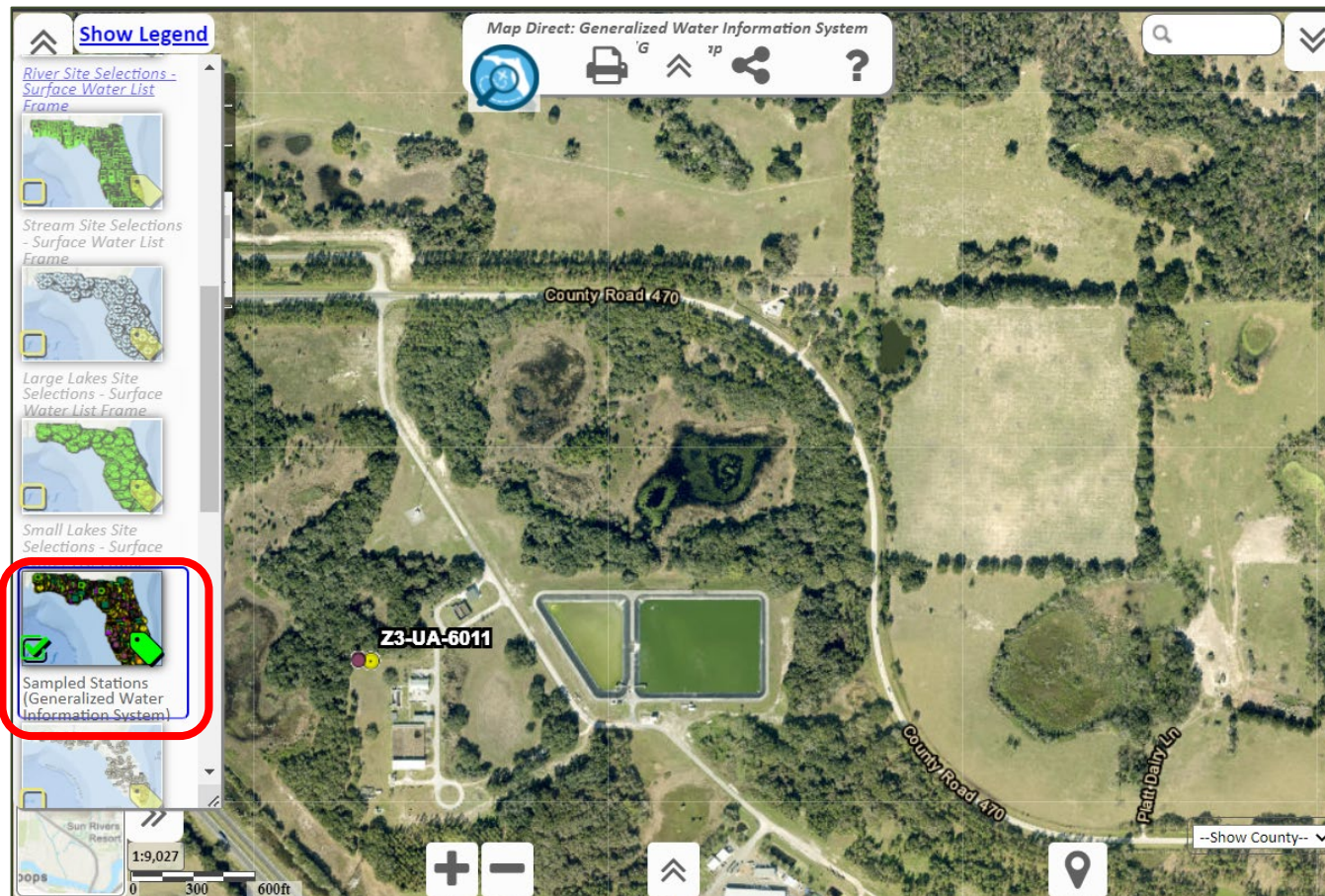
Show Map

CSV

RANDOM SAMPLE LOCATION	LATITUDE	LONGITUDE	SAMPLEABLE	STATION ID
Z4-SL-17001	27° 39' 27.4122009"	81° 28' 58.6825981"	YES	
Z4-SL-17002	28° 9' 17.698"	81° 36'	NO	



Recon with Map Direct



Sampled stations (GWIS) layer contains previous sampling locations



Recon with Map Direct

Map Direct: Generalized Water Information System

Search Box 125 feet wide at
28.74657646 x -81.92606802
28°44'47.6753" x -81°55'33.8449"

Drop Marker What's nearby?

Zoom To this selected feature Clear Print Table Download Format

Cadastral Property Appraiser Parcels -
Cadastral 2020 (Property Appraiser Parcels)
Public View

172024000200000100
PARCEL ID

CITY OF LEESBURG
OWN NAME

C45-000-448-8645-5
STATE PAR ID

1600 COUNTY ROAD 470
LEESBURG FL, FL 34748
PHY Address

172024000200000100 PARCELNO
N 3/4 OF E 1/2 N'LY OF TURNPIK S LEGAL

Nearby Zoom Pan Remove

--Show County--

County Road 470

Z3-CA-15016

1:9,027

0 300 600ft

Show Legend

OpenData_Boating -
FWC Florida Boat
Ramp Inventory

WMS Flowing Waters
Resource 2020 - WMS
Flowing Waters

WMS Lakes Resource
2020 - WMS Lakes
Resource 2017

Cadastral Property
Appraiser Parcels -
Cadastral 2020

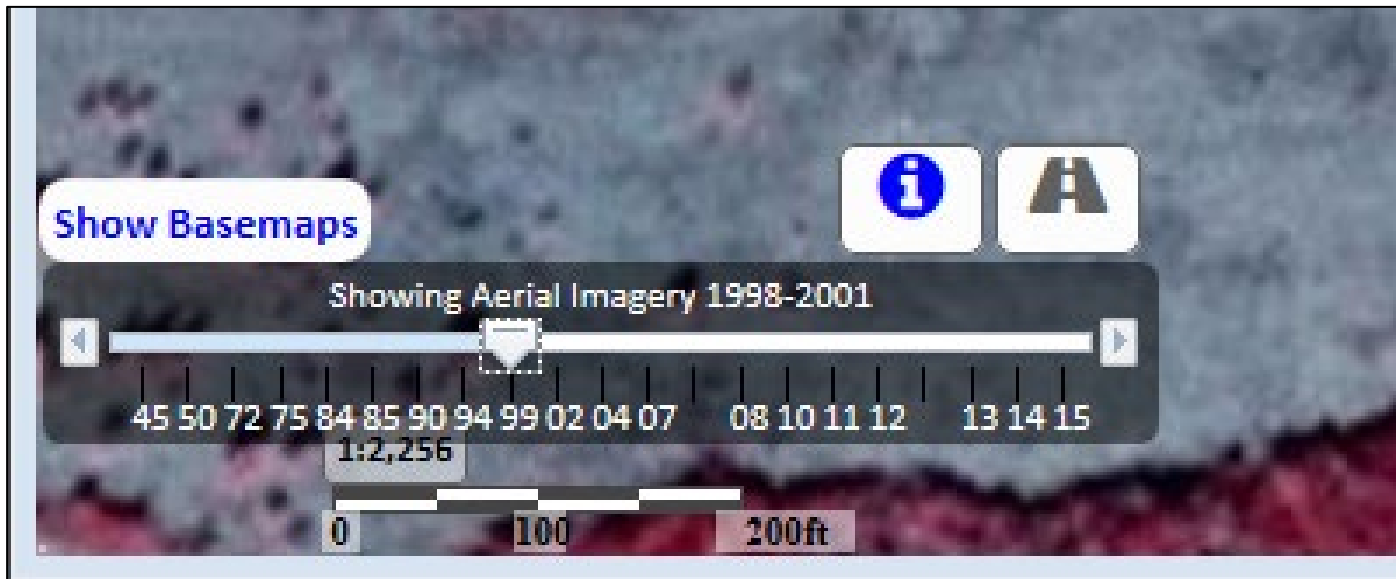
Military Bases

San River Region

*Cadastral
layer contains
property
owner
information*



Recon with Map Direct



Use imagery slider to review available historic aerial photo layers



Map Direct Help Pages

The screenshot shows the "Map Direct: Generalized Water Information System" interface. At the top, there is a map of Florida with various icons. A red arrow points to a question mark icon in the top right corner of the map area. Below the map is a "Help and Contact" sidebar. Inside this sidebar, there is a section titled "Florida Department of Environmental Protection" with a logo and the text "Map Direct v7.210311". Below this, there is a link titled "More Information about Generalized Water Information System (GWIS) Map". A red arrow points to this link. At the bottom of the sidebar, there is a list of links under the heading "Click links below to open help documents." A red arrow points to the first link in the list, "What's New? [PDF]".

Click the "?" Icon here

Click this link to View ArcGIS Online page regarding GWIS Focus

Click "What's New" to find out what is updated in Map Direct.



Watershed Monitoring Information Center

Map Direct Resources

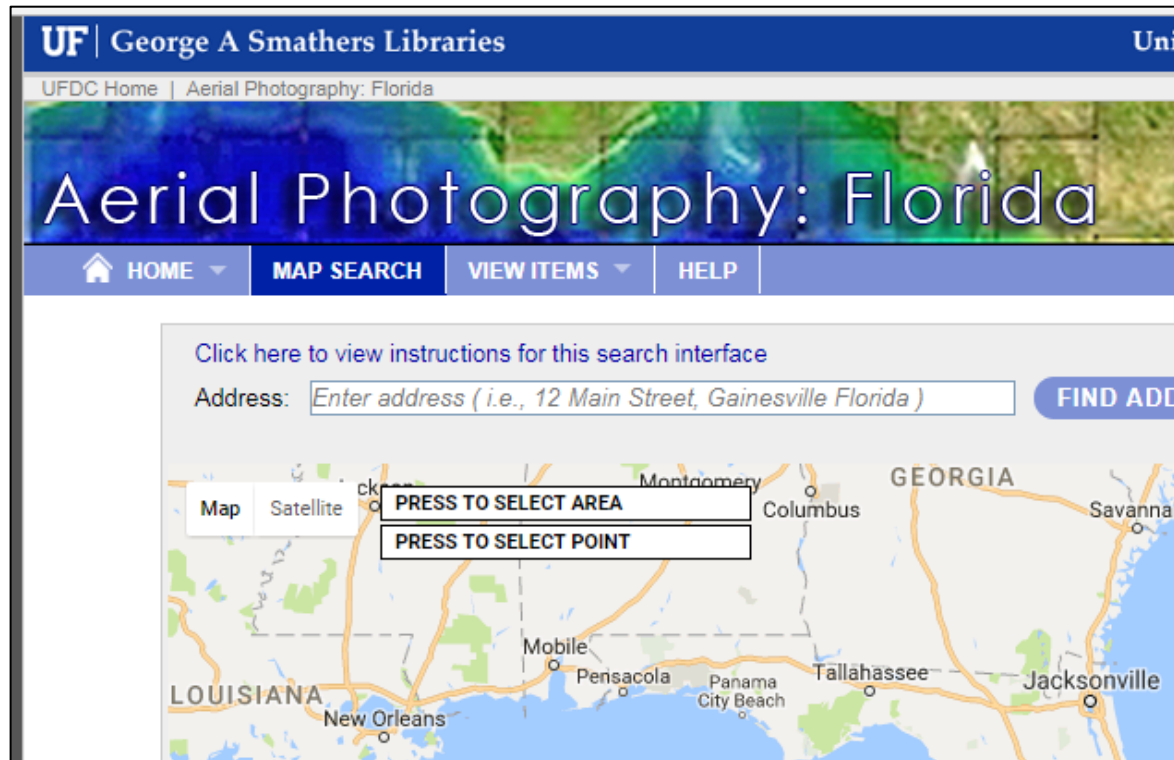
*Custom Files for Status Network
Recon*

*Learn and Customize Map Direct
Handout*



Additional Recon Resources

Historical aerial photographs available at the George A. Smathers library (UF)



<https://original-ufdc.uflib.ufl.edu/aerials>



Additional Recon Resources

Historical Data for Wells

- Well drilling reports
- Well Owner
- Previous photos of the well (check sampled stations layers)
- Check with the Water Management District, USGS, Wastewater Treatment or Water Treatment Facilities.
- Review Recon Manual Appendix B: Aquifers and Groundwater Programs



Status Network Recon

Find your site and its owner

- Open Map Direct from GWIS Database Utilities
 - Previously sampled sites
 - Cadastral Layer (property owner info.)
- **Search for property owner contact info.**
 - **Spokeo**
 - **Sunbiz**
 - **Internet Search**
 - **Large Landowners**



Property Owner Info.

Spokeo

- Like yellowpages but better
- Gives past phone numbers, addresses, & relatives' names
- Access / Usernames obtained through Ashely Phillips
 - WQMP Administrative Assistant
 - Ashley.M.Phillips@FloridaDEP.gov
 - 850-245-8080



Property Owner Info.

Spokeo

[SEE UPDATES NOW](#)



Michael Askew Eckles, Age 42
Who was born in May 1978, lives in Tallahassee, FL and is also known as Micheal A Eckles or Michael Scott Eckles.

[GET UPDATES](#)

[DOWNLOAD PDF](#) | [SHARE](#) | [MORE](#) ...

OVERVIEW

- Contact (5)
- Family (5)
- Personal (9)
- Wealth (2)
- Locations (6)
- Court
- Social (2)
- Work

CONTACT

**850-228-7145**
TALLAHASSEE, FL • AT&T Mobility
Found in 5 data sources 4 years ago

**912-226-6055**
SAVANNAH, GA • Bandwidth.com
Found in 2 data sources 11 years ago

**229-226-6055**
THOMASVILLE, GA • AT&T Southeast
Found in 2 data sources 4 years ago

**meckles2@hotmail.com**
HOTMAIL • 0 social profiles
Found in 2 data sources 3 years ago

**michaeeckles@gmail.com**
GMAIL • 0 social profiles
Found in 4 data sources 5 years ago

33



Property Owner Info. Spokeo

Be careful
what you
ask for.

Often need
to refine
searches.



John Smith



Alabama (3704)



Alaska (404)



Arizona (3423)



Arkansas (2158)



California (17576)



Colorado (3031)



Connecticut (2493)



Delaware (754)



District of Columbia (655)



Florida (13549)



SHOW ALL 52 LOCATIONS



Refine Your Search Results

RESIDES IN SAINT CHARLES, MO

Lived In Panama City FL, Panama City Beach FL, Canton GA, Woodstock GA

Related To Brandy Smith, Jeremy Smith, Nancy Smith, Jason Smith, Jordan Smith

Includes ✓ Profile ✓ Address(6) ✓ Phone(2)

John Clare Smith, 85

RESIDES IN DELTON, MI

Lived In Battle Creek MI, Augusta MI, Bellevue MI

Related To Minnie Smith, Courtney Smith, Clinton Smith, Graham Smith, Carole Smith

Also known as Johnc Smith, J Smith

Includes ✓ Profile ✓ Address(6) ✓ Phone(6) ✓ Email(5)

John A Smith, 69

RESIDES IN SAYREVILLE, NJ

Lived In Springfield PA, Clifton Heights PA, Lansdowne PA, Stratford NJ

Related To Diane Smith, Virginia Smith, Matthew Smith, Judith Smith, Dawn Smith

Includes ✓ Profile ✓ Address(8) ✓ Phone(2)

John E Smith, 75

RESIDES IN PETERSBURG, WV

Related To Faith Smith, William Smith, Connie Smith, Norma Smith, Valerie Smith

Includes ✓ Profile ✓ Address(5) ✓ Phone(4)



Property Owner Info.



GET

Spokeo. Know More.

NAME EMAIL PHONE ADDRESS

Enter a Name, Phone Number, Address or Email

SEARCH NOW

Search by name, phone, address, or email to confidentially lookup information about people you know such as yourself, friends, family, acquaintances, and old classmates.





Property Owner Info.

Sunbiz

- <https://dos.myflorida.com/sunbiz/search/>
- State of FL official business entity index & commercial activity website
- Look up LLCs and other business entities often used by large landowners



Property Owner Info.

Sunbiz

Detail by Entity Name

Foreign Limited Liability Company
LAKELAND SANDS, LLC

Filing Information

Document Number	M20000000208
FEI/EIN Number	N/A
Date Filed	01/06/2020
State	DE
Status	ACTIVE
Last Event	LC STMT OF RA/RO CHG
Event Date Filed	05/12/2020
Event Effective Date	NONE

Principal Address

8789 PENROSE LANE
SUITE 400
LENEXA, KS 66219

Changed: 01/15/2021

Mailing Address

8789 PENROSE LANE
SUITE 400
LENEXA, KS 66219

Changed: 01/15/2021

Registered Agent Name & Address

WHARTON, JOHN L, ESQ
215 S MONROE ST
DEAN. MEAD & DUNBAR
STE 815
TALLAHASSEE, FL 32301

This is a large landowner
Lakeland Sands LLC

- A quick internet search indicates owner of Lakeland Sands LLC is Bill Gates, but he uses many LLCs.
- A lawyer (ESQ) is the contact on the LLC.



Property Owner Info.

Large Landowners

- Many properties are owned by irrevocable trusts, but managed by other companies.
- Helpful to keep a list of land management companies for areas that are visited frequently.
- Some large landowners will allow sampling for some resources but not others. Confirm restrictions at least once per year.

Target
Population?

Site Accessible?

Site Wet?

Permission
to Sample?

Site is safe
and is
sampleable

**Field Recon for
Surface Water**

if **NO** to any question
complete GWIS
exclusion/comments.

Sample the site!

Is the well in the field identical
to the one selected?

Is the well
accessible?

Permission
to Sample?

Sampling point
available prior to
softener/chlorinator/
or filter?

Site is safe and
is sampleable?

**Field Recon for
Groundwater**

if **NO** to any question
complete GWIS
exclusions/comments

Sample the well!



Exclusion Categories Ranked by Importance

WRONG RESOURCE – Highest priority. Likely not available for selection in future cycles. (Not Waters of the State-Contact your Manager)

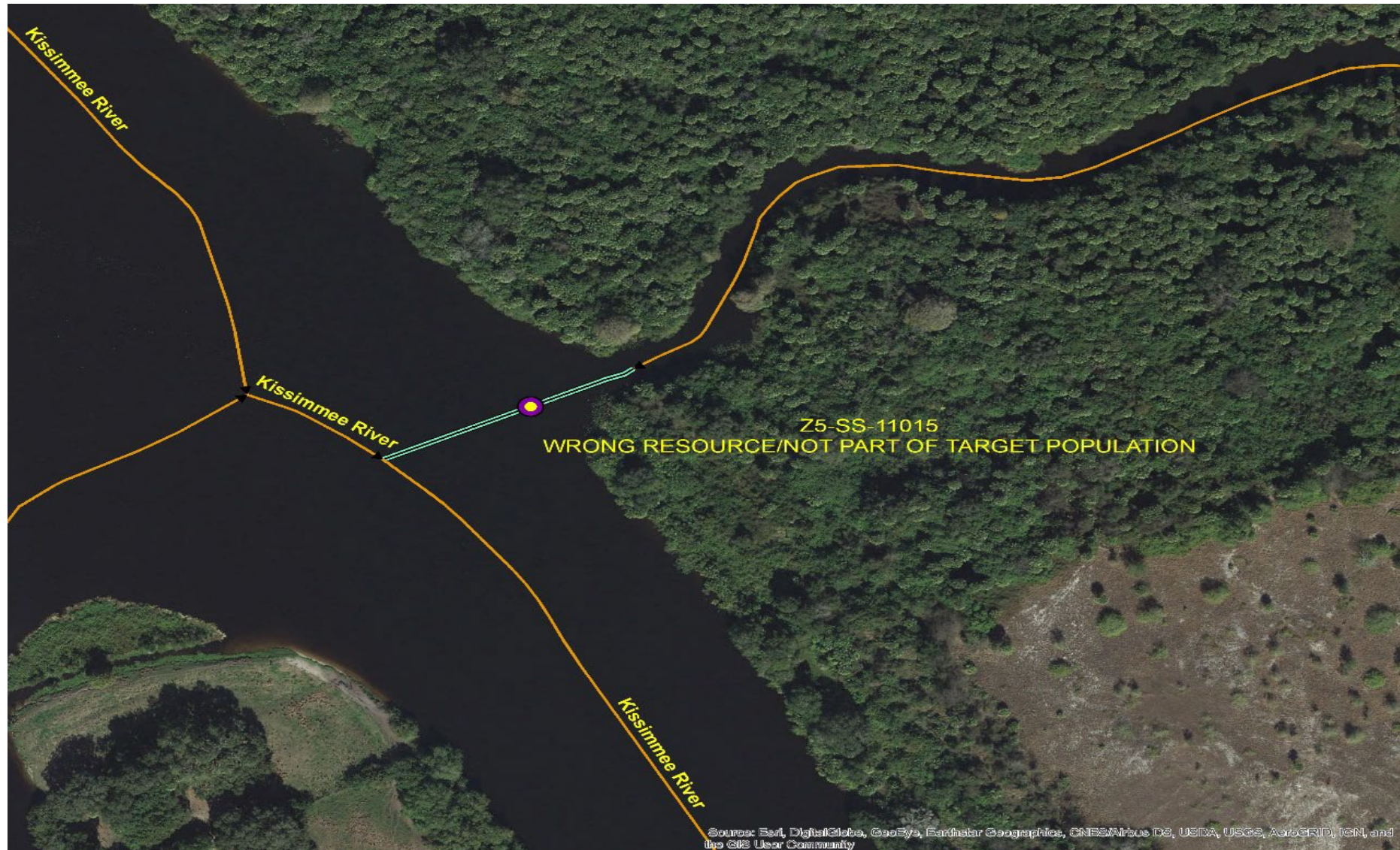
OTHERWISE UNSAMPLEABLE – Depends on comments and exclusion criteria.

NO PERMISSION FROM OWNER – Likely included in next cycle.

UNABLE TO ACCESS – Likely included in next cycle.

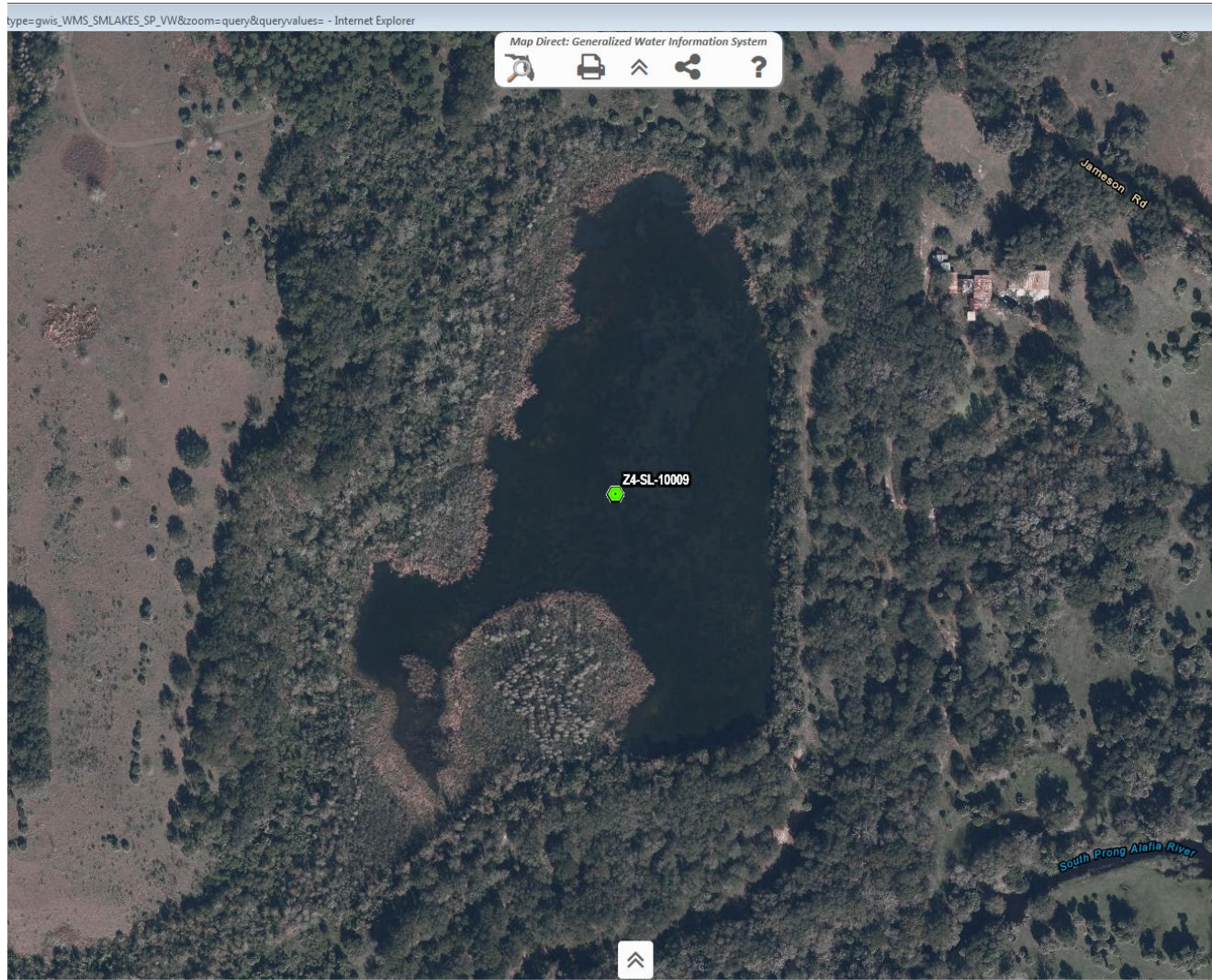
DRY – Likely included in next cycle.

Example - Wrong Resource

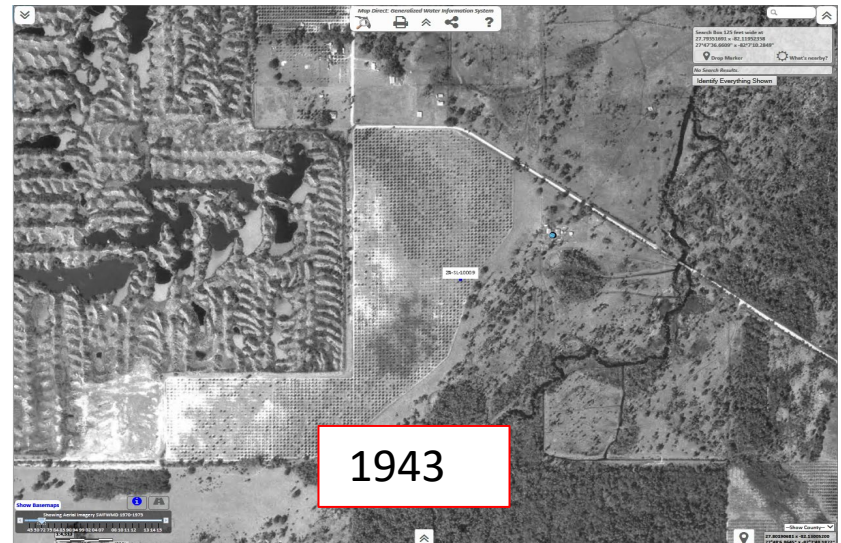
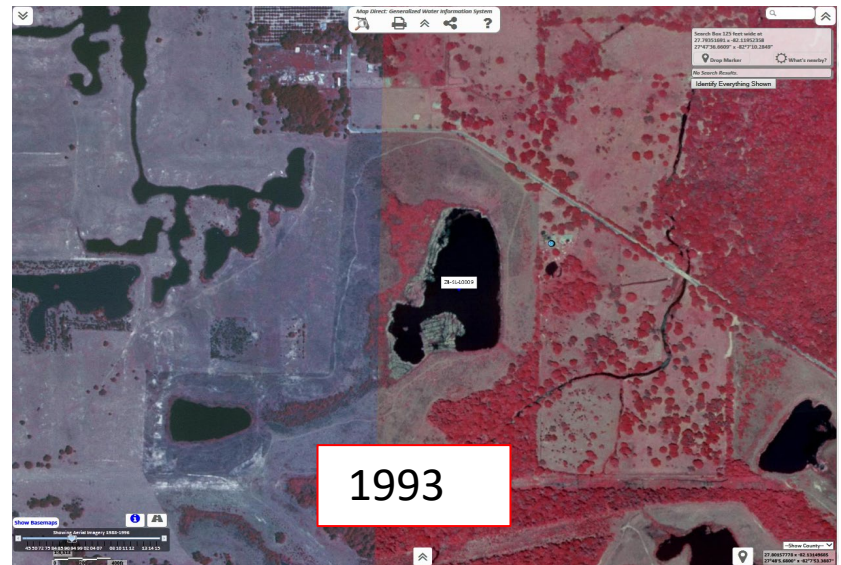
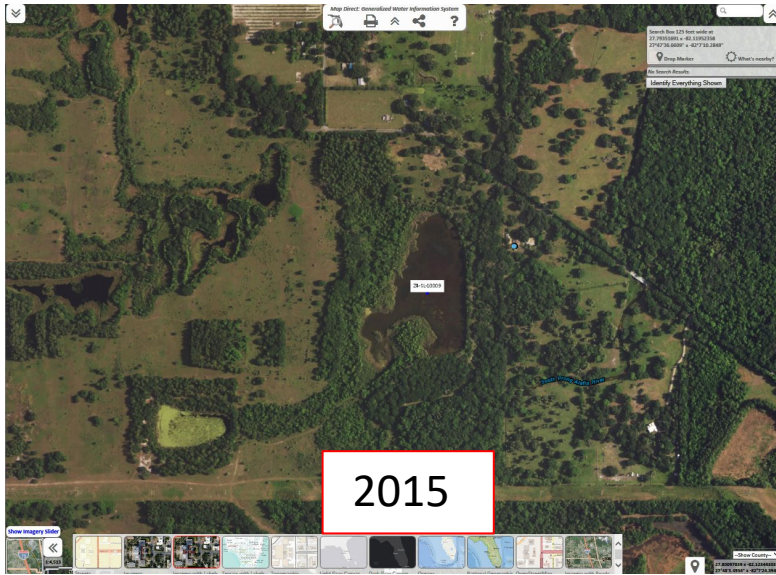


Example Resource Review

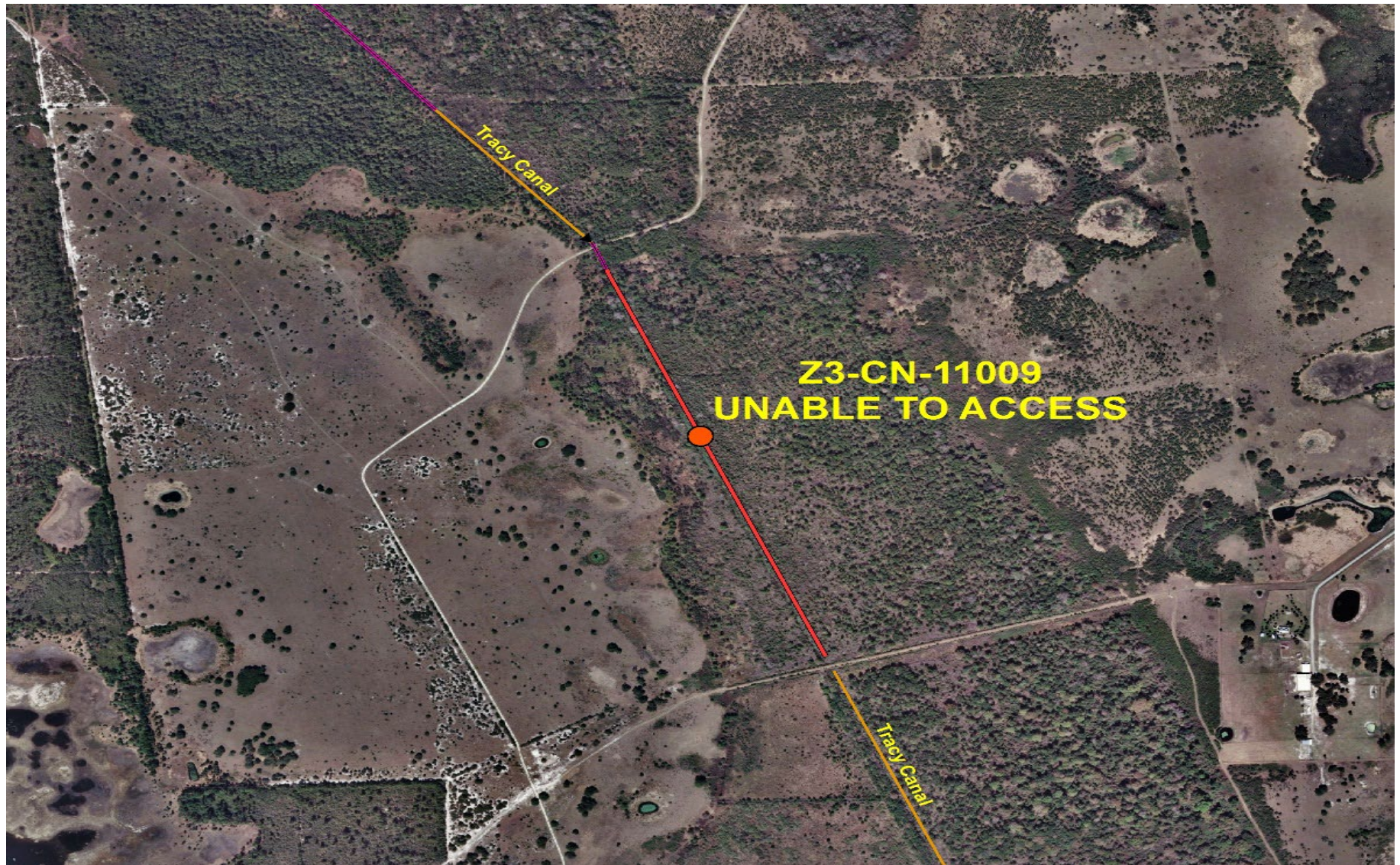
Natural or Man Made?



Review Aerial Imagery



Unable to Access



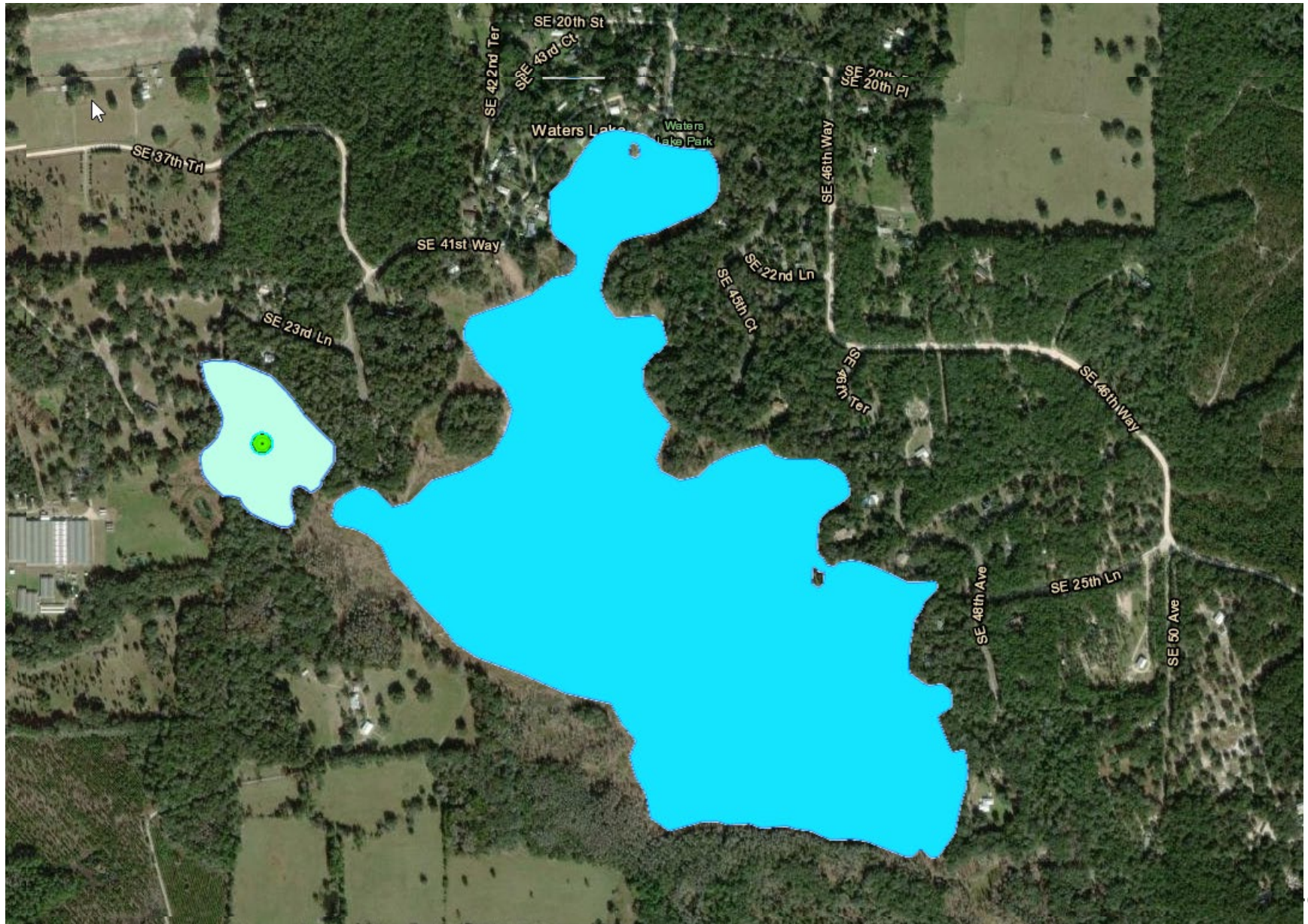
Unable to Access



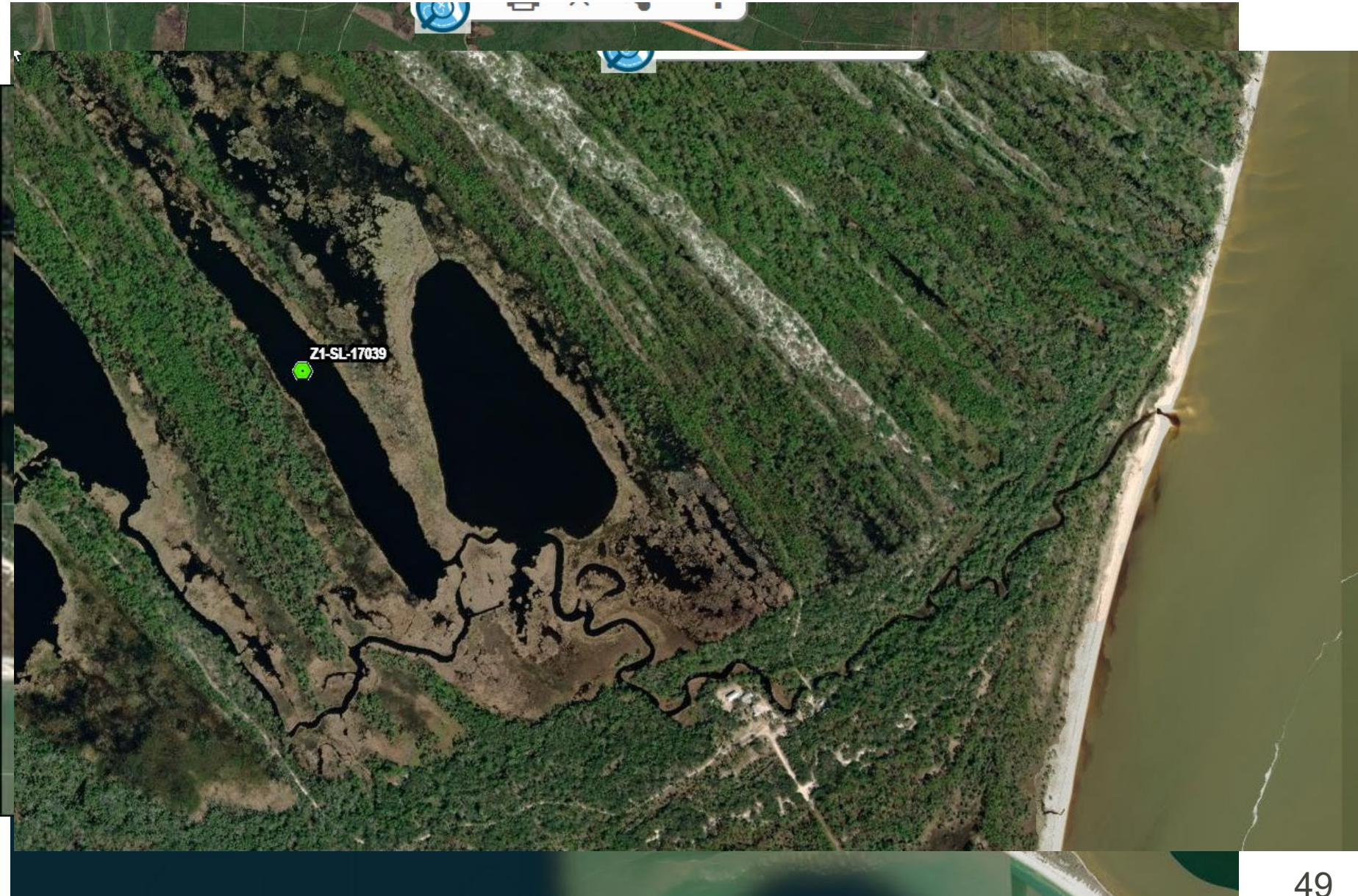
Otherwise Unsampleable



Unsure: Have a Discussion



Unsure: Have a Discussion





Minimum Station Data Requirements for a Well

STATION NAME

COUNTY

AGENCY

WATERBODY NAME

WATER RESOURCE

LATITUDE

• *LONGITUDE*

• *LOCATION METHOD*

• *LOCATIONAL DATUM*

• *CASING DIAMETER*

• *CASING MATERIAL*

• *CASING DEPTH*

• *TOTAL DEPTH*

• *ALL CONTACT
INFORMATION*

If data are unavailable or the well lacks these minimum requirements, exclude as

Otherwise Unsampleable/ Required Physical or Geological Information not Available



Recon Documentation

Enter Recon Info in GWIS Database Utilities

- 1) Ability to Sample – “CAN BE SAMPLED” Yes/No
- 2) If excluded – select Exclusion Category & Criteria and add comments:
 - Please include your initials and date.
 - Indicate how decision was made (“Office Recon” or “Field Recon”).
 - **Detailed comments on the reason why a resource is excluded.**



Recon Documentation

Additional Reminders

- Keep notes on access, ownership and sampleability.
- Submit Recon Documentation to Project Manager two weeks before the primary sampling period begins.
- Remember to add required comments for exclusions to provide feedback to Project Manager & GIS Analyst.
- Contact your Project Manager with any questions / concerns.



Recon Documentation



Home

Recon Tracking

Existing Station

New SW Station

New GW Station

Site Recon Information

PK RANDOM SAMPLE LOCATION: Z6-CN-16005

Station ID: NA

Waterbody Name:

County: HENDRY

WMD: SOUTH FLORIDA WMD

Random Latitude: 26° 26' 3.40145"

Random Longitude: 80° 56' 48.7"

Is Z6-CN-16005 sampleable?: Yes ☐ No ☒ NA ☐ (To change Exclusion Category or Exclusion Criteria, click here)

Exclusion Category: OTHERWISE UNSAMPLEABLE

Exclusion Criteria: UNSAFE SAMPLING CONDITIONS

Was Z6-CN-16005 sampled?:

Comments:

S Fischer (11/23/2021) Unable to get equipment to random sample location due to water control structure nearby (unsafe to navigate waterway)

Save

Reset

Show Map

Please provide name and recon date in comment.



Recon Documentation & Sampling Order

- Surface Water – Primary sites 1 through 15 must be evaluated first but may be sampled in any order and alternate sites are 16 through 150, are evaluated in consecutive order.
- Groundwater – Primary sites 1 through 20 must be evaluated first but may be sampled in any order and alternate sites are 21 through 200, are evaluated in consecutive order.



Public Interactions

Bring copies of the Status and Trends brochure out with you on field visits.

If you are meeting a contact out in the field, be prepared to ask questions

“keys to any access gates”, “any hazards/concerns” and “expected time to be on/off the property”.



Be courteous, and get to the point with any questions.

Be prepared to hear “NO” often.

Thank the contact for allowing access to property.



