



STATUS NETWORK RECONNAISSANCE

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Tallahassee, FL | Nov. 06, 2024



TOPICS

- Introduction.
- Process Steps.
- Exclusions.
- Documentation.
- Public Interaction.



INTRODUCTION


Status Network Reconnaissance



WATERSHED MONITORING INFORMATION CENTER

- Status Network Reconnaissance Manual.
 - Provides more detail than can be presented today.
 - Please review and become familiar with the manual.
- Review the Status Network Reconnaissance Manual
 - Updated in April 2024.

Standard Operating Procedures (SOPs) & Manuals

- 
- [Sampling Manual](#) (April 2022)
 - [Status Network Reconnaissance Manual](#) (April 2024)
 - [GWIS Database Utilities Manual](#) (June 2024)
 - [GNSS Basics Manual](#) (June 2024)
 - [Project Manager Manual](#) (June 2022)
 - [Data Management Protocols](#) (June 2024)
 - [Monitoring Design Document](#) (2024)
 - [Quality Manual](#) (January 2024)
 - [GWIS Database Data Dictionary, Version 2.0](#)
 - [Groundwater Well Definitions](#)

Sampling Schedule

- [Status Network 2024](#)
- [Trend Network, October 2023 - September 2024](#)

Data Entry Applications

- [Generalized Water Information System \(GWIS\) Database Utilities](#) (password required)

GNSS / GPS Unit Resources

Bad Elf GNSS Units

- [WMS GNSS Basics Manual for use with Bad Elf 2500 Units \(June 2024\)](#)
- [Training Exercise for Bad Elf 2500 Units \(June 2024\)](#)
- [Status Network KML Files for Navigation](#)

Trimble GNSS Units

- [GPS Basics Manual for Use with Trimble Units](#) (April 2021)
- [GNSS Training Videos](#)
- [Trimble Data Transfer Software](#)
- [Status Network Trimble Data Files for Navigation](#)
- [2024 Status Network Trimble Data Dictionary](#)

Field Sheets and Sampling Resources

Field Audits

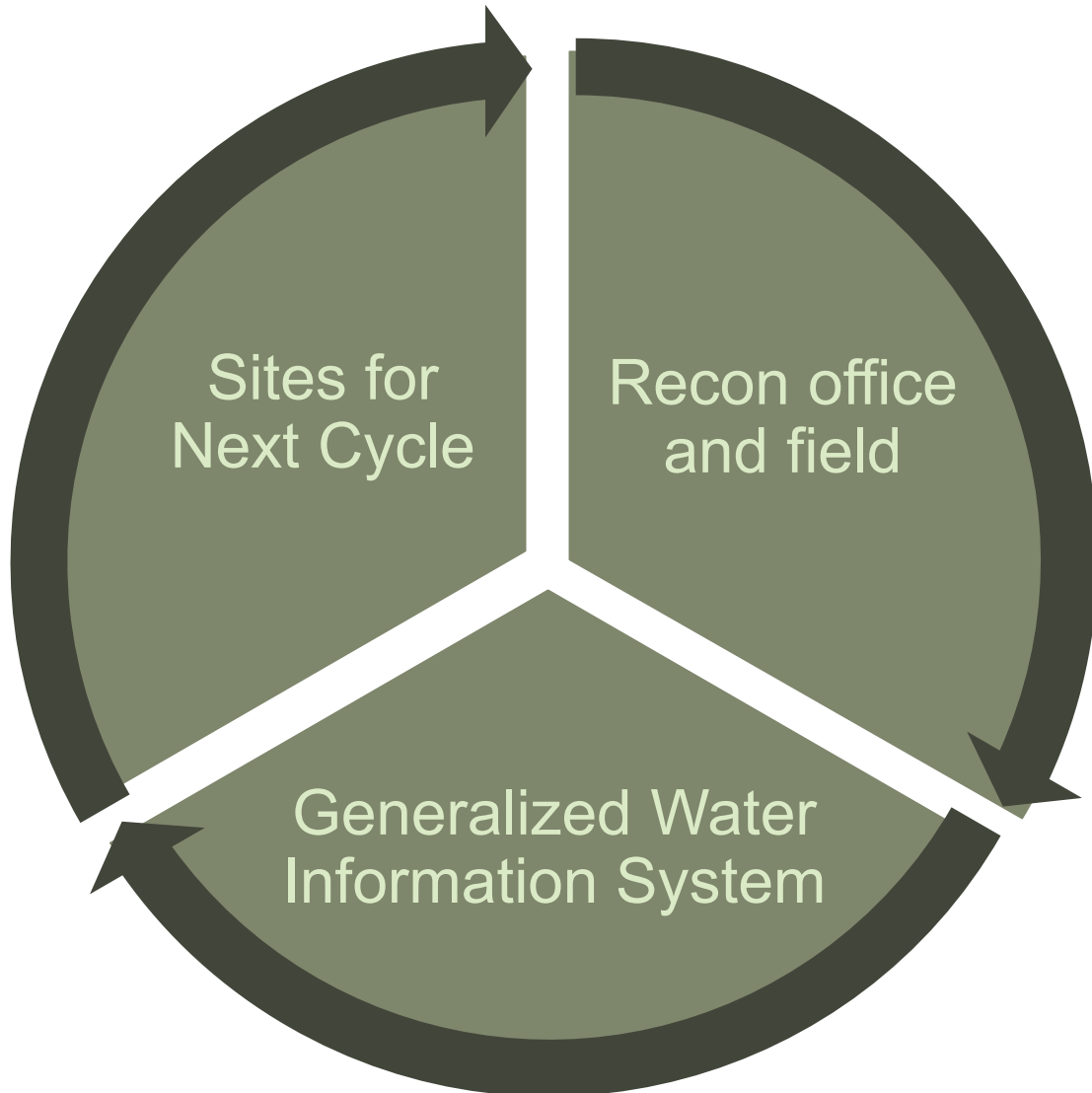
- [Field Audit Form \(October 2021\)](#)

Quality Assurance Reports

- [Quality Assurance Report Template \(October 2017\)](#)



THE RECONNAISSANCE PROCESS



Why conduct Reconnaissance (Recon)?

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

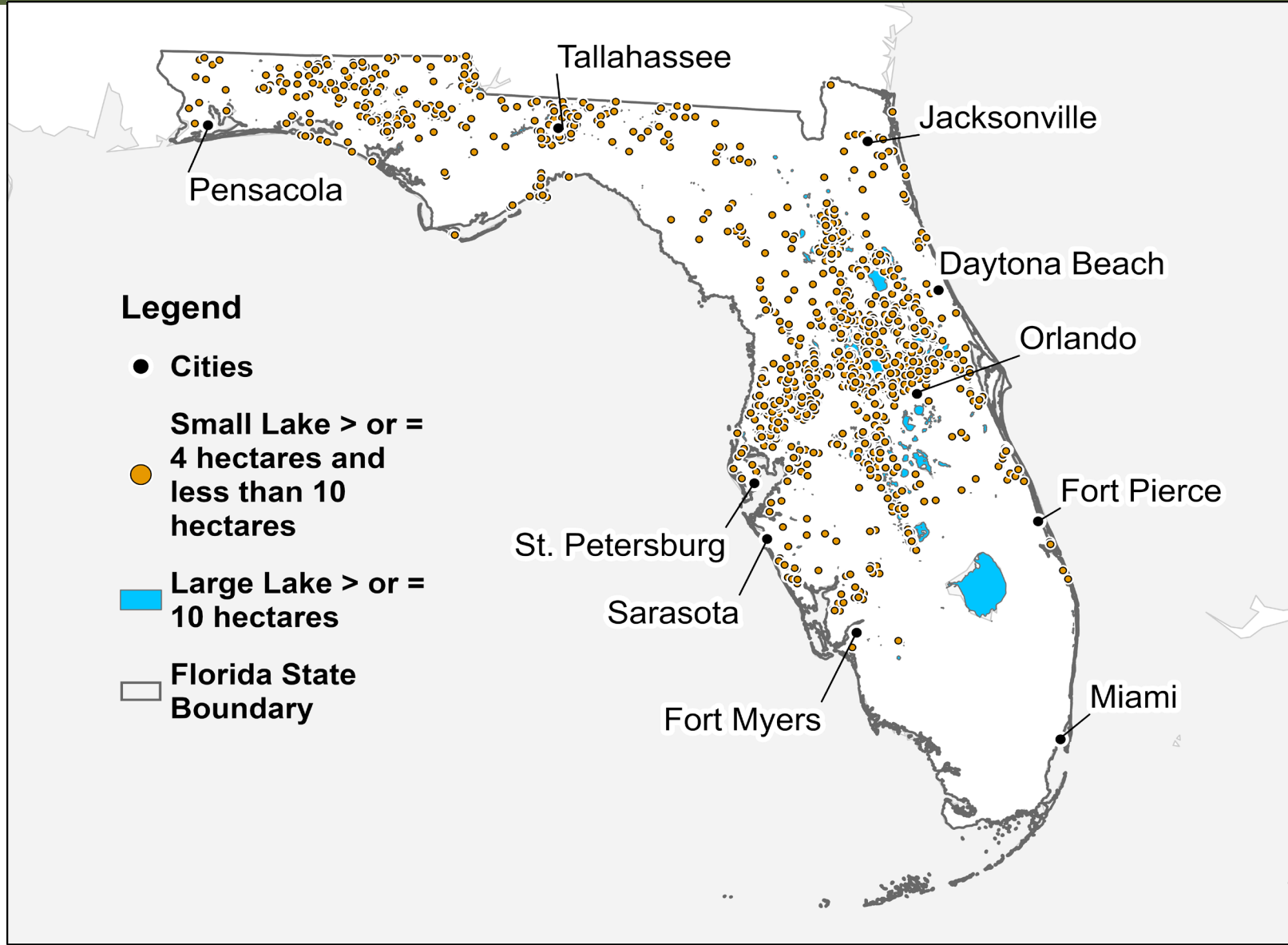


STATUS FLOWING WATERS COVERAGE



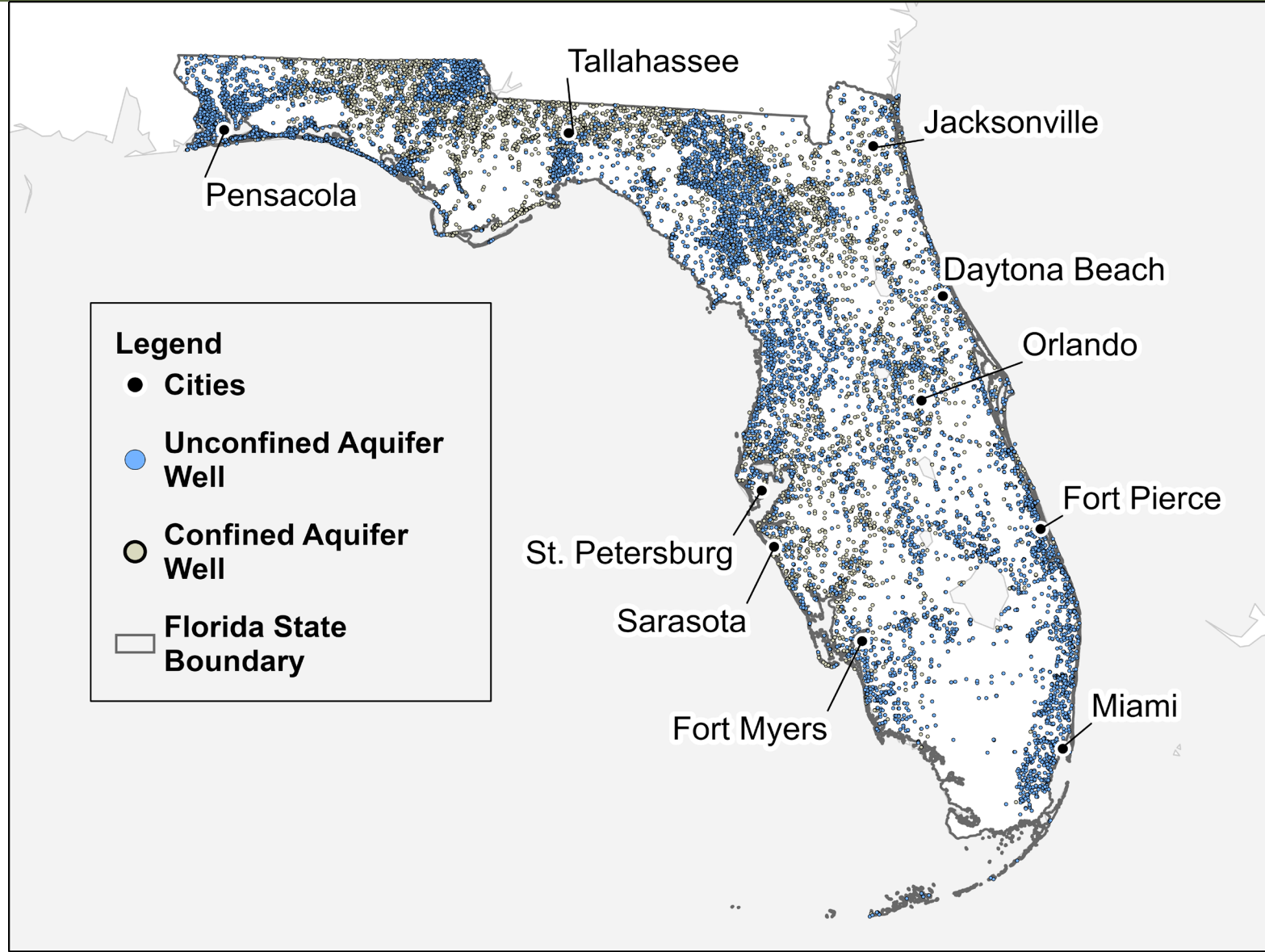


STATUS LAKES COVERAGE





STATUS WELLS COVERAGE



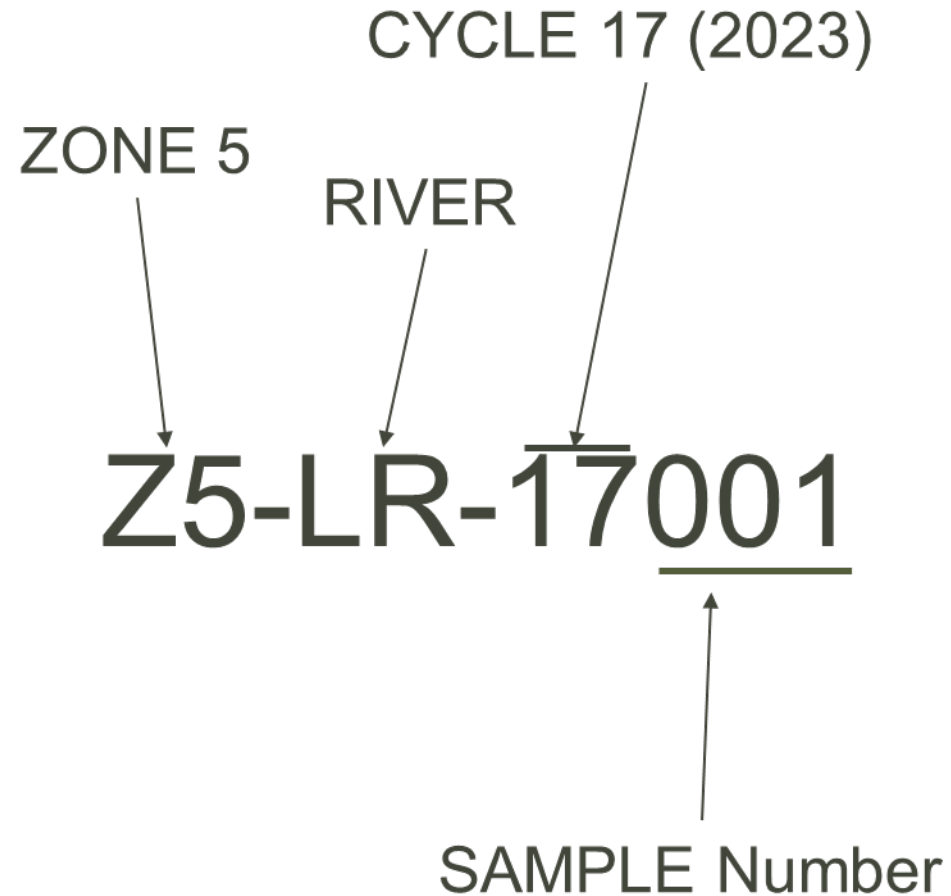
Legend

- Cities
- Unconfined Aquifer Well
- Confined Aquifer Well
- Florida State Boundary



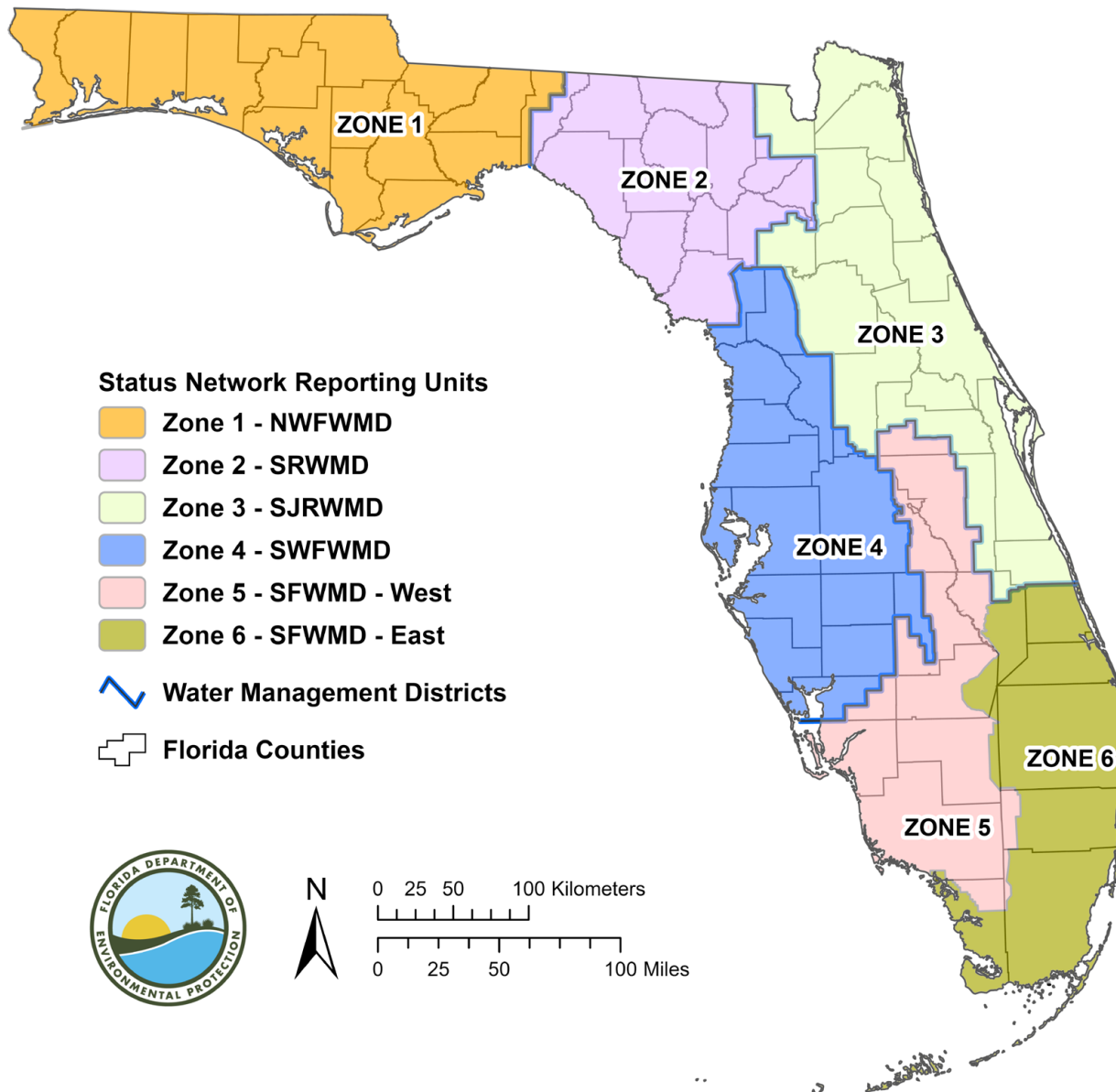
RESOURCE ACRONYMS

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





Watershed Monitoring Reporting Units





PROCESS STEPS

Status Network Reconnaissance



OFFICE RECON

- Office recon should be completed one month prior to the sampling index period.
- Get list of sites.
 - Generalized Water Information System (GWIS) Database Utilities.
- Launch Map Direct from GWIS Database Utilities to view sites.



ACCESSING GWIS DATABASE UTILITIES

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

External staff (e.g., NFWFMD).

- Tommy Adams, WMS Data Coordinator.
 - 850-245-8512.
 - 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

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

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

Key:	Sampleable	Sampled	Field Recon	Contact Owner	Excluded
Site Number	NAME	COUNTY	SAMPLED_DATE	Recon Notes	Access
Z4-SL-18001		CITRUS			
Z4-SL-18002	GLASS LAKE	HILLSBOROUGH			
Z4-SL-18003		HILLSBOROUGH		Streetview is blurry, but there should be a path. There is a lake office if neither of those work.	Option 1: 28 07 11.88, -82 30 30.65, Option 2: 28 07 04.35, -82 30 23.89, Lake Office: 28 07 04.58, -82 30 14.05
Z4-SL-18004		SARASOTA		Access off of Forbes Trail, in the Deer Prairie Creek Preserve. SWFWM key should work, if not talk to the office	27 06 28.43, -82 19 08.36
Z4-SL-18005		SUMTER		WETLAND	
Z4-SL-18006		PASCO		Point appears to be dry? Lake has been shrinking over time and as of June 2023 the point appears to be located in a dry	
Z4-SL-18007		HILLSBOROUGH		Contact Lakeview at Citrus Park. There is a sidewalk leading to a dock (long way to carry canoes) and possibly a spot at the end of a roundabout, depending on vegetation thickness	
Z4-SL-18008	LAKE CHILTON	HIGHLANDS		Easy access off of N Priestler Rd.	28 37 59.45, -81 33 27.64
Z4-SL-18009		PASCO		Might be able to drive behind construction site to access. If not, will	
Z4-SL-18010	EAST LAKE ELLIS	PASCO		Access from parking lot of Ukelele Brand's. Might need to talk to an	4805 Land O' Lakes Blvd Land O' Lakes, FL 34639
Z4-SL-18011	CRYSTAL LAKE	POLK		Should be able to access off the side of Hwy 27, behind billboard	28 09 36.75, -81 38 25.29
Z4-SL-18012		POLK		WETLAND	
Z4-SL-18013	MILLS SMOKEHOUSE POND	HERNANDO		Might just be a wetland, contact owner	
Z4-SL-18014		PASCO		WETLAND	
Z4-SL-18015	LAKE SILVER	HILLSBOROUGH		Mostly houses, some businesses. May be able to access behind Midflorida Credit Union	
Z4-SL-18016		HIGHLANDS		Private, will need to contact homeowners	
Z4-SL-18017	LITTLE CLEARWATER LAKE	MARION		Deep in agricultural property, will need to contact	
Z4-SL-18018		PASCO		Deep in Starkey, but should be able to access through trails. Should contact park to be sure.	
Z4-SL-18019	LAKE WASTENA	HILLSBOROUGH		Only private access, contact	
Z4-SL-18020		SARASOTA		In the Lincer Preserve. Looks very difficult to access, probably requires offroading. May be able to access off of Border Road. In the floodzone of Myakka River so do not do right after heavy rains.	Boarder Road Entrance: 27 07 21.39, -82 20 34.00 Possible Trail?: 27 07 21.37, -82 19 32.06
Z4-SL-18021	BIRD ISLAND LAKES	PASCO		DRY AS A BONE	
Z4-SL-18022	COOL KELL LAKE	HILLSBOROUGH		Accessible behind stormwater pond	28 09 57.86, -82 27 02.09
Z4-SL-18023		HERNANDO		Looks like a wetland	
Z4-SL-18024		POLK		Private, will need to contact homeowners	

- Open comma-separated values (CSV) file with Excel.
- Document recon progress.
- Project manager will review your comments and exclusions.



TEAMWORK

- You may be part of a recon team for a specific resource.
 - Communicate with each team member.
 - Track completion of assigned tasks.
 - Work efficiently.



STATUS NETWORK RECON

- Presents unique challenges for site access logistics and obtaining permission from property owners.
 - Sites often have not been previously visited.
 - Sites are only sampled once.



OFFICE RECON FOR SURFACE WATER

Target
Population?

Site Accessible?

Site Wet?

Owner
contacted?

Owner gave
permission to
access site?

If **no** to any question, then
complete GWIS
exclusions/comments.

Go to the site.



OFFICE RECON FOR GROUNDWATER

Target
Population?

Well Accessible?

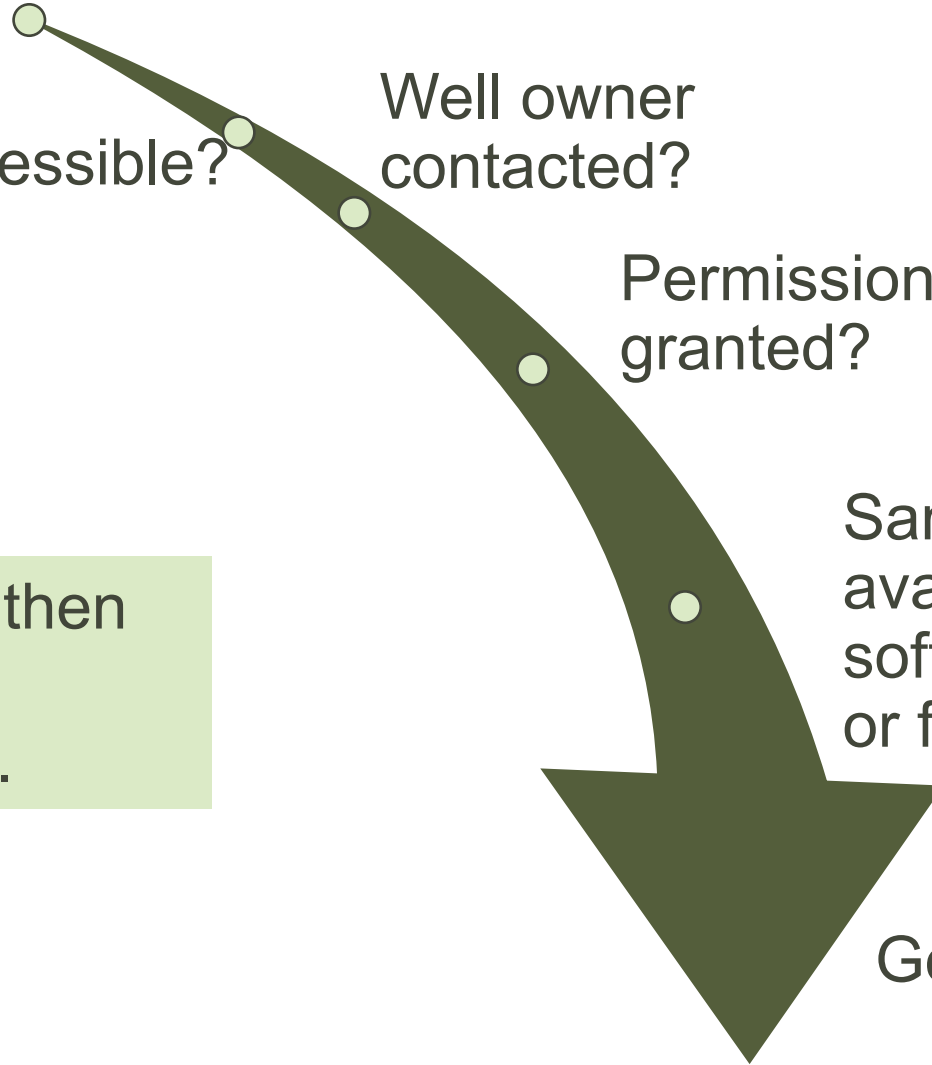
Well owner
contacted?

Permission
granted?

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

If **no** to any question, then
complete GWIS
exclusions/comments.

Go to the site!





STATUS NETWORK RECON

FIND YOUR SITE AND ITS OWNER

- Open Map Direct from GWIS Database Utilities.
 - Previously sampled sites.
 - Cadastral layer.
 - Property owner information.
- Search for property owner contact information.
 - Spokeo.
 - Sunbiz.
 - Internet search.
 - Large landowners.



RECON WITH MAP DIRECT

Navigation menu:

- 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

Cadastral layer contains property owner information.

The screenshot displays the Map Direct: Generalized Water Information System interface. The central map shows an aerial view of a property with a cyan cadastral boundary. A red circle highlights the 'Cadastral Property Appraiser Parcels - Cadastral 2020' layer in the legend on the left. The right-hand panel provides detailed information for the selected parcel.

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

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

Nearby Zoom Pan Remove

--Show County--

Map Direct: Generalized Water Information System

County Road 470

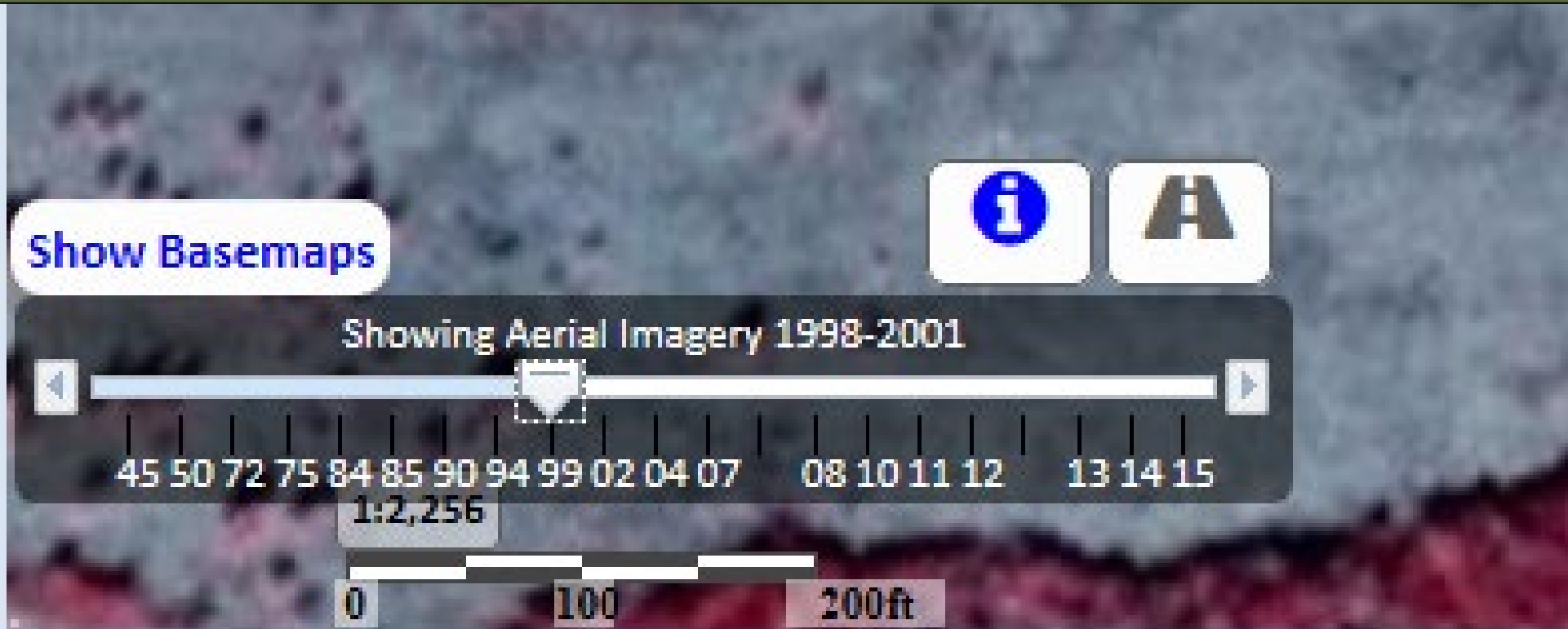
Z3-CA-15016

1:9,027

0 300 600ft



RECON WITH MAP DIRECT



Use imagery slider to review available historic aerial photo layers.





MAP DIRECT HELP PAGES

Click “What’s New” to find out what is updated in Map Direct.

Map Direct: Generalized Water Information System

Click the “?” icon.

Help and Contact

 **Florida Department of Environmental Protection**  Map Direct v7.210311

[More Information about Generalized Water Information System \(GWIS\) Map](#)

Click links below to open help documents.

- [What's New?](#) [PDF]
- [Quick Start Guide](#) [PDF]
- [Guide to Navigation](#) [PDF]
- [Guide to Searching](#) [PDF]
- [Guide to Search Results](#) [PDF]
- [Guide to Map Layers](#) [PDF]
- [Guide to Sharing & Printing](#) [PDF]
- [Guide to the Area of Interest Report](#) [PDF]
- [Guide to Drawing](#) [PDF]

Visit Us at [Florida Department of Environmental Protection](#)
[Map Direct Disclaimer](#) | Powered by [ESRI](#) | [Data Download Website](#)
[Contact Us](#)

Click on this link to view ArcGIS online page regarding GWIS Focus.



WATERSHED MONITORING INFORMATION CENTER

- Map Direct resources.
- Custom files for Status Network Recon.
- Learn and customize Map Direct handout.



ADDITIONAL RECON RESOURCES

A screenshot of the "Aerial Photography: Florida" website. The header includes the UF logo and "George A Smathers Libraries". Below the header is a navigation bar with "HOME", "MAP SEARCH", "VIEW ITEMS", and "HELP". The main content area features a search bar with the placeholder text "Enter address (i.e., 12 Main Street, Gainesville Florida)" and a "FIND ADDRESS" button. Below the search bar is a map of Florida with two callout boxes: "PRESS TO SELECT AREA" and "PRESS TO SELECT POINT". The map shows major cities like New Orleans, Mobile, Pensacola, Panama City Beach, Tallahassee, Jacksonville, Montgomery, Columbus, and Savannah. The states of Louisiana and Georgia are also labeled.

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



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, U.S. Geological Survey, wastewater treatment and/or water treatment facilities.
- Review Recon Manual: Appendix B: Aquifers and Ground Water Programs.



STATUS NETWORK RECON

FIND YOUR SITE AND ITS OWNER

- Open Map Direct from GWIS Database Utilities.
 - Previously sampled sites.
 - Cadastral layer.
 - Property owner information.
- Search for property owner contact information.
 - Spokeo.
 - Sunbiz.
 - Internet search.
 - Large landowners.



PROPERTY OWNER INFORMATION

SPOKEO

- Provides past phone numbers, addresses and relatives' names.
- Please contact Ken Weaver for access and username.
 - Kenneth.Weaver@FloridaDEP.gov
 - 850-245-7609.
- DEP pays per search to use this service.



PROPERTY OWNER INFORMATION

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



PROPERTY OWNER INFORMATION

SPOKEO

Will need to
refine searches.

The screenshot shows the Spokeo search results for 'John Smith'. On the left, there is a list of states with the number of records for each: Alabama (3704), Alaska (404), Arizona (3423), Arkansas (2158), California (17576), Colorado (3031), Connecticut (2493), Delaware (754), District of Columbia (655), and Florida (13549). A 'SHOW ALL 52 LOCATIONS' button is at the bottom of this list. On the right, the search results are refined to show three individuals:

- 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 INFORMATION

SPOKEO



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 INFORMATION

SUNBIZ

- State of Florida official business entity index and commercial activity website.
- Look up Limited Liability Companies (LLCs) and other business entities often used by large landowners.

<https://dos.myflorida.com/sunbiz/search/>



PROPERTY OWNER INFORMATION

SUNBIZ

Lakeland Sands, LLC.

- Large Landowner.
- Owner is Bill Gates.
- Sunbiz shows a lawyer (ESQ) as the LLC contact.

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 STMNT 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



PROPERTY OWNER INFORMATION

LARGE LANDOWNERS

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



OFFICE RECON FOR SURFACE WATER

Target
Population?

Site Accessible?

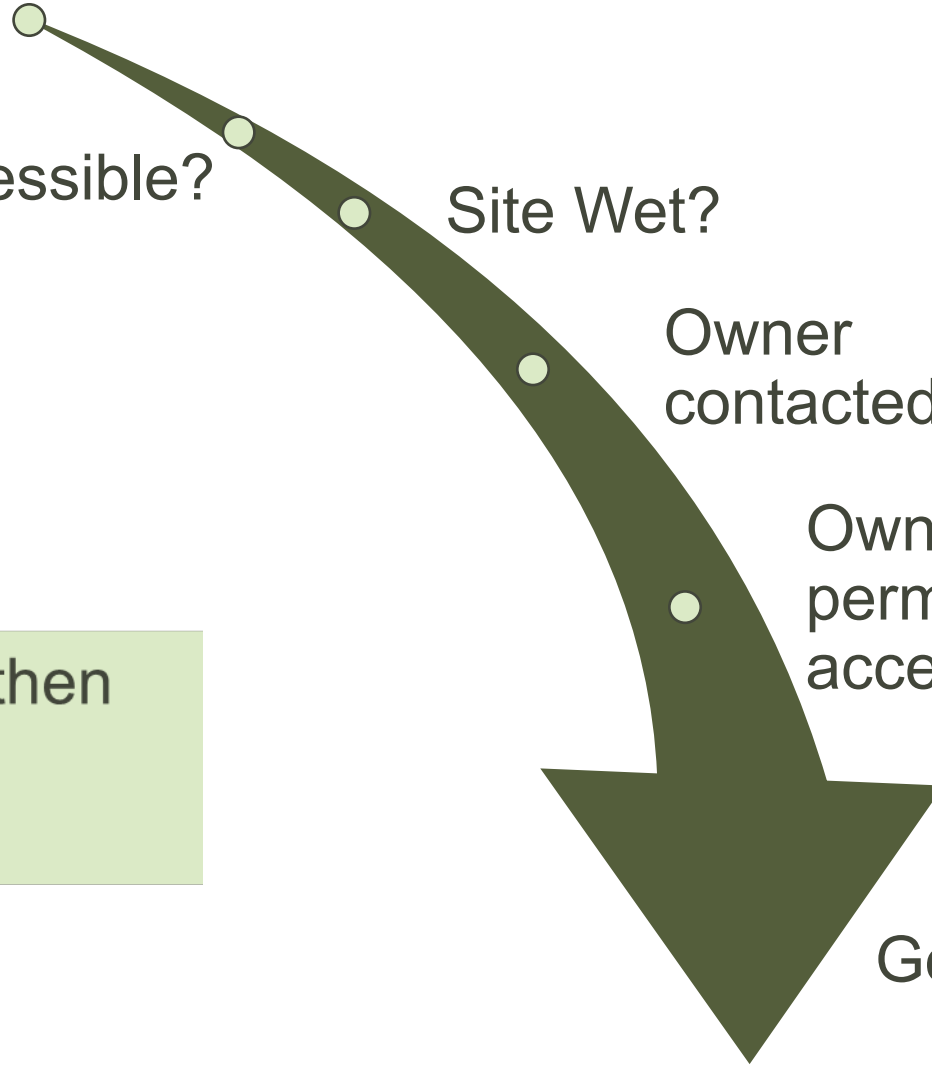
Site Wet?

Owner
contacted?

Owner gave
permission to
access site?

If no to any question, then
complete GWIS
exclusions/comments.

Go to the site!





OFFICE RECON FOR GROUNDWATER

Target
Population?

Well Accessible?

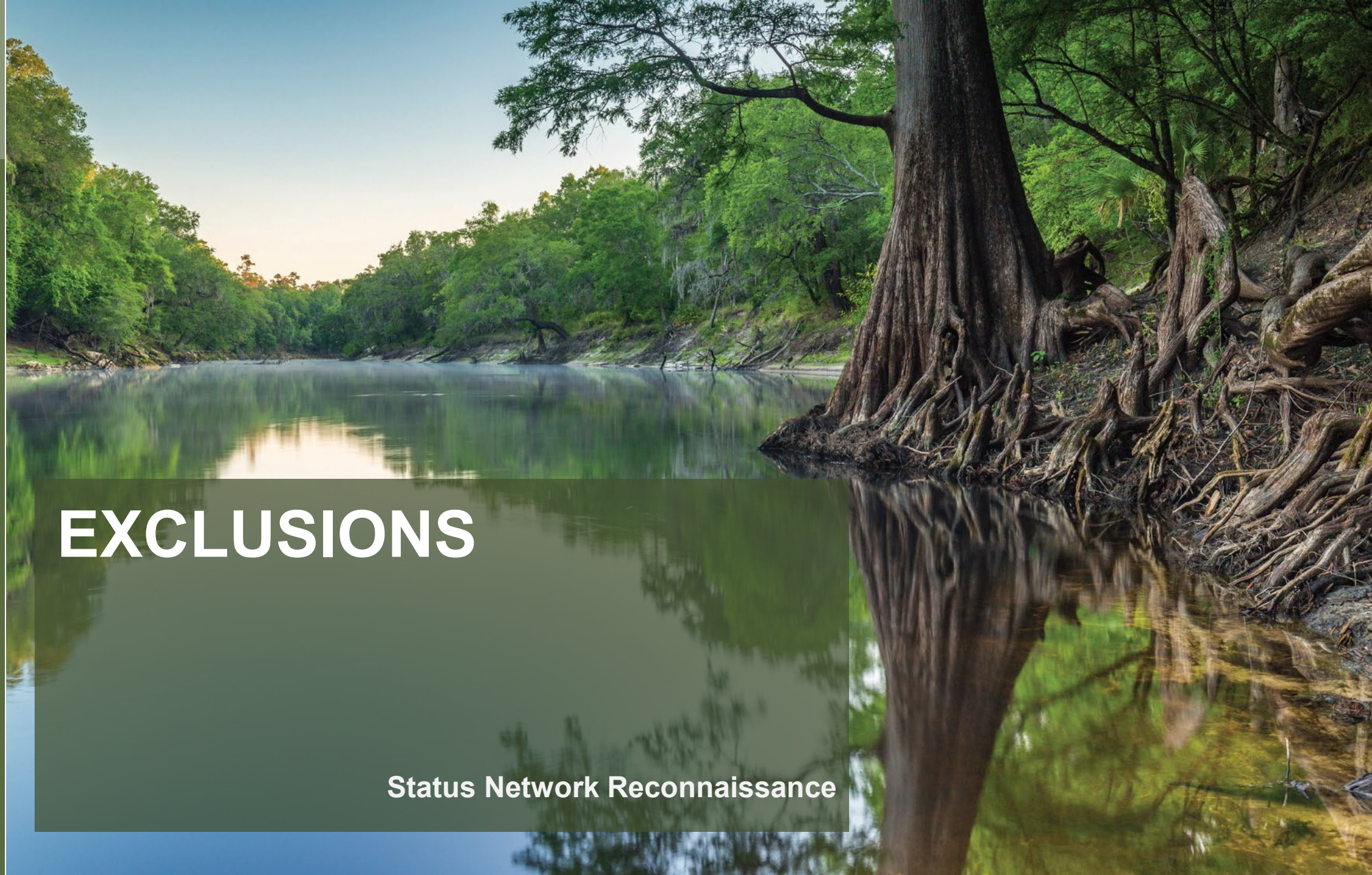
Well owner
contacted?

Permission
granted?

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

If no to any question, then
complete GWIS
exclusions/comments.

Go to the site!



EXCLUSIONS

Status Network Reconnaissance



EXCLUSION CATEGORIES

RANKED BY IMPORTANCE

- **Wrong Resource**
 - Highest priority.
 - Likely not available for selection in future cycles.
 - For anything deemed not a water of the state, contact your manager.
- **Otherwise Unsampleable.**
 - Depends on comments and exclusion criteria.
- **No Permission From Owner.**
 - Likely to be included in next cycle.
- **Unable to Access.**
 - Likely to be included in the next cycle.
- **Dry**
 - Likely to be included in the next cycle.



EXAMPLE WRONG RESOURCE





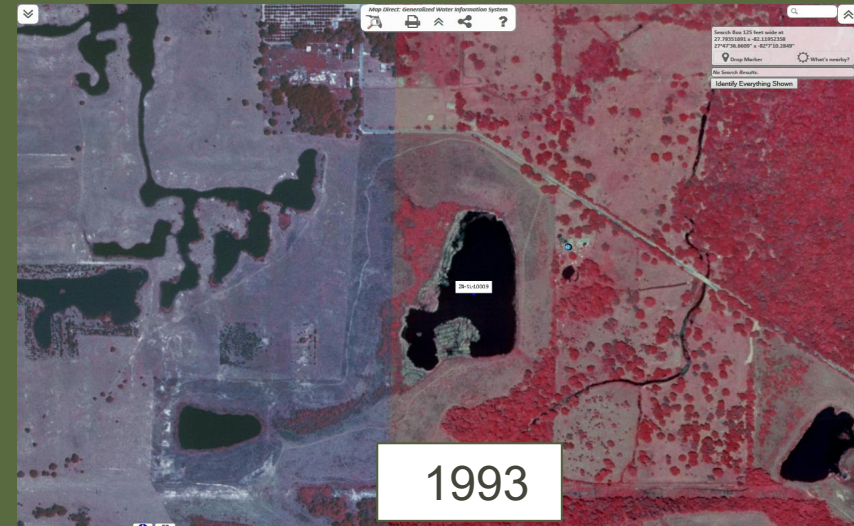
EXAMPLE

NATURAL OR MAN MADE



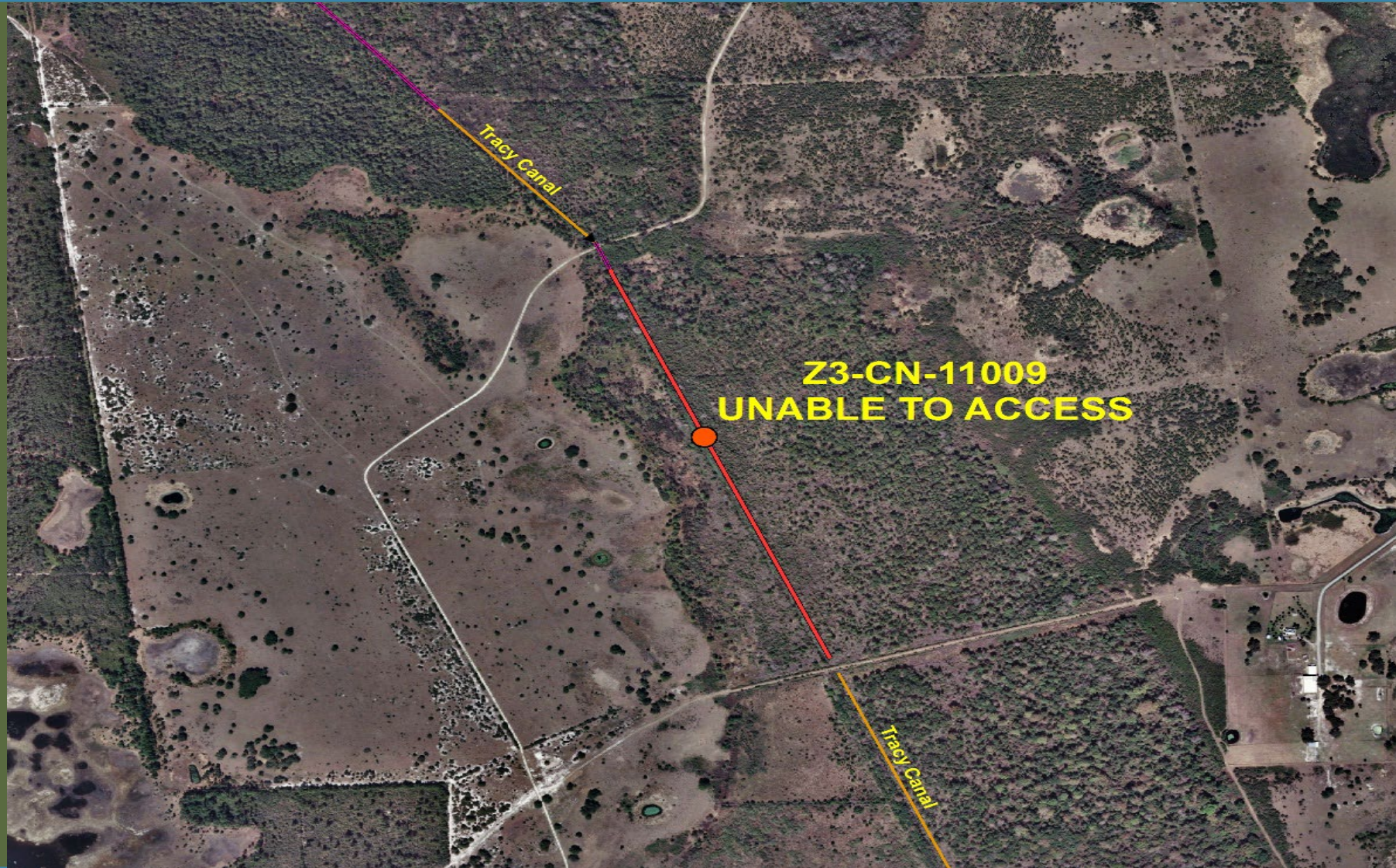


EXAMPLE REVIEW AERIAL IMAGERY



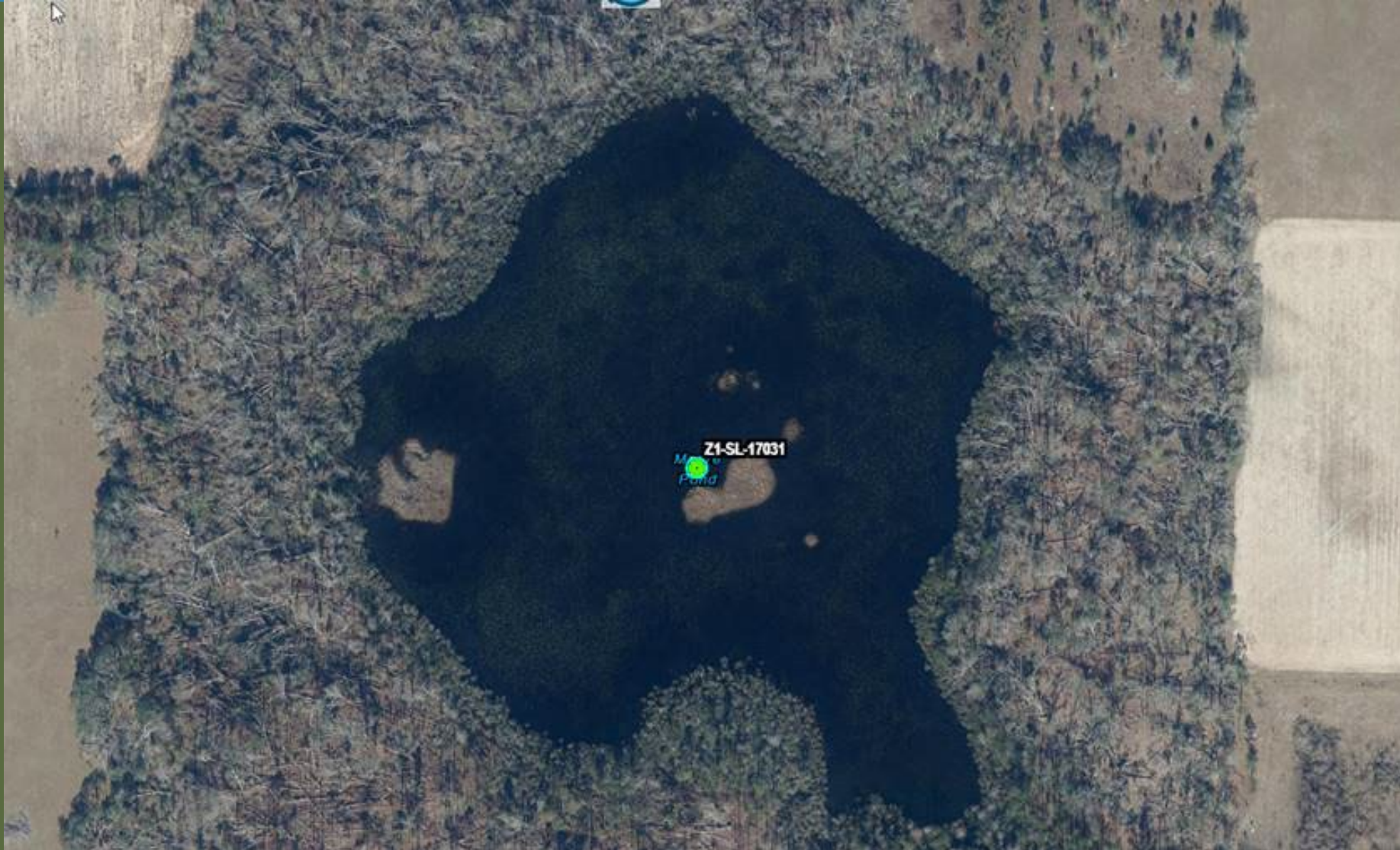


EXAMPLE UNABLE TO ACCESS





EXAMPLE UNABLE TO ACCESS





EXAMPLE OTHERWISE UNSAMPLEABLE



Z3-CN-11016
OTHERWISE UNSAMPLEABLE

Photo source: Solent News.

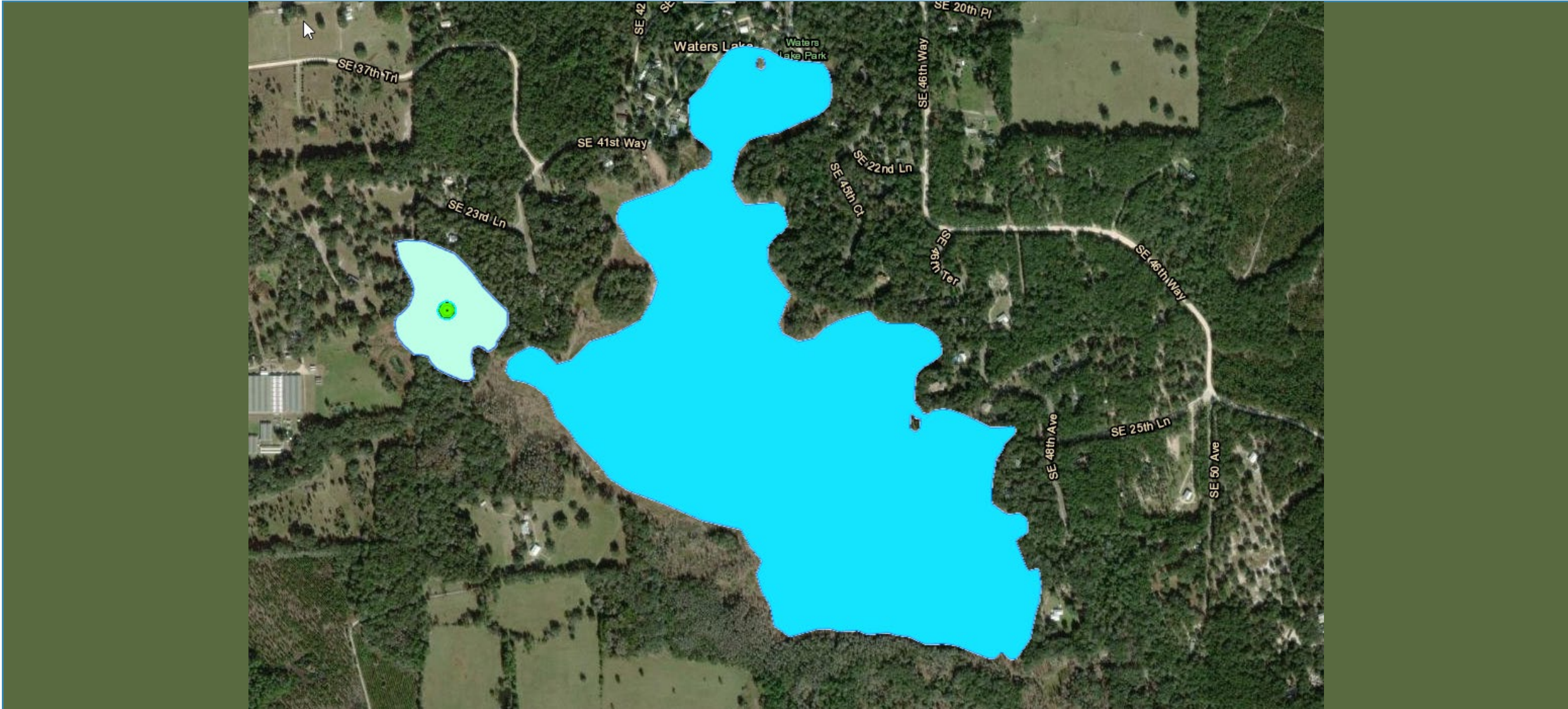


EXAMPLE UNSURE





EXAMPLE UNSURE





EXAMPLE UNSURE



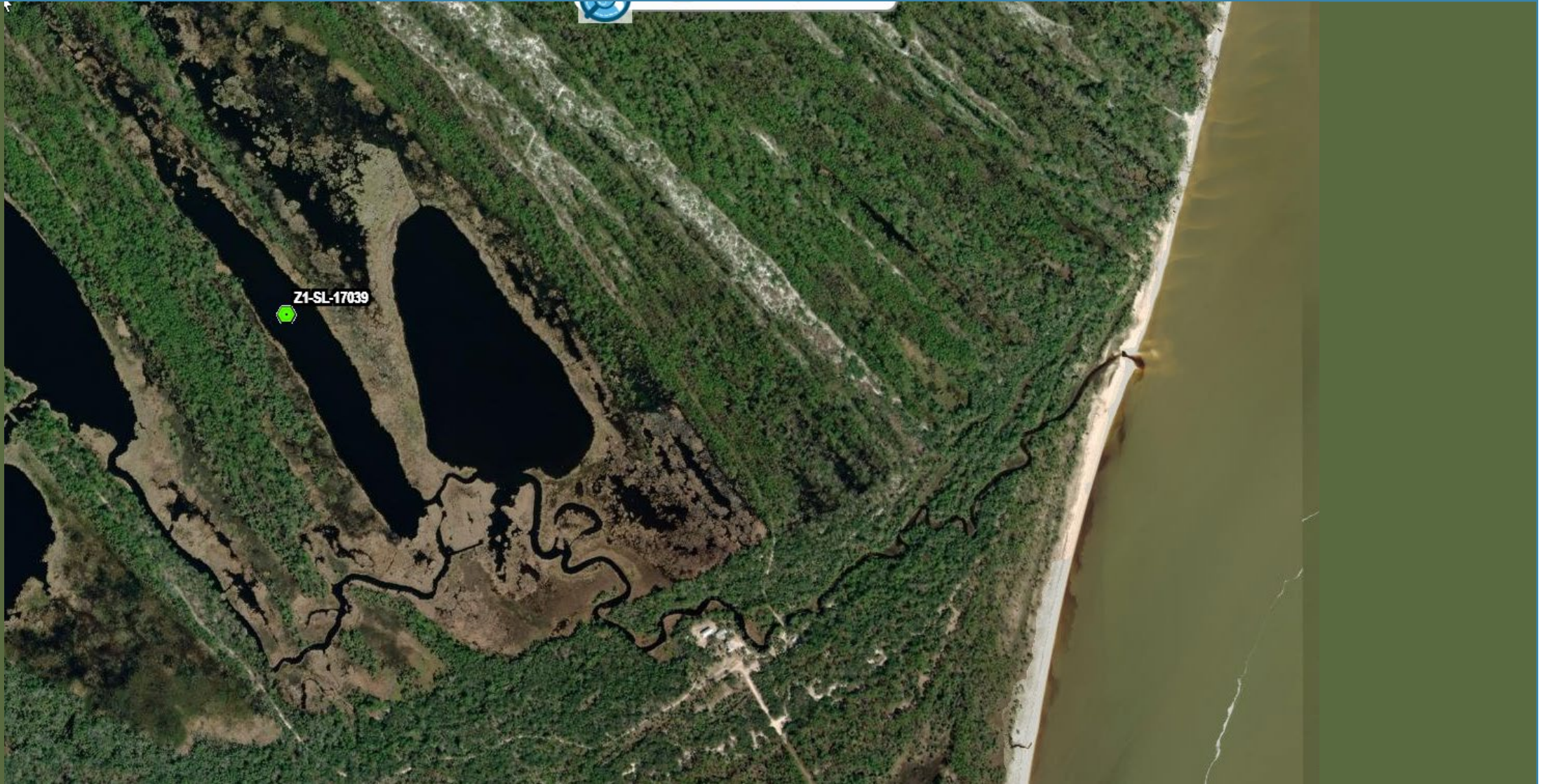


EXAMPLE UNSURE





EXAMPLE UNSURE





MINIMUM STATION DATA REQUIRED FOR A WELL

If data are unavailable or the well lacks these minimum requirements, exclude as Otherwise Unsampleable/Required Physical or Geological Information Not Available.

- 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.



DOCUMENTATION

Status Network Reconnaissance



RECON DOCUMENTATION

ENTER RECON INFO INTO GWIS DATABASE UTILITIES

- Ability to sample.
 - “CAN BE SAMPLED”, yes or no.
- If excluded.
 - Select Exclusion Category and Criteria.
 - Add Detailed Comments.
 - Include initials and date.
 - Indicate how decision was made.
 - Office or field recon.
 - 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 and GIS analyst.
- Contact your project manager with any questions or concerns.



RECON DOCUMENTATION

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, p

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) ↵

Please provide name and recon date in comment.



RECON DOCUMENTATION

SAMPLING ORDER

- Primary sites must be evaluated first.
 - Sampled in any order.
 - Surface Water 1 – 15.
 - Groundwater 1 – 20.
- Alternate sites must be evaluated in consecutive order.
 - Sampled in any order, but no gaps in evaluation.
 - Surface Water 16 – 150.
 - Groundwater 16 – 200.



PUBLIC INTERACTION

Status Network Reconnaissance



PUBLIC INTERACTIONS

- Bring copies of the Status and Trend brochure with you on field visits.
 - Recon and sampling.
- Be prepared to ask questions when meeting a contact.
 - Keys to access gates.
 - Hazards/concerns.
 - Expected time on/off property.
- Be courteous and get to the point with any questions.
- Be prepared to hear “no.”
- Always thank the contact for allowing access to property.



THANK YOU

Lana Kolonay

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Contact Information:

850-245-8321

Lana.Kolonay@FloridaDEP.gov

