MAP DIRECT PRACTICE EXERCISE

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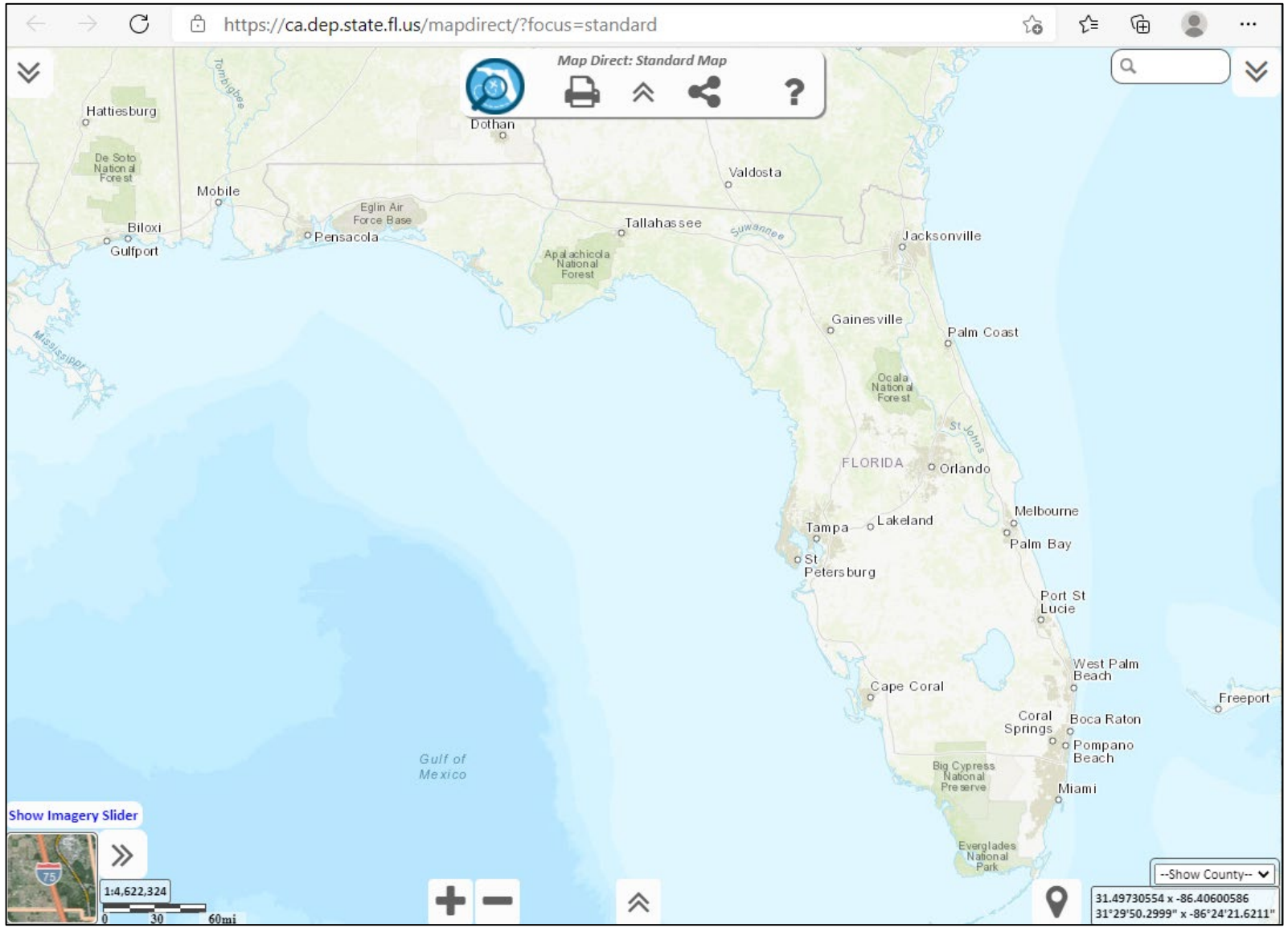
PRESENTATION OVERVIEW

- What is Map Direct?
- Open Map Direct from Generalized Water Information System (GWIS) Database Utilities.
- Display Status Network Sites on a Map.
- Explore Map Direct Interface.
- Explore Commonly Used Recon Tools.
- Save and Load Maps in Map Direct.
- Other Resources to Assist Your Recon.

WHAT IS MAP DIRECT?



Map Direct is an in-house developed, web-based, graphical mapping tool designed to assist users with data visualization and analysis.

WHAT CAN MAP DIRECT DO?

- Quickly display layers (no special software needed).
- Filter lists of features.
- Create customizable maps, export and save maps.
- Add layers from other online sources to map.
- Perform “what’s nearby” searches of other layers.
- Perform searches within polygon layers or buffer searches around a selected feature.

(See links provided at end of presentation for additional Map Direct tutorials.)

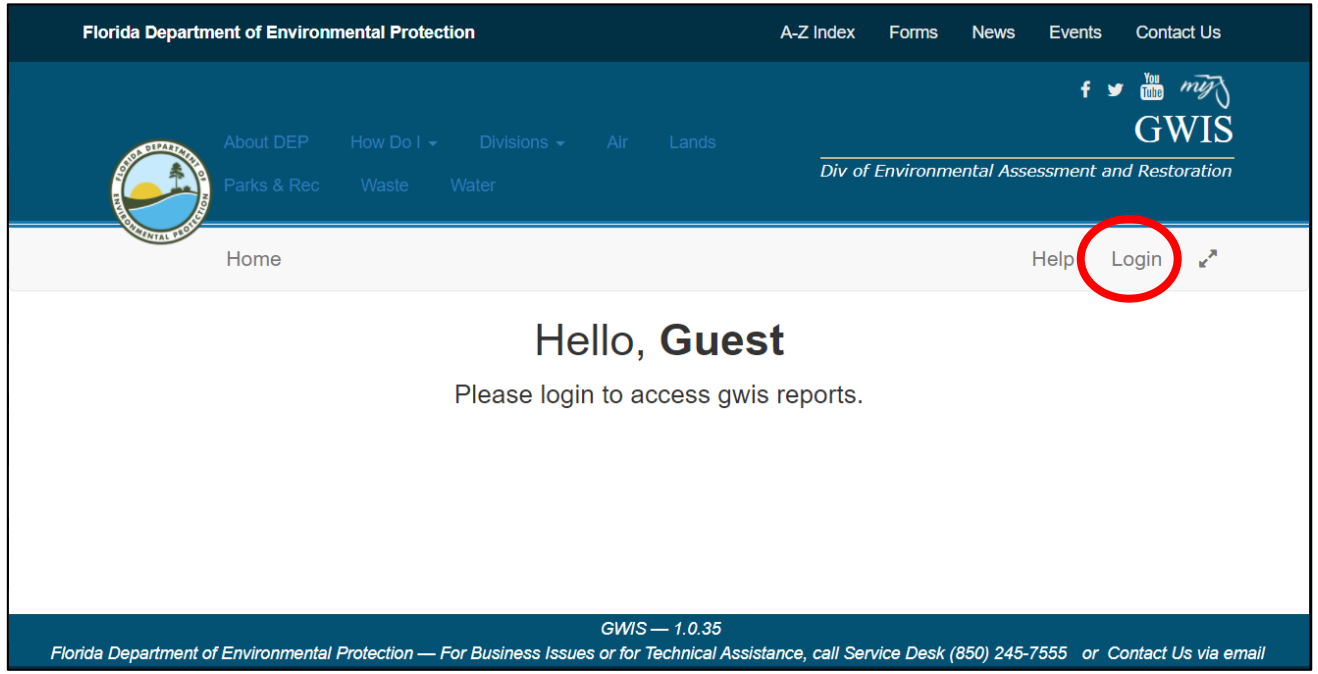
LIMITATIONS OF MAP DIRECT

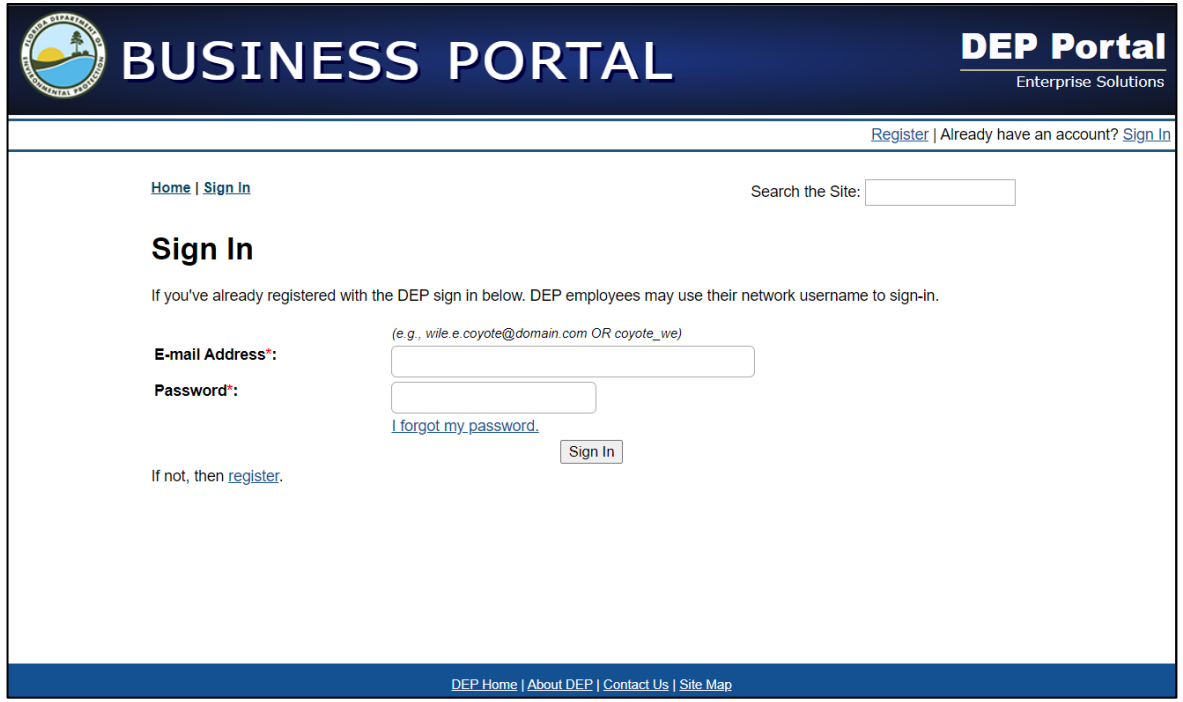
- Cannot perform advanced Geographic Information System (GIS) analyses.
- Cannot change symbology of layers.
- Cannot edit layers within the map.
- Limited support for adding offline data.
- Limited functionality on mobile devices.

PRACTICE EXERCISE:

ACCESS GWIS DATABASE UTILITIES

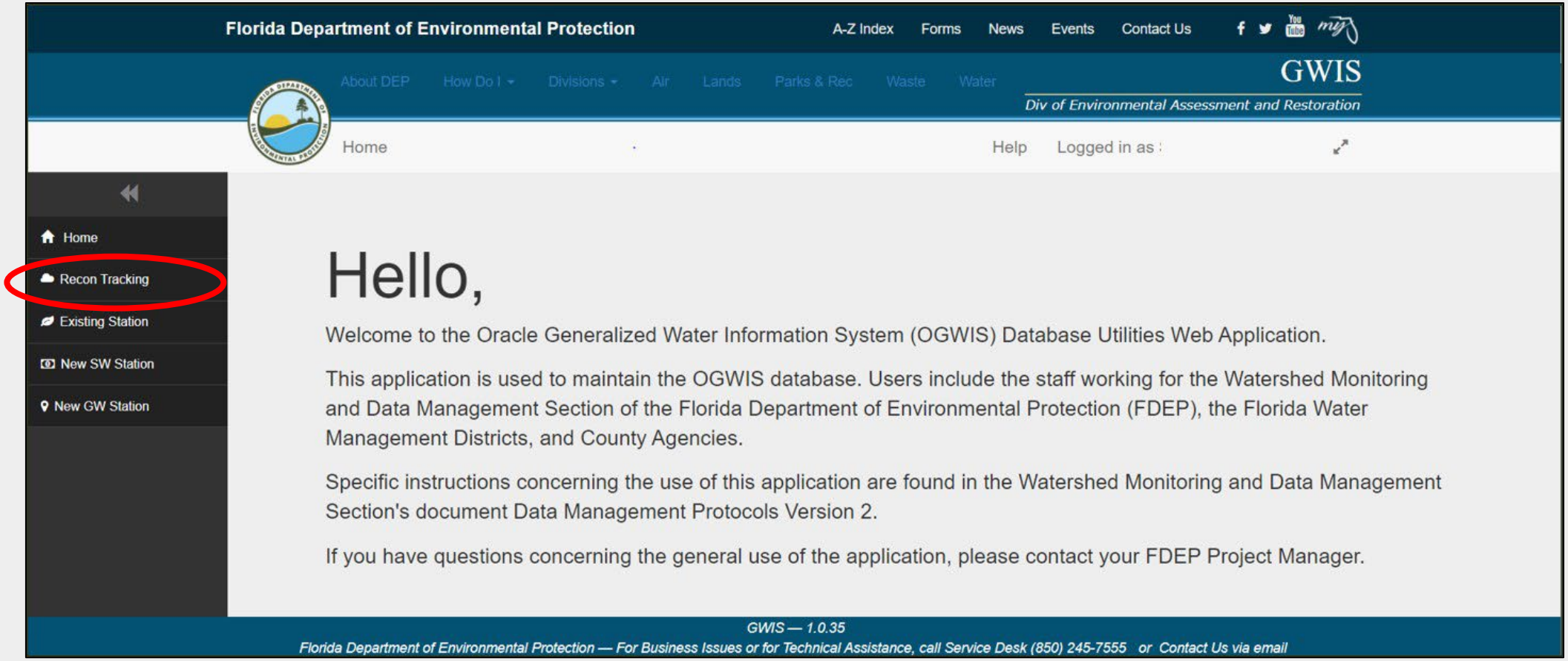
https://prodapps.dep.state.fl.us/gwis/





PRACTICE EXERCISE

Click on Recon Tracking.



PRACTICE EXERCISE

Enter Recon Tracking Search Criteria

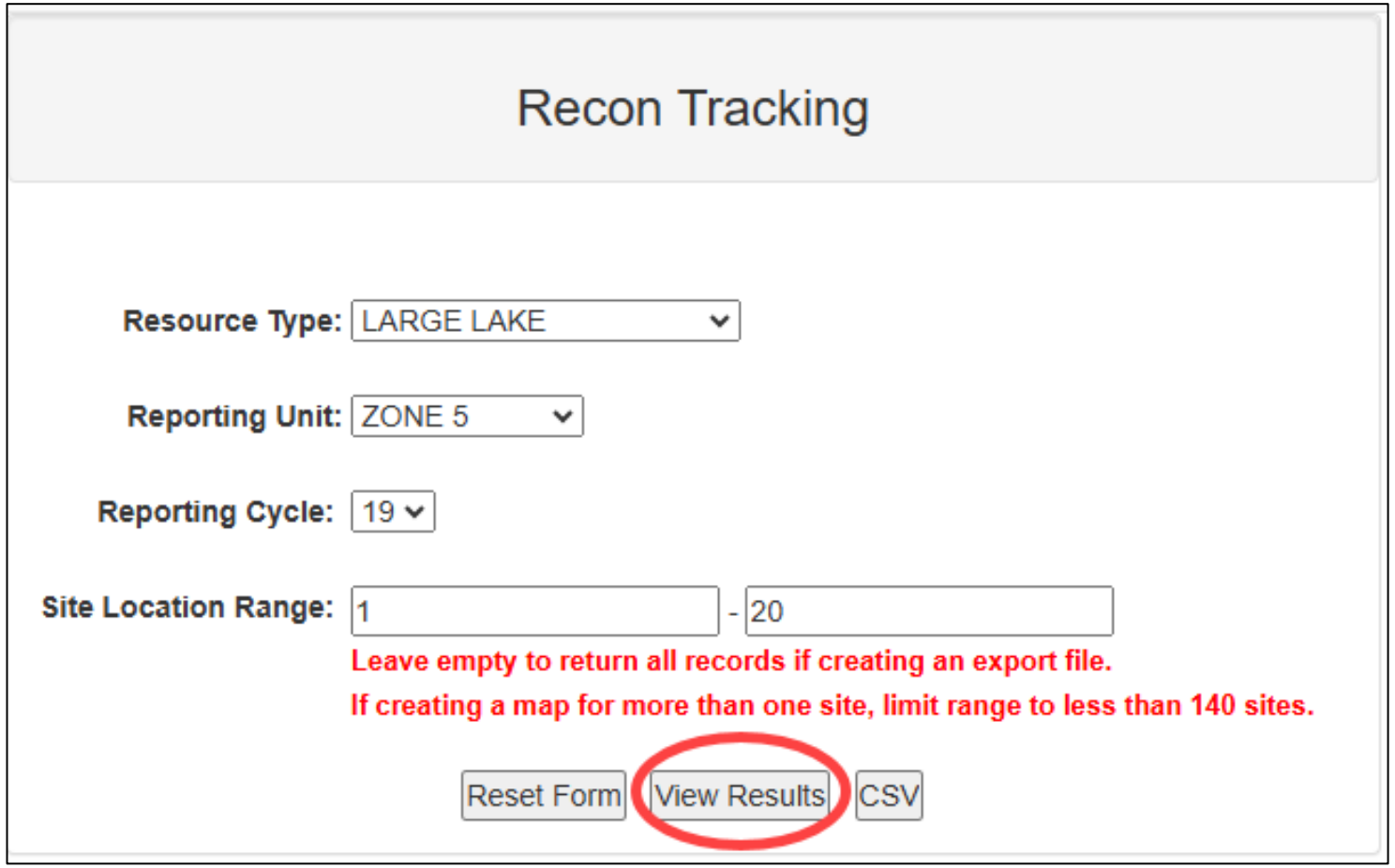
Resource Type = Large Lake

Reporting Unit = Zone 5

Reporting Cycle = 19 (2025)

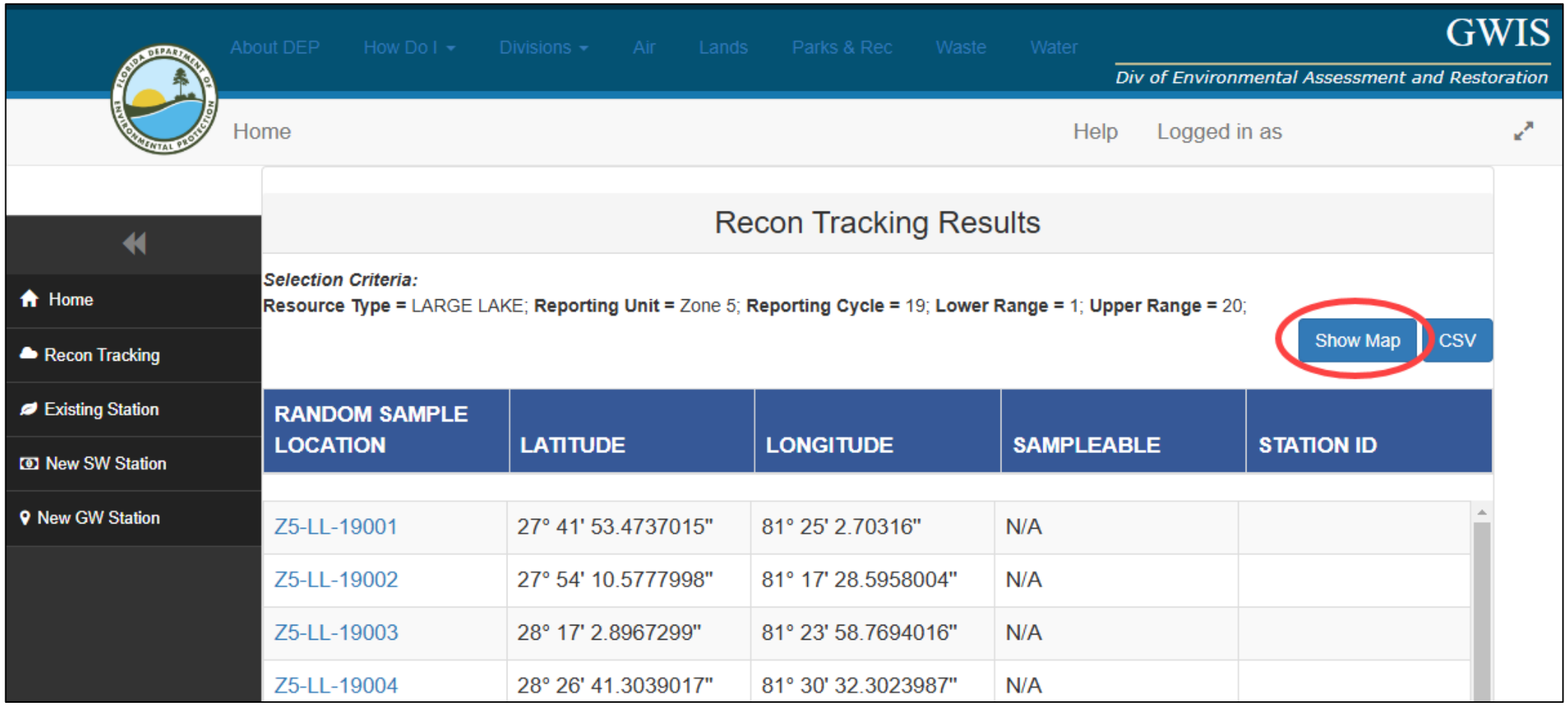
Site Location Range = 1 to 20

Click “View Results.”



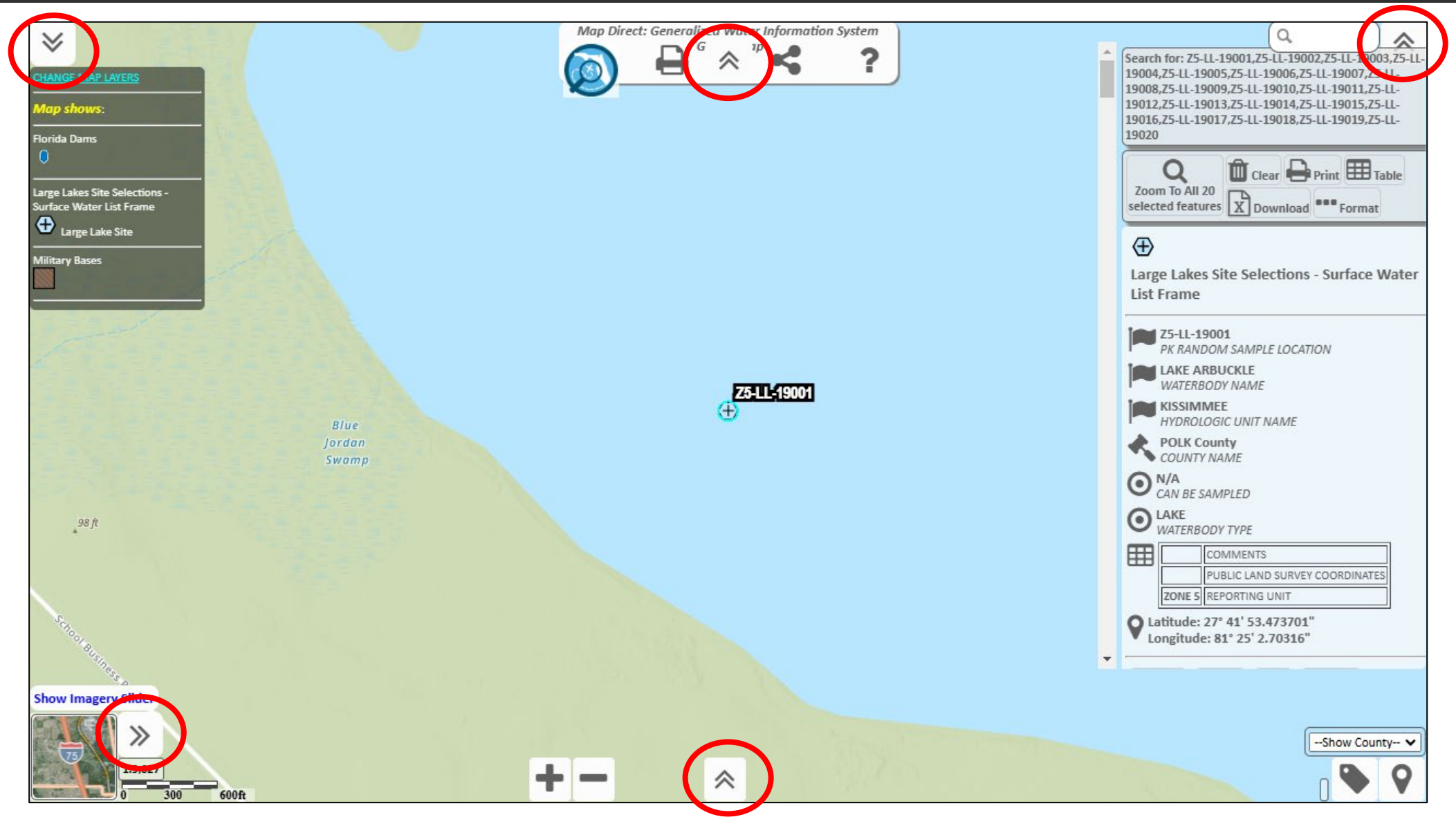
PRACTICE EXERCISE

Click
“Show Map”



EXPLORE MAP DIRECT INTERFACE:

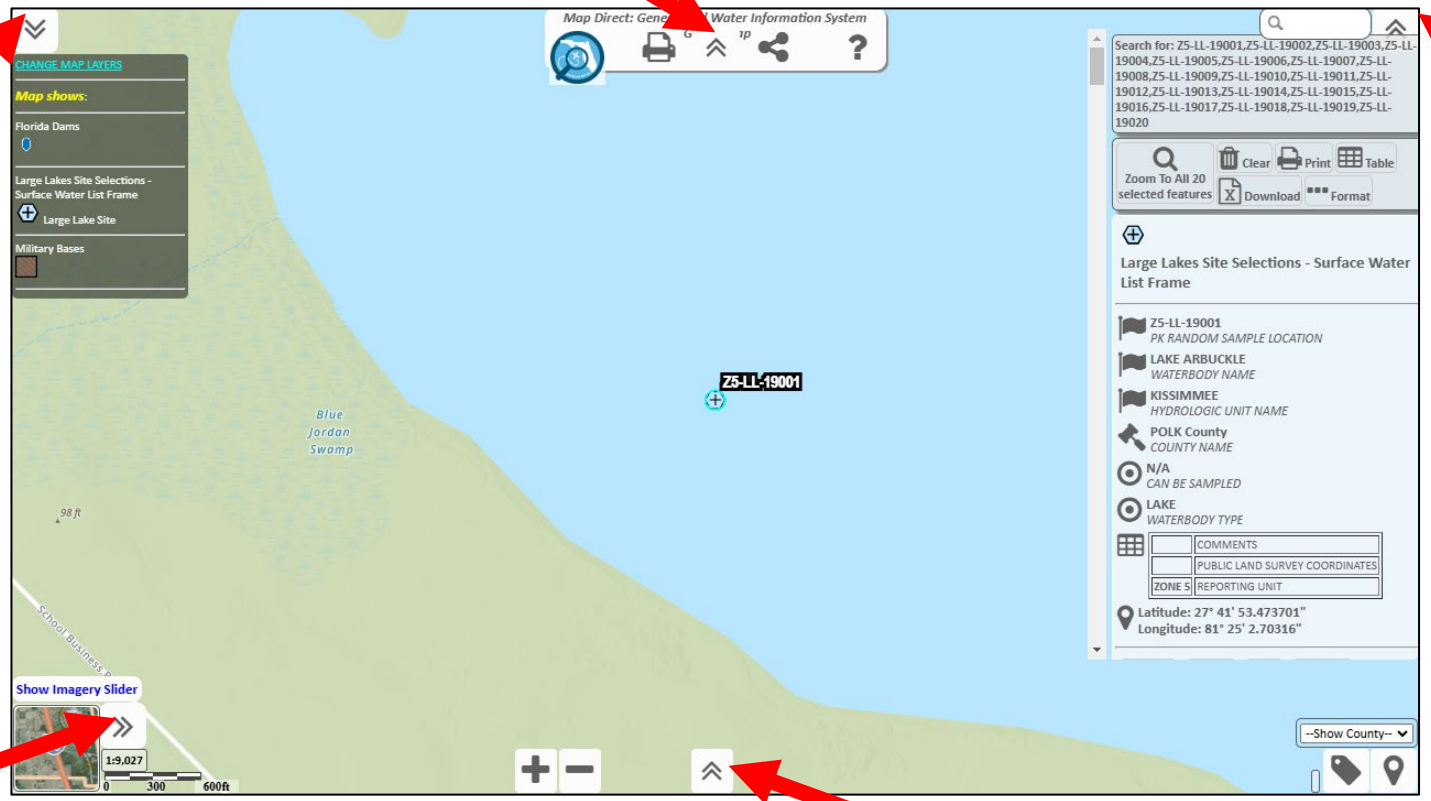
CHEVRON BUTTONS EXPAND AND HIDE MENUS



MAP DIRECT MENUS

Save/Load/Share Maps; Map Direct Help.

Show Map Legend; Table of Contents: Layer Visibility and Labels; Add Data to Map.



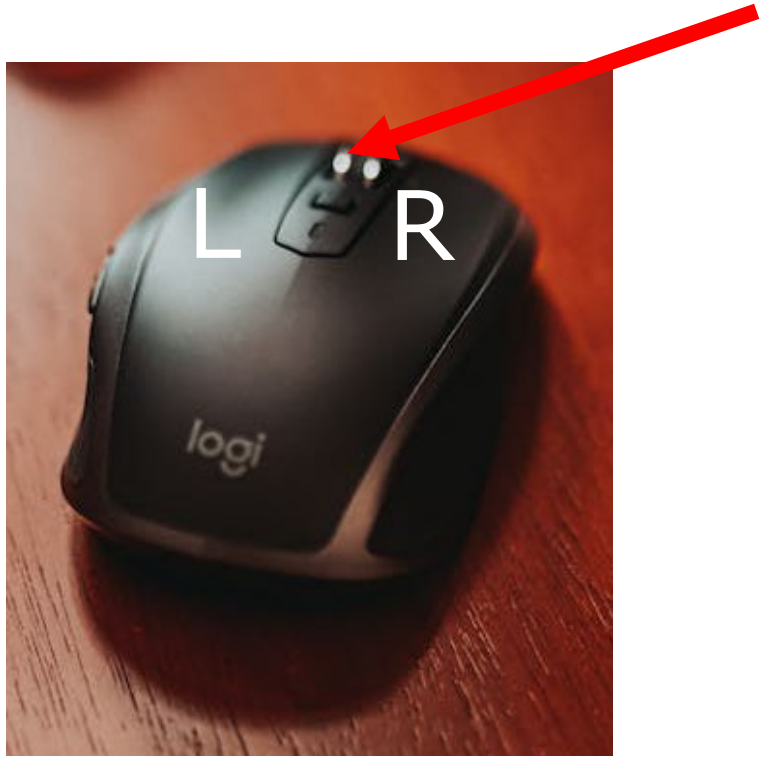
Search Options; View Feature Attributes.

Change Basemaps; Switch between Basemap and Imagery Slider.

Navigation and Selection Tools: Bookmarks; Zoom Tools; Identify; Measurement Tools; Drawing Tools.

EXPLORE MAP DIRECT INTERFACE:

MOUSE BUTTON INTERACTIONS



Center button (wheel)

- Use wheel to zoom in or out of the map.
- Click and hold to pan the map.

Left button (L)

- Click chevron to hide or unhide a tool.
- Click map features to identify them.
- Click and hold to pan the map.

Right button (R)

- Click and hold to pan the map.
- Click an item in the contents panel to open the layer tools menu.

EXPLORE MAP DIRECT INTERFACE:

TOUCH SCREEN INTERACTION FOR TABLETS

(NOTE – Some touch screen interactions and tools do not work when viewing Map Direct on smartphones.)

Pinch

- Zoom in or out of the map.

Touch

- Hide or unhide a tool.
- Identify a feature.

Touch and Drag

- Pan the map.
- Draw search boxes.

Double Touch

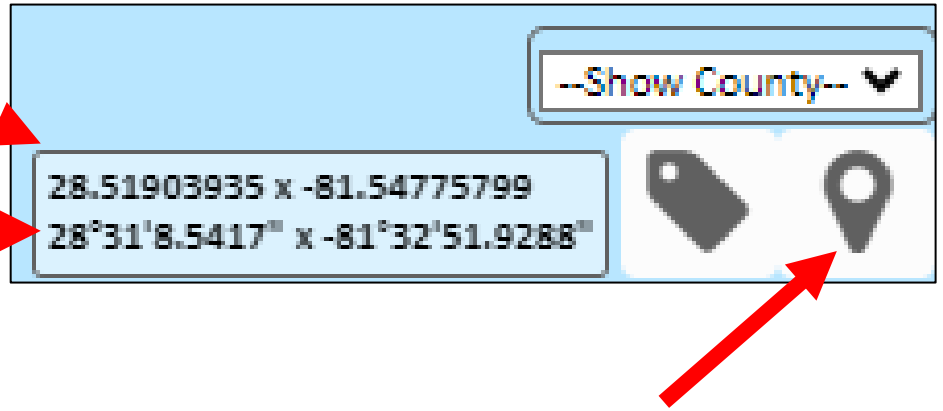
- Zoom in on an area of the map.
- Open the layer tools menu by interacting with an item in the contents panel.

EXPLORE MAP DIRECT INTERFACE:

COORDINATES OF MOUSE POINTER

Latitude, Longitude
(Decimal Degrees)

Latitude, Longitude
(Degrees, Minutes and
Decimal Seconds)

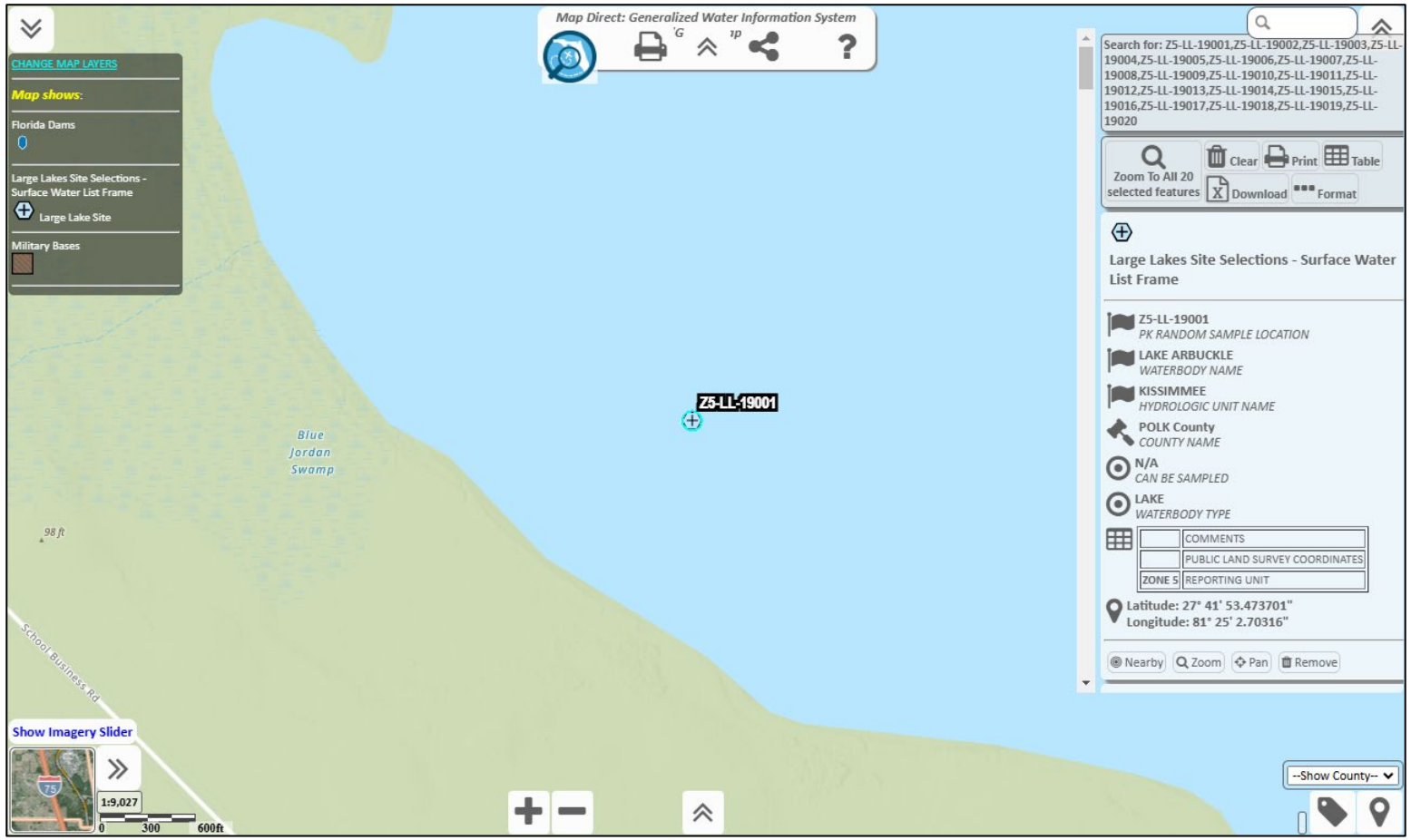


Map Pointer Drop Symbol

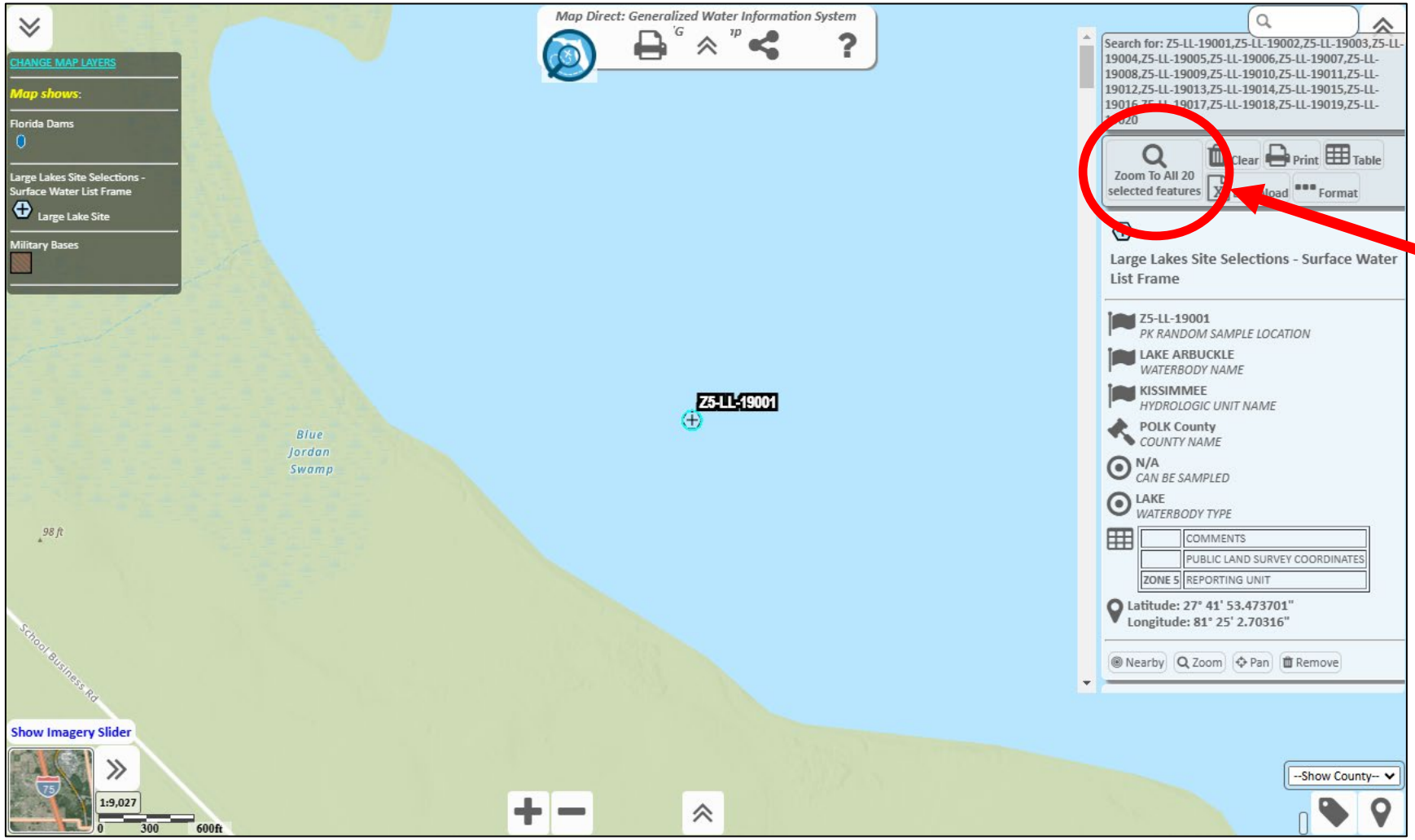
- Display identifies the location of your mouse pointer on the Map.
- Use the map pointer drop symbol tool to drop a marker on the map location of interest. The location details window will open, and additional search options will be available.

EXPLORE COMMONLY USED RECON TOOLS

Please Refresh Your Internet Browser to Return to Original View of Z5 LL, Cycle 19 Search Results.



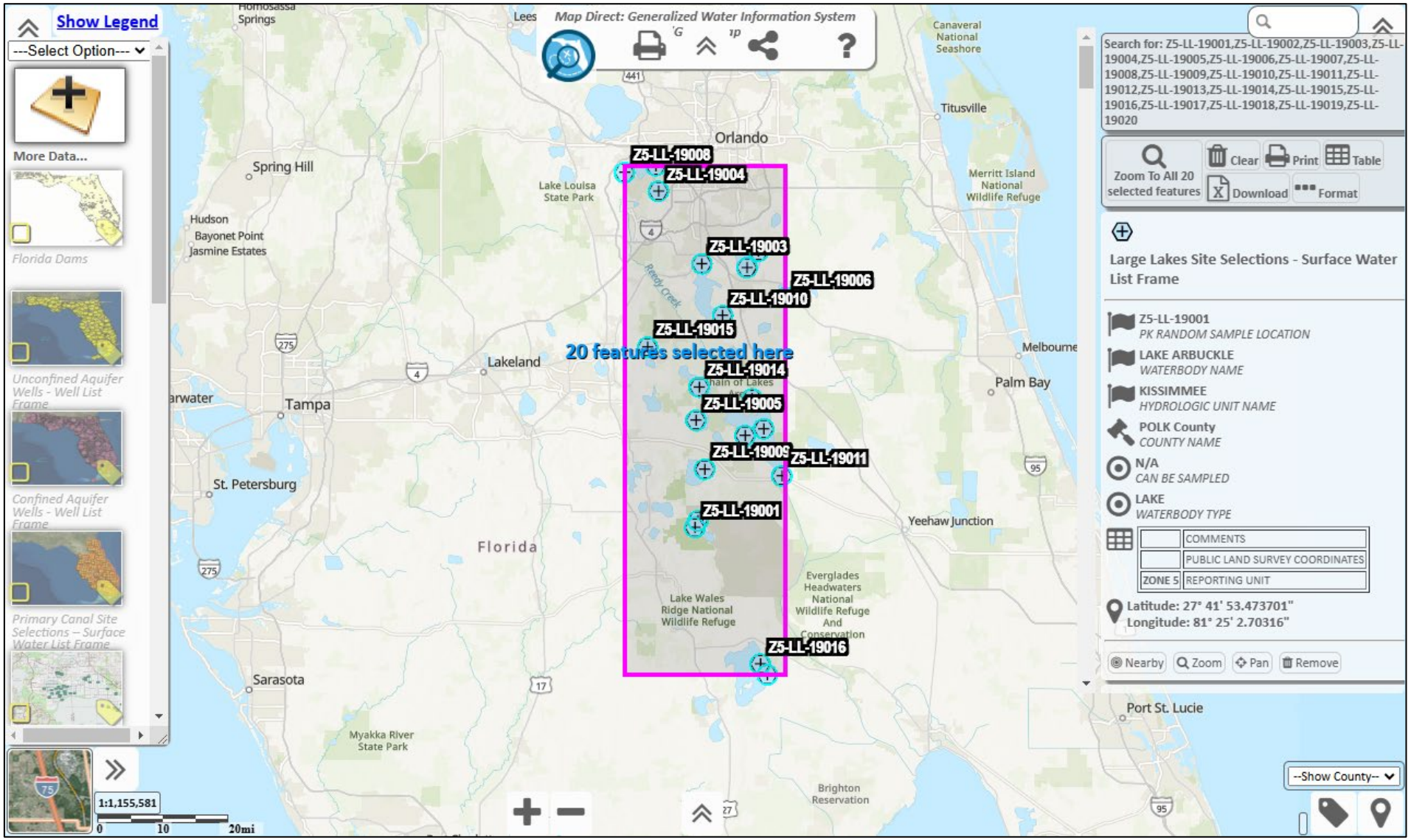
COMMON RECON TOOLS:
ZOOM TO ALL SELECTED SITES



COMMON RECON TOOLS:

ZOOM TO ALL SITES

Zone 5
Large Lakes
Cycle 19,
Sites 1 to 20.



COMMON RECON TOOLS:

VIEW SELECTED SITES IN TABLE

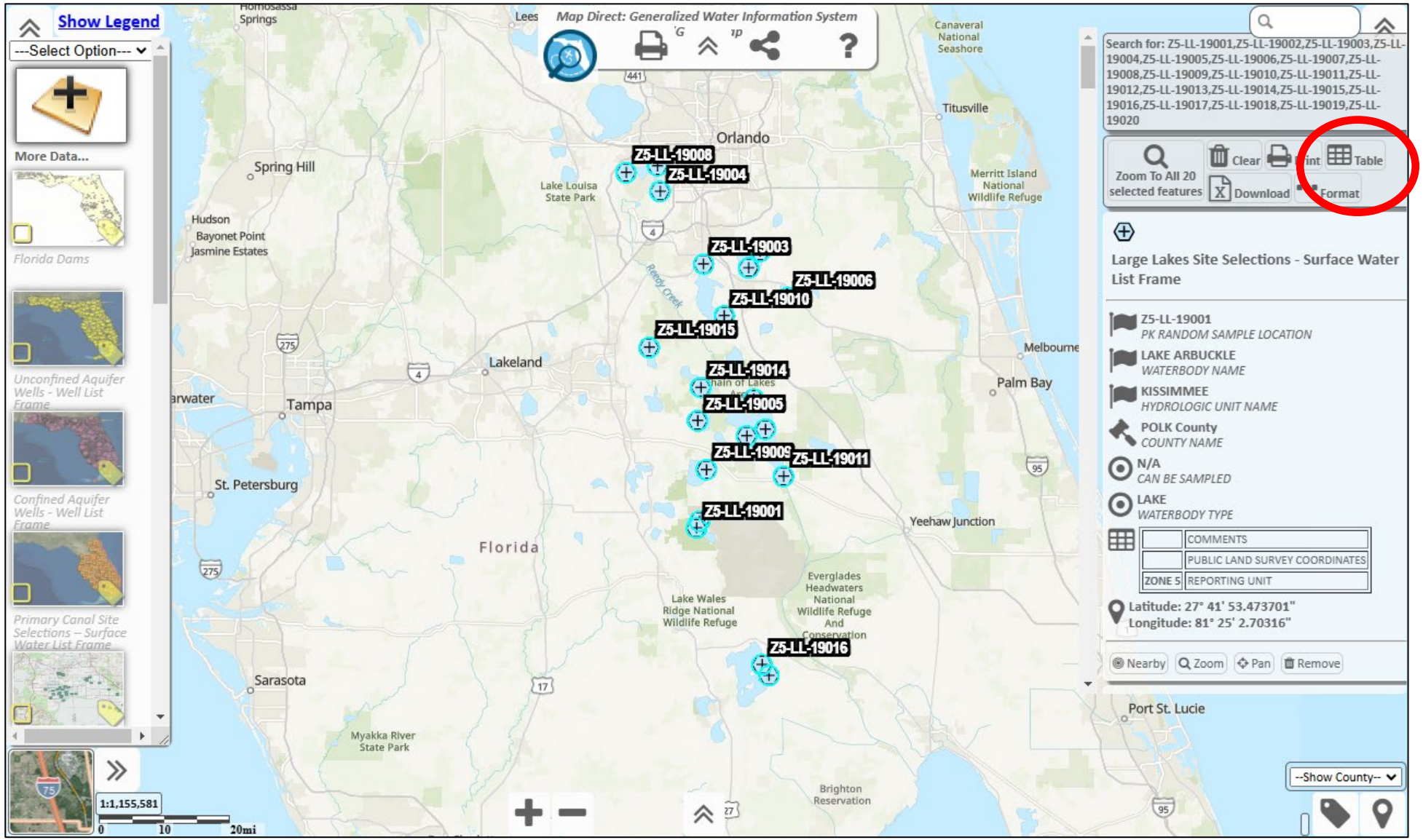


TABLE VIEW

Click column name to sort.

Clear Results | Printable View | Download as Spreadsheet | Close

Large Lake Site Selections - Surface Water List Frame: 20 found.

	PK_RANDOM_SAMPLE_LOCATION (String)	REPORTING_UNIT (String)	WATERBODY_TYPE (String)	WATERBODY_NAME (String)	CAN_BE_SAMPLED (String)	LAT_DD (Double)	LAT_MM (Double)	LAT_SS (Double)	LONG_DD (Double)
	Primary key	*One of the six geographic zones used for data analysis. Zones correspond to WMS boundaries, except for South Florida which is split into an east and west subunits. For cycle two of the status network see TMDL_BASIN database field name*	*The name identifying the type of the water body on which the station is located. The designation 'stream' includes canals, rivers, and sloughs. The designation 'lake' includes some marshes. Dictates which Impaired Water Rule (IWR) assessment procedure to use.*	*Legal or USGS quad (DRG) name of the water body on which the station resides*	*Boolean value indicating whether site is samplable*	*The degrees portion of the angular distance on a meridian north or south of the equator*	*The minutes portion of the angular distance on a meridian north or south of the equator.*	*The seconds portion to four significant digits of the angular distance on a meridian north or south of the equator*	*The degrees portion of the angular distance on a meridian east or west of the prime meridian. Although measurements west of the prime meridian are by convention regarded as negative, the standard provides for the storage of positive values to conform to current practice.*
Remove	Z5-LL-19001	ZONE 5	LAKE	LAKE ARBUCKLE	N/A	27	41	53.473701	81
Remove	Z5-LL-19002	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	54	10.5778	81
Remove	Z5-LL-19003	ZONE 5	LAKE	LAKE TOHOPEKALIGA	N/A	28	17	2.89673	81
Remove	Z5-LL-19004	ZONE 5	LAKE		N/A	28	26	41.303902	81
Remove	Z5-LL-19005	ZONE 5	LAKE	LAKE ROSALIE	N/A	27	56	12.109	81
Remove	Z5-LL-19006	ZONE 5	LAKE	ALLIGATOR LAKE	N/A	28	12	35.165699	81
Remove	Z5-LL-19007	ZONE 5	LAKE	EAST LAKE TOHOPEKALIGA	N/A	28	16	32.131699	81
Remove	Z5-LL-19008	ZONE 5	LAKE		N/A	28	29	10.4425	81
Remove	Z5-LL-19009	ZONE 5	LAKE	LAKE WEOHYAKAPKA	N/A	27	49	41.474201	81
Remove	Z5-LL-19010	ZONE 5	LAKE	LAKE TOHOPEKALIGA	N/A	28	10	9.12725	81
Remove	Z5-LL-19011	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	48	47.670601	81
Remove	Z5-LL-19012	ZONE 5	LAKE	LAKE ISTOKPOGA	N/A	27	22	9.47002	81
Remove	Z5-LL-19013	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	55	4.77608	81
Remove	Z5-LL-19014	ZONE 5	LAKE	LAKE HATCHINEHA	N/A	28	0	38.057999	81
Remove	Z5-LL-19015	ZONE 5	LAKE	LAKE MARION	N/A	28	5	57.049702	81
Remove	Z5-LL-19016	ZONE 5	LAKE	LAKE ISTOKPOGA	N/A	27	23	37.014099	81
Remove	Z5-LL-19017	ZONE 5	LAKE	LAKE ARBUCKLE	N/A	27	42	48.5565	81
Remove	Z5-LL-19018	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	59	4.53651	81
Remove	Z5-LL-19019	ZONE 5	LAKE	EAST LAKE TOHOPEKALIGA	N/A	28	18	44.298	81
Remove	Z5-LL-19020	ZONE 5	LAKE	LAKE DOWN	N/A	28	30	4.90749	81

TABLE VIEW

Click on a row to return to map and zoom to site.

Example:
Z5-LL-19008

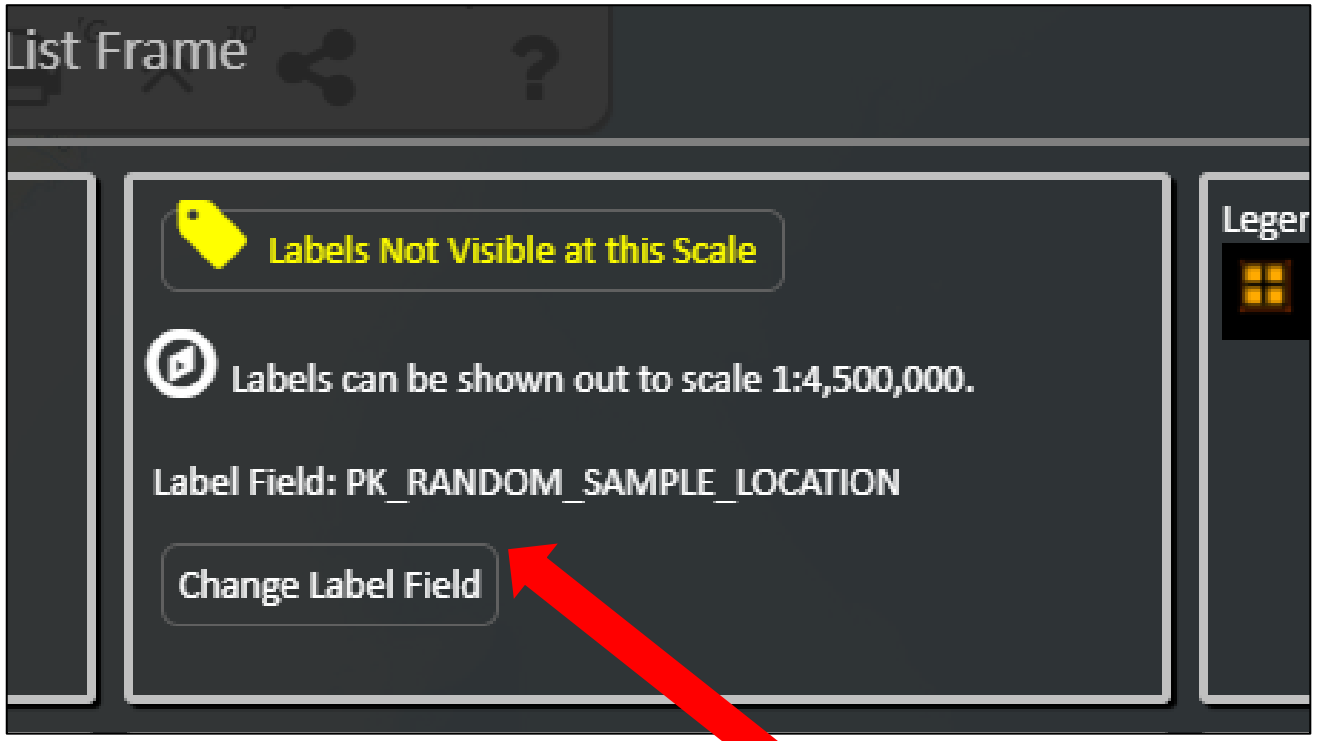
Clear Results | Printable View | Download as Spreadsheet | Close

Large Lakes Site Selections - Surface Water List Frame: 20 found.

	PK_RANDOM_SAMPLE_LOCATION (String)	REPORTING_UNIT (String)	WATERBODY_TYPE (String)	WATERBODY_NAME (String)	CAN_BE_SAMPLED (String)	LAT_DD (Double)	LAT_MM (Double)	LAT_SS (Double)	
	Primary key	*One of the six geographic zones used for data analysis. Zones correspond to WMS boundaries, except for South Florida which is split into an east and west subunits. For cycle two of the status network see TMDL_BASIN database field name*	*The name identifying the type of the water body on which the station is located. The designation 'stream' includes canals, rivers, and sloughs. The designation 'lake' includes some marshes. Dictates which Impaired Water Rule (IWR) assessment procedure to use.*	*Legal or USGS quad (DRG) name of the water body on which the station resides*	*Boolean value indicating whether site is samplable*	*The degrees portion of the angular distance on a meridian north or south of the equator*	*The minutes portion of the angular distance on a meridian north or south of the equator.*	*The seconds portion to four significant digits of the angular distance on a meridian north or south of the equator*	*The d angu east meric meas prime conve nega for th value pract*
Remove	Z5-LL-19001	ZONE 5	LAKE	LAKE ARBUCKLE	N/A	27	41	53.473701	81
Remove	Z5-LL-19002	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	54	10.5778	81
Remove	Z5-LL-19003	ZONE 5	LAKE	LAKE TOHOPEKALIGA	N/A	28	17	2.89673	81
Remove	Z5-LL-19004	ZONE 5	LAKE		N/A	28	26	41.303902	81
Remove	Z5-LL-19005	ZONE 5	LAKE	LAKE ROSALIE	N/A	27	56	12.109	81
Remove	Z5-LL-19006	ZONE 5	LAKE	ALLIGATOR LAKE	N/A	28	12	35.165699	81
Remove	Z5-LL-19007	ZONE 5	LAKE	EAST LAKE TOHOPEKALIGA	N/A	28	16	32.131699	81
Remove	Z5-LL-19008	ZONE 5	LAKE		N/A	28	29	10.4425	81
Remove	Z5-LL-19009	ZONE 5	LAKE	LAKE WEOHYAKAPKA	N/A	27	49	41.474201	81
Remove	Z5-LL-19010	ZONE 5	LAKE	LAKE TOHOPEKALIGA	N/A	28	10	9.12725	81
Remove	Z5-LL-19011	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	48	47.670601	81
Remove	Z5-LL-19012	ZONE 5	LAKE	LAKE ISTOKPOGA	N/A	27	22	9.47002	81
Remove	Z5-LL-19013	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	55	4.77608	81
Remove	Z5-LL-19014	ZONE 5	LAKE	LAKE HATCHINEHA	N/A	28	0	38.057999	81
Remove	Z5-LL-19015	ZONE 5	LAKE	LAKE MARION	N/A	28	5	57.049702	81
Remove	Z5-LL-19016	ZONE 5	LAKE	LAKE ISTOKPOGA	N/A	27	23	37.014099	81
Remove	Z5-LL-19017	ZONE 5	LAKE	LAKE ARBUCKLE	N/A	27	42	48.5565	81
Remove	Z5-LL-19018	ZONE 5	LAKE	LAKE KISSIMMEE	N/A	27	59	4.53651	81
Remove	Z5-LL-19019	ZONE 5	LAKE	EAST LAKE TOHOPEKALIGA	N/A	28	18	44.298	81
Remove	Z5-LL-19020	ZONE 5	LAKE	LAKE DOWN	N/A	28	30	4.90749	81

COMMON RECON TOOLS:

CHANGE SITE LABELS



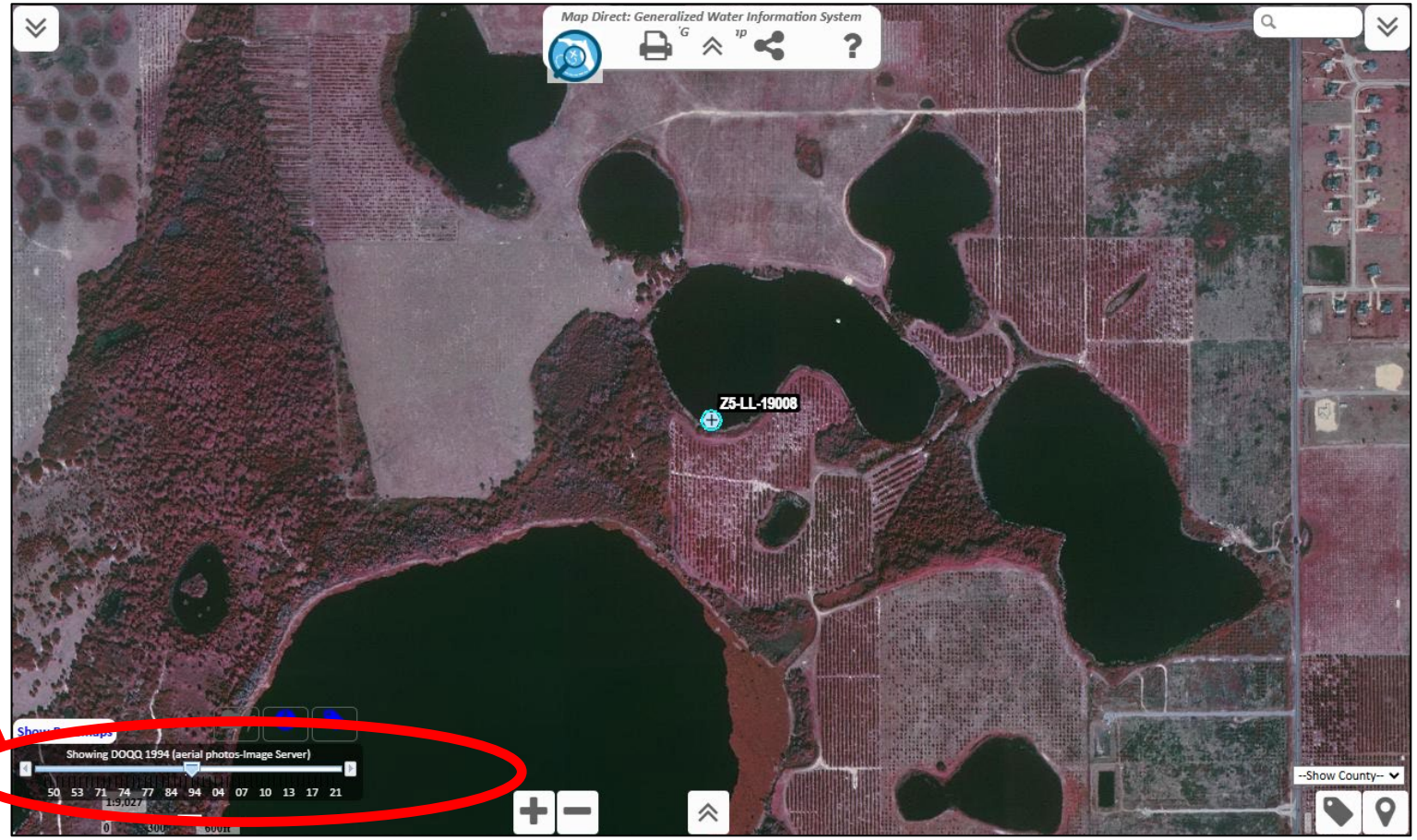
Double click the Large Lakes Site selections tile with left mouse button (Double Touch for touch screen devices.).

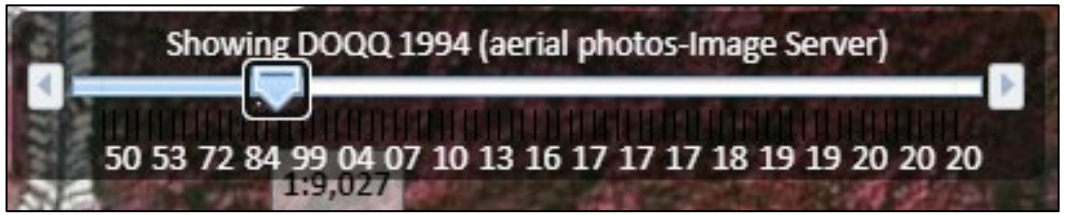
In Layer Properties Menu, Select “Change Label Field.”

COMMON RECON TOOLS:

EXAMINE IMAGERY FROM MULTIPLE YEARS

Click “Show Imagery Slider.”



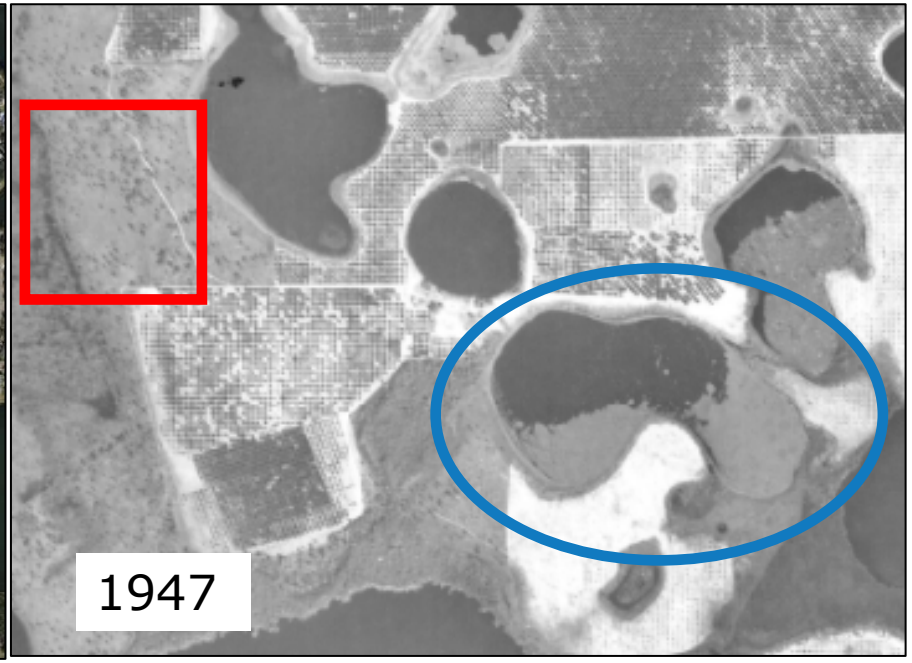


Example: DOQQ 1994

CONFIRM PRESENCE OF WATERBODY IN HISTORIC AERIALS

Imagery Sources

- Map Direct Imagery Slider.
- University of Florida Smathers Library Historic Aerial Photos. https://original-ufdc.uflib.ufl.edu/aerials



Blue circle shows that the Unnamed Lake (Z5-LL-19008) is present in photos from 1947.

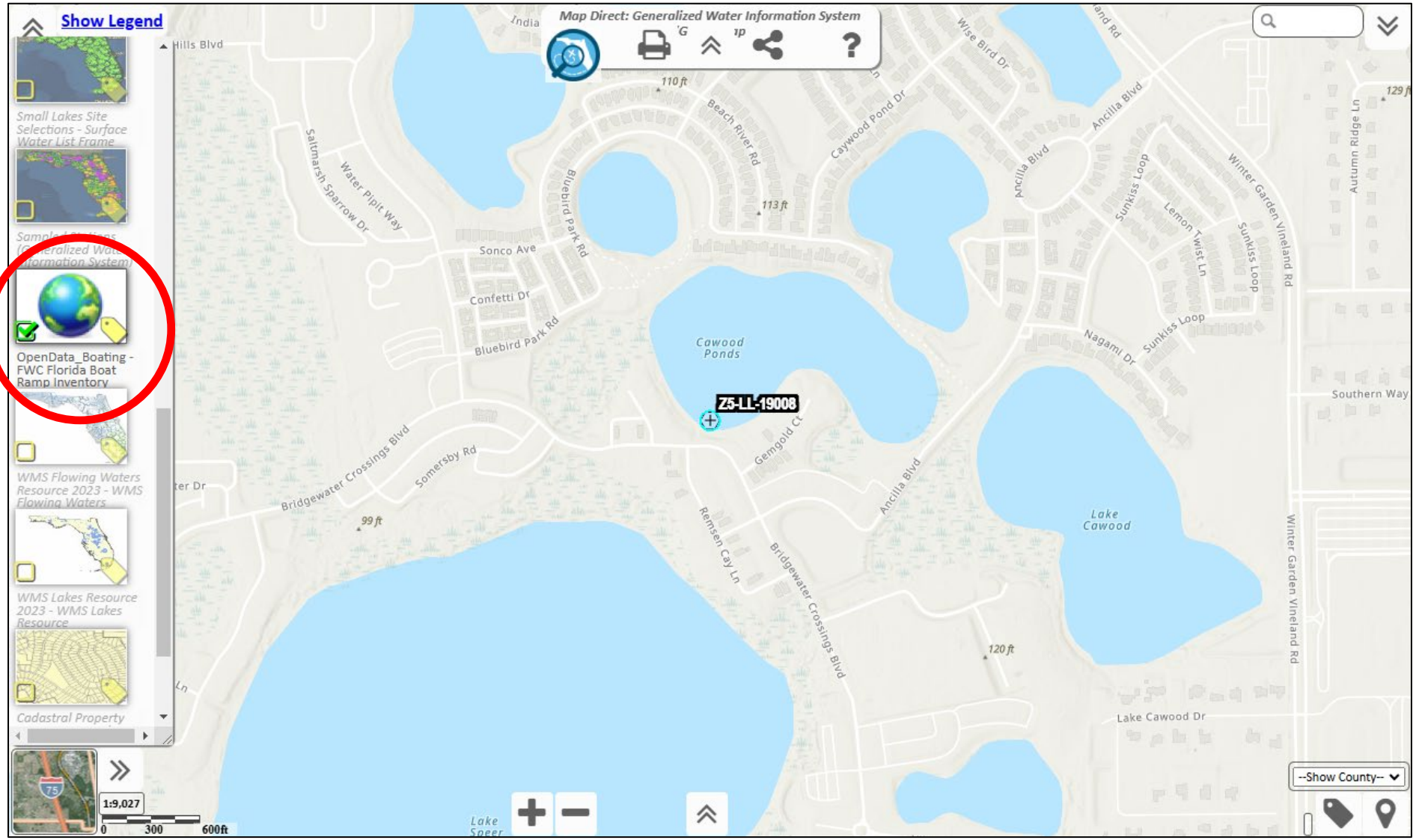
Red rectangle shows example of a nearby manmade lake-like feature, which is not present in the photos from 1947.

EXPLORE TOOLS FOR SITE ACCESS

- Make Florida Fish and Wildlife Conservation Commission (FWC) Boat Ramps Layer Visible.
- Identify landowners surrounding the lake.

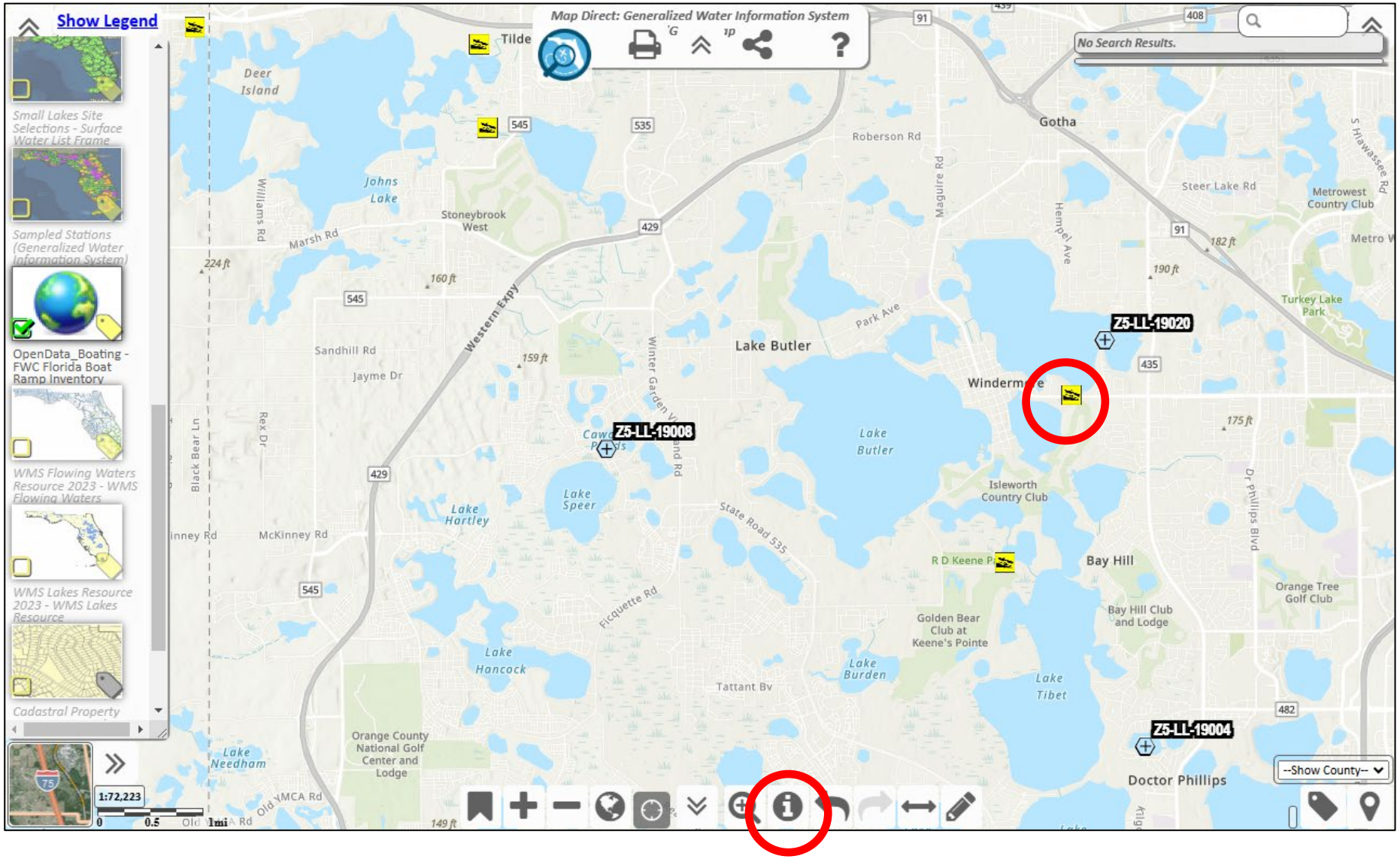
TOOLS FOR SITE ACCESS:

FWC BOAT RAMPS LAYER



TOOLS FOR SITE ACCESS:

FWC BOAT RAMPS LAYER



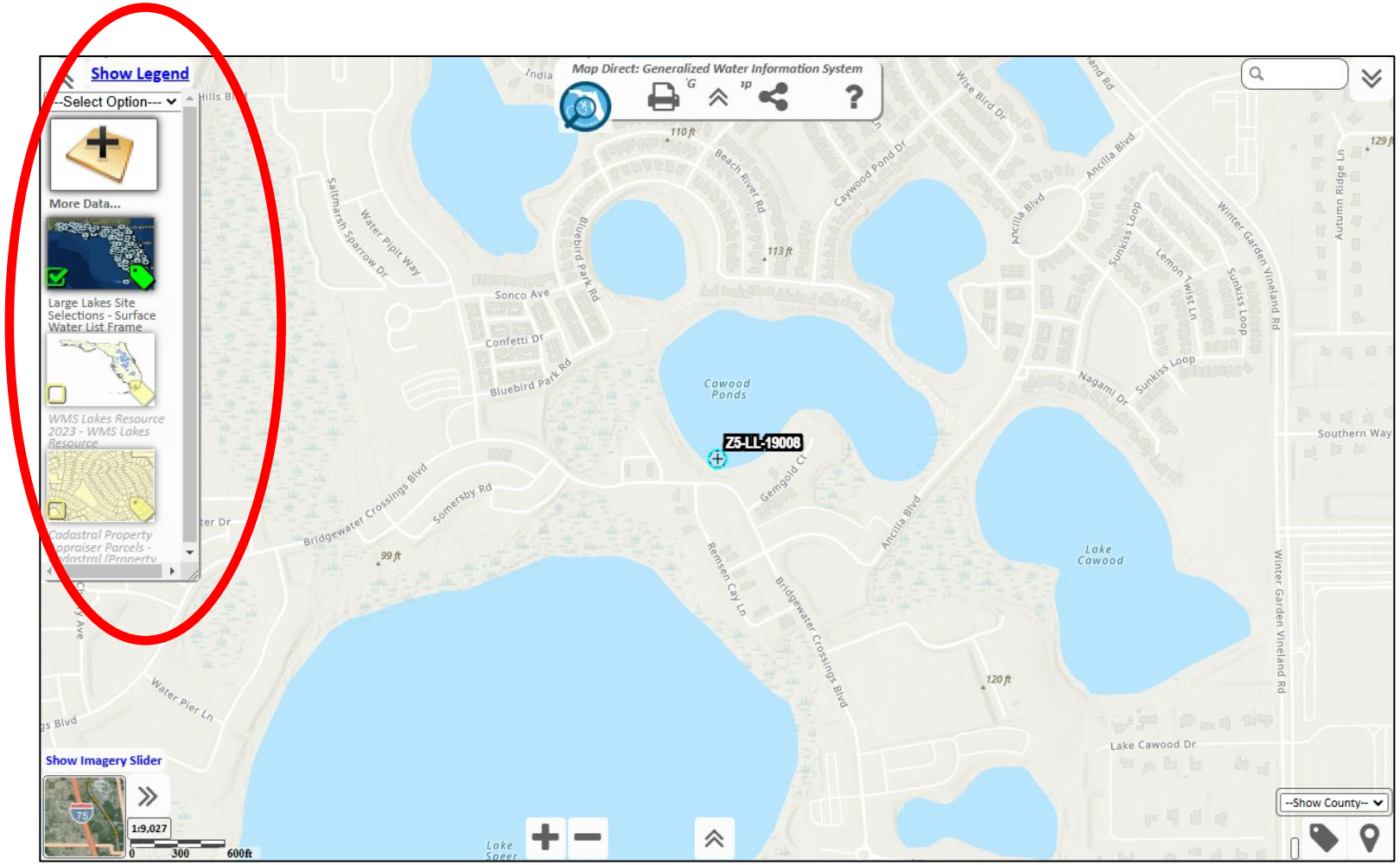
Use Identify Tool to Display Details.

(No boat ramps on selected unnamed lake. Example shown for other lakes nearby.)

TOOLS FOR SITE ACCESS:
IDENTIFY PROPERTY OWNERS

Preparation:
Remove all layers
(click tile and drag to right)
or turn off visibility
(no green check mark on tile).

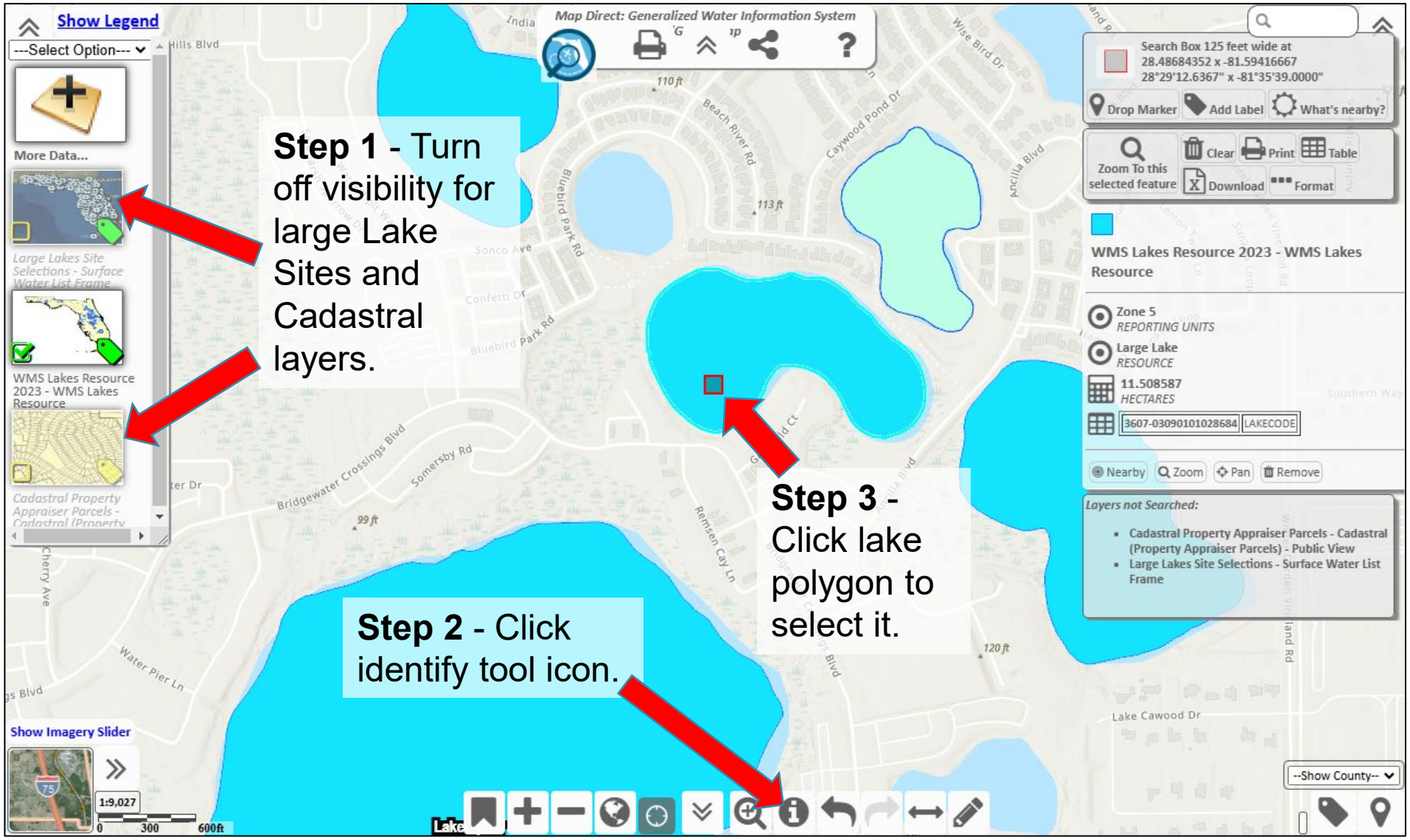
Except:
Large Lakes Site Sections,
WMS Lakes Resource, and
Cadastral Property Appraiser
Parcels.



TOOLS FOR SITE ACCESS:
IDENTIFY PROPERTY OWNERS

Make WMS lakes resource (polygon layer) the only visible layer in the map.

Use identify tool to select the Unnamed Lake that contains site Z5-LL-19003.

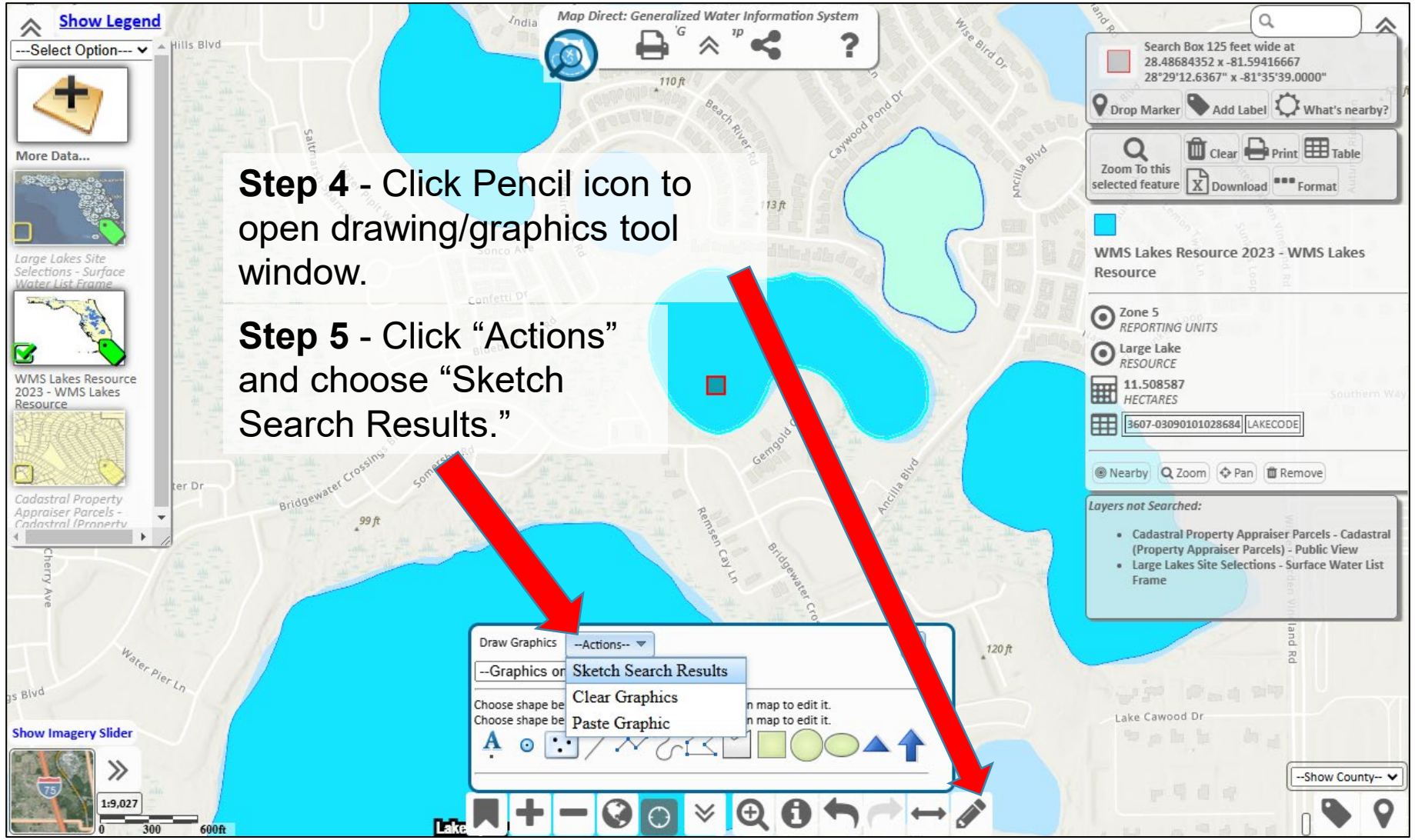


TOOLS FOR SITE ACCESS:
IDENTIFY PROPERTY OWNERS

Click pencil icon to open drawing/graphics tools.

In “actions” menu, select “sketch search results.”

This will draw a temporary copy of the lake polygon.

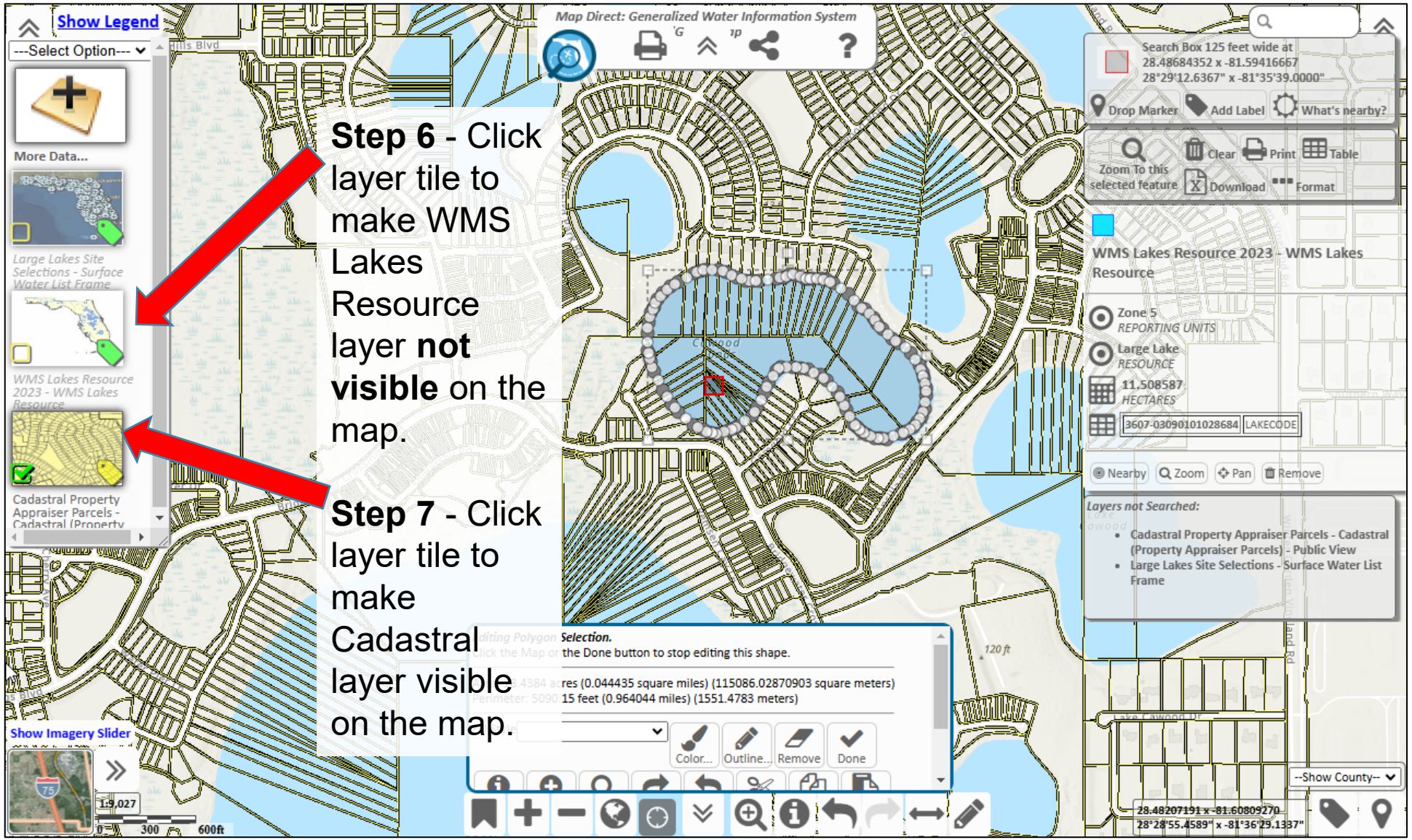


TOOLS FOR SITE ACCESS:
IDENTIFY PROPERTY OWNERS

Use polygon drawing to identify parcels and owners.

Make lake polygons layer not visible.

Make cadastral layer visible.



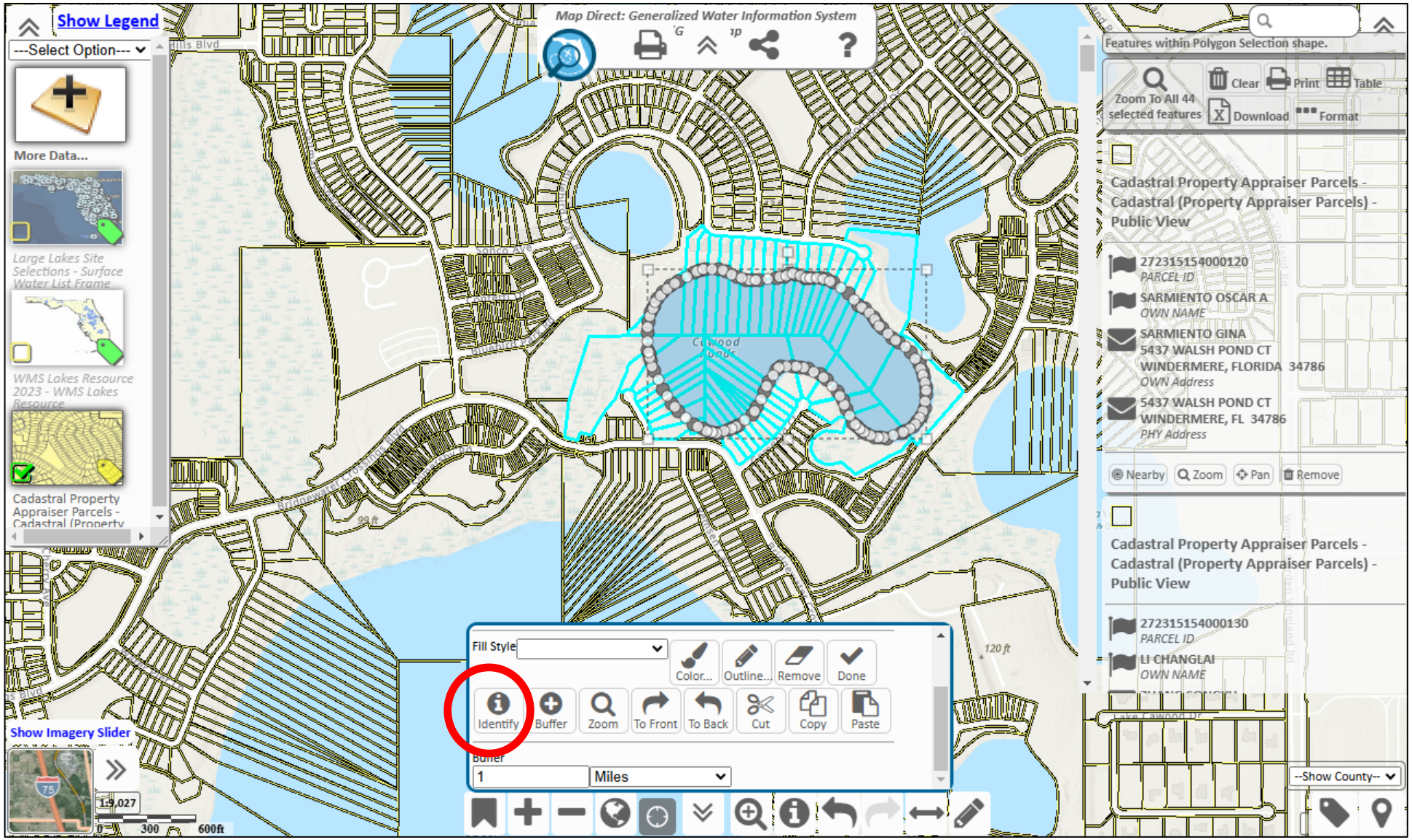
Step 6 - Click layer tile to make WMS Lakes Resource layer **not visible** on the map.

Step 7 - Click layer tile to make Cadastral layer visible on the map.

TOOLS FOR SITE ACCESS:

IDENTIFY PROPERTY OWNERS

Click “identify” in search sketch results window to get a list of parcels surrounding the lake.



TOOLS FOR SITE ACCESS:
IDENTIFY PROPERTY OWNERS

Open table view and download spreadsheet of selected parcels and property owner information.

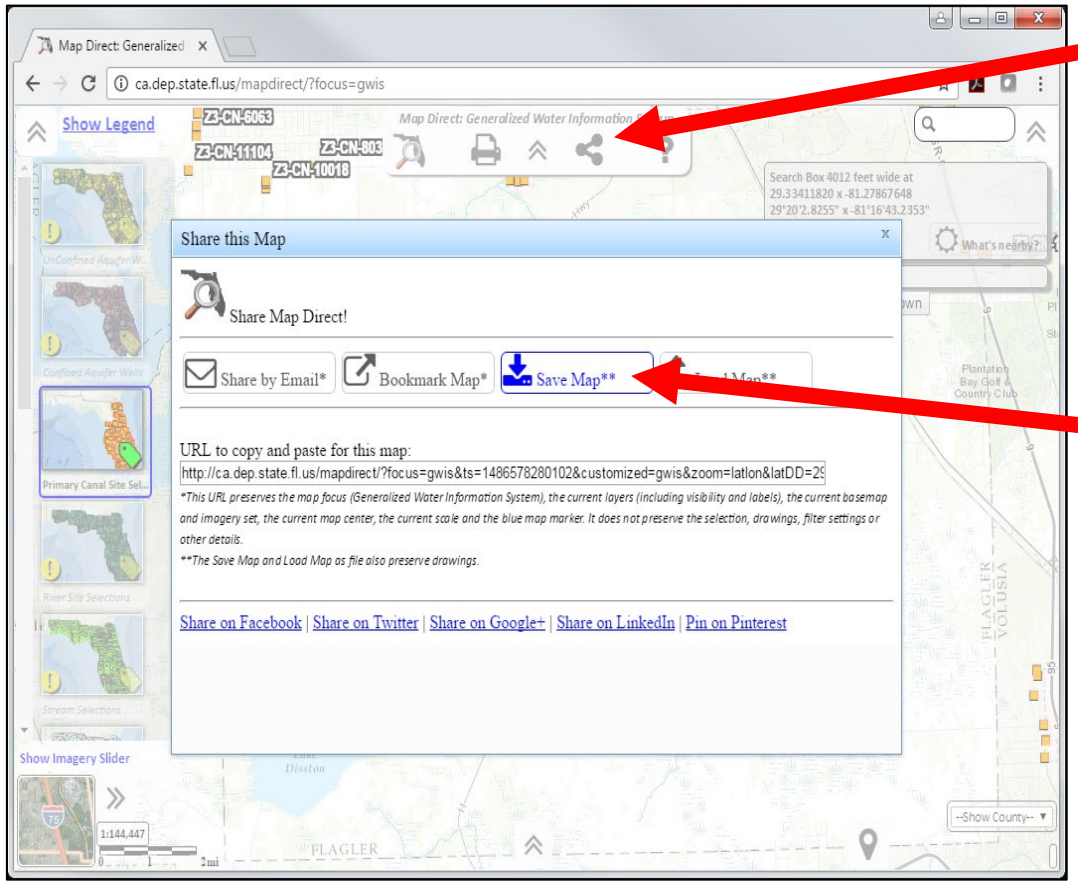
Clear Results | Printable View | Download as Spreadsheet | Close

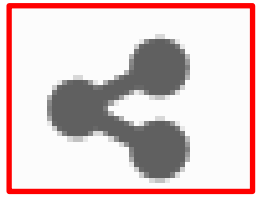
Cadastral Property Appraiser Parcel - Cadastral (Property Appraiser Parcels) - Public View: 44 found.

	OBJECTID (OID)	PARCELNO (String)	PARCEL_ID (String)	OWN_NAME (String)	OWN_ADDR1 (String)	OWN_ADDR2 (String)	OWN_CITY (String)	OWN_S (Strin
	Internal feature number.		*Parcel Identification Code. This field reflects a unique code assigned to each parcel by the property appraiser based on a parcel coding system that is applied uniformly within the county. The uniform coding system is determined by the property appraiser and will therefore vary from county-to-county. The entry in this field is variable length and can contain up to 26 alphanumeric characters. Examples (two of several systems in use by property appraisers): County A may use a section/township/range/subdivision/block/lot coding system: County B may use a seven digit leading and four digit extension system: 1234567-1234*	*Owner's Name. This field reflects data that represents the primary owner's name. The entry in this field is variable length and can contain up to 30 alphanumeric characters.*	*Owner's Street or PO Box Address - Line 1. This field reflects data that represents the street or P.O. Box of the primary owner's mailing address. The entry in this field is variable length and can contain up to 40 alphanumeric characters.*	*Owner's Street Address-Line 2. This field reflects data that represents additional space if needed for the primary owner's mailing address. If not required, this field will be blank. The entry in this field is variable length and can contain up to 40 alphanumeric characters.*	*Owner Mailing Address-City. This field reflects data that represents the city of the primary owner's mailing address. The entry in this field is variable length and can contain up to 40 alphanumeric characters.*	*Owner Mailing A This field reflects represents the si providence, or c primary owner's address. The ent is variable length contain up to 25 characters.*
Remove	6005060	272315154000120	272315154000120	SARMIENTO OSCAR A	SARMIENTO GINA	5437 WALSH POND CT	WINDERMERE	FLORIDA
Remove	6005061	272315154000130	272315154000130	LI CHANGLAI	ZHANG SONGYU	5443 WALSH POND CT	WINDERMERE	FLORIDA
Remove	6005068	272315154000200	272315154000200	TAMIKO J HAEUSEL REVOCABLE TRU	C/O TAMIKO J HAEUSEL TRUSTEE	5432 GEMGOLD CT	WINDERMERE	FLORIDA
Remove	6039775	272310839000370	272310839000370	RYEL HEATHER J	14038 BLUEBIRD PARK RD		WINDERMERE	FLORIDA
Remove	6032518	272310839000330	272310839000330	PALMER SAMUEL J	PALMER BARBARA J	14014 BLUEBIRD PARK RD	WINDERMERE	FLORIDA
Remove	6009289	272310838901360	272310838901360	FABIOLA CARVALHINHO REVOCABLE	C/O FABIOLA CARVALHINHO TRUSTE	14451 BLUEBIRD PARK RD	WINDERMERE	FLORIDA
Remove	6005065	272315154000170	272315154000170	UNDER THE BANYAN TREE LLC	5456 GEMGOLD CT		WINDERMERE	FLORIDA
Remove	6005066	272315154000180	272315154000180	PHILLIPS WILLIAM RICHARD	PHILLIPS LISA	5450 GEMGOLD CT	WINDERMERE	FLORIDA
Remove	6005070	272315154000220	272315154000220	MASSAYA-ANON NILONGKOT	HOON SAMANG SAE	5420 GEMGOLD CT	WINDERMERE	FLORIDA
Remove	6006358	272315154000270	272315154000270	SCHMITZ GREGORY R	SCHMITZ JOANNA	5409 GEMGOLD CT	WINDERMERE	FLORIDA
Remove	6005059	272315154000110	272315154000110	SMITH SHARON A	5431 WALSH POND CT		WINDERMERE	FLORIDA
Remove	6014306	272315154000070	272315154000070	WALSH POND LLC	1966 HILLVIEW ST		SARASOTA	FLORIDA
Remove	6032519	272310839000340	272310839000340	MURPHY DANIEL	MURPHY ALLISON	14020 BLUEBIRD PARK RD	WINDERMERE	FLORIDA
Remove	6013175	272310838901320	272310838901320	FRIEDMAN MICHAEL J	FRIEDMAN CHRISTINE A	13832 BLUEBIRD PARK RD	WINDERMERE	FLORIDA
Remove	6014307	272315154000080	272315154000080	DIAZ CARMEN LUZ	5413 WALSH POND CT		WINDERMERE	FLORIDA
Remove	6039774	272310839000360	272310839000360	DAVIES CRAIG	CHAMBERS ANDREA	14032 BLUEBIRD PARK RD	WINDERMERE	FLORIDA
Remove	6032517	272310839000320	272310839000320	KHAN FARHANA	391 BURLOAK DR		OAKVILLE ONTARIO	CANADA
Remove	6006355	272315154000240	272315154000240	WANG XIKE	BATTILLO CHIHMING	5408 GEMGOLD CT	WINDERMERE	FLORIDA
Remove	6002556	272315154003001	272315154003001	SUMMERPORT RESIDENTIAL PROPERT	14422 BLUEBIRD PARK RD		WINDERMERE	FLORIDA
Remove	6005064	272315154000160	272315154000160	HAEUSEL TAMIKO	5432 GEMGOLD CT		WINDERMERE	FLORIDA
Remove	6005067	272315154000190	272315154000190	EICHELBERGER JONATHAN DEAN	EICHELBERGER SEMRA FRANCESCA	5438 GEMGOLD CT	WINDERMERE	FLORIDA
Remove	6006767	272315154012002	272315154012002	SUMMERPORT RESIDENTIAL PROPERT	14422 BLUEBIRD PARK RD		WINDERMERE	FLORIDA
Remove	6032520	272310839000350	272310839000350	GORDON SUSAN L	14026 BLUEBIRD PARK RD		WINDERMERE	FLORIDA

SAVING AND LOADING MAPS:

SAVE MAP TOOL





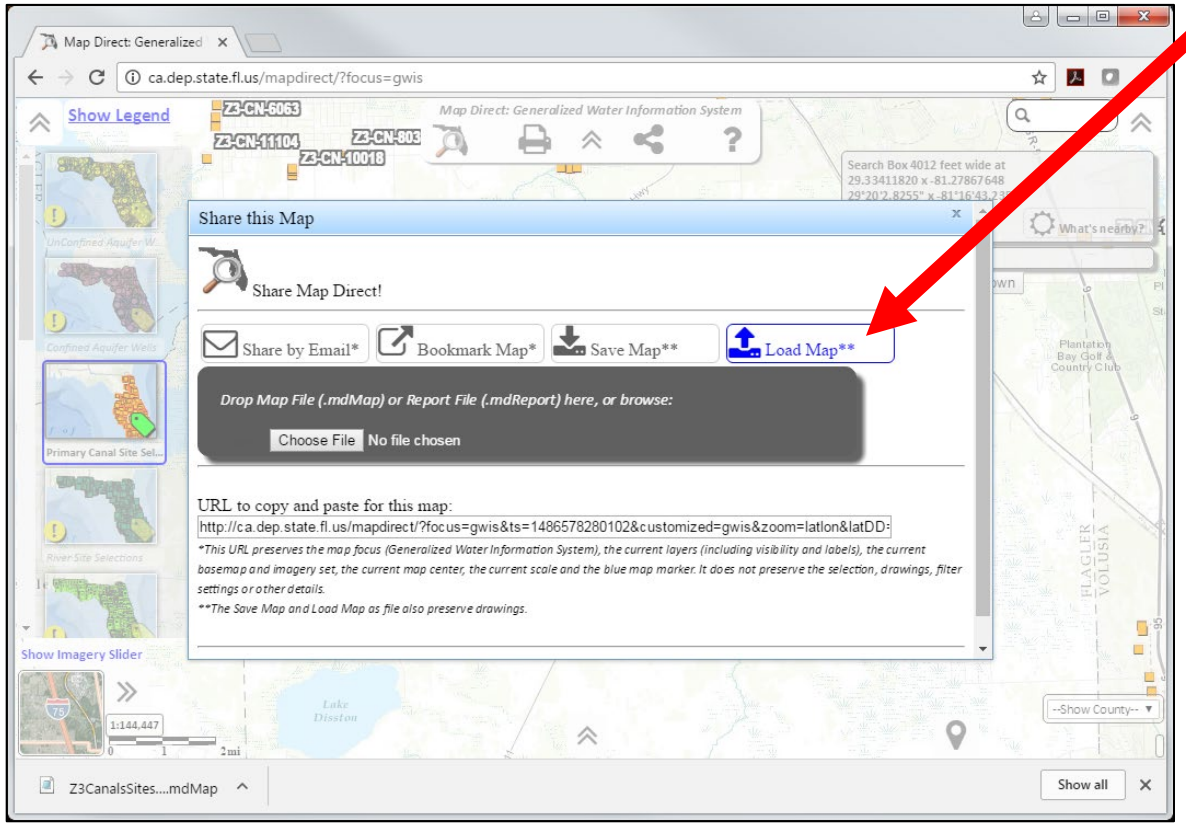
Click on the Share icon and choose “save map” button.

File will be saved with the “.mdMap” extension.

Default file name is unrelated to your search criteria.
Before saving, enter a more meaningful name for the file.
“Z5_LL_Cycle19_Sites1to20.mdMap”.

SAVING AND LOADING MAPS:

LOAD MAP TOOL



Click “Load Map.” Then, drag file to gray area of button or browse to file location. “Choose file” to load into the “standard” map.

“Z5_LL_Cycle19_Sites1to20.mdMap”

ADDITIONAL ONLINE RESOURCES

Map Direct Help Guides

https://ca.dep.state.fl.us/MapDirectDocs/

Watershed Information Center

Map Direct Resources Section

(https://floridadep.gov/dear/watershed-monitoring-section/content/watershed-monitoring-information-center)

Custom Files for Status Network Recon

Map Direct files with all site selections for each project in current Cycle.

Learn and Customize Map Direct Handout

Provides more detail on tools and features of Map Direct.

REPORT ISSUES / ASK QUESTIONS

Contact for Map Direct Accessed from GWIS Database Utilities:

Tommy Adams

DEP WMS Data Coordinator

Thomas.L.Adams@FloridaDEP.gov

850-245-8512

THANK YOU

Stephanie Sunderman-Barnes
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Florida Department of Environmental Protection

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FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION