

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 inhouse 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 = Small Lake
- Reporting Unit = Zone 5
- Reporting Cycle = 18(2024)
- Site Location Range = 1 to 20

Click "View Results."

	Recon Tracking
Pesource Type	SMALLLAKE
Resource type	
Reporting Unit	ZONE 5 V
Reporting Cycle:	18 🗸
Site Location Range:	1 - 20
	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



PRACTICE EXERCISE

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Abo				e Water)iv of Environmental /	Assessment and	GW Restora
Hor	me			Help	Logged in as		1
		Re	con Tracking Re	sults			
Recon Tracking	Selection Criteria: Resource Type = SMALL L	AKE; Reporting Unit = Zon	e 5; Reporting Cycle = 18;	Lower Range = 1	Upper Range = 20		
Existing Station				Ū	Sho	w Map CSV	
 Existing Station New SW Station New GW Station 	RANDOM SAMPLE LOCATION	LATITUDE	LONGITUDE	SAMPLEAE	SLE STATIO	ON ID	
 Existing Station New SW Station New GW Station 	RANDOM SAMPLE LOCATION Z5-SL-18001	LATITUDE 27° 48' 39.1469994"	LONGITUDE 81° 19' 29.2495003"	SAMPLEAE N/A	BLE STATIC	ON ID	
 Existing Station New SW Station New GW Station 	RANDOM SAMPLE LOCATIONZ5-SL-18001Z5-SL-18002	LATITUDE 27° 48' 39.1469994" 28° 29' 22.6081009"	LONGITUDE 81° 19' 29.2495003" 81° 35' 24.6436005"	SAMPLEAE N/A N/A	SLE STATIO	ON ID	
 Existing Station New SW Station New GW Station 	RANDOM SAMPLE LOCATION Z5-SL-18001 Z5-SL-18002 Z5-SL-18003	LATITUDE 27° 48' 39.1469994" 28° 29' 22.6081009" 28° 20' 53.6483002"	LONGITUDE 81° 19' 29.2495003" 81° 35' 24.6436005" 81° 38' 40.0340996"	SAMPLEAE N/A N/A N/A	BLE STATIC	ON ID	

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



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 or to zoom into and out of the map view.

Left button (L)

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

Right button (R)

- Click and hold to pan the map with all tool menus temporarily hidden.
- 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



- 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 SL, Cycle 18 Search Results.





COMMON RECON TOOLS: ZOOM TO ALL SELECTED SITES





COMMON RECON TOOLS: ZOOM TO ALL SITES

Zone 5 small lakes Cycle 18, Sites 1 to 20.





COMMON RECON TOOLS: VIEW SELECTED SITES IN TABLE





TABLE VIEW

Click column name to sort.

(-			ning overlengingen mater injon	mation system	National			
Clear F	Results Printable View	Download as Spreadsheet	Close					
Small Lakes	s Straselections - Surface . Uster	List Frame: 20 found.						
	PK RANDOM SAMPLE LOCATION (String)	REPORTING UNIT	WATERBODY TYPE (String)	WATERBODY NAME (String)	CAN BE SAMPLED (String)	LAT_DD (Double)	LAT_MM (Double)	Γ
	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 DRG map 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 to dig dis me sou
Bemove	Z5-SL-18001	ZONE 5	LAKE		N/A	27	48	39.
<u> Remove</u>	Z5-SL-18002	ZONE 5	LAKE		N/A	28	29	22
Remove	Z5-SL-18003	ZONE 5	LAKE	LAKE CHAPIN	N/A	28	20	53
Remove	Z5-SL-18004	ZONE 5	LAKE	LAKE EVE	N/A	28	23	29.
Remove	Z5-SL-18005	ZONE 5	LAKE		N/A	27	44	5.5
Remove	Z5-SL-18006	ZONE 5	LAKE		N/A	28	26	51
Remove	Z5-SL-18007	ZONE 5	LAKE	LAKE AUSTIN	N/A	28	21	42
Remove	Z5-SL-18008	ZONE 5	LAKE		N/A	28	28	3.8
Remove	Z5-SL-18009	ZONE 5	LAKE	LAKE TYLER	N/A	28	29	26
Remove	Z5-SL-18010	ZONE 5	LAKE		N/A	28	24	39.
<u> Remove</u>	Z5-SL-18011	ZONE 5	LAKE		N/A	28	15	36
Remove	Z5-SL-18012	ZONE 5	LAKE		N/A	28	28	37.
Remove	Z5-SL-18013	ZONE 5	LAKE		N/A	28	21	43
<u> Remove</u>	Z5-SL-18014	ZONE 5	LAKE		N/A	28	24	57.
<u> Remove</u>	Z5-SL-18015	ZONE 5	LAKE	LAKE PAMELA	N/A	28	31	15.
Remove	Z5-SL-18016	ZONE 5	LAKE	LAKE CROWELL	N/A	28	25	10.
Domouro	75 SL 19017	ZONE E	LAKE		NI/A	20	24	10



TABLE VIEW

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

Example: Z5-SL-18003

ll Lakes Site Selections - Surface Water	List Frame: 20 found.					
PK RANDOM SAMPLE LOCATION	REPORTING UNIT (String)	WATERBODY TYPE (String)	WATERBODY NAME (String)	CAN BE SAMPLED (String)	LAT_DD (Double)	LAT_MM (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 DRG map 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.
emove Z5-SL-18001	ZONE 5	LAKE		N/A	27	48
emove Z5-SL-18002	ZONE 5	LAKE		N/A	28	-29
em ve Z5-SL-18003	ZONE 5	LAKE	LAKE CHAPIN	N/A	28	20
emove Z5-SL-18004	ZONE 5	LAKE	LAKE EVE	N/A	28	23
emove Z5-SL-18005	ZONE 5	LAKE		N/A	27	44
emove Z5-SL-18006	ZONE 5	LAKE		N/A	28	26
emove Z5-SL-18007	ZONE 5	LAKE	LAKE AUSTIN	N/A	28	21
emove Z5-SL-18008	ZONE 5	LAKE		N/A	28	28
emove Z5-SL-18009	ZONE 5	LAKE	LAKE TYLER	N/A	28	29
emove Z5-SL-18010	ZONE 5	LAKE		N/A	28	24
emove Z5-SL-18011	ZONE 5	LAKE		N/A	28	15
emove Z5-SL-18012	ZONE 5	LAKE		N/A	28	28
emove Z5-SL-18013	ZONE 5	LAKE		N/A	28	21
emove Z5-SL-18014	ZONE 5	LAKE		N/A	28	24
emove Z5-SL-18015	ZONE 5	LAKE	LAKE PAMELA	N/A	28	31
emove Z5-SL-18016	ZONE 5	LAKE	LAKE CROWELL	N/A	28	25
emove Z5-SL-18017	ZONE 5	LAKE	LAKE RHEA	N/A	28	31



COMMON RECON TOOLS: CHANGE SITE LABELS



List Frame Layer Propertie	es Menu	
Labels Not Visible at this Sca Labels can be shown out to sca Label Field: PK_RANDOM_SAMPLE Change Label Field	ale 1:4,500,000. _LOCATION	Leger
Double click the Small Lakes Site selections tile with left mouse button (Double Touch for touch screen devices.).	Select "Change Label Field."	



COMMON RECON TOOLS: EXAMINE IMAGERY FROM MULTIPLE YEARS



Click "Show Imagery Slider."



CONFIRM PRESENCE OF WATERBODY IN HISTORIC AERIALS

Imagery Sources

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



Blue circle shows that Lake Chapin (Z5-SL-18003) is present in photos from 1944.

Red rectangle shows example of a nearby manmade lake-like feature, which is not present in the photos from 1944.



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





Preparation:

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

Except:

Small Lakes Site Sections, WMS Lakes Resource, and Cadastral Property Appraiser Parcels.





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

Use identify tool to select lake chapin.





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.





Use polygon drawing to identify parcels and owners.

Make lake polygons layer not visible.

Make cadastral layer visible.





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





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

¥.					11111111			
Clear I	Results	Printable View	X Download as Spreadsheet K Close					
Cadastral Property Appraiser Parcels - Cadastran (Hoperty Appraiser Parcels) - Public View: 16 found.								
	OBJECTID	PARCELNO	PARCEL ID	OWN NAME	OWN ADDR1	OWN ADDR2		
	<u>(OID)</u>	(String)	<u>(String)</u>	(String)	<u>(String)</u>	(String)		
	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 This field reflects data that represents additional space needed for the primary own mailing address. If not requ this field will be blank. The e in this field is variable lengt and can contain up to 40 alphanumeric characters.		
<u> Remove</u>	6096223	272431030603140	272431030603140	MORSE WILLIAM O	17200 ARROWHEAD BLVD			
<u> Remove</u>	6097608	272431030603160	272431030603160	SECONDO THOMAS JOHN	17138 ARROWHEAD BLVD			
<u> Remove</u>	6096221	272431030603120	272431030603120	CERAVOLO PAUL	CERAVOLO MICHELLE	17226 ARROWHEAD BLVD		
<u> Remove</u>	6092451	272431779900002	272431779900002	GRIGSBY PROPERTIES LLC 83.36%	GRIGSBY FAMILY PARTNERSHIP LTD	10736 MARKERT AVE		
<u> Remove</u>	6096222	272431030603130	272431030603130	FULLERTON NICOLETTE	17214 ARROWHEAD BLVD			
<u> Remove</u>	6096220	272431030603110	272431030603110	LEWANDOWSKI JUSTIN GABRIEL	17248 ARROWHEAD BLVD			
<u> Remove</u>	6096224	272431030603150	272431030603150	ANDERSON MARY J	216 SE CAMP ST			
<u> Remove</u>	6097614	272431030603230	272431030603230	CENTRAL FLORIDA INVESTMENTS IN	5601 WINDHOVER DR			
<u> Remove</u>	6097611	272431030603200	272431030603200	BASS ROBERT S	JARRELL SANDRA J	14914 ARRENA RD		
<u> Remove</u>	6104569	272431030603090	272431030603090	NEWELL JOEL	14817 AVALON RD			
Remove	6104568	272431030603080	272431030603080	SUMNER MICHAEL B	14829 AVALON RD			
Remove	6097609	272431030603170	272431030603170	DARLING ALAN H	DARLING SUSAN H	17126 ARROWHEAD BLVD		
Remove	6096219	272431030603100	272431030603100	GROOVER JEREMY	14805 AVALON RD			
Remove	6097613	272431030603220	272431030603220	LU DAN	14938 ARRENA RD			
🛱 Remove	6097610	272431030603180	272431030603180	POLANSKAS MARK V	POLANSKAS MARY TERESA ROBEY	4377 SAMBOURNE ST		



SAVING AND LOADING MAPS: SAVE MAP TOOL

A Map Direct: General ← → C ① ca.de Show Legend Uncontinued Agagine M. Uncontinued Agagine M. Continued Agagine M. Continued Agagine M.	ized X ep.state.fl.us/mapdirect/?focus=gwis	Click on the Share icon and choose "save map" button.
Primary Canal Site Selu. Primary Canal Site Selu. Prover Site Selections Stroom Selections Show Imagery Silder Show Imagery Silder Show Imagery Silder Show Imagery Silder Show Imagery Silder Show Imagery Silder	URL to copy and paste for this map: http://ca.dep.state.fl.us/mapdirect/?focus=gwis&ts=1496578280102&customized=gwis&zoom=lation&latDD=29 *Tris URL preserves the mop focus (Generalized Water Information System), the current loyers (Including visibility and lobels), the current basemap and imagery set, the current map center, the current scale and the blue map marker. It does not preserve the selection, drawings, filter settings or order details. ***The Save Map and Load Map as file also preserve drawings. Share on Facebook Share on Twitter Share on Google+ Share on LinkedIn Pin on Pinterest Director Binston PLAGLER	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_SL_Cycle18_Sites1to20.mdMap".



SAVING AND LOADING MAPS: LOAD MAP TOOL

🕅 Map Direct: Generaliz	red x	
\leftrightarrow \rightarrow C (i) ca.de	p.state.fl.us/mapdirect/?focus=gwis	☆ 🖪 🖸
Show Legend	ZZ-CIN-K0039 ZZ-CIN-K11001 ZZ-CIN-K10010 ZZ-CIN-K10000 ZZ-CIN-K10000 ZZ-CIN-K10000 ZZ-CIN-K10000 ZZ-CIN-K10000 ZZ-CIN-K10000 ZZ-CIN-K100000 ZZ-CIN-K100000 ZZ-CIN-K1000000 ZZ-CIN-K10000000000 ZZ-CIN-K1000000000000000000000000000000000000	at 48
	Share this Map	O What's nearby?
UnConfined Aquifer W	Share Map Direct!	WN PI
Confined Aquifer Wels	Share by Email* Bookmark Map* Save Map** Load Map** Drop Map File (.mdMap) or Report File (.mdReport) here, or browse: Choose File No file chosen	Plantarev Bay Got A Country Club
	URL to copy and paste for this map:	
River Site Selections	Intp./rea.dep.state.m.ds/mapuffect/riocus=gwiskts= 14005/0200102&customized=gwiskz500m=fation&latDD4 *This URL preserves the map focus (Generalized Water Information System), the current layers (including visibility and labels), the current basemap and imagery set, the current map center, the current scale and the blue map marker. It does not preserve the selection, drawings, filter settings or other details. **The Save Map and Load Map as file also preserve drawings.	VOLUSIA
Show Imagery Slider	Lake Dission	Show County V
Z3CanalsSitesmo	iMap ^	Show all

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

... Load Map**

"Z5_SL_Cycle18_Sites1to20.mdMap"



ADDITIONAL ONLINE RESOURCES

Map Direct Help Guides

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

Watershed Information Center

Map Direct Resources Section

http://publicfiles.dep.state.fl.us/dear/watershed%20monitoring/Info%20Ce nter/

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 Division of Environmental Assessment and Restoration Florida Department of Environmental Protection

Contact Information: 850-245-8517 Stephanie.Sundermanbarnes@FloridaDEP.gov

