

**Data, Monitoring and Investigations
Team (DMIT)**

DMIT Wetland Site Location Selection

**DMIT/EMT/HAT/MFL Sub-Teams
November 6, 2018**



Goal of DMIT

“Ensure that available hydrologic, environmental, and other pertinent data collected throughout the region are identified, inventoried, and accessible to support the CFWI technical initiatives and CFWI regulatory activities.”



Major DMIT Tasks

- Create and maintain an inventory of existing monitoring data sites (DMIT CFWI Inventory)
 - Metadata and link to data source
- Determine additional data collection needs and develop a work plan to meet those needs
 - Gap Analysis
 - Regional Monitoring Program Summary Report (June 2014)
 - DMIT Hydrogeologic Work Plan for FY 2015-FY2020

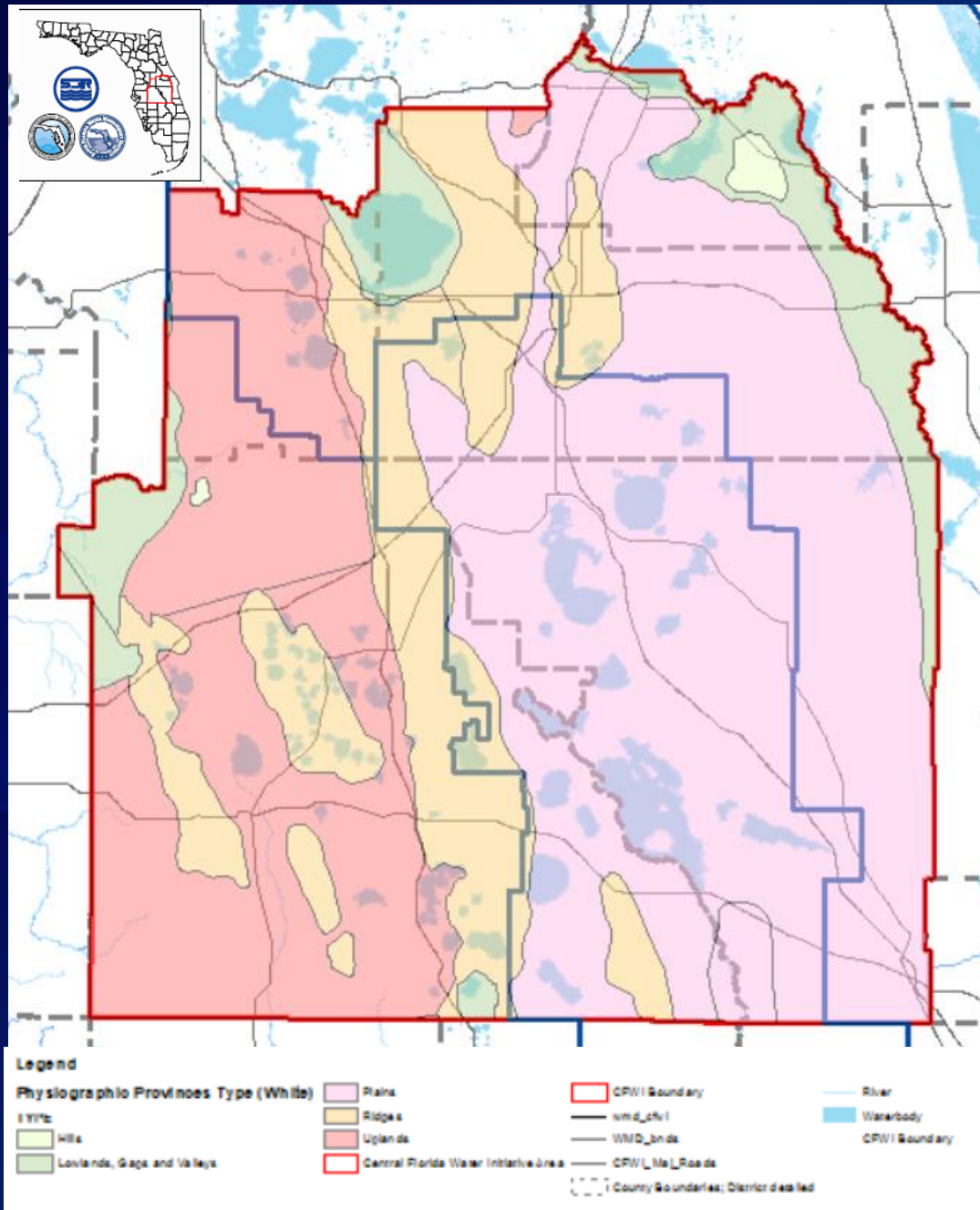
Wetland Monitoring Site Development

- In the 2014 Summary Report, DMIT presented recommendations for a minimum and optimum amount of monitoring for each of the aquifer systems and for wetlands.
- DMIT's approach to developing a minimum recommendation was to start with the monitoring sites that meet a specific, urgent need and fit within DMIT recommendations for regional monitoring improvement and efficiency.
- For the Wetland Minimum, DMIT recommended that a minimum number of wetland monitoring sites should be set so that there is at least one monitoring site per hydroclass of wetland within each of the identified physiographic regions.
- This would result in the addition of 107 wetland monitoring sites to meet a minimum of wetland sites that are monitored.

Wetland Monitoring Site Selection

- Due to practical, logistical and safety reasons, DMIT has identified the need to modify the wetland site selection approach.
- DMIT is coordinating with stakeholders.
- DMIT will recommend a modification of the approach that meets the data needs for the CFWI teams. The total number of sites is unchanged.

Physiographic Provinces within CFWI



- Lake Uplands
- Lake Wales Ridge
- Rock Ridge Hills
- Zephyrhills Gap
- Polk Uplands
- Winter Haven Ridge
- Lakeland Ridge
- Gordonville Ridge
- Eastern Valley
- St. Johns River Offset
- Central Valley
- Marion Upland
- Western Valley
- Osceola Plain
- Mount Dora Ridge
- Geneva Hill
- Orlando Ridge
- Bombing Range Ridge
- Okeechobee Plain
- Desoto Plain
- Lake Henry Ridge
- Intraridge Valley



Limitations to Site Selection

- Confounding factors (e.g., flood control/regulation schedules, storm water management systems, mining activities, etc.)
- Site access on private land, single family homesites
- Wetland/upland ecotone highly altered by current land-use practices
- Safety considerations (Avon Park Bombing Range) and security of equipment considerations
- Access requests declined

Example of Practical Limitations

Kissimmee River Pool A

Hydroclass 2F Floodplain

Structure S65A



Okeechobee Plain

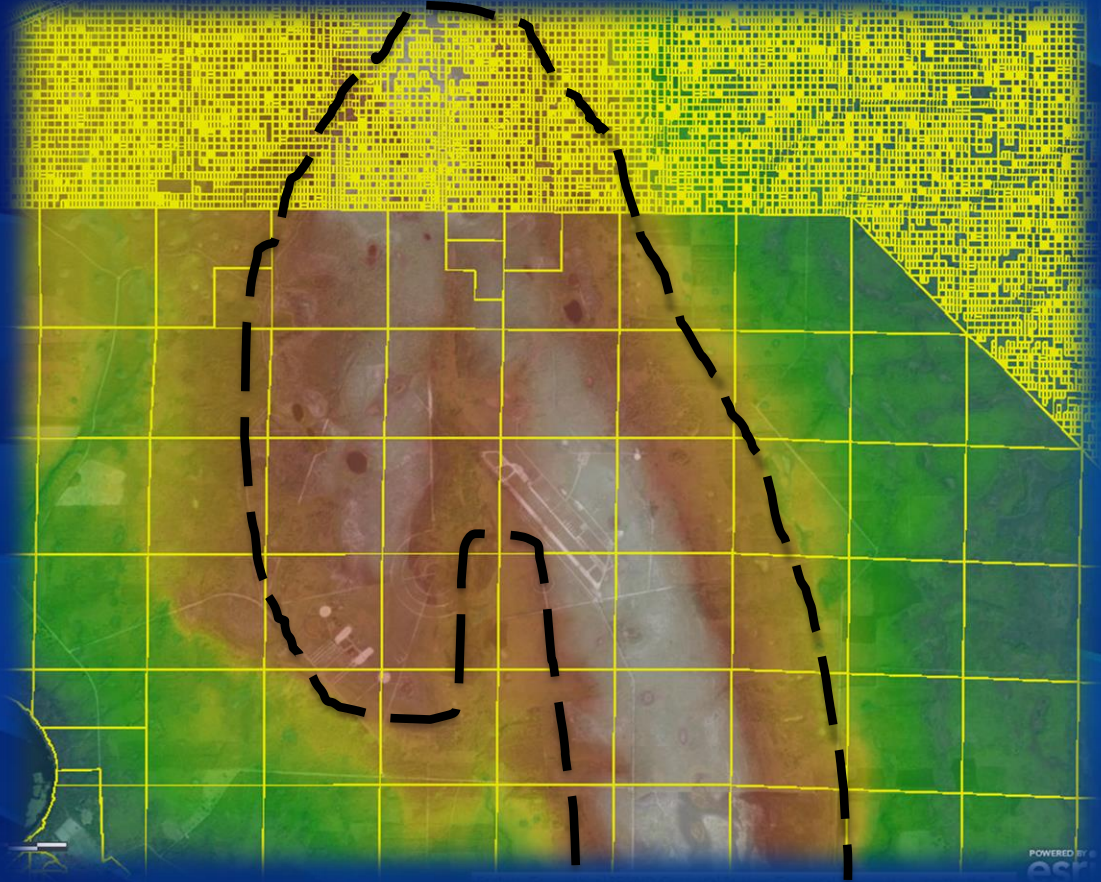


SFWMD has 5 existing surficial aquifer monitoring wells within the physiographic region

Examples of Site Access and Safety Limitations

Bombing Range Ridge

- 6 of 11 hydroclasses
- Only 2 hydroclasses can be monitored
- Remaining 4 hydroclasses are part of active bombing area
- Single-family lots and no road access



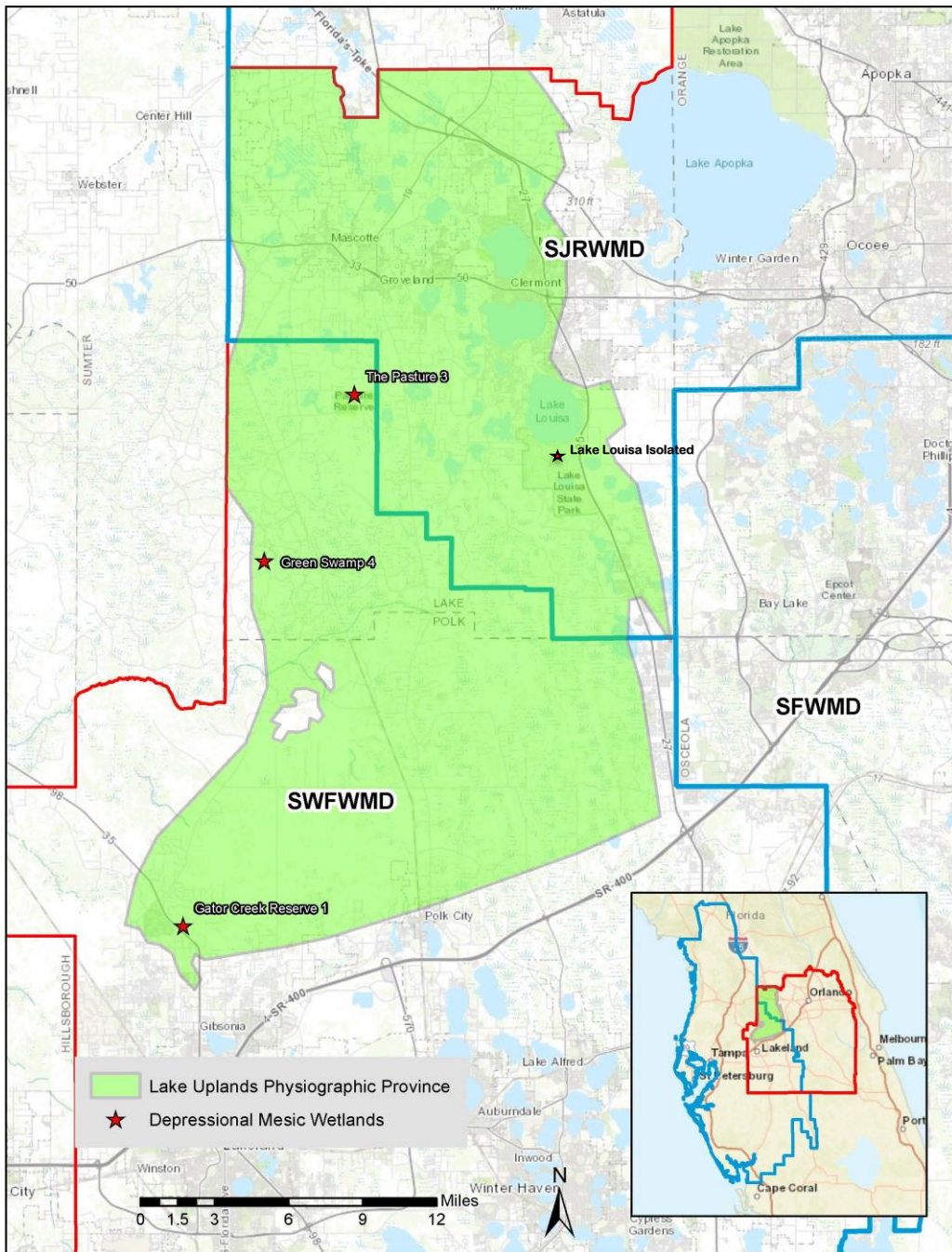
Proposed DMIT Recommendations

Select 107 wetland monitoring sites including establishing multiple sites of the same hydroclass in physiographic region to provide:

- Geographic representation of larger physiographic regions
- Increase monitoring of underrepresented and sensitive hydroclass wetland types (1A Depressional Mesic, 1B Depressional Xeric, 2A-M Large Isolated, 2A-X Isolated Ridges)
- Increase hydroclass representation of sites expected to exhibit indicators of stress and that are currently exhibiting indicators of stress
- Focus on sites that will provide long term viability of data
- Meet the data needs for future groundwater and water supply planning analysis
- Would provide for cost saving related to access and site distribution

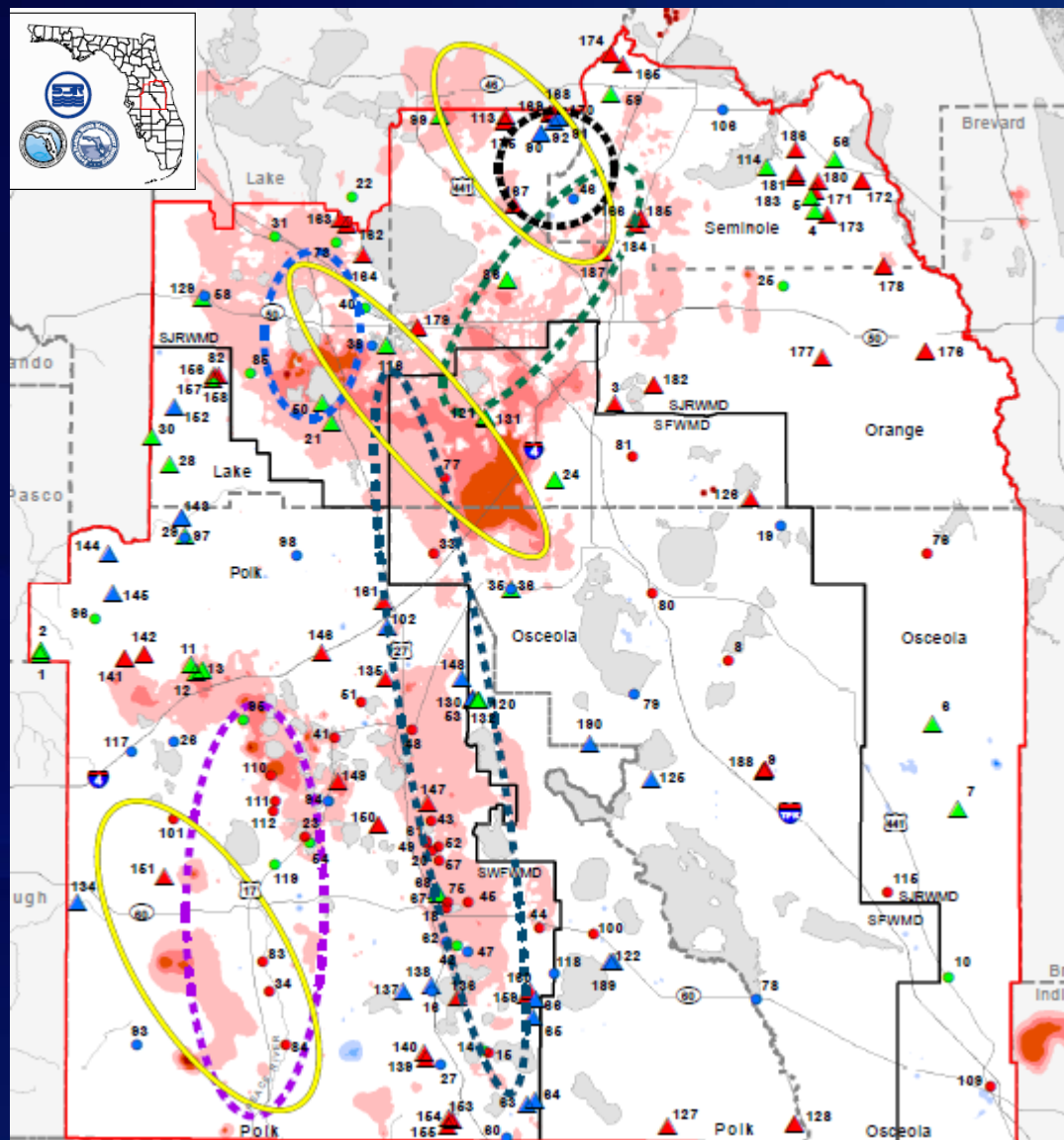
Lake Uplands

- Occurs in 2 WMDs
- Large area that extends from the northern boundary of CFWI planning area to just north of I-4
- Propose multiple monitoring sites for 1A Depressional Mesic hydroclass type



Locations of Proposed Monitoring Sites

- Focus on Priority areas
- Sited where stress expected and where observed
- Provides distribution over large physiographic provinces
- Provides sites where no stress expressed or expected (baseline)
- Sited on public lands with greater long-term viability



Status of All DMIT Sites



Distribution of Proposed Monitoring Sites

WETLAND HYDROCLASS	SF Only		SF and SJ			SJ Only					SF/SJ/SWF	SJ and SWF		SWF Only								
	Bombing Range Ridge	Okeechobee Plain	Osceola Plain	Orlando Ridge	Mount Dora Ridge	Eastern Valley	Geneva Hill	St. Johns Offset	Marion Upland	Central Valley	Lake Wales Ridge	Lake Upland	Western Valley	Desoto Plain	Intraridge Valley	Lake Henry Ridge	Gordonville Ridge	Lakeland Ridge	Polk Uplands	Rock Ridge Hills	Winter Haven Ridge	Zephyrhills Gap
1A Depressional Mesic			6		1	1	1	1	1	1	1	4							3	1		1
1B Depressional Xeric	1		1	1	1						4							1	2			
1C Seepage			1	1	1	1	1		1	1	1								1			
1D Flats Wetlands			1			1	1	1	1													
1E Flatland Lakes			1				1															
1F Xeric Lakes	1			1	2					1	3	2							2		2	
2A M Large Isolated			2	1		1	1		1			3	1						1			1
2A X Isolated Ridges				1	1						2											
2D Strands/Sloughs			1	1	1	1	1		1	1	1	2	2						2			
2F Floodplains			4			1	1		1	1	1	1							2			
2G Floodplain Lakes			1								1											

Key:

Number of sites identified in this hydroclass

No wetland in this hydroclass

Access limitations/no suitable sites

No sites selected in this hydroclass

Underrepresented or sensitive hydroclass wetland types (2014 Summary Report)



Wetland Monitoring Site Development

- Schedule:
 - November 6, 2018: Coordinate with WRAT Sub-Teams
 - November 8, 2018: Present to WRAT
 - Future: Present to MOC and SC as part of DMIT Annual Update

Questions?

<https://Cfwiwater.com/data.html>

