Environmental Measures Team

August 10, 2016



EMT Members & Participants*

- Marc Ady SFWMD
- Kym Holzwart & Jaime Swindasz SWFWMD
- Kristian Holmberg & Lance Hart* SJRWMD
- Shirley Denton & David MacIntyre Utilities
- Debbie Bradshaw* & Keith Browning* Utilities



Wetland Comparison – Isolated & Contiguous

GIS % coverage of EMT studied wetlands

Data from EMT Final report

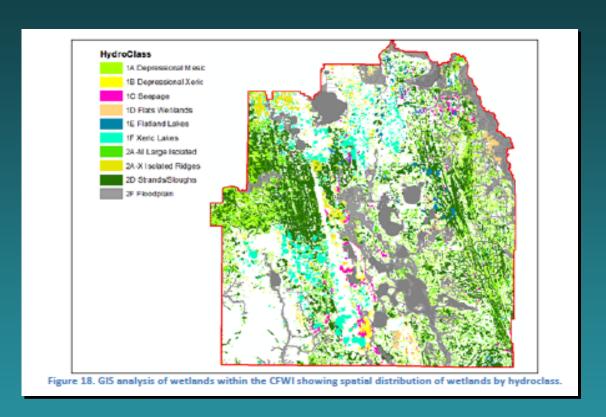
Table 4. Total acreages and percentage coverages of wetland hydroclasses (types) within the CFWI, based on the GIS analysis.

Туре	Description	Acreage	% Total Wetland Acres
1A + 2A-M + 1E	Isolated and semi-isolated mesic (plains)	169,000	15.7
1B + 2A-X + 1F	Isolated and semi-isolated xeric (ridges)	119,000	11.1
10	Slope (seepage)wetlands	22,000	2.1
**1D	Flats wetlands (ridges, plains and floodplains)	26,000	2.4
2D*	Connected-(strands/sloughs-ridges and plains)	279,000	25.9
2F*	Floodplain (lakes and wetlands)	461,000	42.8
	TOTALS	1,076,000	100



DMIT Wetland Hydroclasses

- 10 Hydroclasses:
- Depressional Mesic
- Depressional Xeric
- Seepage
- Flats Wetlands
- Flatland Lakes
- Xeric Lakes
- Large Isolated
- Isolated Ridges
- Strands/Sloughs
- Floodplain
- Hydroclasses from EMIT Final Report





EMT Wetland Classes

Wetland Data Class	No. of Wetlands	Data Class Characteristics		
		Wetland Type	Current Stress Condition	Water Level Hydrograph
Class 1	44	Known	Known	Known
Class 2	313	Known	Known	Unknown
Class 3	(thousands)	Known	Unknown	Unknown

Isolated Wetlands Only



Isolated & Contiguous Wetlands

Isolated Wetlands

- Most Sensitive to change
- Represents roughly 25%
- Data applied for model calibration
- Stress Evaluation
- EMT & DMIT Studied

Contiguous Wetlands

- Represents roughly 75%
- Confounded
- Data unsuitable for HAT model calibration
- Potential comprehensive view
- DMIT studied



EMT Consensus – Isolated & Contiguous Wetlands

- Recognize desire to focus resources
- Early stages of identifying 107 wetland sites to be monitored
- Although contiguous wetlands represent largest percentage of wetlands within CFWI – refocus wetland monitoring on isolated wetlands for at least short term
- Contiguous wetlands can be included at future date if this data adds value

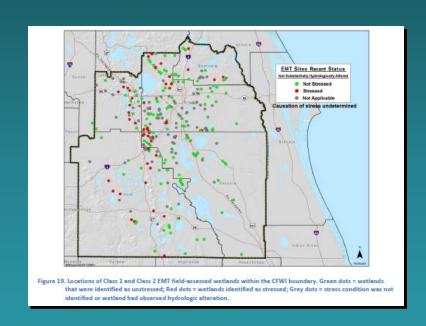


Wetland Monitoring – Class I

- Does need exist for EMT to reevaluate Class I Wetlands?
 - Soils and Wetland Edge Surveyed in 2013
 - EMT consensus No Action Necessary

All EMT Reviewed Wetlands

- Roughly 400 Sites
 - Green Not Stressed
 - Red Stressed
 - Grey –Confounded orStress Unknown





Class II wetlands to Class I Status

- Only 44 Class I Wetlands
- DMIT currently undertaking work product & producing GIS Map
- EMT not compiling candidate list but could assist if required
- EMT Consensus DMIT should increase Class I wetland sample size



Wetland Monitoring – Class II

- Does need exist to re-evaluate original 357 Class II wetlands?
 - Several years since last review
 - Logistics for Site Access determined
 - Original budget + \$400K
 - Original Data Collected over years
 - Specific tasks, procedures and methodology must be streamlined
 - MOC guidance



EMT Consensus – Class II Wetland Monitoring

- Develop staged rollout for monitoring to include:
 - Random sample of original 357 Class II Wetlands
 - Streamlined protocol, methodology & data collection
 - Stressed & non-stressed evaluation initially conducted
 - Increase monitoring intensity only if necessary
- Screening level analysis
- Receive input from MOC concerning intended monitoring and scope of work
- No reason to update statistical evaluation if no significant change noted



HAT Model Calibration

Wetland Monitoring requested from DMIT / EMT

Covers Entire CFWI Geographic area – Not just Kissimmee Valley

GIS map being produced by HAT group – will show data gaps

EMT consensus – Following map evaluation, could select several sites for screening level analysis.

MOC input relative to request

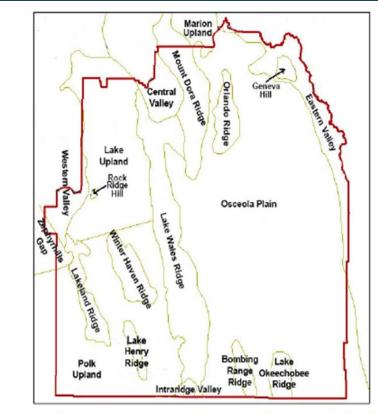
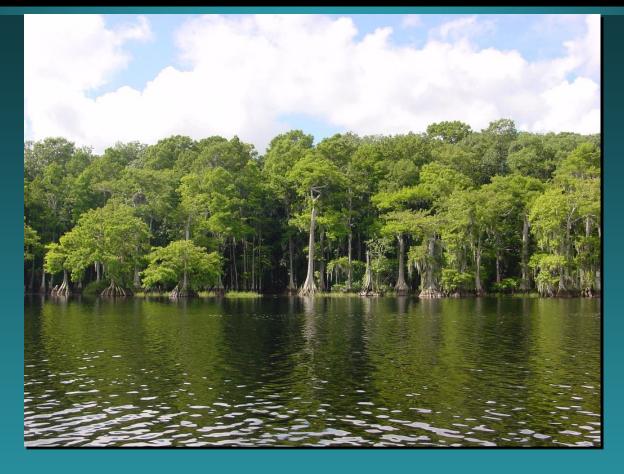


Figure 2. Generalized boundaries of the major physiographic provinces (based on Brooks, 1982) within the CFWI study area boundary.





Questions

Environmental Measures Team

