### Environmental Measures Team

**Current Work Status** 

Management Oversight Committee January 14, 2019

Kym Rouse Holzwart

Senior Environmental Scientist Southwest Florida Water Management District Environmental Measures Team Chair



# **Introduction and Background**

- Subteam of the Water Resources Assessment Team (WRAT)
- Scientists from 3 water management districts and public supply utility representatives
- Provides expertise concerning wetlands and surface waters





### Tasks 1 and 2: Wetlands Analysis Methodology Options COMPLETED

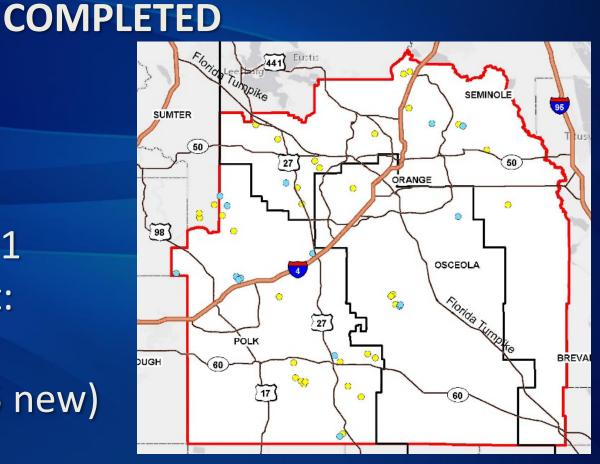
- Statistical analysis of Class 2 wetlands dataset indicated sample greater than original needed to provide reliable answer
- Approved methodology:
  - Visit original Class 1 wetlands
  - Add new Class 1 wetlands
  - Original methodology with expanded Class 1 wetlands dataset and updated model



# Task 3: 2018 Assessment of Class 1 Wetlands

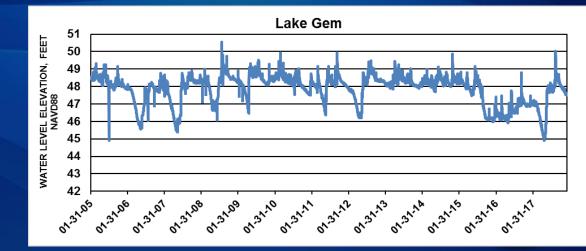


Expanded Class 1
 wetland dataset:
 56 wetlands
 (41 original + 15 new)



### Task 4: Determination of Period-of-Record of Class 1 Wetlands Water Level Data for Wetlands Analysis COMPLETED

 Selected period of record: 2009 through 2017



# Task 5: GIS Tasks in Support of Wetlands Analysis COMPLETED

- Calculate acreage of Class 1 wetlands
- No GIS work needed for Class 2 wetlands
- Calculate acreage of Class 3 wetlands for western portion included in new model
- Calculate stressed and unstressed wetland acreage in each model cell for each model scenario



### Task 6: Wetlands Analysis Task 7: Report Preparation

- Calculate statistical relationship between stress and water levels for Class 1 wetlands
- Relationship used to develop equations to estimate probability of future change in wetland stress status
- Predict probable future change in stressed and unstressed wetland acreage
- Report to support 2020 RWSP



### Task 8: Develop New Methodology to Assess the Impacts of Future Groundwater Withdrawals on Wetlands in the CFWI Planning Area

- Methodology will be used for future RWSPs
- Focus will be on data from wetlands monitoring program being established by the Data, Monitoring and Investigations Team (DMIT)





#### Task 9: Future of the EMT

- In position to complete analyses for future five-year updates of the RWSP, future wetland and surface water assessments, and other related work assignments
- Documentation will ensure knowledge is maintained
- Composition will change over time but representation will remain similar or increase



## **EMT Schedule**

Task	Start Date	Stop Date
1. Class 2 Wetland Power Analysis	1/1/17	5/31/17
2. Methodology Options for Wetlands and Lakes Analysis in Support of the 2020 RWSP	6/1/17	1/31/18
3. 2018 Assessment of Class 1 Wetlands	2/1/18	12/31/18
4. Determine Period-of-Record of Class 1 Wetlands Water Level Data for Wetland Analysis	2/1/18	10/1/18
5. GIS Tasks in Support of Wetlands Analysis	10/1/18	12/21/18
6. Wetlands Analysis	2/1/18	4/30/19
7. Report and Chapter Preparation	2/1/18	4/30/19
8. Develop New Methodology to Assess the Impacts of Future Groundwater Withdrawals in the CFWI Area on Wetlands and Lakes	4/30/19	12/31/20
9. Future of the EMT	4/30/19	Ongoing

