

# Central Florida Coordination Area Update

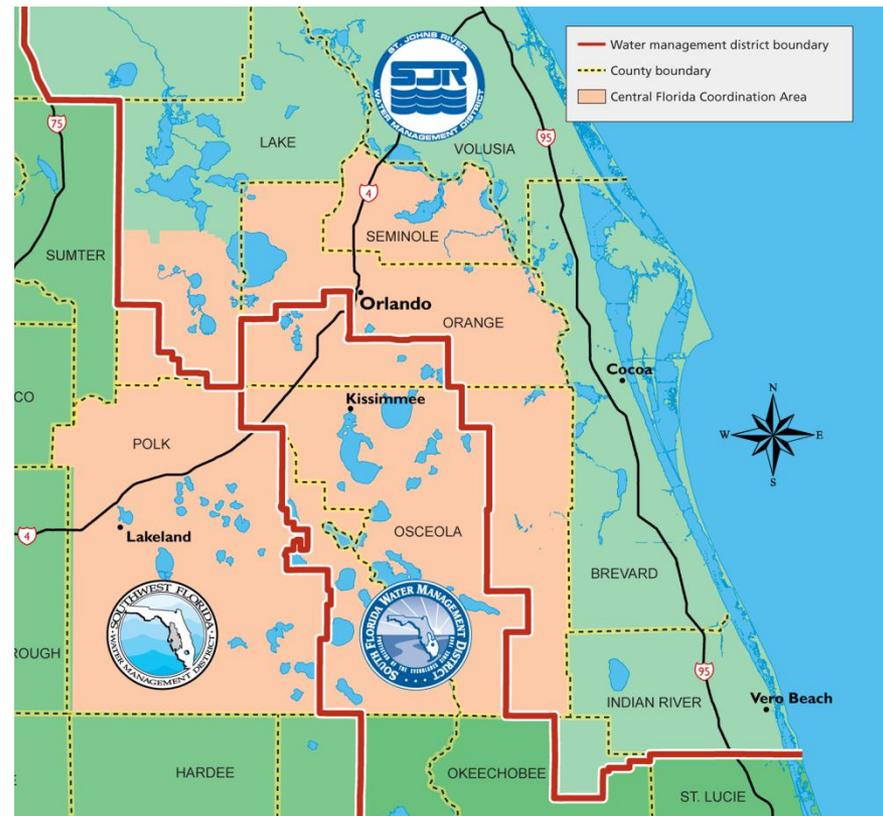
SFWMD Governing Board Workshop

March 11, 2010

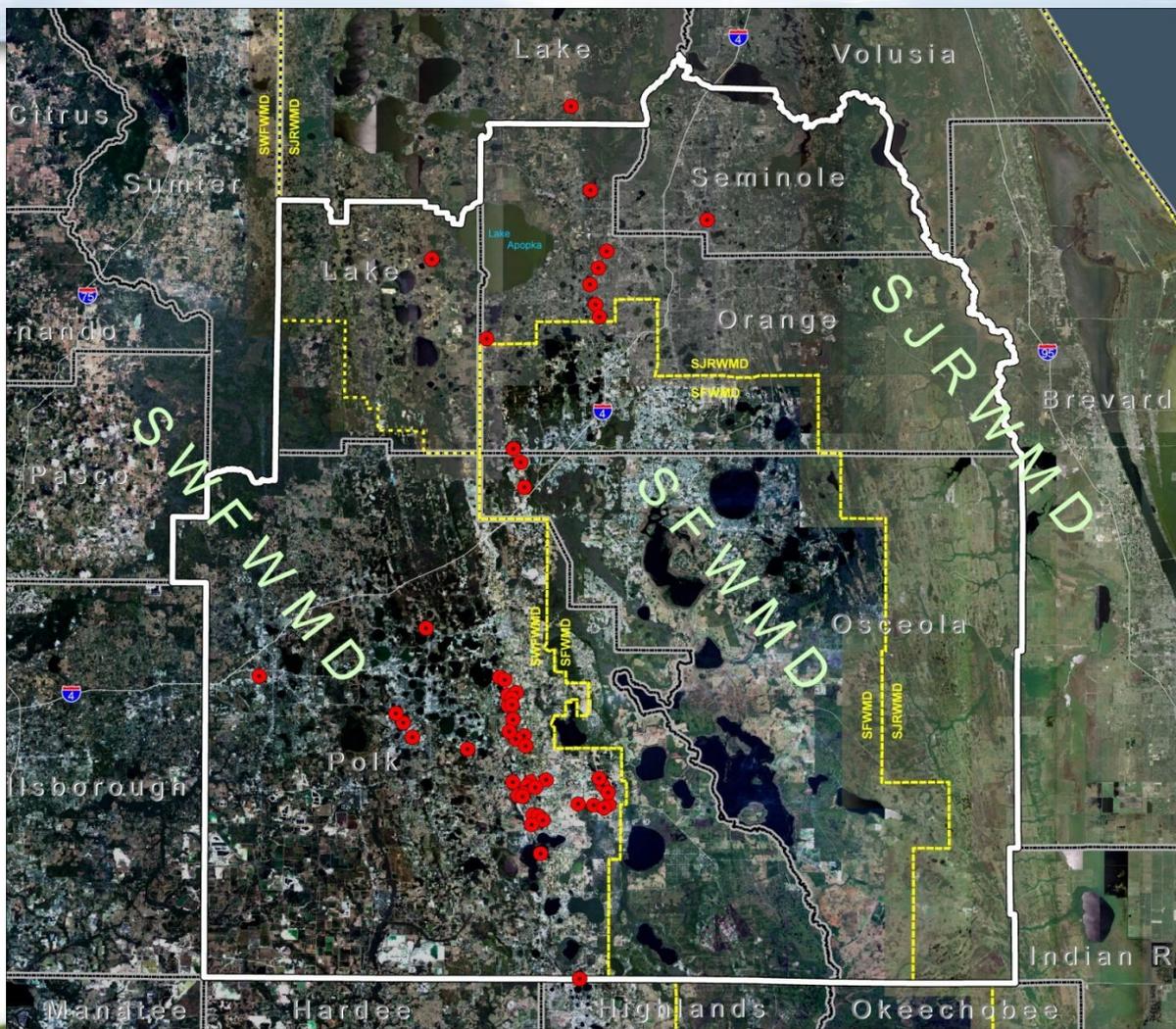
Presented by Dean Powell

# Central Florida Coordination Area (CFCA)

- Portion of Central Florida within three District boundaries
- Groundwater withdrawals may trigger resource constraints in adjacent Water Management District(s)
- Develop a uniform water supply strategy
  - Similar regulations
  - Similar tools
  - Similar planning



# Observed Impacts



**Lakes/ Wetlands With Currently Observed Impacts**

-  CFCA boundary
-  Water management districts
-  County boundary
-  Lakes and wetlands with observed impacts / stressed lakes



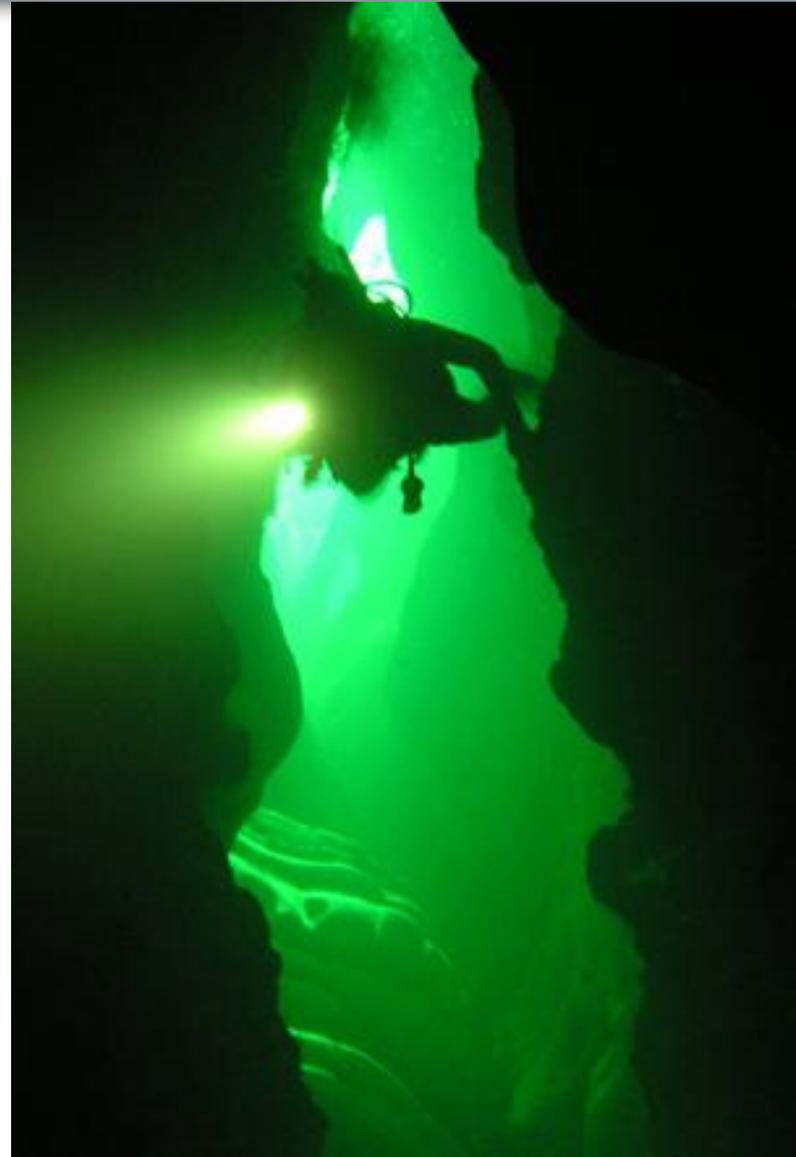
# Southwest Florida Water Management District Resource Constraints

- Groundwater limited in Southern Water Use Caution Area (SWUCA)
  - Extensive saltwater intrusion has occurred
  - Goal is to reduce groundwater withdrawals
- Adopted minimum levels for lakes in central ridge area
  - Immediately west of boundary with South Florida Water Management District
- Upper reach of Peace River extends into CFCA
- Wetland impacts from drawdown of surficial aquifer



# Saint Johns River Water Management District Resource Constraints

- Adopted Minimum Flows and Levels for springs and lakes
- Saltwater intrusion (Cocoa Beach, Melbourne)
- Wetland impacts from drawdown of surficial aquifer



# South Florida Water management District Resource Constraints

- In process of establishing Water reservation for Kissimmee River & Upper Chain of Lakes
  - Sets water aside for protection of fish and wildlife
  - May limit surface water availability
- Wetland impacts from drawdown of surficial aquifer



# Chronology

- February '06 - SJRWMD proposed issuance of Consumptive Use Permit to Orange County
  - Challenged by many governmental entities – SFWMD intervenes
- March '06 - Joint Water Management District Meeting
  - WMDs, DEP & Governor's Office
  - Direction to increase coordination across WMD Boundaries in Central Florida
- September '06 - CFCA Action Plan adopted
- December '06 - STOPR (St. Cloud, Toho Water Authority, Orange County, Polk County, Reedy Creek) formation
  - Goal is to work cooperatively



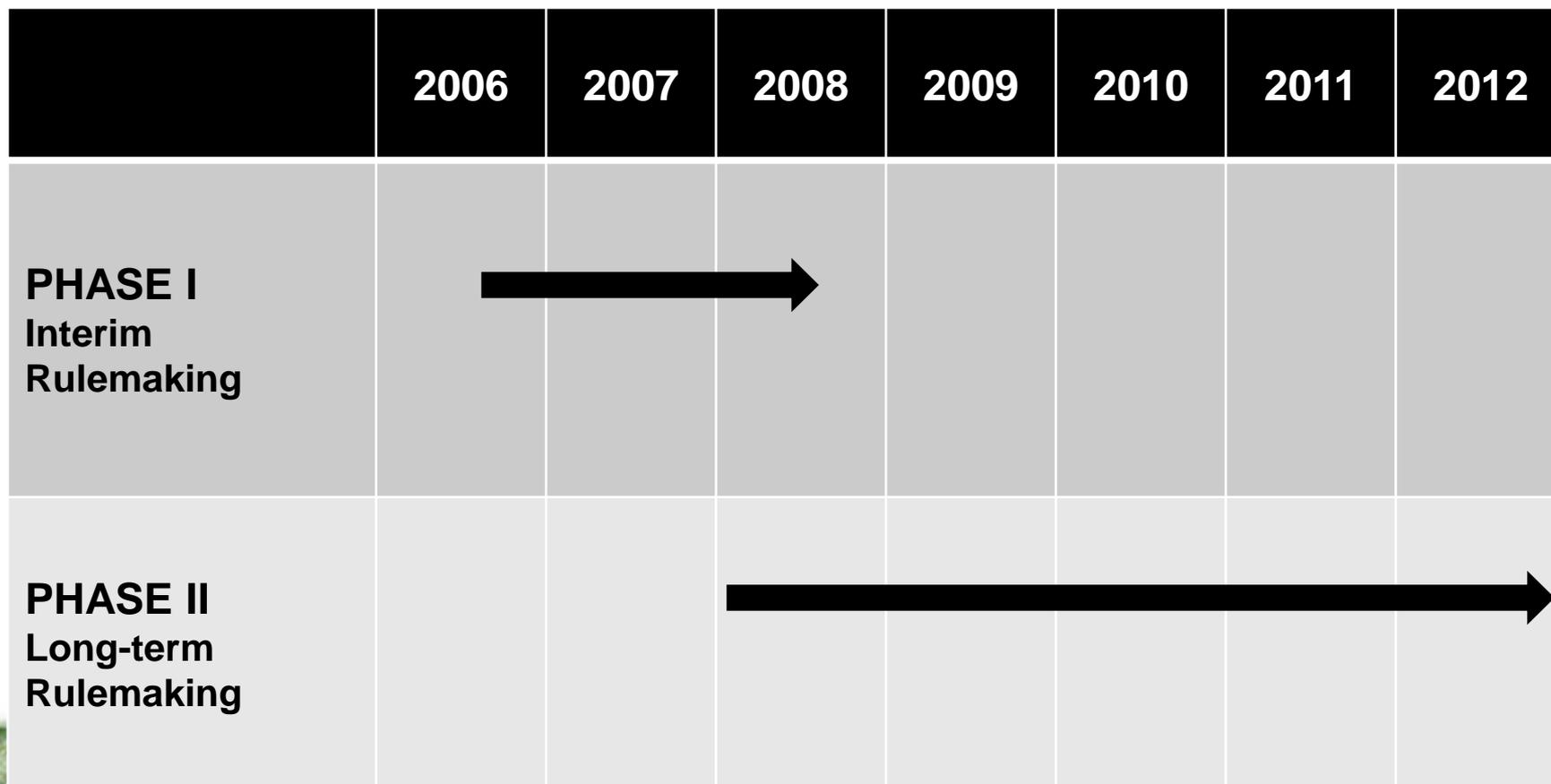
# Central Florida Coordination Area Action Plan – September 2006

- 3 WMD's Developed "Central Florida Coordination Area (CFCA) Action Plan"
  - 2 Phases
  - 3 Components:
    - Regulatory
    - Planning
    - Modeling and Predictive Tools

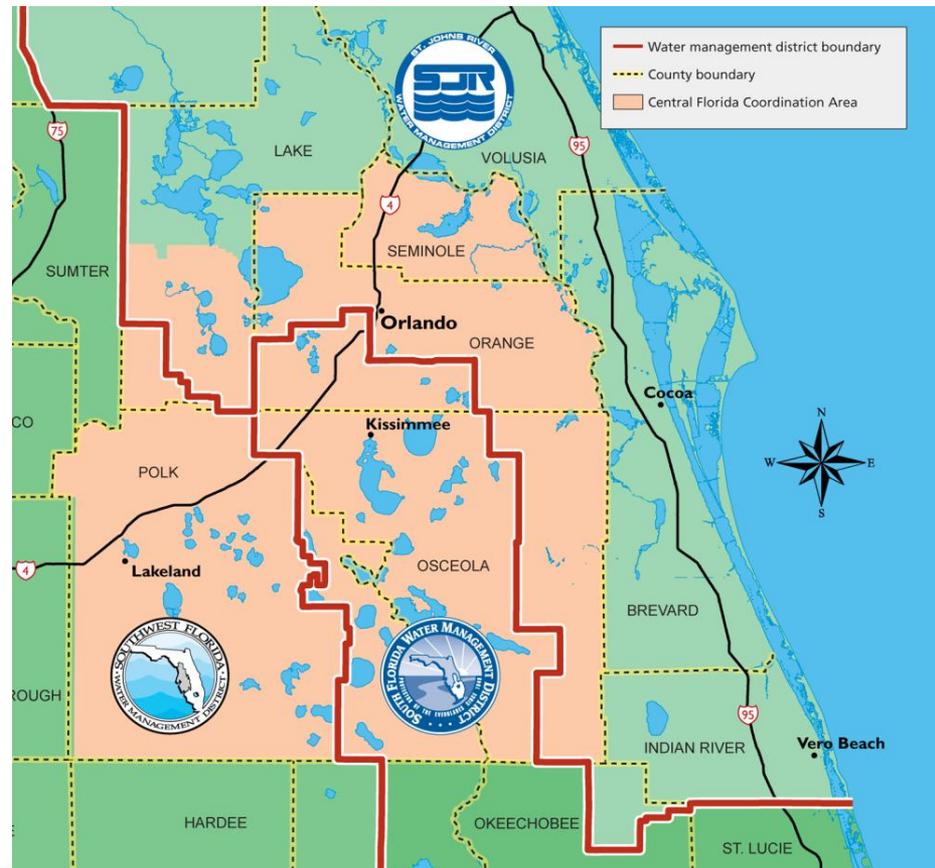


# CFCA Master Schedule

	2006	2007	2008	2009	2010	2011	2012
<b>PHASE I</b> Interim Rulemaking							
<b>PHASE II</b> Long-term Rulemaking							



# CFCA Interim Rules



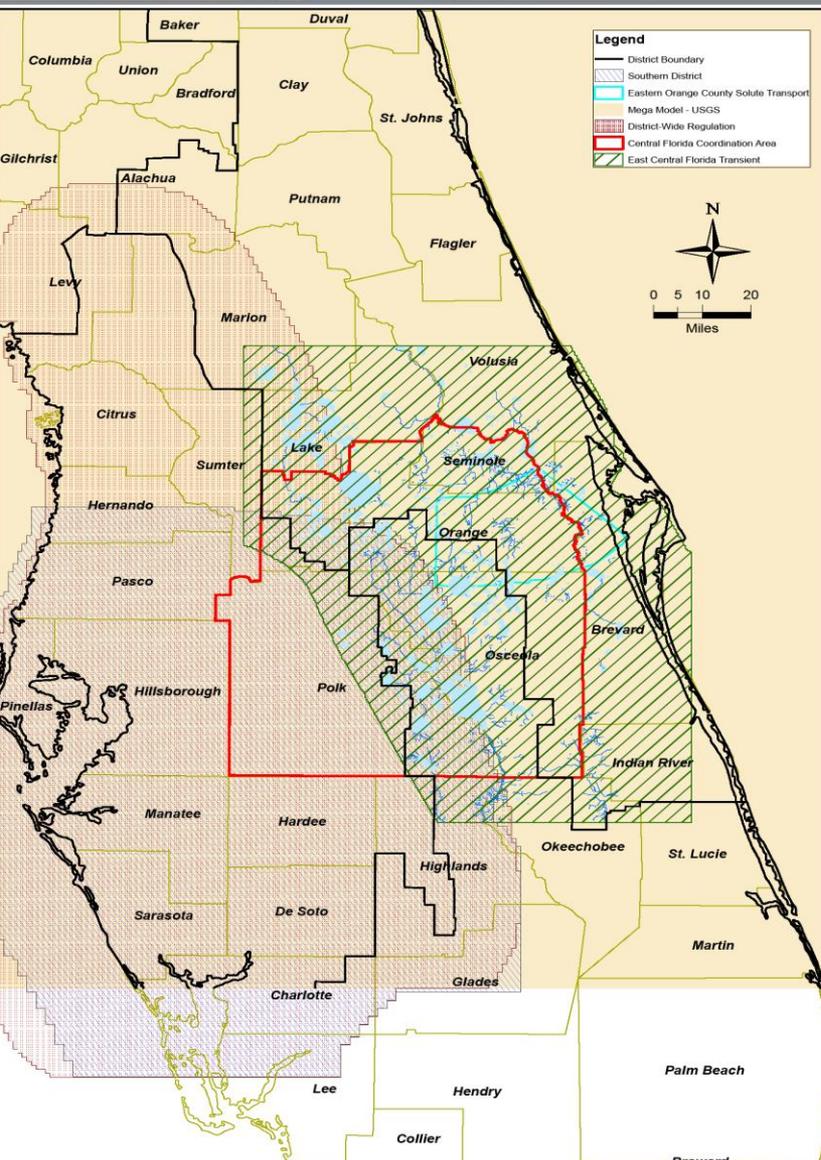
- Adopted in 2007 and sunset in December 31, 2012
- Effective in entire CFCA area, except SWFWMD Southern Water Use Caution Area (SWUCA)
- Groundwater allocations would be limited to a maximum of the demonstrated 2013 demand
- Provides interim regulatory framework for public supply utilities and other similar applicants



# CFCA Master Schedule- Phase II

	2008	2009	2010	2011	2012
<b>Model Development (ECFT &amp; DWRM)</b>	→				
<b>Environmental Assessment</b>	→				
<b>Stakeholder Participation/Input Process</b>		→			
<b>Long Term CFCA Rulemaking</b>		→			
<b>SWS Source Development</b>	→				
<b>Water Supply Plans</b>		→			

# Computer Modeling Component

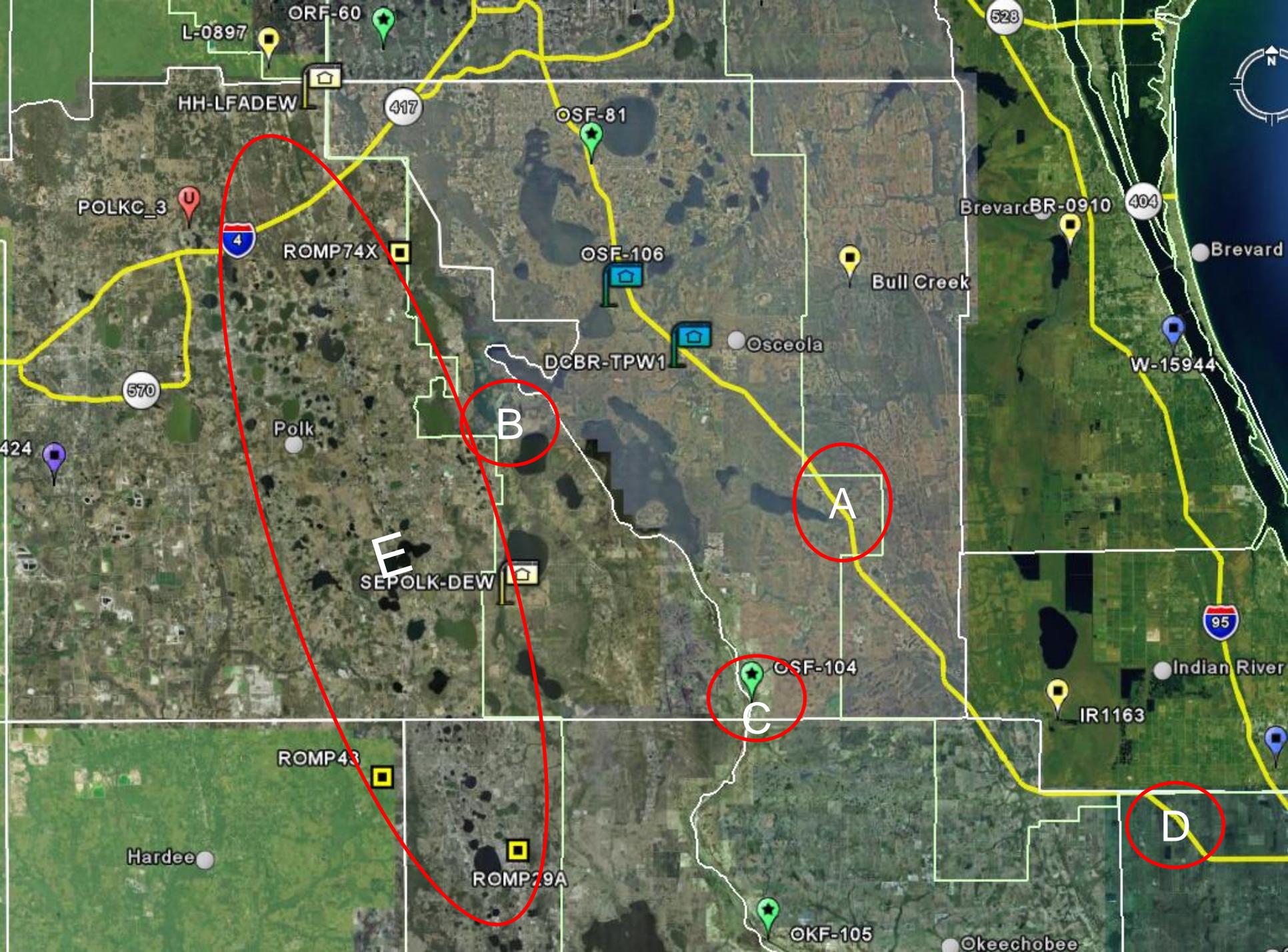


- Two models developed to simulate groundwater conditions
- The East Central Florida Transient Model (SFWMD)
- District Wide Regulation Model (SWFWMD)

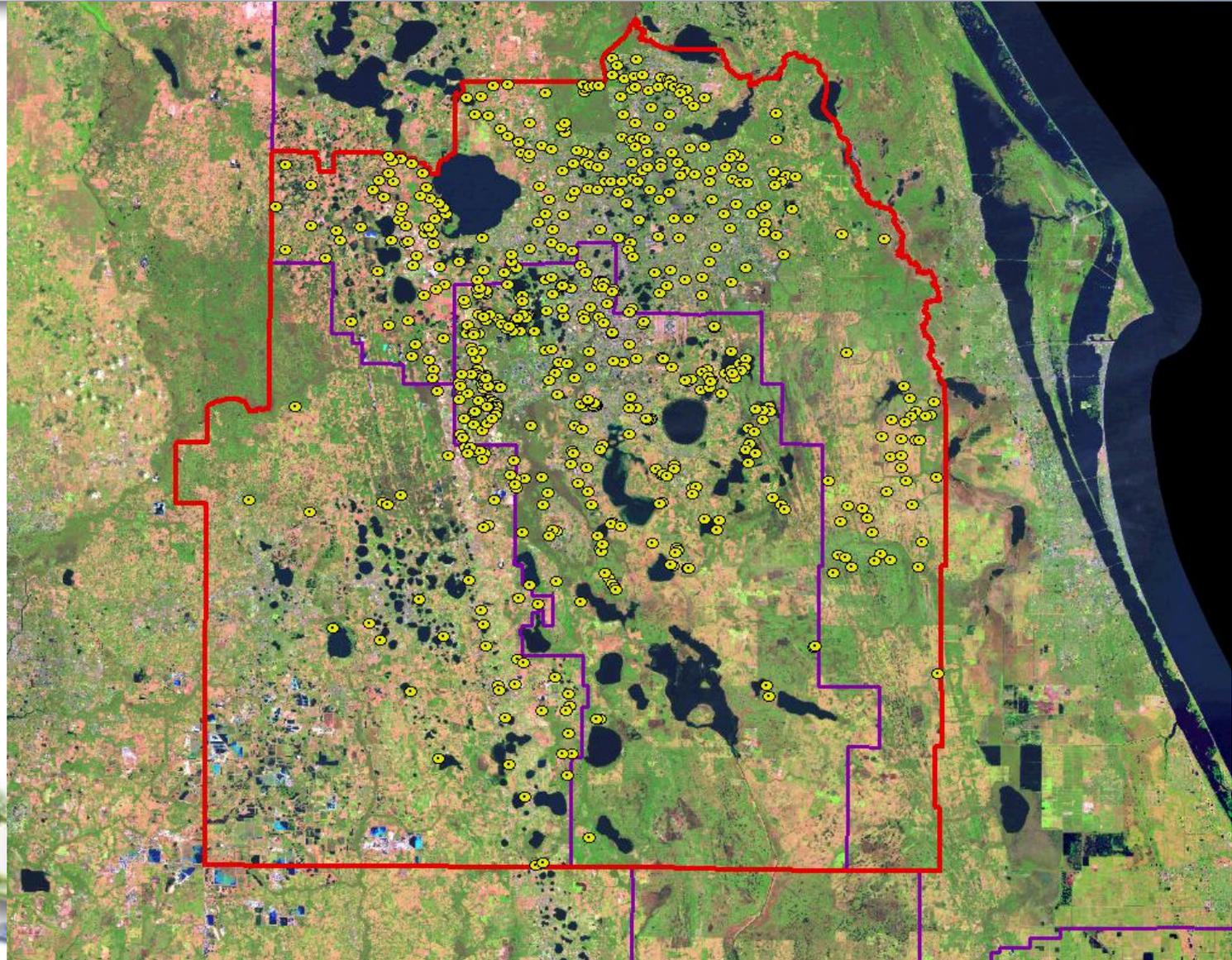
# Strategy to Enhance East Central Florida Transient Model

- Identify Five (5) areas (Sites A, B, C, D, and E) in Upper Kissimmee Basin and vicinity and at each site:
  - Install wells to explore multiple zones above and into the Lower Floridan Aquifer and Boulder Zone
  - Conduct hydrogeologic and isotope data collection and analysis
  - Install recorders/telemetry for long-term water level monitoring of new wells
- \$8,865,700 over 5 years





# Wetland Assessment Component



# Field Assessment - Indicators of Stress

## ■ Vegetation

- Invasion by plants of drier communities
- Presence of invasive/exotic species
- Leaning/fallen trees
- Dead trees or other vegetation
- Shifts and changes in plant communities
- Age class differences of trees
- Lack of regeneration

## ■ Soils

- Oxidation/subsidence
- Fissuring

## ■ Hydrology

- Evidence of reduced hydrology, etc.
- Lack of hydrologic indicators





## Abnormal Adventitious Roots

Caused by Hydrologic Extremes from Dry to Wet Conditions



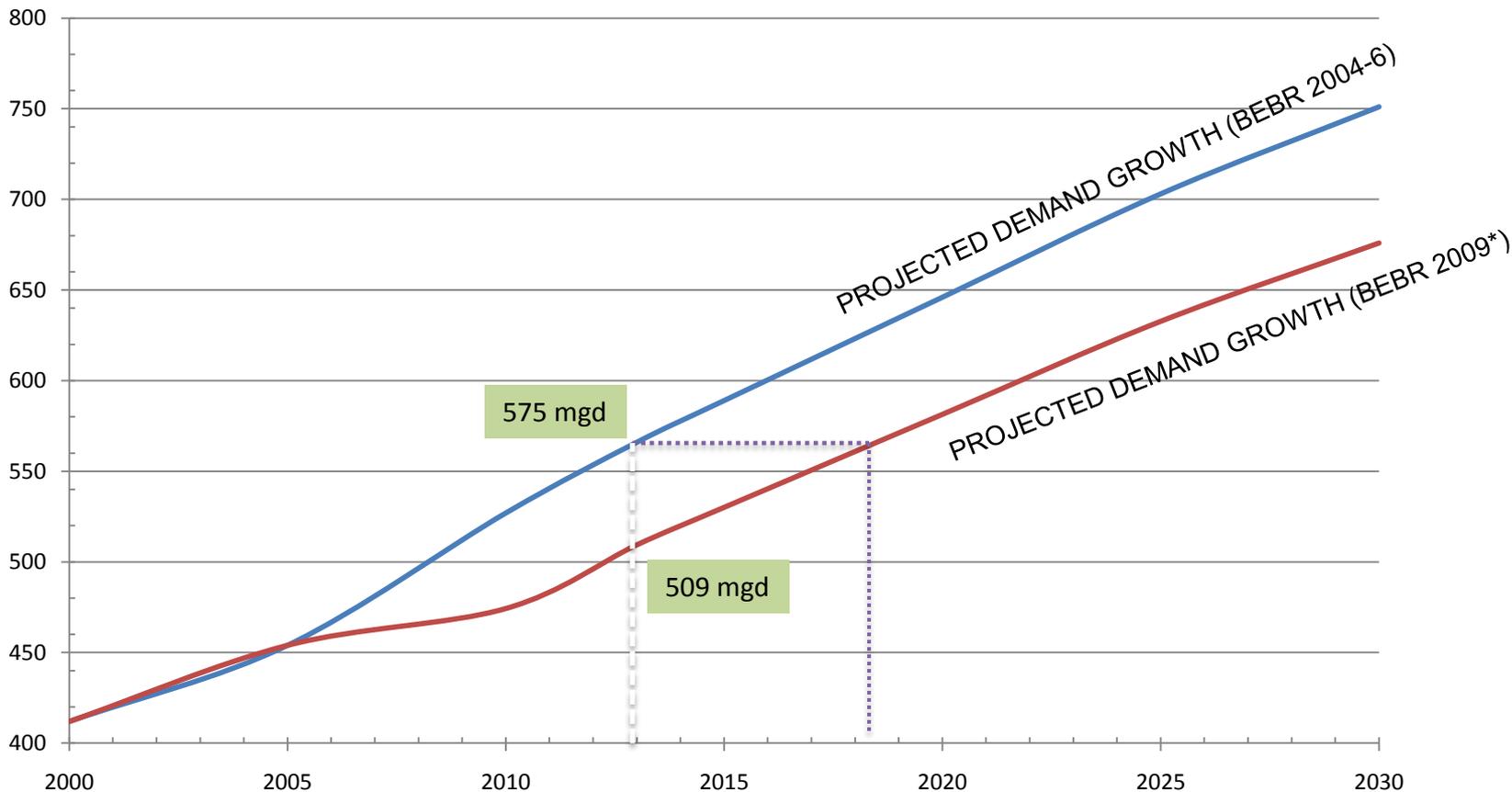
**Soil Fissures**

# Planning Component

- Identify:
  - Future demands
  - Supplemental water supply (SWS) projects to satisfy needs beyond 2013 demand
- Evaluate combinations of SWS projects to best meet projected demands
- Develop implementation strategies



# Estimated Total CFCA Utility Demands\*



\* Estimate dated 12/27/09 and do not represent final values



# Potential Rulemaking Components

## Long-term Rules Adopted by 12-31-2012

- CFCA boundary changes
- Conjunctive use of different sources
- Land-use transitions
- Groundwater availability
- Reuse
- Stormwater capture
- Inter-district transfers
- Conservation
- Defining wetland harm



# Next Steps

- **Now – June:** Define groundwater limits
- **Now – Summer:** Inter-District rule development discussions
- **April – Aug:** Public workshops on groundwater availability
- **September:** Start solution development workshops with public
- **Fall of 2010:** Begin rule development workshops
- **End of 2011:** Summarize strategic water supply plan for CFCA
- **Dec 2012:** Complete rulemaking effort



# *Questions?*

