

Florida Department of Environmental Protection



Water Use & Water Supply Planning

February 12, 2013



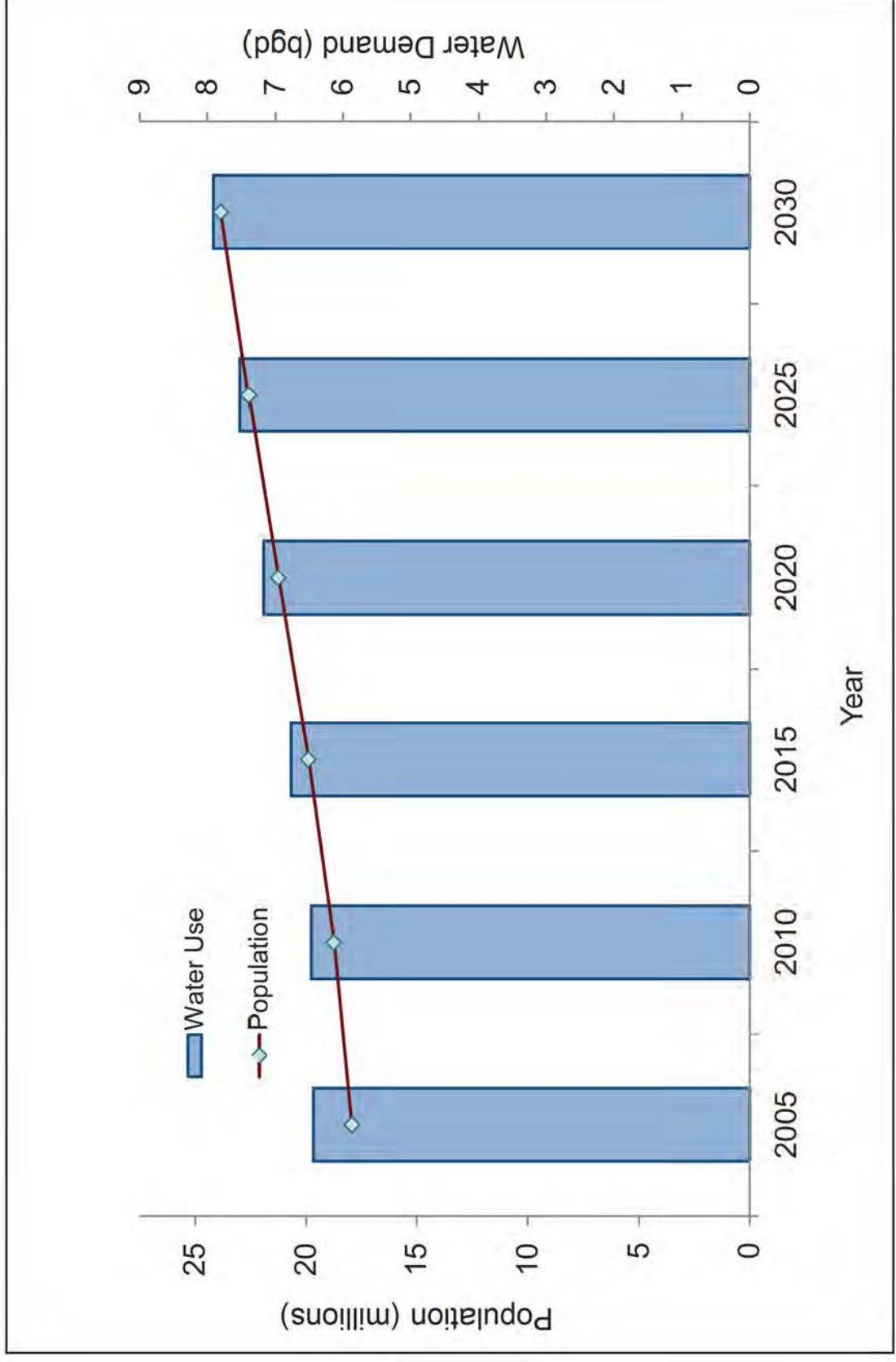


Tools for Managing Water Supply

- Consumptive Use Permitting
- Minimum Flows and Levels/Reservations of Water
- Regional Water Supply Planning

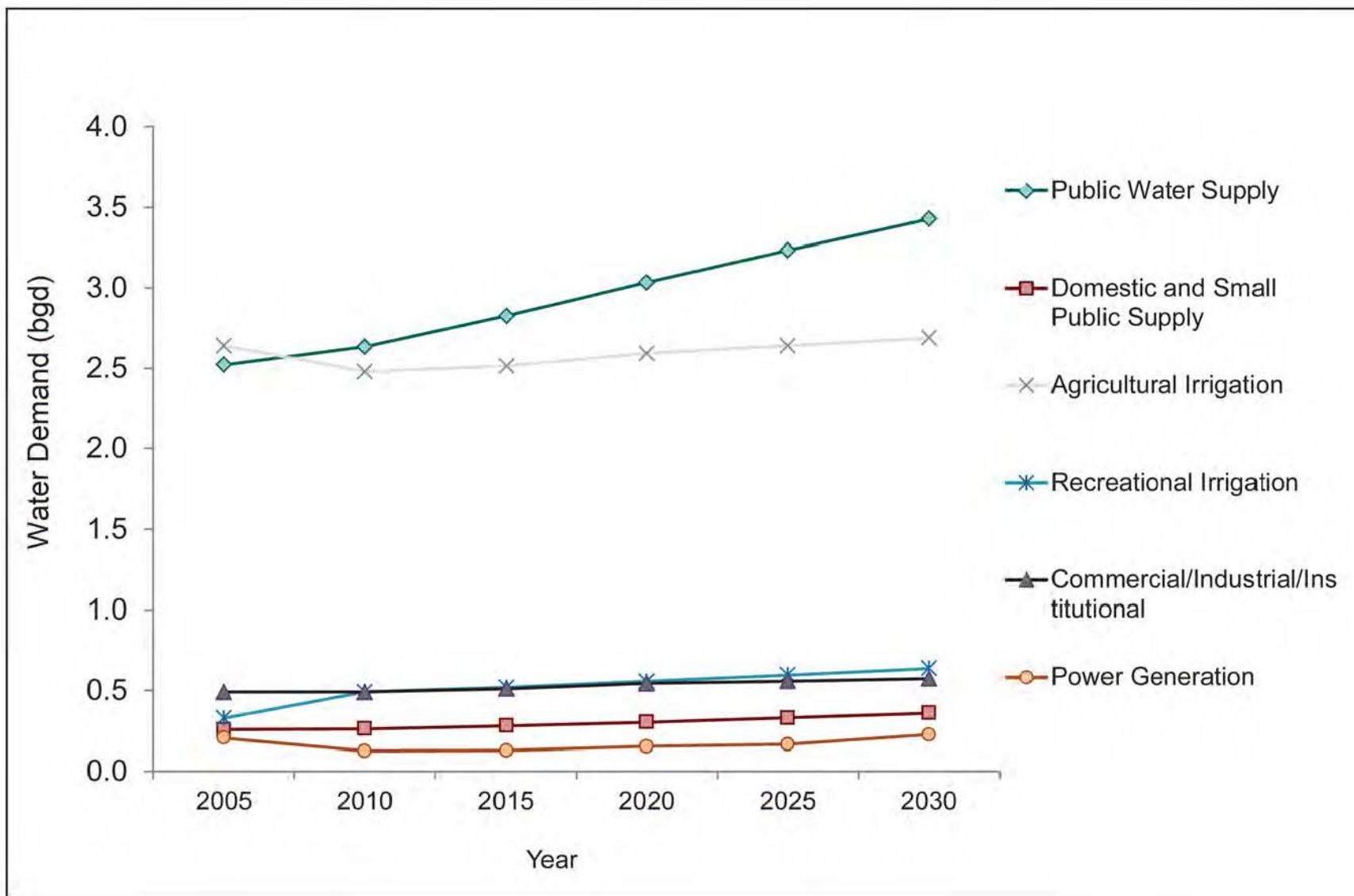


Statewide Demand and Population Projections





Projected Water Demand by Sector



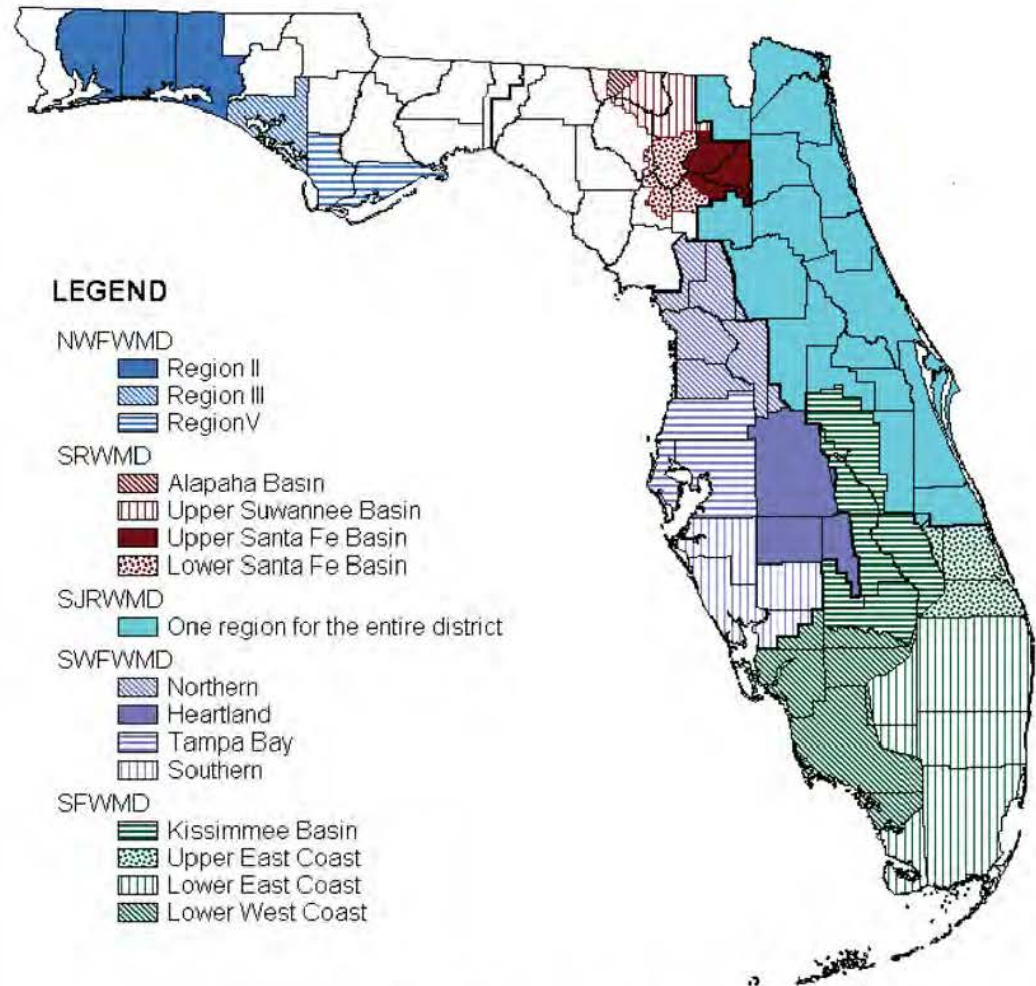


How to Meet Future Demand?

- Develop more water supplies
 - Reclaimed water
 - Surface water supplies
 - Treatment of brackish groundwater/ sea water
 - Increase storage (reservoirs and ASR)
- Conservation
 - Increased water use efficiency
 - Delays the need for water supply development



Regional Water Supply Planning



Planning Regions in Florida





Regional Water Supply Plans



- Planning horizon of at least 20 years.
- Identify environmentally, technically, and economically feasible water supply options.

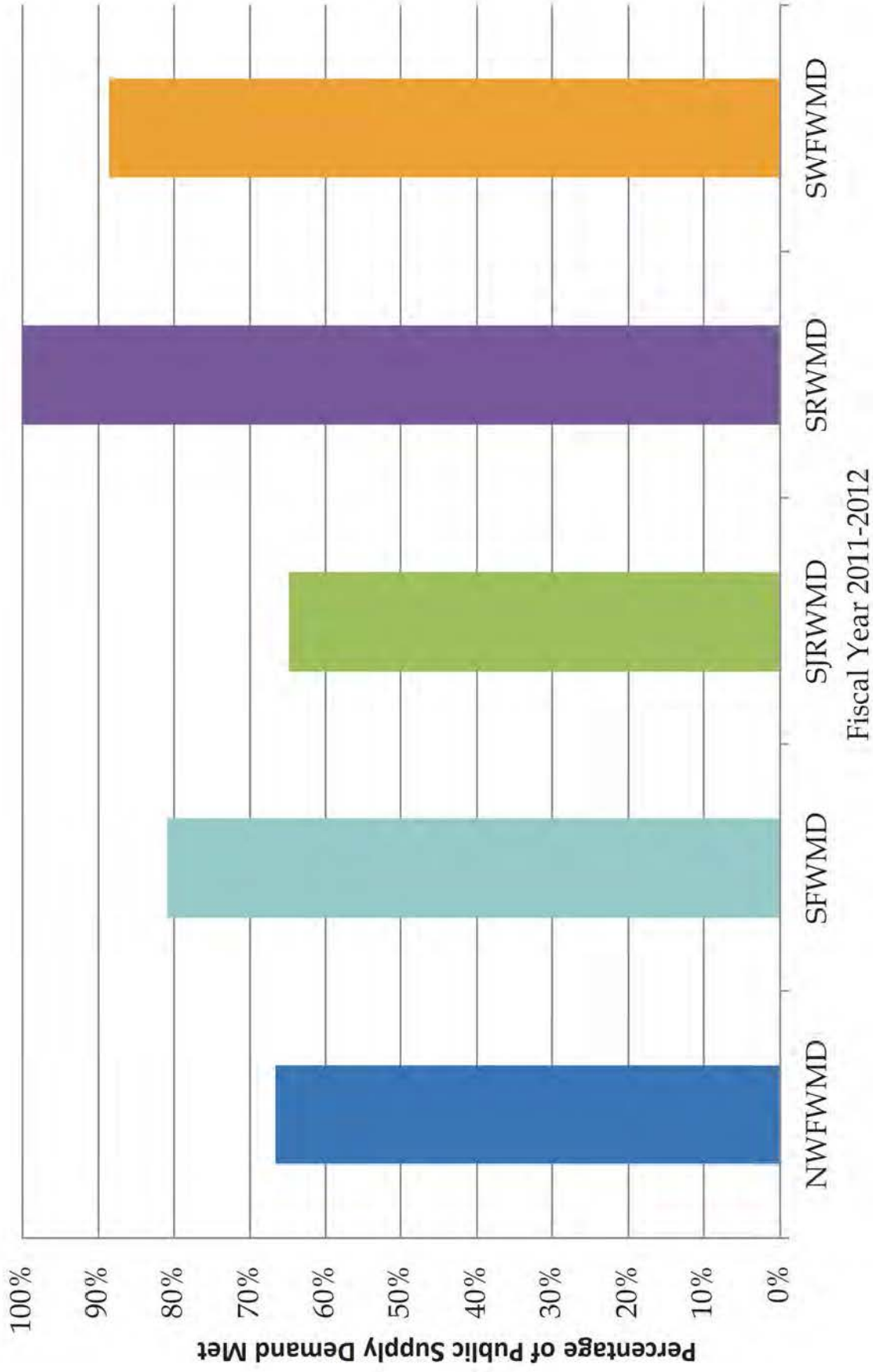
Coordination with water providers and local governments.

- Update Every Five Years



Water Supply

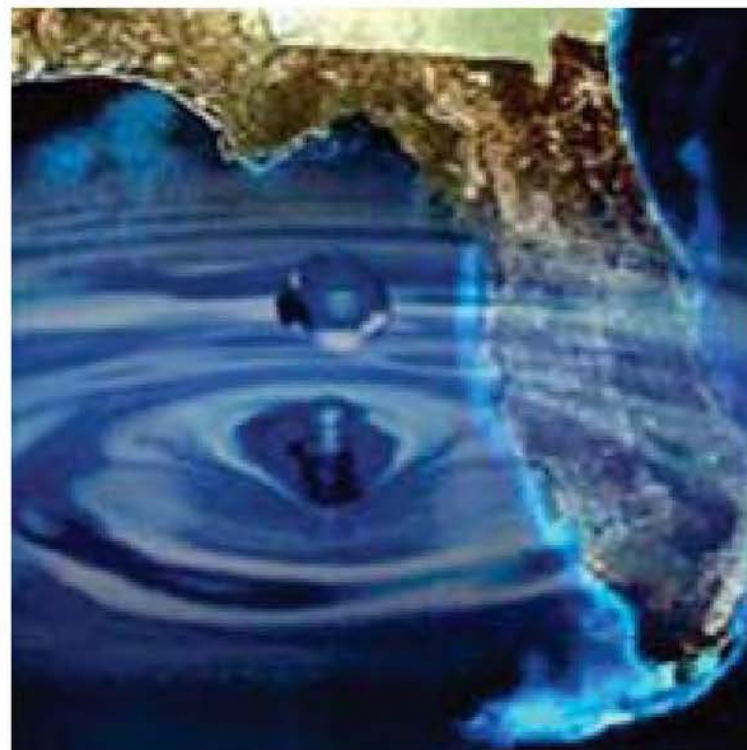
Percent of 2010-2030 Increase in PWS Demand Met





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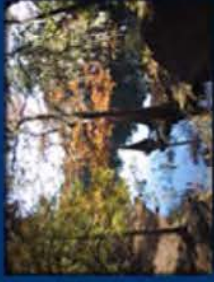


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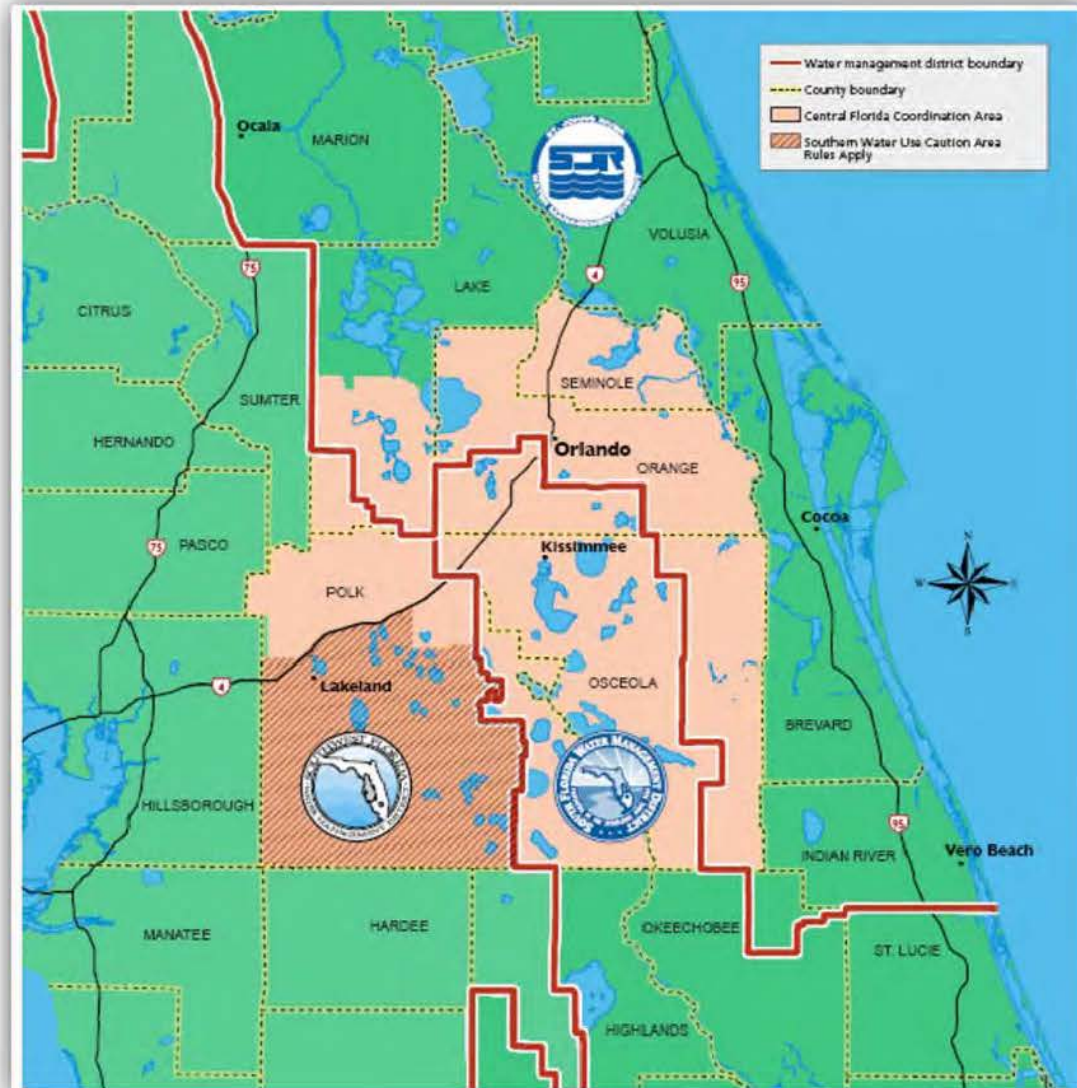
Central Florida Water Initiative

February 11, 2013



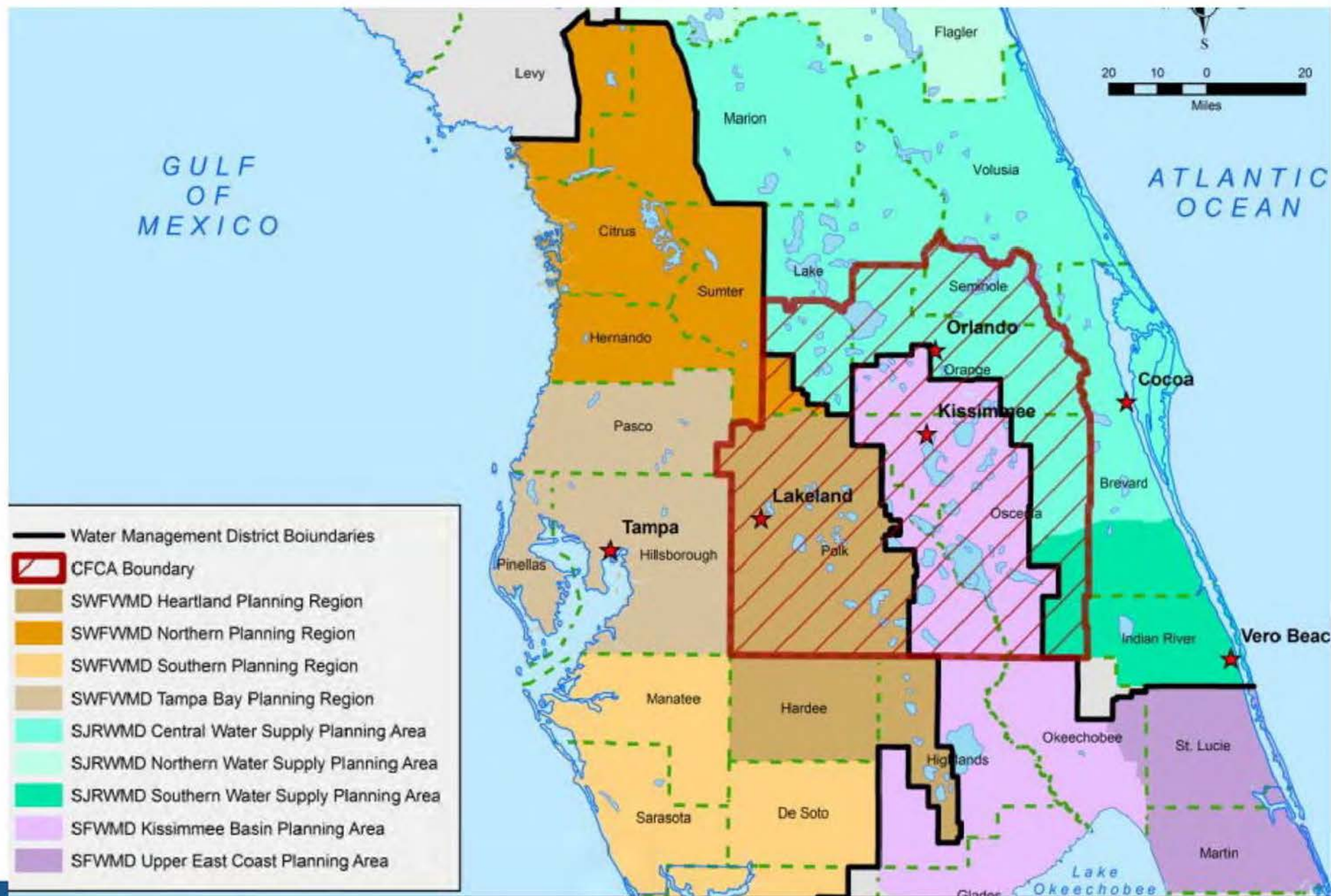
Central Florida Water Initiative

- ***“A collaborative water supply endeavor to protect, conserve and restore our water resources”***
- FDEP
- SJR, SF, SWF Water Management Districts
- Stakeholder interests



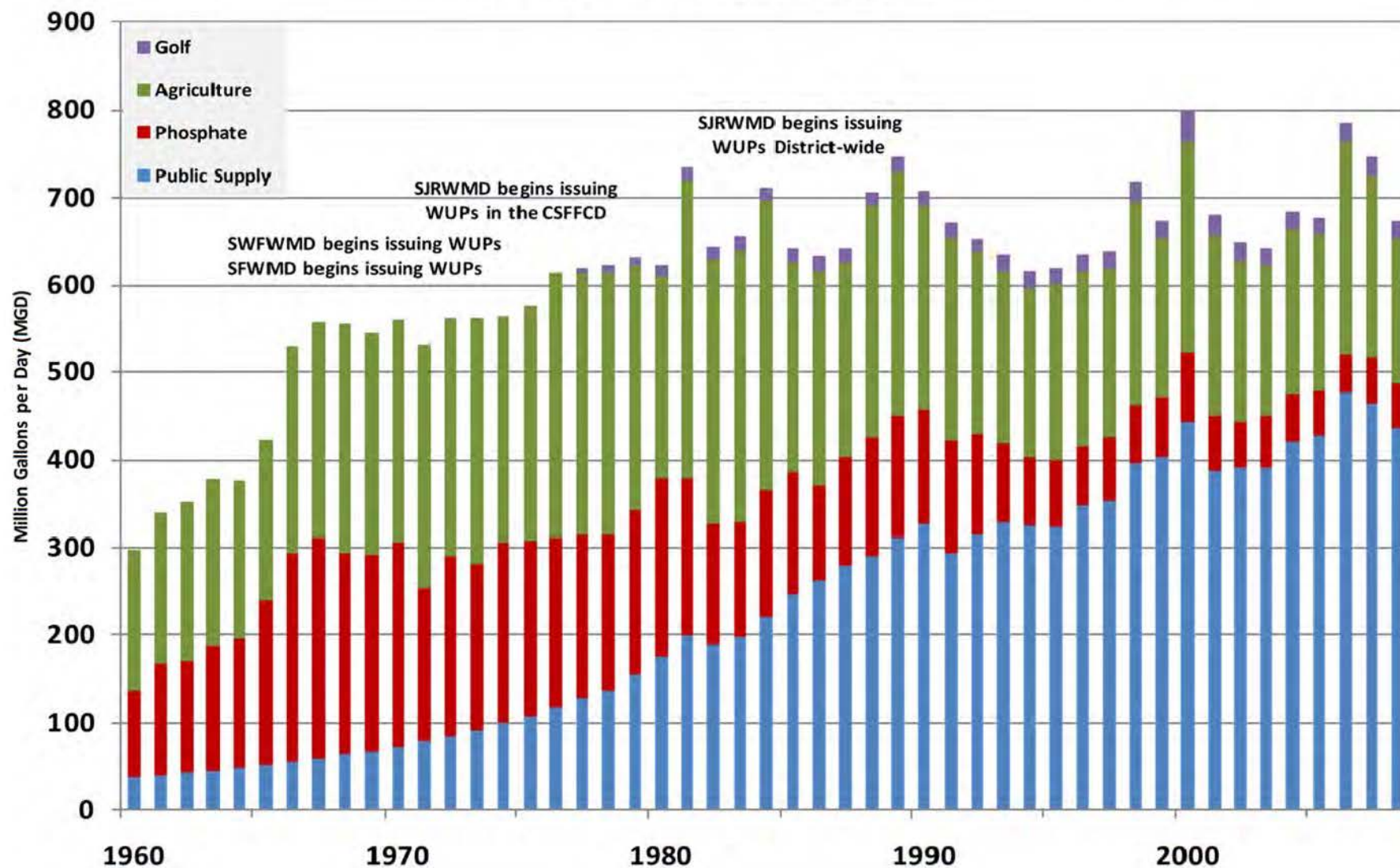


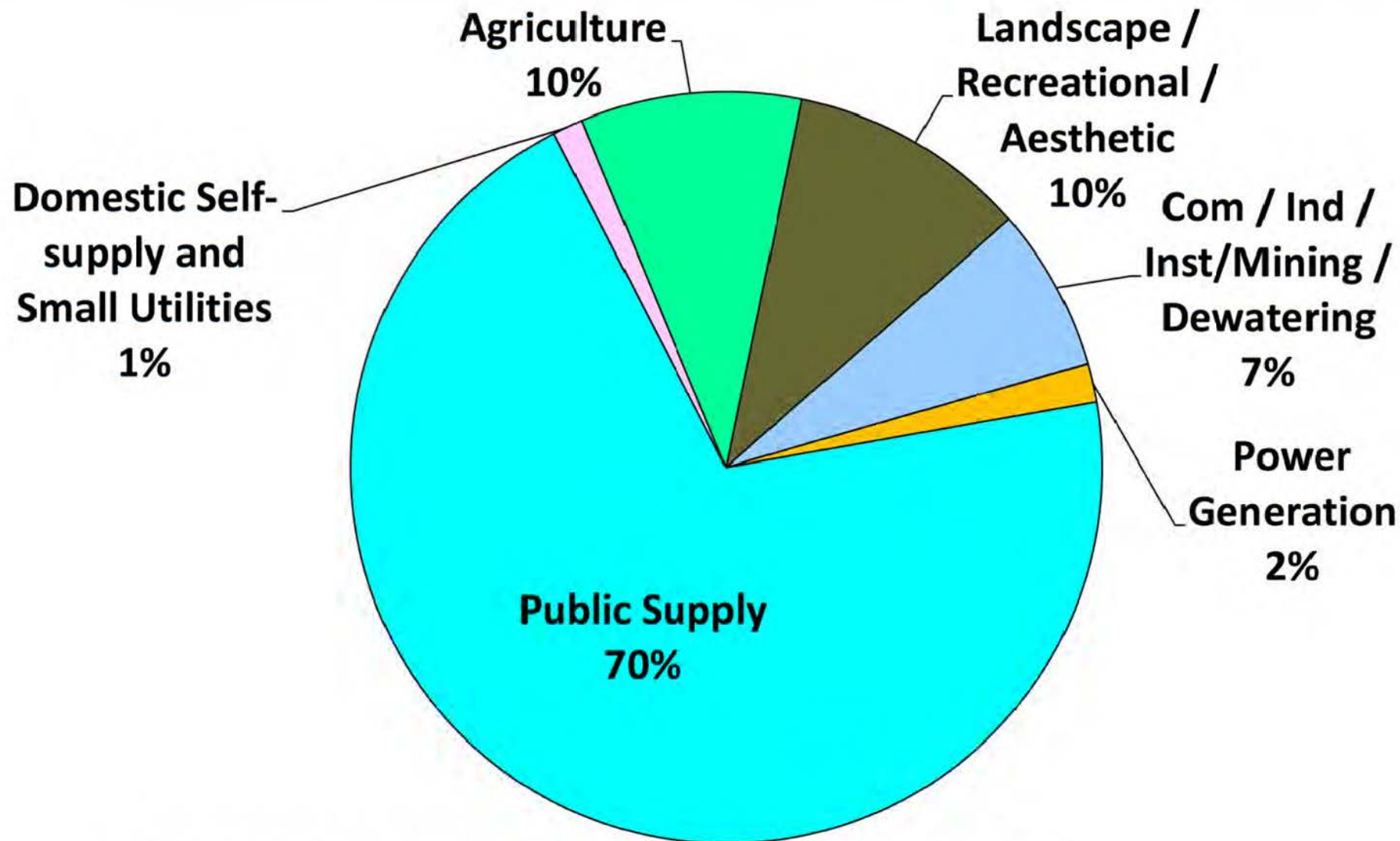
Central Florida Water Initiative



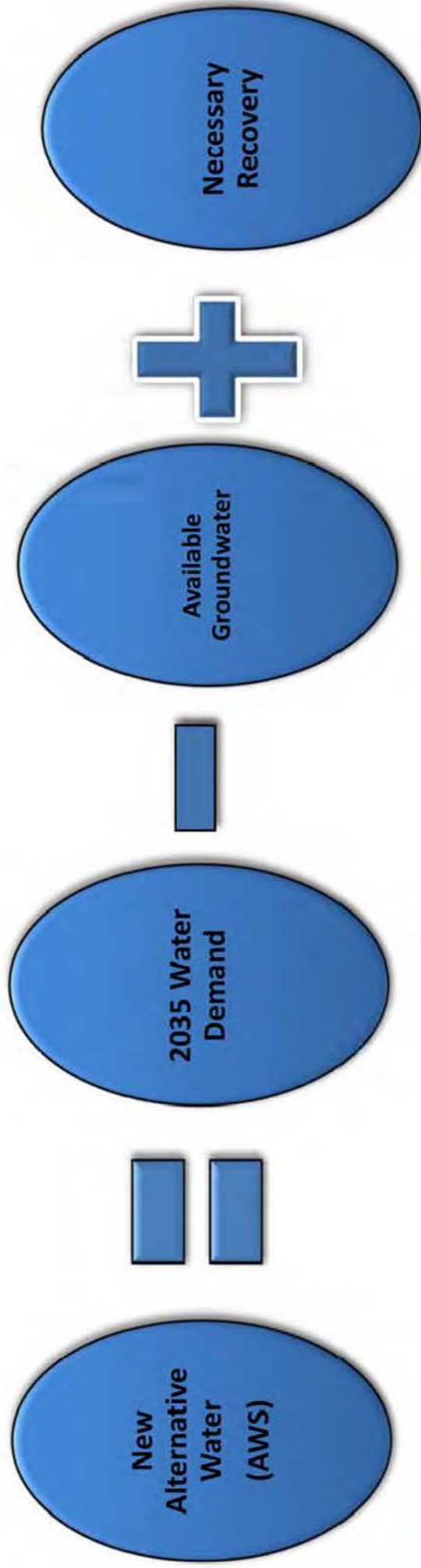
Estimated Groundwater Use in Central Florida Area

(Includes area adjacent to the CFWI area)



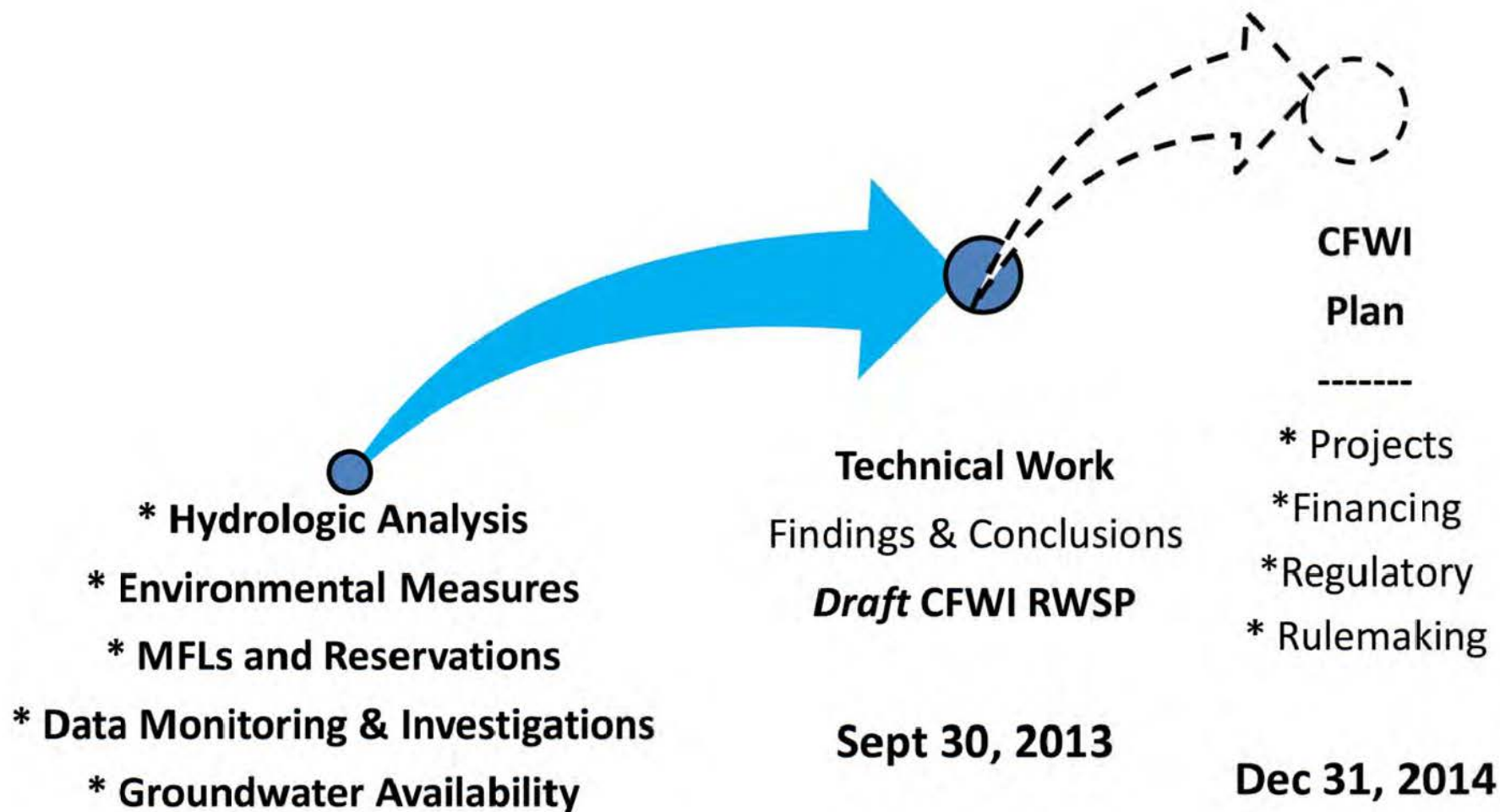


Demand Increase 2015-2035 (mgd)



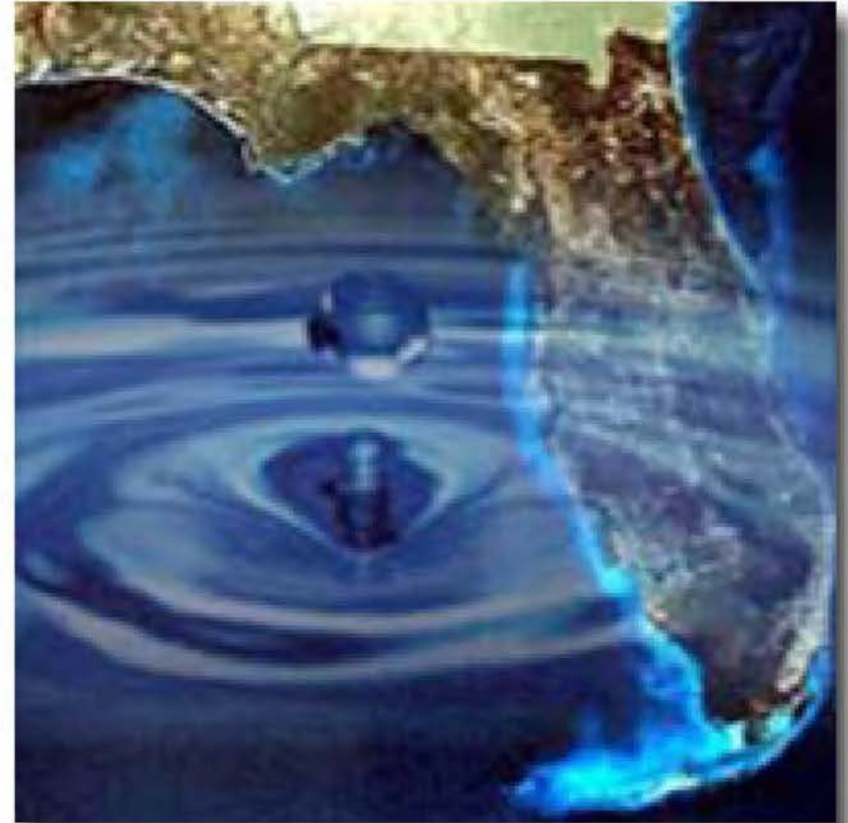


Steering Committee Scheduling Guidance



Contact

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Planning for Future Agricultural Water Supply Needs

Rich Budell, Director
Office of Agricultural Water Policy

Florida Department of Agriculture and Consumer Services
Commissioner Adam H. Putnam

Agricultural Water Demand Projections – The Data

- Current vs. Future Crop Acreage
- Estimated vs. Measured Water Use
- Crop-specific Water Use Coefficients



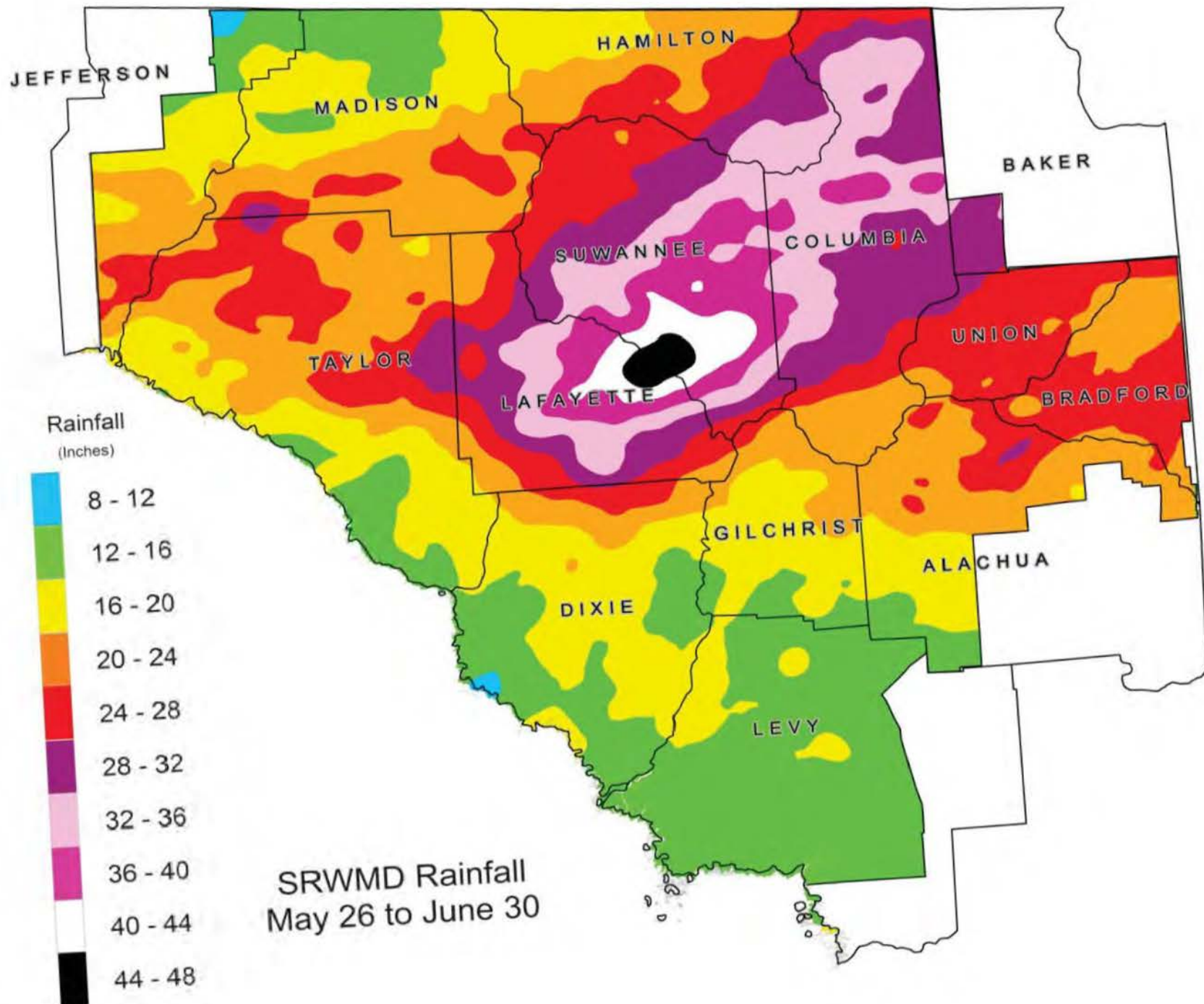
Agricultural Water Demand Projections – The Uncertainty

- Weather Variability
- Pest/Disease Pressure
- Economics and Markets



Water Supply Challenges

- For the first time, domestic supply has overtaken agriculture as the largest permitted water user.
- By 2025 domestic supply demand is projected to increase by 49% - agricultural supply demand is projected to increase by only 6%.
- Minimum Flows and Levels (MFLs)
- Competition issues:
 - Dover/Plant City
 - Central Florida Water Initiative
 - North Florida Regional Water Supply Plan
 - Lake Okeechobee





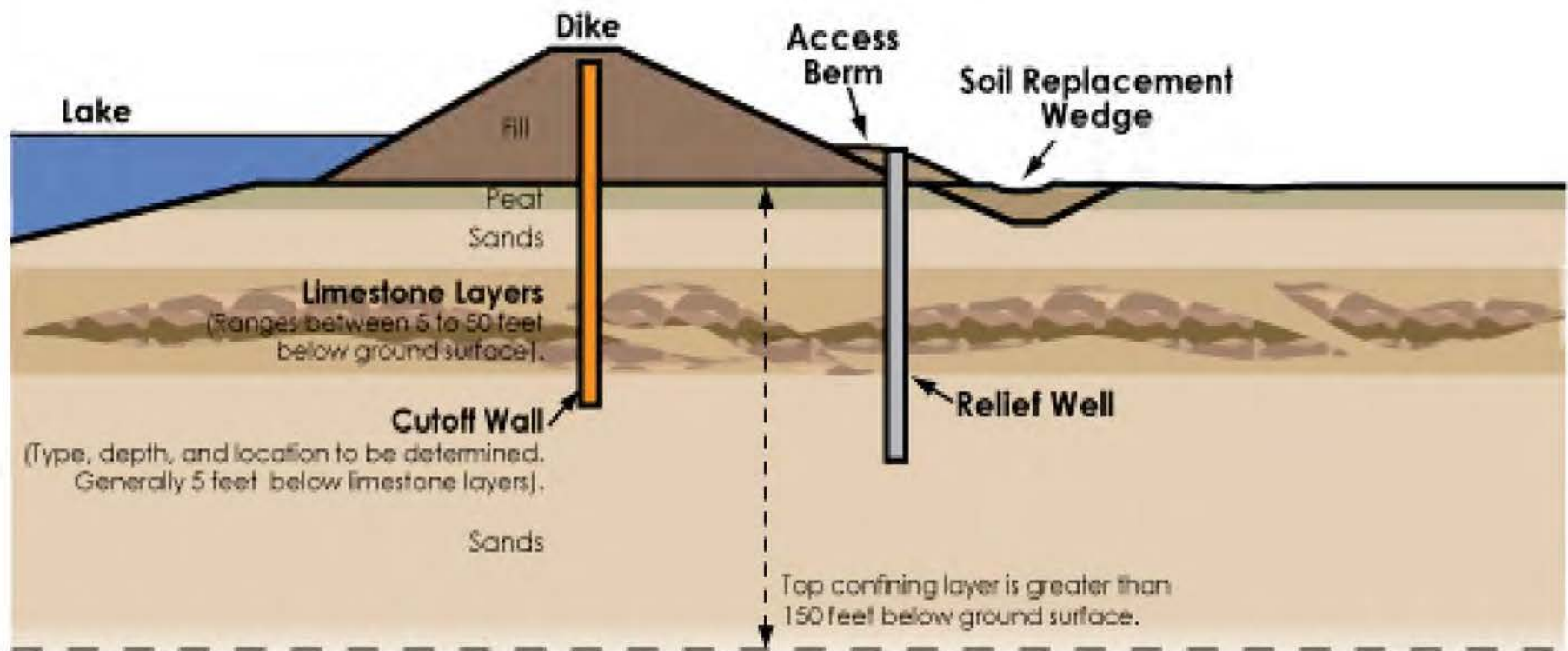
Lake Okeechobee Challenge

- Critical water source for public supply, environment and agriculture
- 2008 Lake Okeechobee Regulation Schedule
- Herbert Hoover Dike rehabilitation
 - 143 miles of levee
 - Dozens of spillways, culverts, locks & pump stations
 - No overflow capacity

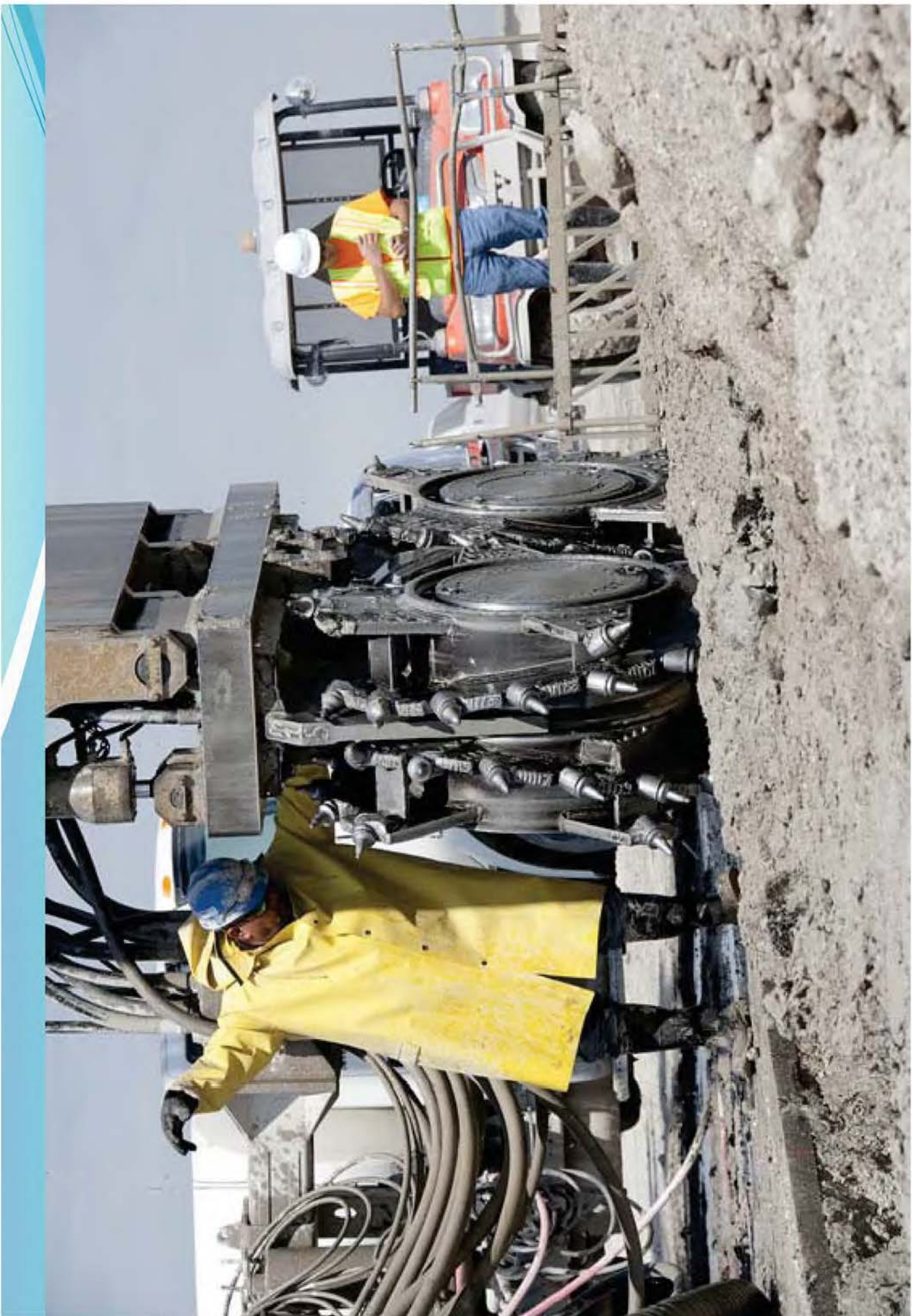
HERBERT HOOVER DIKE

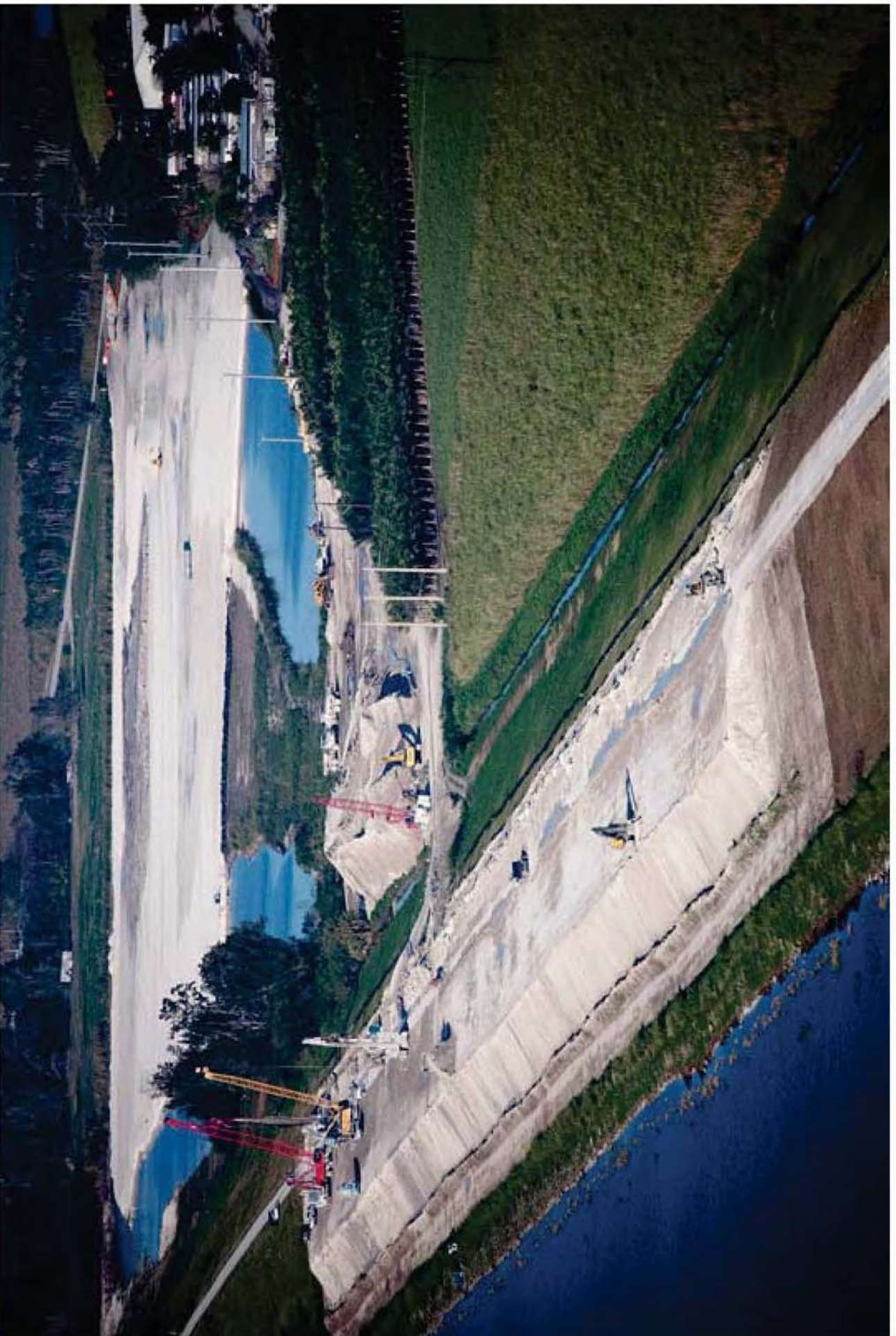
Rehabilitation Concept

Relief Wells with Soil Replacement

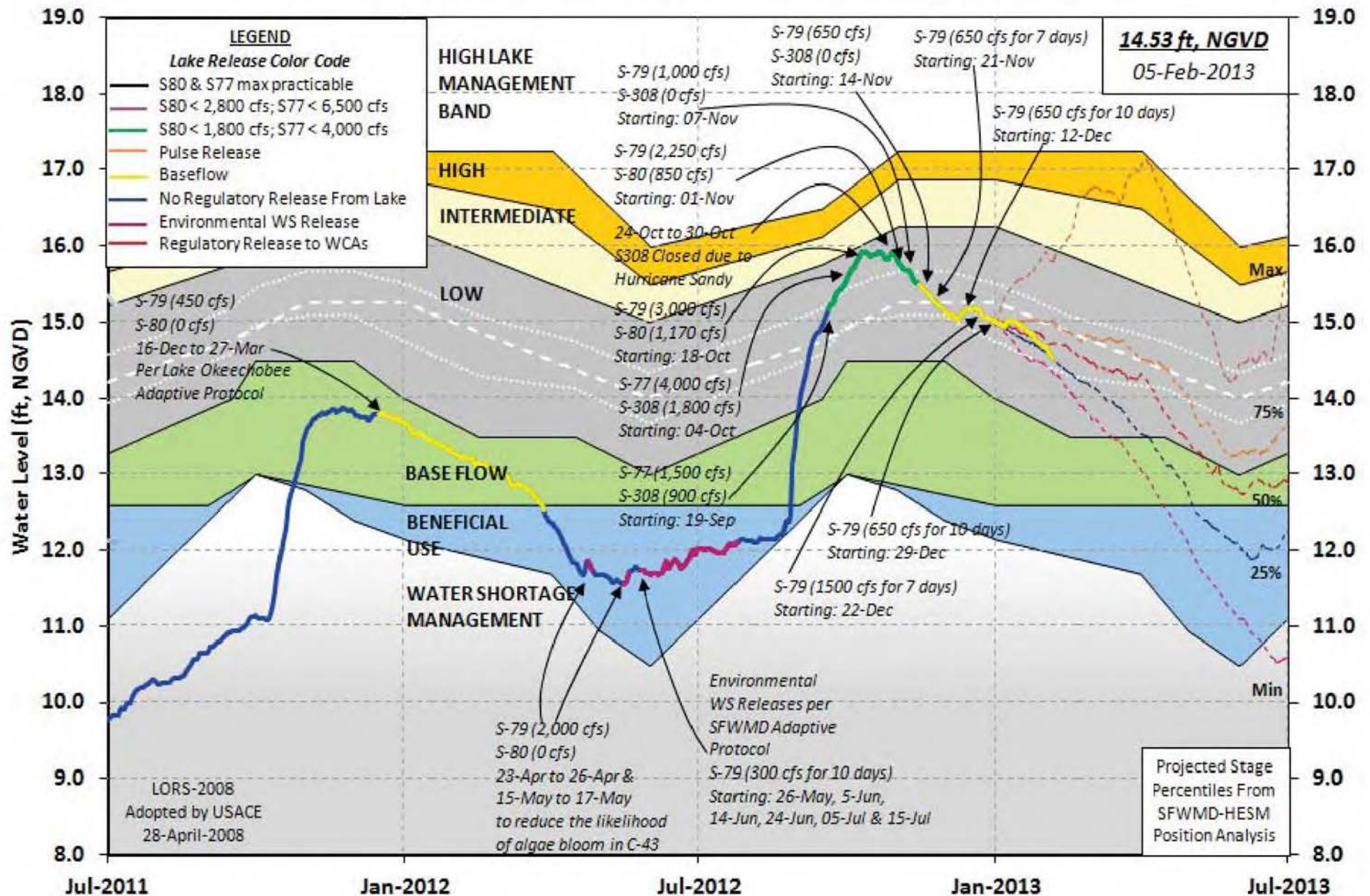


NOT TO SCALE





Lake Okeechobee Water Level History and Projected Stages





Water Supply Challenges

- In some areas and at some times, our use of water exceeds the natural systems ability to supply it.
- We won't run out of water, but we will run out of cheap water.
- We must figure out a way to sustain funding for alternative water supply development.

