

# *Central Florida Water Initiative*

*Water for Tomorrow*

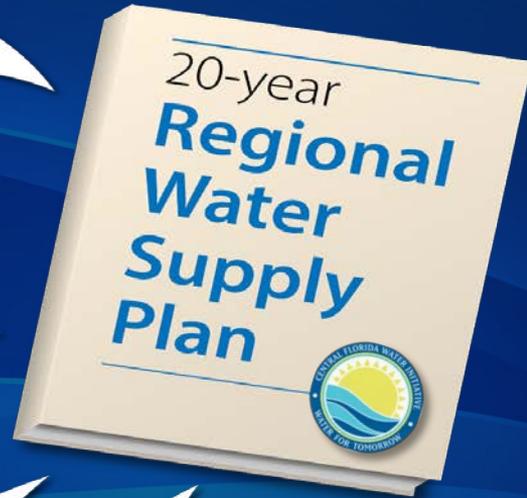


Steering Committee

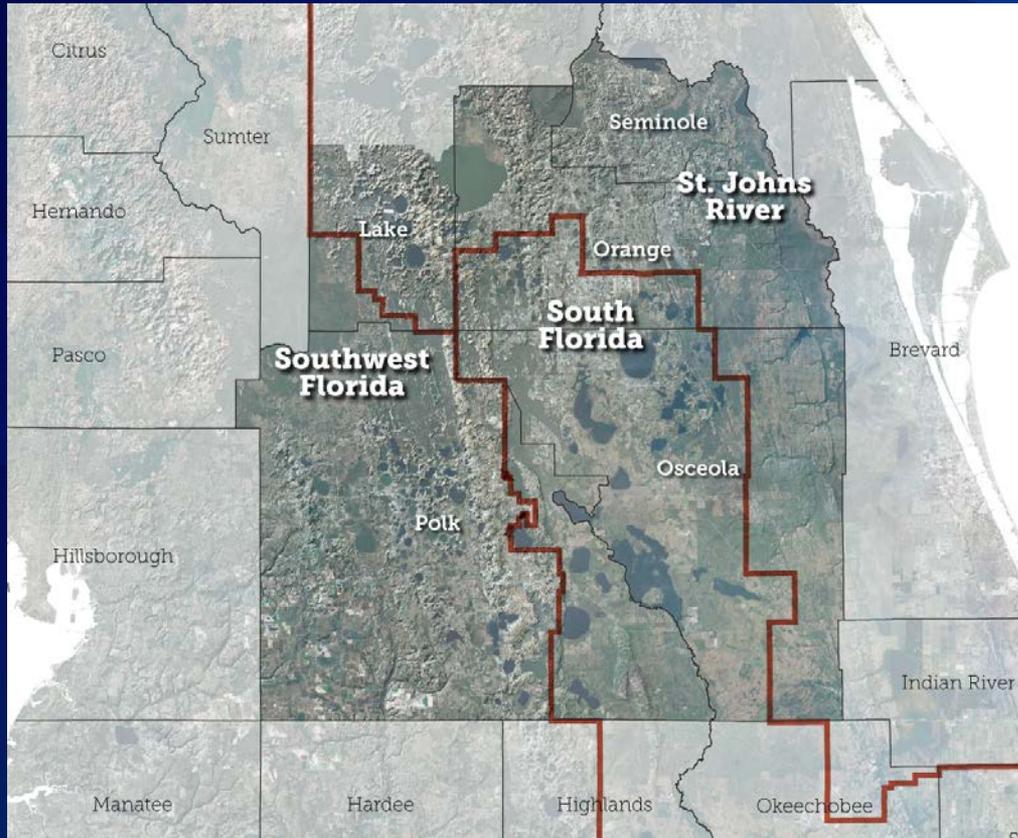
October 28, 2020

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Regional Water Supply Plan Team Lead



# Central Florida Water Initiative Planning Area

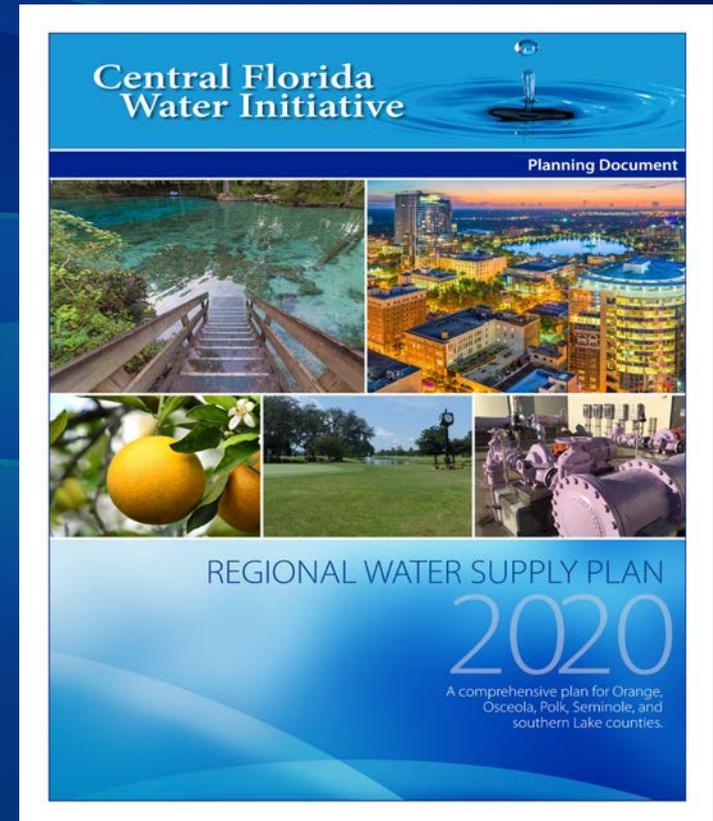


- A collaborative water supply planning effort to protect, manage, conserve, and restore Central Florida's water resources
- Goals
  - Identify sustainable quantities of groundwater sources
  - Develop strategies to meet water demands
  - Complete the 2020 CFWI RWSP

# 2020 CFWI Regional Water Supply Plan

## RWSP chapters

1. Introduction
2. Progress since 2015 CFWI RWSP
3. Population and Water Demands
4. Water Resource Assessment
5. Water Conservation
6. Water Source Options
7. Water Supply & Water Resource Development Options
8. Funding Options
9. Conclusions and Recommendations



# Progress since 2015

- Updated and expanded ECFT model, including an independent peer-review panel
- FY15 – FY19 funding (\$45 million) for 39 alternative water supply projects that will make available 94.3 mgd
- Lower Floridan aquifer investigations at multiple locations in Polk County, and installation and testing of more than 15 LFA wells
- Water Conservation Implementation Strategy was approved
- Regional Cooperation – Polk Regional Water Cooperative was created in 2016

# Water Demands in the CFWI Planning Area

	Public Water Supply	Domestic and Small Public Supply	Agricultural Irrigation	Industrial/ Commercial/ Institutional	Landscape/ Recreational Irrigation	Power Generation	Total
<b>2015</b>	385.97	21.56	159.38	53.50	38.24	8.47	<b>667.12</b>
<b>2040</b>	592.28	24.59	163.49	69.00	46.96	11.27	<b>907.59</b>
<b>Change</b>	206.31	3.03	4.11	15.50	8.72	2.80	<b>240.47</b>
<b>% Change</b>	53%	14%	3%	29%	23%	33%	<b>36%</b>

Demands under average rainfall conditions, in million gallons per day.

## Population

2015 2,933,915 residents  
 2040 4,373,309 residents

*49% increase*



## Irrigated agricultural acres

2015 135,700 acres  
 2040 134,300 acres

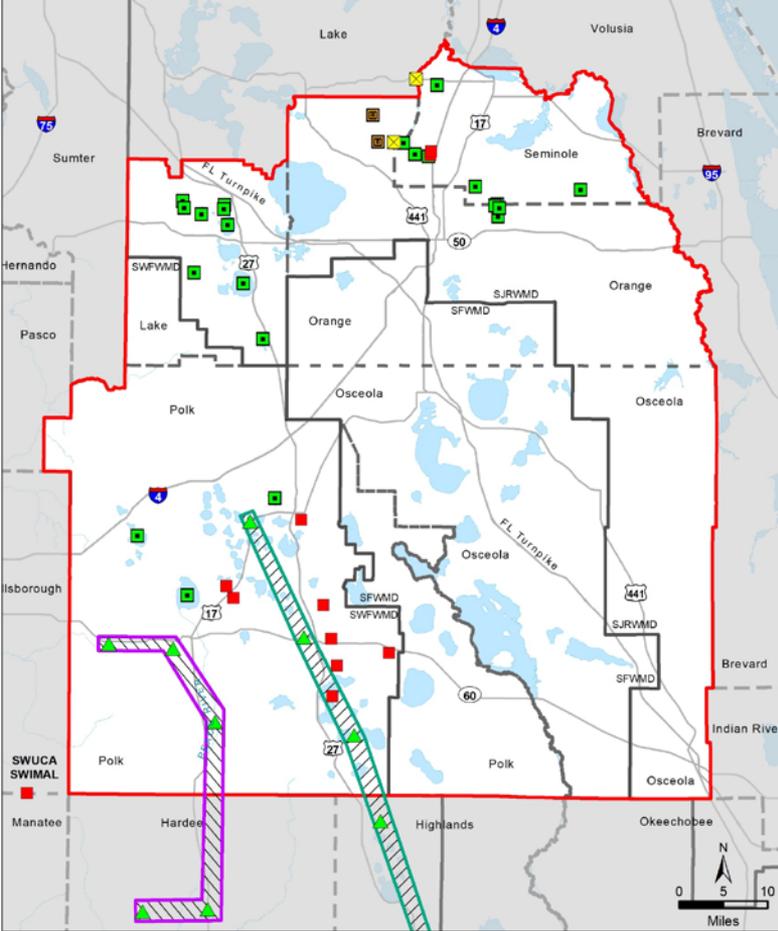
*1% decrease*



# Environmental Measures

## 39 MFL and MFL-related environmental criteria

- Adopted MFLs in CFWI:
  - 29 lakes/wetlands
  - 6 springs
  - 1 river segment
- Adopted SWUCA SWIMAL
- Upper Peace River target wells for SWUCA recovery
- Ridge Lakes target wells for SWUCA recovery



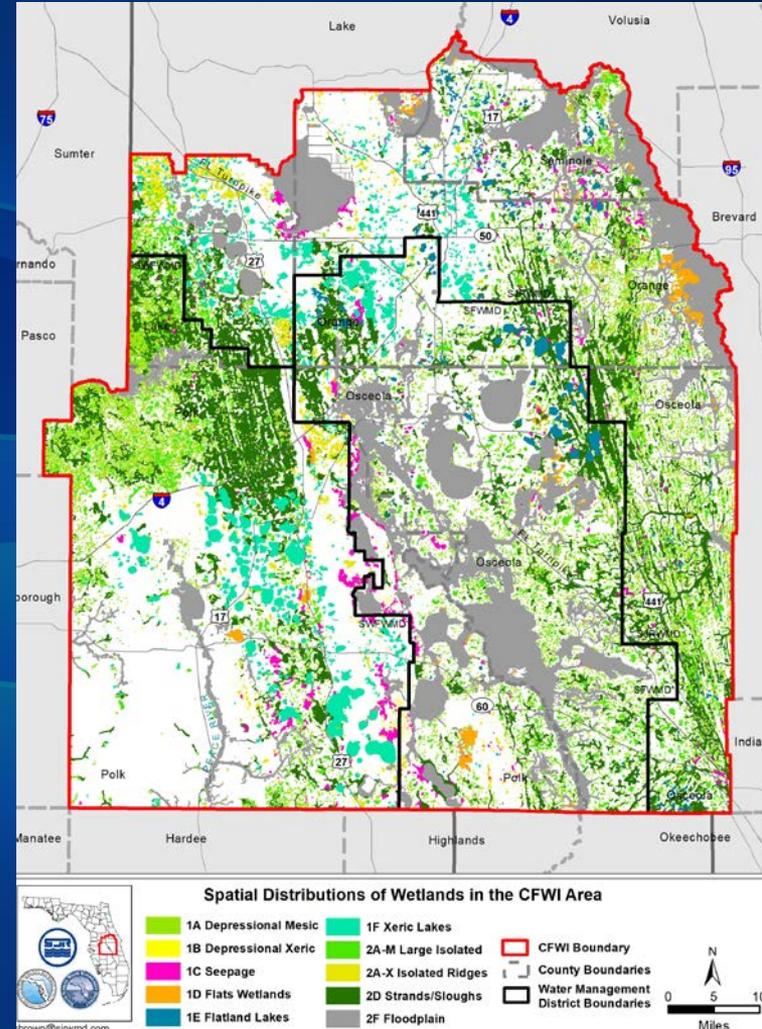
2040 Withdrawals Condition Status of MFL and MFL-Related Environmental Criteria in the Central Florida Water Initiative (CFWI) Area



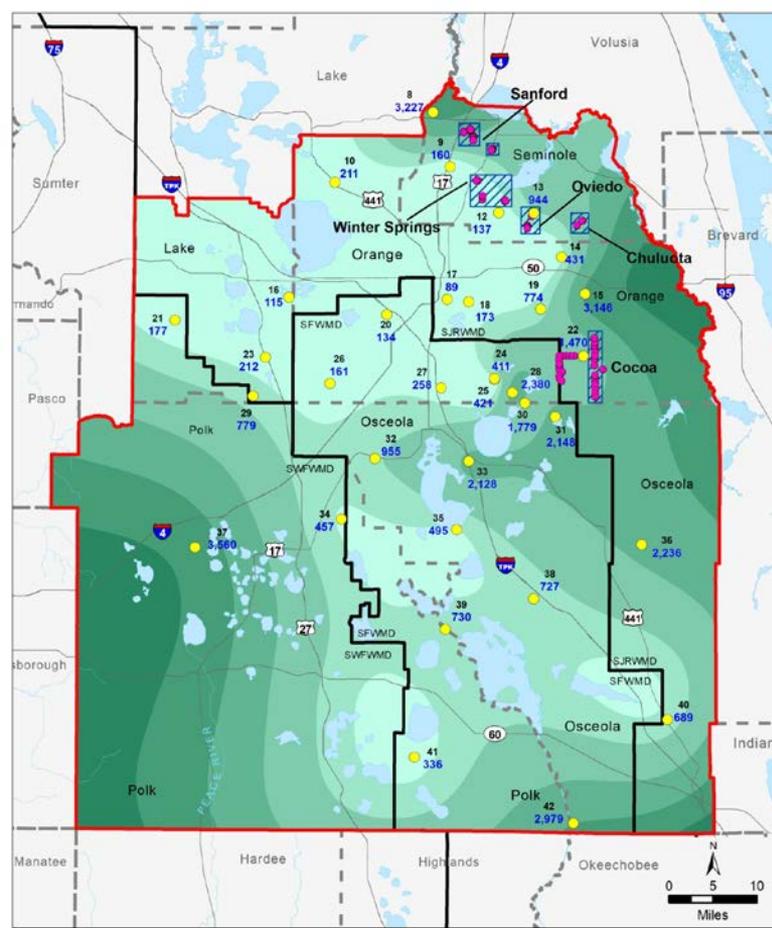
# Environmental Measures

## Wetlands

- >1 million acres in CFWI
- Focus on groundwater-dominated wetlands
- 189,000 acres of wetlands assessed (~19% of total)



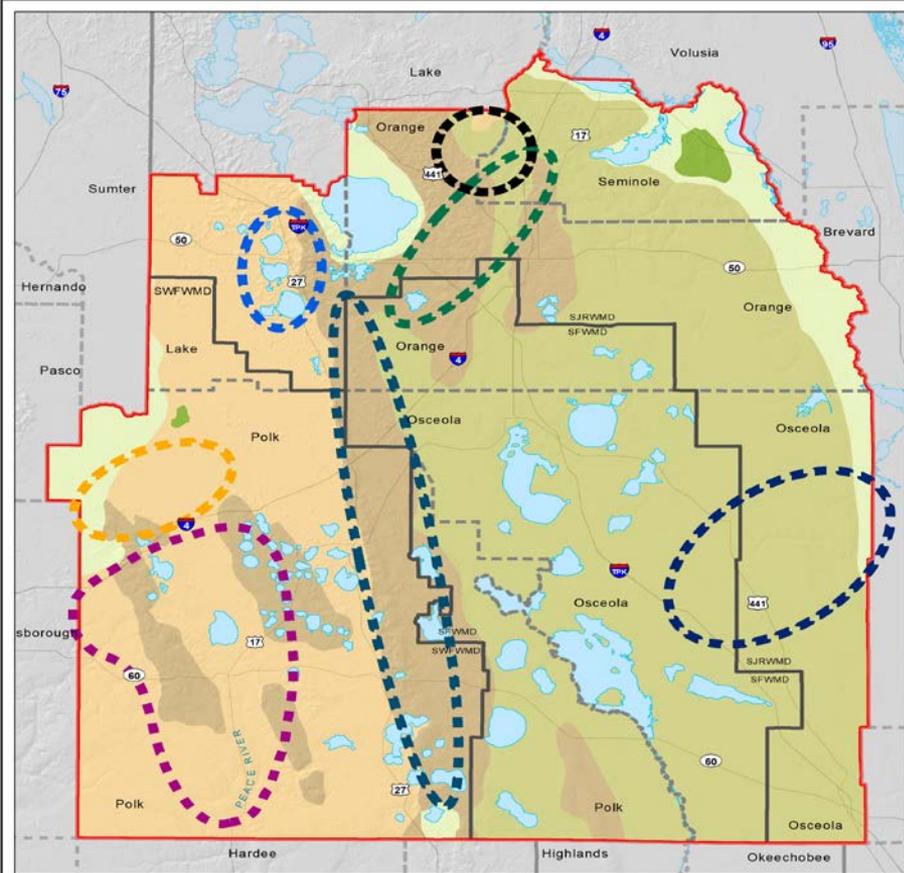
# Total Dissolved Solids in the Lower Floridan Aquifer



**Total Dissolved Solids (TDS) within the Upper Most Permeable Zone of the Lower Floridan Aquifer Model Layer 9 (LFA)**

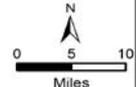


# Primary Areas Susceptible to Groundwater Withdrawals



## Areas Susceptible to Groundwater Withdrawals within the Central Florida Water Initiative (CFWI) Planning Area

- Primary areas susceptible to groundwater withdrawals
  - Central Polk County
  - East Osceola County
  - Lake Wales Ridge
  - South Lake County
  - Upper Peace River
  - Wekiva Springs / River System
  - West Seminole & Orange Counties
- Physiographic Regions (White 1970)
  - Hills
  - Lowlands, Gaps and Valleys
  - Plains
  - Ridges
  - Uplands
- CFWI Boundary
- County Boundaries
- Water Management District Boundaries



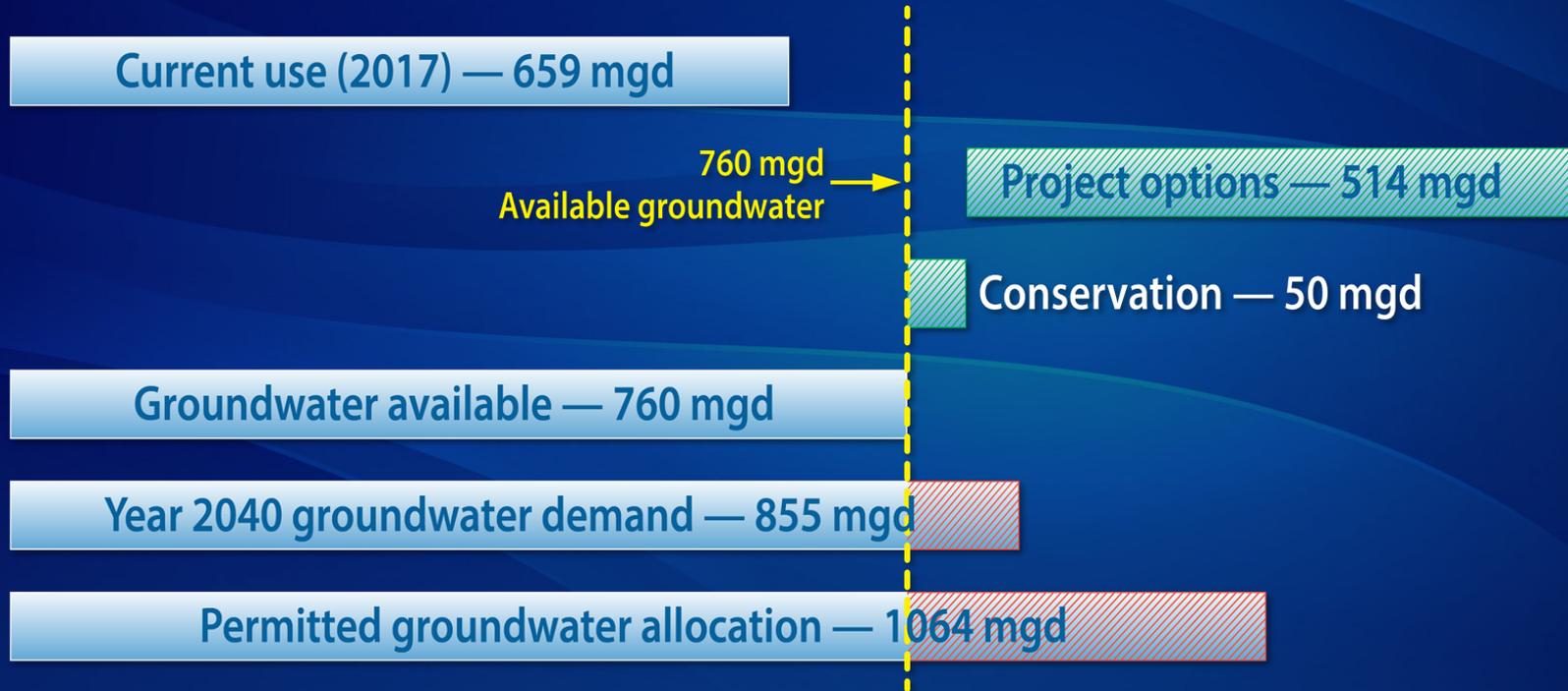
Areas\_Susceptible\_to\_Groundwater-Withdrawals\_Pf\_200610

# CFWI Planning-Level Groundwater Availability Assessment

Model Scenarios	Environmental Measures		
	MFLs and MFL-related (39 criteria)	Plains Wetlands (139,000 acres)	Ridge Wetlands (50,000 acres)
2014 (~620 mgd)	11 Not Met	16,700 ac	18,700 ac
2025 (~760 mgd)	11 Not Met	17,400 ac	19,200 – 21,400 ac
2030 (~800 mgd)	13 Not Met	17,700 ac	19,400 – 22,200 ac
2040 (~860 mgd)	15 Not Met	18,100 ac	19,700 – 23,400 ac

# 2020 CFWI RWSP

## Planning-Level Groundwater Availability



# Projected Water Conservation Savings

Category	Projected 2040 Water Demand (mgd)	Projected 2040 Water Conservation Savings (mgd)
Public Supply	592.28	41.50 – 44.16
Domestic and Small Public Supply	24.59	0.86
Agriculture	163.49	4.19
Landscape/Recreational	46.96	2.22
Commercial/Industrial/Institutional	69.00	1.55 – 4.40
Power Generation	11.27	
<b>Total</b>	<b>907.59</b>	<b>50.32 – 55.83</b>

# Water Supply and Water Resource Development Options

County	Brackish/ Nontraditional Groundwater	Management Strategies	Reclaimed Water	Surface Water	Stormwater	Total
Lake	13.70	0.00	3.80	5.00	0.00	<b>22.50</b>
Orange	24.00	5.00	31.97	71.00	0.00	<b>131.97</b>
Osceola	30.00	0.00	0.00	120.00 <sup>a</sup>	5.90	<b>160.90</b>
Polk	45.00	6.00	11.35	46.10	0.00	<b>108.45</b>
Seminole	1.00	0.00	7.03	82.20	0.00	<b>90.23</b>
<b>Total</b>	<b>113.70</b>	<b>11.00</b>	<b>59.15</b>	<b>324.30</b>	<b>5.90</b>	<b>514.05</b>

Project options are shown in million gallons per day

<sup>a</sup> Includes the Grove Land Reservoir Project located in Okeechobee and Indian River counties.

# Draft 2020 CFWI RWSP

## Conclusions and Recommendations

- Although groundwater sources are limited, the 2020 CFWI RWSP concludes that current and future water demands can be met through 2040, while sustaining water resources and related natural systems
- The RWSP outlines an integrated approach that includes:
  - Increased water conservation
  - Development of alternative water supplies
  - Further hydrogeologic investigation
  - Optimization of groundwater withdrawals
  - Additional project evaluation and modeling
  - Pursuit of funding for water resource/water supply projects
  - Development of consistent rules/regulations

# Local Government Requirements



- After the Districts approve the RWSP:
  - Local governments must amend their Comprehensive Plans to include a 10-year Water Supply Facilities Work Plan within 18 months of RWSP update and submit it to the Dept. of Economic Opportunity
  - Work Plan must demonstrate sufficient water supply for at least the next 10 years
  - Identify projects to be developed

# Public Outreach

- Numerous presentations and meetings were held with regional planning councils, stakeholder and interest groups, advisory committees, professional organizations, city councils, and county commissions
- CFWI website
- CFWI quarterly newsletter



# Public Outreach (continued)

- Technical methods workshop April 2019
- 2 public workshops/webinars April 2020
- Public comment 3/13/20 to 5/15/20
- MOC review 8/26/20 to 9/16/20



# Public Draft Comment Summary

- Public review
  - 239 comments received
  - 90 individual stakeholders
- Comments and responses document



# Comment Highlights

- Water conservation
- Water supply project options
- CFWI consumptive/water use permitting rulemaking
- MFLs and springs protections
- Tribal entitlements
- Modeling and resource evaluation
- Statutory requirements



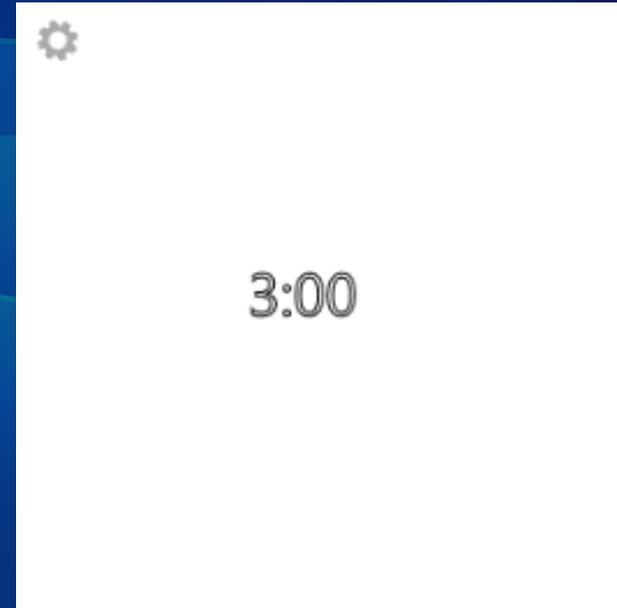
# 2020 CFWI RWSP Approval

- SJRWMD Governing Board 11/10/20
- SFWMD Governing Board 11/12/20
- SWFWMD Governing Board 11/17/20



# General Public Comment

- If you are participating via Zoom, use the Raise Hand feature
- If you are participating via phone:
  - \*9 raises hand
  - \*6 mutes/unmutes



# Steering Committee Actions

- Endorse and approve the Final Draft 2020 CFWI RWSP and the associated appendices
- Encourage the respective Governing Boards to consider approval of the Final Draft 2020 CFWI RWSP and the associated appendices

