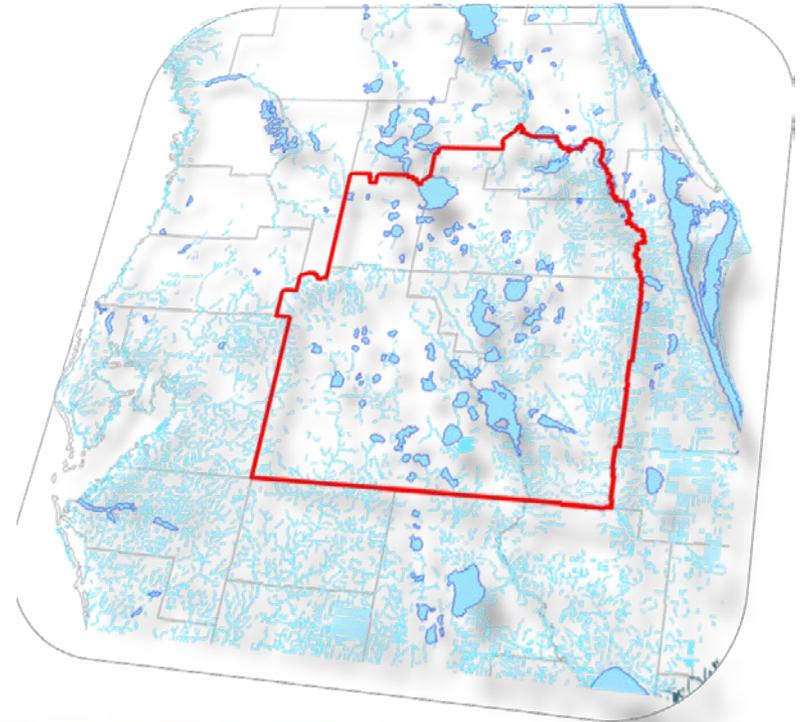


# Solutions Team Work Progress

December 19, 2014



# Groundwater Sub-team Project Evaluations

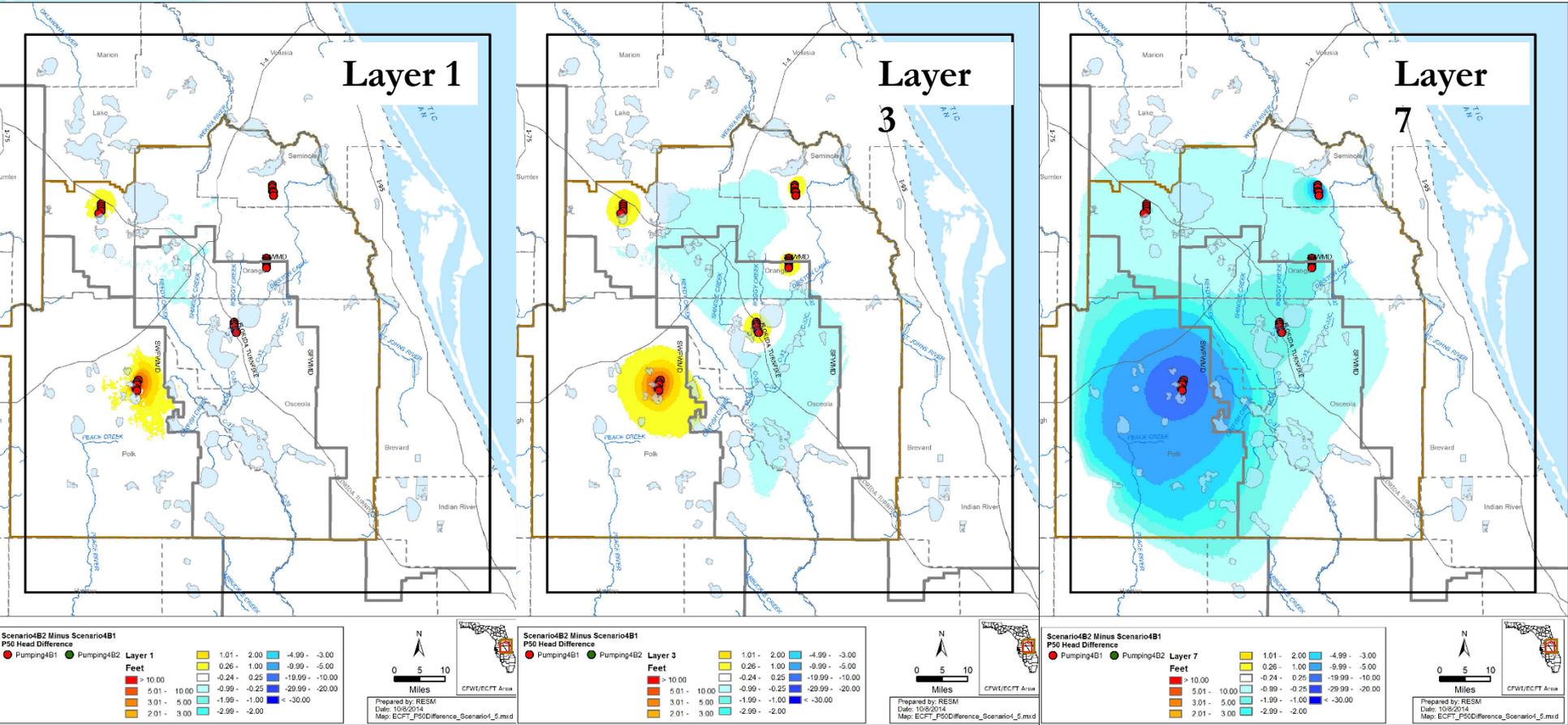
Project	Supply (mgd)
South Lake Wellfield	12.7
Cypress Lake Wellfield	20.5*
SE Polk Co Wellfield	30

\*Total Project is 30 mgd.

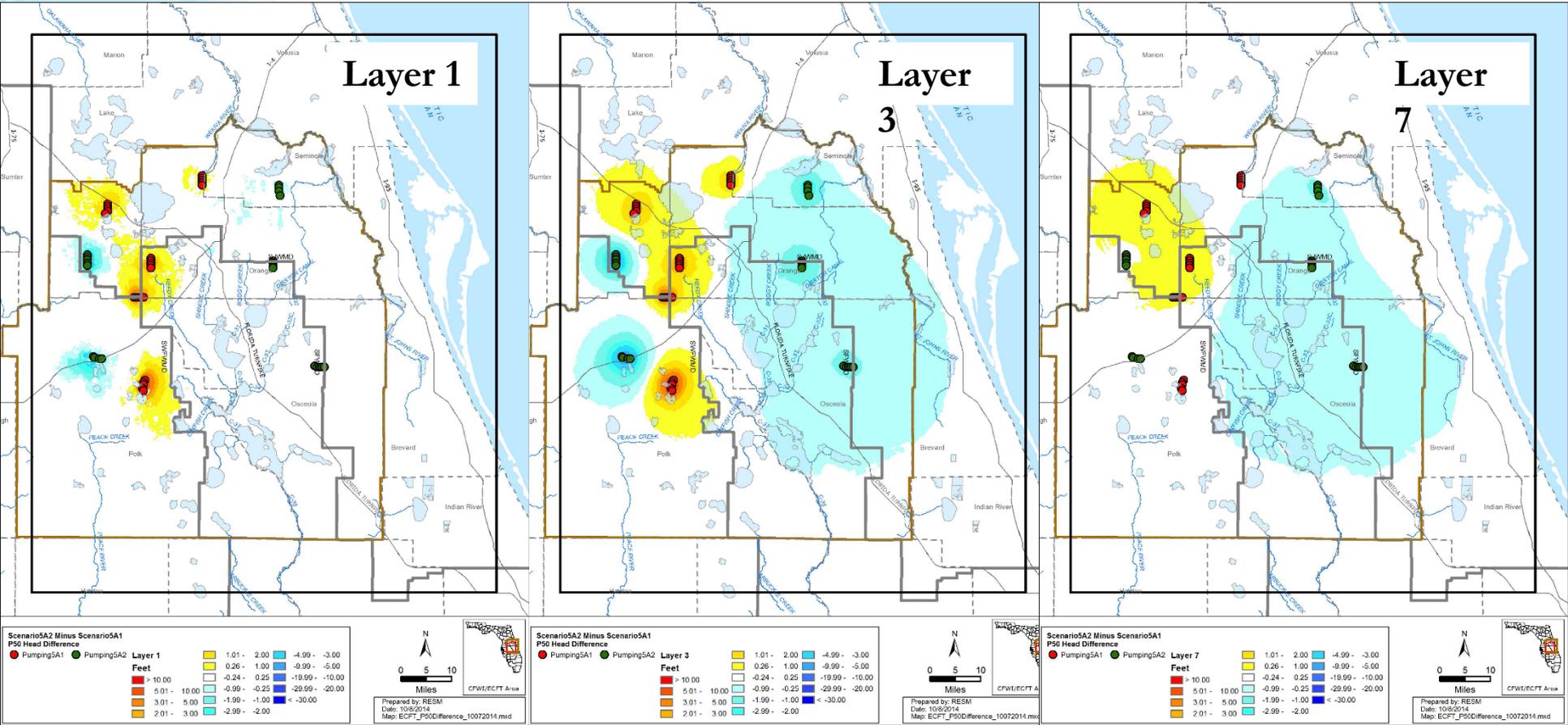
# Project Concept Model Scenarios

1. Shift withdrawals from the UFA to the LFA
2. Change withdrawal locations away from sensitive areas
3. Targeted Recharge
4. Distributed versus concentrated withdrawals from the LFA
5. Benefit of increasing return flow (Can return flows from non-groundwater AWS projects improve environmental conditions?)

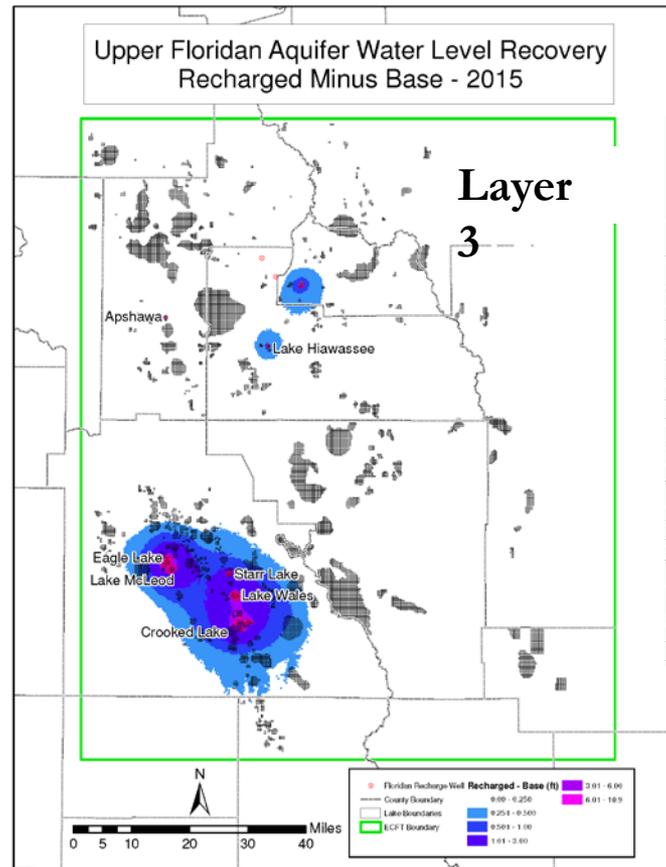
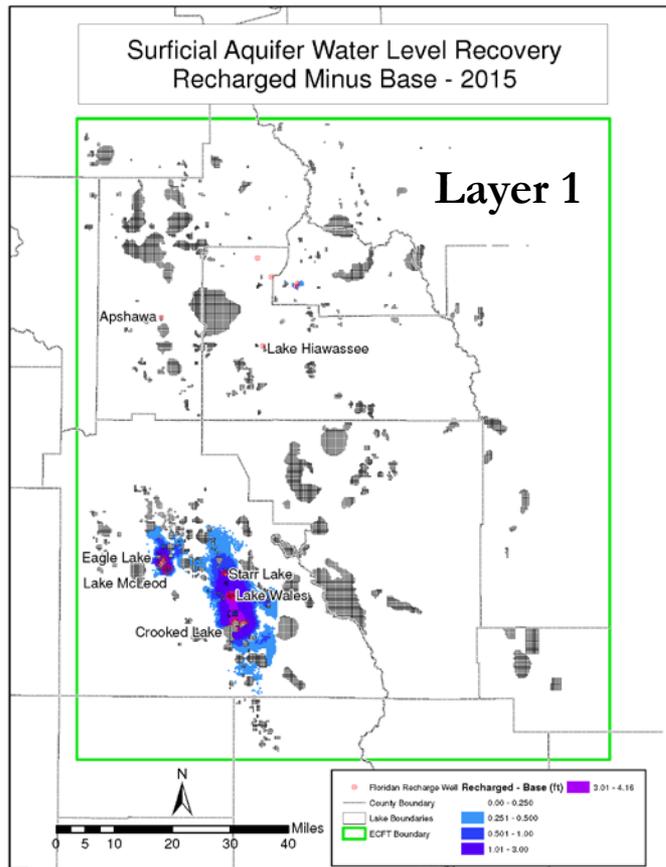
## Shifting Withdrawals from UFA to LFA (conceptual)



# Shift UFA withdrawals away from Susceptible Areas (conceptual)

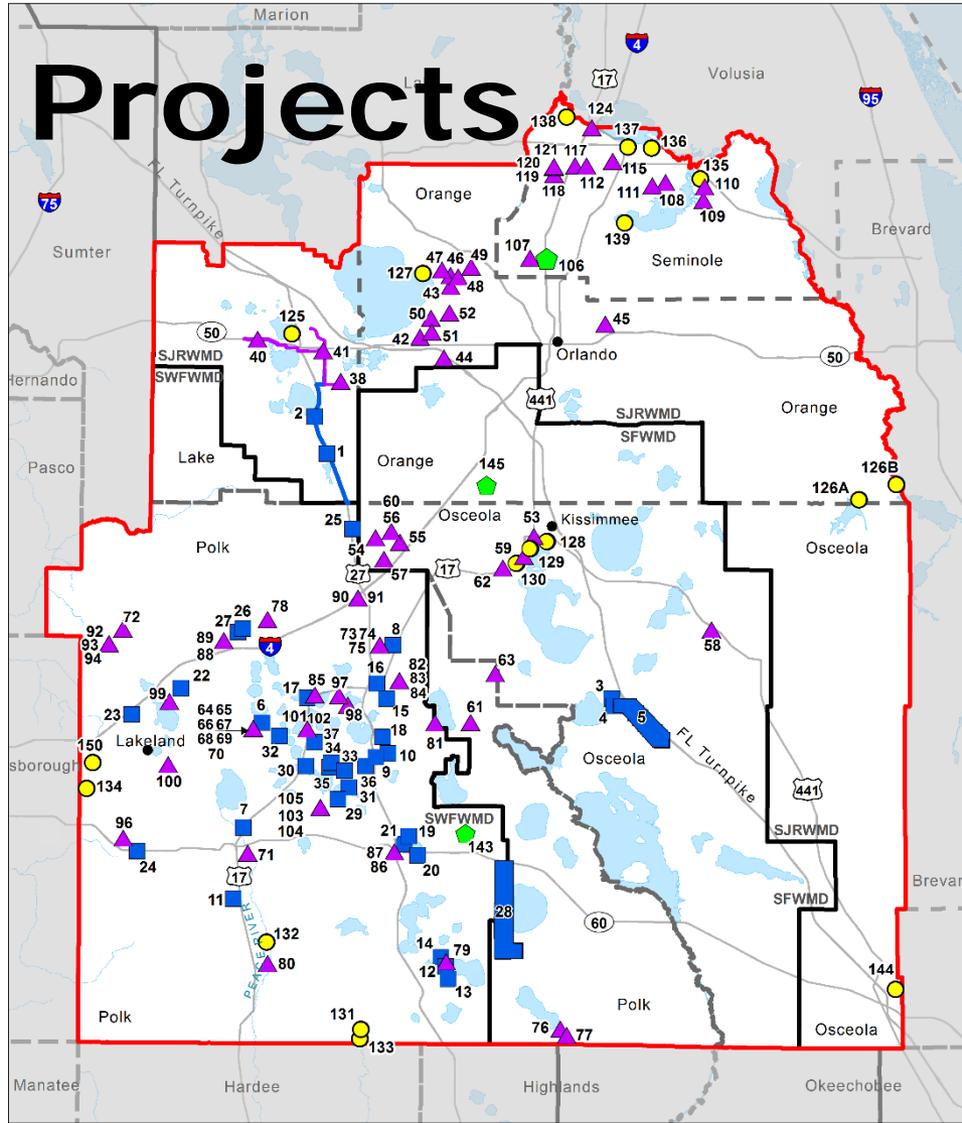


## Assess the affects of UFA recharge near MFL waterbodies (conceptual).



Lake / Spring	Injection Rate (MGD)	# Wells	Flow/ Well (MGD)
Apshawa	0.4	1	0.4
Crooked	7.7	5	1.5
Eagle	3.3	5	0.7
Hiawassee	1.0	1	1.0
McLeod	1.0	4	0.3
Starr	0.8	2	0.4
Wales	4.0	5	0.8
Rock Springs	0.5	1	0.5
Wekiwa Springs	0.5	1	0.5
Starbuck Spring	0.9	1	0.9
Palm Springs	4.0	1	4.0

# RWSP Projects

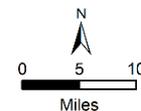


**Water Supply Option Projects (WSOPs) Within the Central Florida Water Initiative (CFWI) Planning Area**

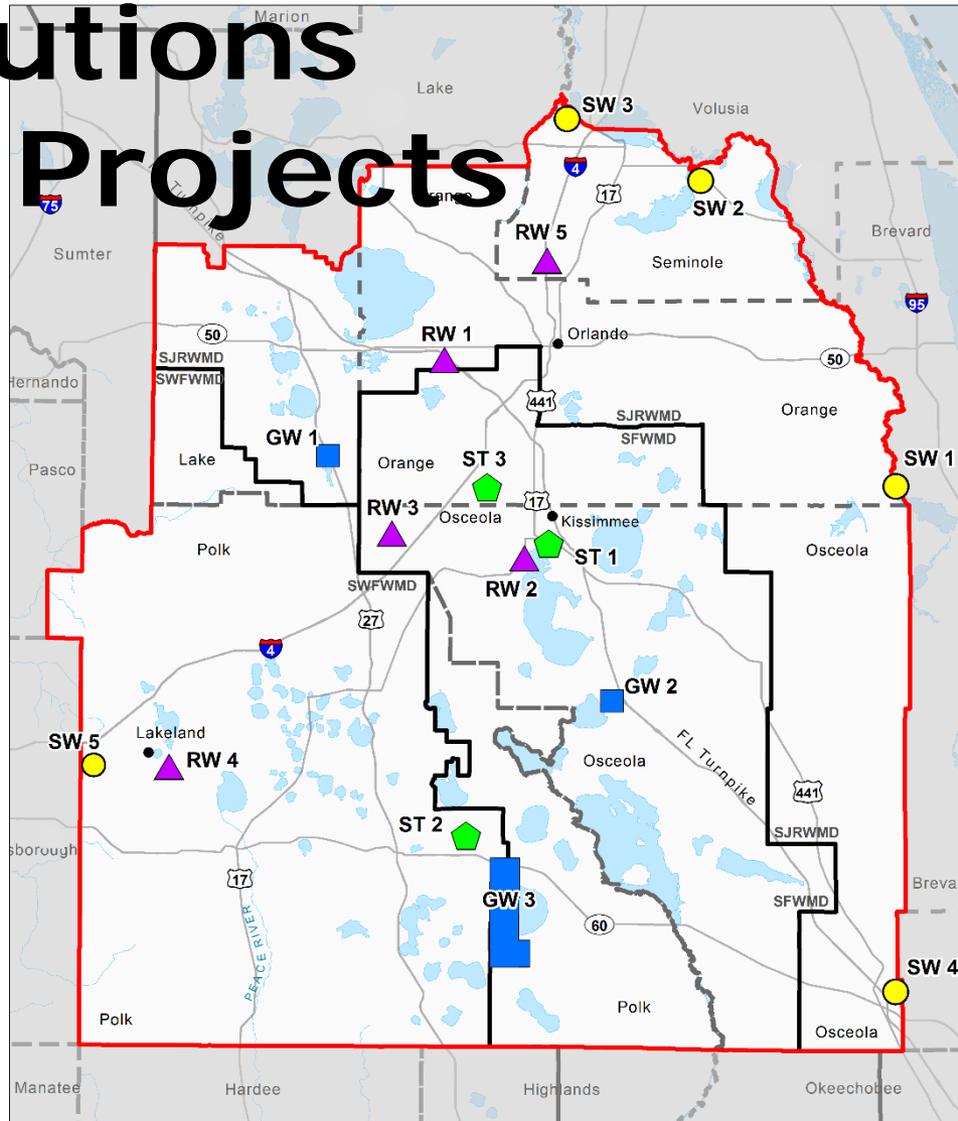
- Groundwater
- ▲ Reclaimed Water
- Surface Water
- ◆ Storm Water
- CFWI Boundary
- County Boundaries
- Water Management District Boundaries



spbrown\workspace\cfwi\WSOPs - spbrown



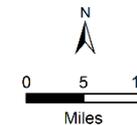
# Solutions Team Projects



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**Solution Phase Water Supply Option Projects (WSOPs) Within the Central Florida Water Initiative (CFWI) Planning Area**

- Groundwater
- ▲ Reclaimed Water
- Surface Water
- ◆ Storm Water
- CFWI Boundary
- County Boundaries
- Water Management District Boundaries



# Solutions Team Projects

- 142 RWSP Projects
- 10 Projects Introduced during Solutions Process
- Solutions Evaluated 18 projects/programs
  - 417 mgd
  - \$3.7 Billion plus

# Central Florida Water Initiative

## Solutions Planning Team Projects

### Conservation

- Public Water Supply and Other Self Supply 32.4 mgd
- Agricultural Programmatic Approach 4.3 mgd

### Surface Water Projects

- St Johns River/Taylor Creek Reservoir 54 mgd
- St Johns River near State Road 46 Project 40 mgd
- St Johns River near Yankee Lake Project 40 mgd
- Groveland Reservoir and Stormwater 122 mgd raw water
- Polk Regional Alafia River Basin Project 10 mgd

### Groundwater Projects

- South Lake Wellfield and Infrastructure 12.7 mgd  
(May include dispersed options)
- Cypress Lake Wellfield 30 mgd
- Polk County Southeast Wellfield 30 mgd  
(May include dispersed options)

### Reclaimed Water Projects

- Project RENEW 9.2 mgd
- Kissimmee West Ditch 1.5 mgd
- 160-ac Site Indirect Potable Reuse 4.5 mgd
- TECO Polk Power Reuse 10 mgd
- AFIRST/Altamonte Springs 4.5 mgd

### Stormwater Projects

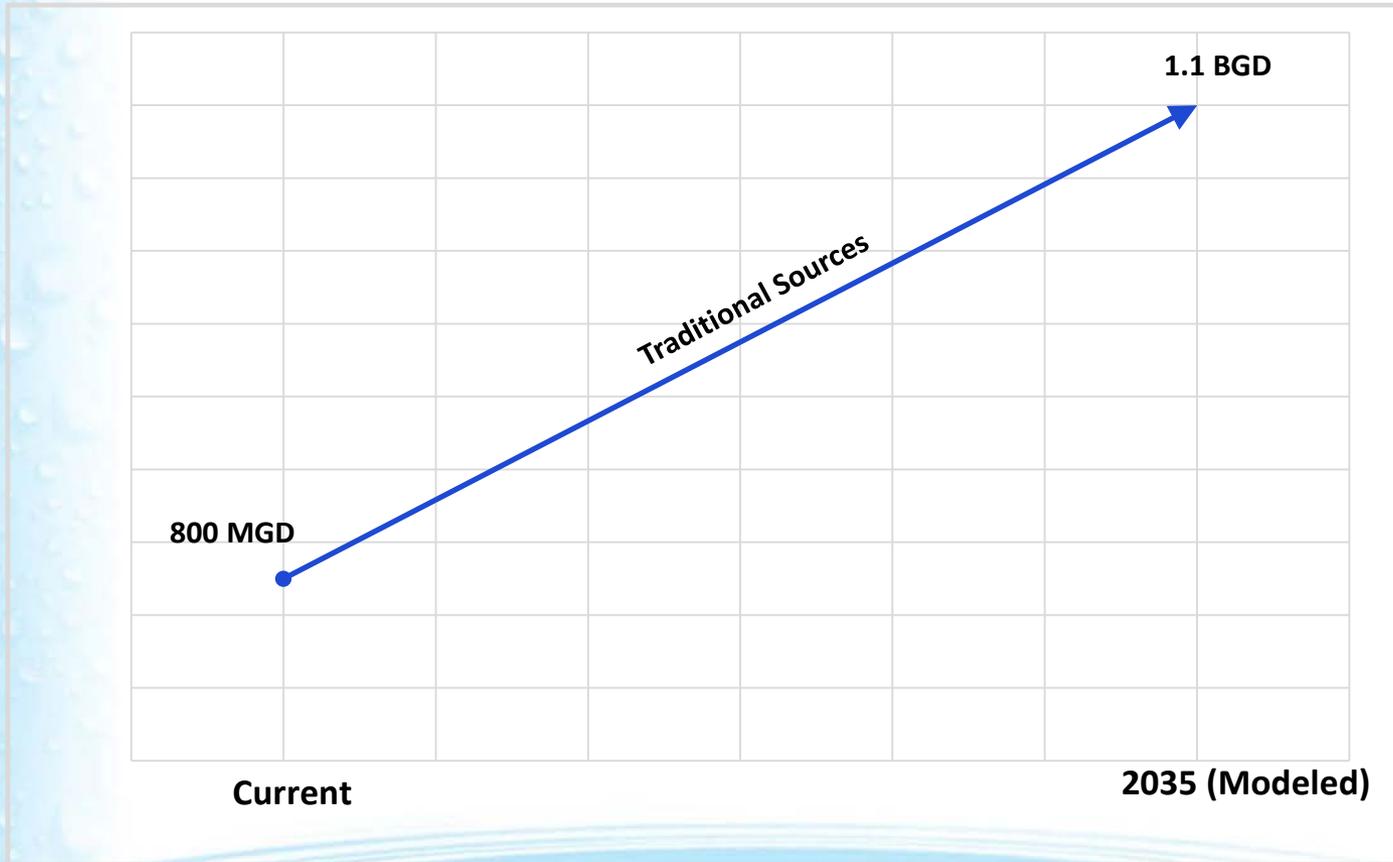
- Judge Farms Stormwater Supplement 6.0 mgd
- Peace Creek Option, Lake Wailes Recovery Project 1.4 mgd
- Reedy Creek Improvement District 4.0 mgd

# Central Florida Water Initiative

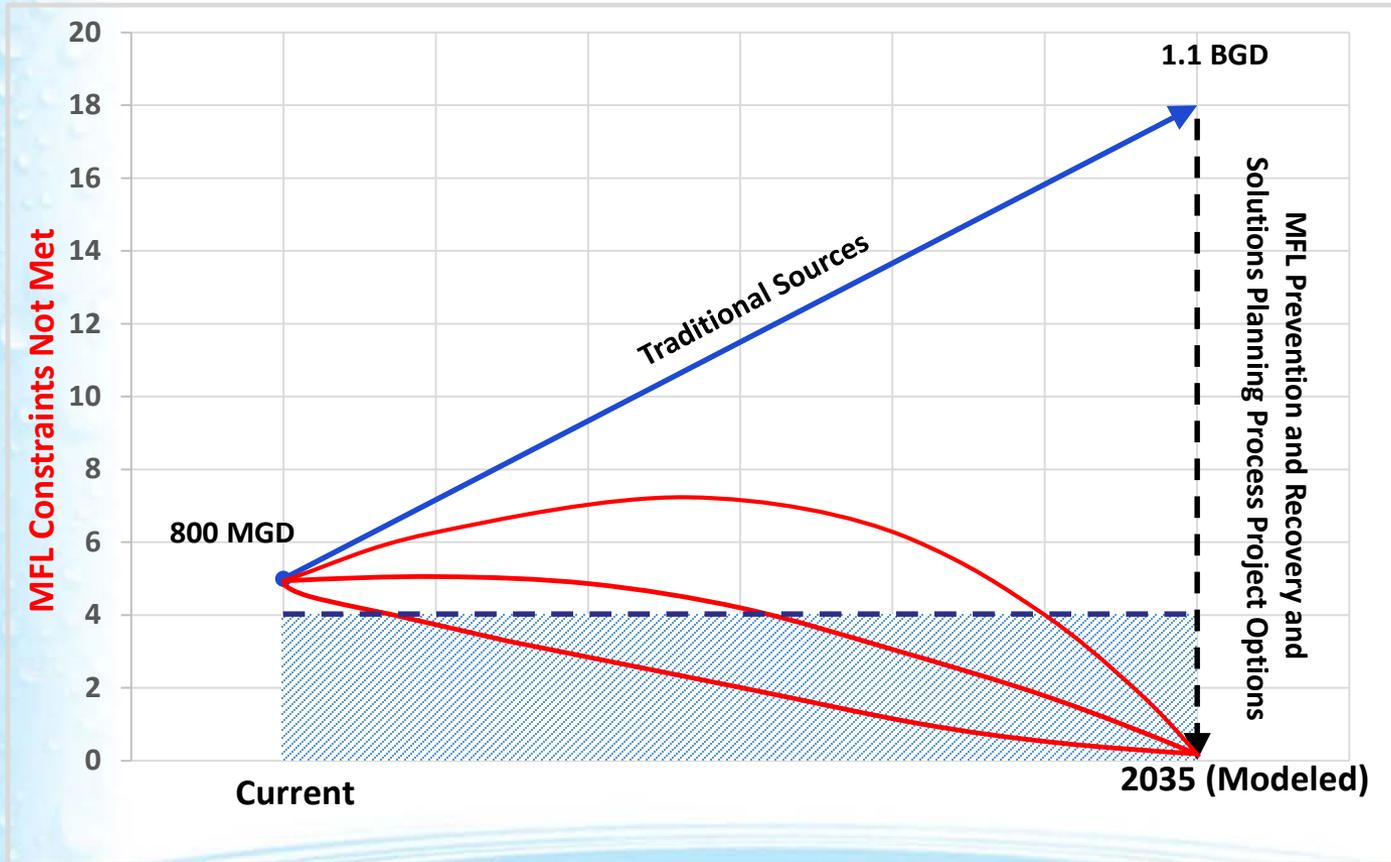
## DRAFT Solutions Planning Team Financial Plan

	Year 1		Year 2		Year 3-5		Year 6-10		Year 11-20		Total	
Category/Project	Funds (Mil/\$)	Water (MGD)										
<b>Conservation</b>												
Ag Programmatic Approach	1	0.2	1	0.2	2	0.6	3	1.1	5	2.2	12	4.3
Public Water Supply and Other Self Supply	8	1.6	8	1.6	23	4.9	39	8.1	78	16.2	156	32.4
Education	1		1		3		5		10		20	
<b>Environmental Recovery</b>												
Recovery Projects	0.5		0.5		10		19		20		50	
<b>Next Steps</b>												
Critical Water Resource Data	3		8		15						26	
Research	2		2		2						6	
<b>Alternative Water Supply Projects</b>												
Reclaimed Projects	6		9		37	9	60	6.2			112	15.2
Stormwater Projects	0.5		19		19	8.4					39	8.4
Surface Water Projects	1.5		3		32		297	12.4	1,243	121.6	1576	134
Groundwater Projects	16.4		28.4		344		182	32.5	157	20	728	52.5
<b>Sub Total</b>	<b>40.1</b>	<b>1.8</b>	<b>79.8</b>	<b>1.8</b>	<b>487</b>	<b>22.9</b>	<b>605</b>	<b>60.3</b>	<b>1513</b>	<b>160</b>	<b>\$2,725</b>	<b>246.8</b>

# Draft Graphic Option



# Draft Graphic Option



# Next Steps

- Finalize
  - The RWSP
  - CFWI 2035 Water Resources Protection and Water Supply Strategies Plan
    - CFWI Regional Alternative Water Supply Priority Projects List
    - CFWI Regional Financial Plan
  - Options for Consistent Regulations & Implement Solutions Strategies

# Next Steps

- Implement
  - Conservation to the Greatest Extent Practicable
  - Critical Water Resource Data Collection
  - Research to Support Water Resource Projects
- Update ECFT Groundwater Model
- Initiate
  - Annual Status Reports
  - Process for 5-year Assessment and Update (2020)

**Questions?**



# Central Florida Water Initiative

## Meeting 2035 Demands – Example 1

<b>Net Total Water Needs by 2035</b>	<b>1100 MGD</b>	
Current Total Water Use	<b>800 MGD</b>	
<b>Potential Solutions Team Project Options</b>		
• Conservation (All)	37 MGD	
• Additional Traditional Groundwater Available	50 MGD	
• LFA Groundwater Projects	53 MGD	
• Surface Water Projects	94 MGD	
• Reclaimed Water Projects	25 MGD*	
• Stormwater Projects	4 MGD	
<b>RWSP Projects (Non Solutions)</b>	37 MGD	
<b>Total</b>	<b>300 MGD</b>	<b>\$2.3 B</b>

\* Approximately 14.5 mgd of this total is already in construction

# Central Florida Water Initiative

## Meeting 2035 Demands – Example 2

<b>Net Total Water Needs by 2035</b>	<b>1100 MGD</b>	
Current Total Water Use	<b>800 MGD</b>	
<b>Potential Solutions Team Project Options</b>		
• Conservation (All)	42 MGD	
• Additional Traditional Groundwater Available	50 MGD	
• LFA Groundwater Projects	63 MGD	
• Surface Water Projects	94 MGD	
• Reclaimed Water Projects	30 MGD*	
• Stormwater Projects	8 MGD	
<b>RWSP Projects (Non Solutions)</b>	13 MGD	
<b>Total</b>	<b>300 MGD</b>	<b>\$2.4 B</b>

\* Approximately 14.5 mgd of this total is already in construction