Solutions Team Meeting November 21, 2013

Sub-Team Regional Project Distribution

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Water Demand by Category

Category	2010	2015	2035
Public Supply	435	476	653
Domestic Self-Supply and Small Utilities	21	21	25
Agriculture	185	219	215
Commercial / Industrial / Institutional & Mining / Dewatering	74	71	96
Power Generation	17	18	22
Landscape / Recreational / Aesthetic	40	45	72
Total	772	850	1,083

Demand is shown in million gallons per day

Water Demand by County

Category	2010	2015	2035
City of Cocoa	24	25	31
Lake*	54 61		91
Orange	244	262	354
Osceola	105	150	196
Polk	271	274	321
Seminole	74	78	90
Total	772	850	1,083

Demand is shown in million gallons per day.

* Demand is only shown for portion of Lake County in CFWI.

Solutions Team Goal

Develop 250 mgd of additional supplies to meet the total projected regional water supply demands.

Solutions Team Regional Projects

Multi-jurisdictional solutions that serve more than one utility.

Should quantity/water produced be considered?

Solutions Team Sub-teams

- Surface Water
- Groundwater
- Reclaimed Water
- Recovery/Prevention
- Conservation & Other Mgmt Strategies (Ag & Urban Landscape)
- Other Stormwater, Dispersed Storage, etc.

Solutions Team Sub-teams Basic Project Questions

- Identify regional water supply project (Provide a concept diagram and description)
- Cost-benefit analysis of yield (\$ per thousand gallons)
- 3. Cost estimates (Capital & Annual O&M)
- 4. Identify water resource constraints
- 5. Identify potential partners and governance options
- 6. Pumping, storage and transmission configurations

Solutions Team Sub-teams Basic Project Questions

- Project feasibility, permitability and estimated property requirements
- 8. Funding sources
- Identify regional water supply project limitations or constraints resulting from the inconsistency of the rules
- Other considerations public concerns or nontechnical obstacles
- 11. Estimated implementation schedule

Surface Water

	County	CFWI Sub- Regions	Project Name	Implementing Agency or Entity	Project Description	Project Type	Water Source	Est. Water Generated (mgd)	
-	Orange	SJRWMD/ SFWMD	St Johns River/TCR	Orange County, OUC, Cocoa, TWA, ECFS	Regional AWS project - Taylor Creek Reservoir and the St. Johns River	PWS	Surface water - brackish	42	2.0
	Osceola	SFWMD	Kissimmee River Basin AWS Project	Water Cooperative of Central Florida	Surface water conjunctive use project in the Kissimmee River	PWS	Surface Water	25	5.0
	Polk	SWFWMD	Joint Tampa Bay Water/ Polk County Supply	PCU, TBW	Partnership to expand TBW Desal facility or a 2nd Alafia River Reservoir	PWS	Sea Water or Surface Water	10	0.0
	Seminole	SJRWMD	St. Johns River Near SR 46 Project	Orange County, multiple	Project includes an intake for brackish surface water from the St. Johns River	PWS and reuse augmenta tion	Surface water - brackish	55	5.0
	Seminole	SJRWMD	St. Johns River Near Yankee Lake	Seminole County, SJRWMD	Expansion of existing Yankee Lake Treatment Plant	PWS	Surface water	50).0

Groundwater

County	CFWI Sub- Regions	Project Name	Implementing Agency or Entity	Project Description	Project Type	Water Source	Est. Water Generated (mgd)
Osceola	SFWMD	Cypress Lake Brackish GW Wellfield	Water Cooperative of Central Florida	Cypress Lake Brackish Groundwater	PWS	Brackish GW	30.0
Polk	SFWMD	SE Polk Co Wellfield	Polk Regional Entity	LFA wells in the SE area of Polk County.	PWS	LFA GW	30.0
Multiple	Multiple	TBD	ТВD	Fresh Groundwater	PWS	Fresh GW	0-75.0
manaple							60.0-135.0



Reclaimed Water

- In 2010 wastewater flows in the CFWI were 193 mgd
 - 105 mgd irrigation and industrial uses
 - 73 mgd aquifer recharge or environmental enhancement
 - 15 mgd disposal
- By 2035 wastewater flows in the CFWI are projected to be 314 mgd
 - 121 mgd additional wastewater flows available by 2035 for beneficial reuse and recharge
 - Not including 15 mgd of current disposal

Recovery/Prevention

- Where and when will recovery be needed?
- Coordinated Recovery/Prevention
 - SWFWMD continuing with SWUCA Recovery Strategy
 - SJRWMD reinitiating R/P in January 2014
- How much water will be needed to meet recovery and prevention?
- What additional data and monitoring will be needed to fully assess prevention and recovery?

CONSERVATION & OTHER MGMT STRATEGIES (AG & URBAN LANDSCAPE)

Water Demand Category	Projected 2035 Demand (mgd)	Projected 2035 Conservation (mgd)
Public Supply	653	27
Domestic Self-Supply	24	1.2
Agriculture	215	11
Landscape/Recreational/Aesthetic	72	2
Commercial/Industrial/Institutional	96	1.2
Power Generation	22	0.3
Total	1,083	42

Other Stormwater, Dispersed, Storage, etc.

and the second se	County	CFWI Sub- Regions	Project Name	Implementing Agency or Entity	Project Description	Project Type	Water Source	Est. Water Generated (mgd)
	Seminole	SJRWMD	Altamonte Springs FDOT Reuse & Stormwater Treatment (AFIRST)	Altamonte Springs	Stormwater treatment and associated facilities to produce public access reuse	Other	Reclaimed Water and Storm Water Reuse	4.5
	All Counties	Multiple	Dispersed Storage	Multiple	Dispersed storage of stormwater/surface water	Other	Stormwater Surface water	TBD
								4.5

CFWI Water Supply Project Summary

Project Category	Project Options	Estimated Water Generated (mgd)	Total Capital (\$M)
Surface Water	15	184 to 209	\$1,871 to \$2,035
Brackish Groundwater	35	45 to 75	\$482
Fresh Groundwater	TBD	0 to 75	TBD
Reclaimed Water	TBD	TBD	TBD
Conservation & Other Management Strategies (AG & Urban Landscape)	TBD	42	\$451
Recovery/Prevention	TBD	TBD	TBD
Other - Stormwater, Dispersed, Storage, etc.	2	4	\$27
Total	136	275 to 405	\$2,831 to \$2,995

Project Potential

Solutions Team Goal

250 mgd

7 Largest Projects

242 mgd (97% of Goal)

TBD

Reclaimed Water

Conservation

42 mgd (17% of Goal)