# CFWI RECLAIMED WATER SUBTEAM PROJECTS REPORT

## Steering Committee

October 24, 2014

JoAnn Jackson, PE Subteam Leader

## Reclaimed Water Projects

Project No.	Name	Utility	Water Generated (mgd)	WMD
44	Project RENEW	OUC	9.2	SJRWMD
106	AFIRST	Altamonte Springs	4.5	SJRWMD
59	West Ditch Stormwater for Reuse Augmentation	ТОНО	1.5	SFWMD
60	160-Acre Site IPR	ТОНО	5.0	SFWMD
100	TECO Polk Power Reuse	TECO, Lakeland, Mulberry, Polk Co.	10.0	SWFWMD

# 44. Project RENEW Reclaimed Water – 9.2 mgd

**Purpose**: To provide 9.2 mgd of reclaimed water to NW Orange Co. or South Lake Co. to offset pumping impacts and/or assist with MFL P&R strategies.

Cost Estimates: Phase 1 Phase 2

Total capital: \$24,647,000 \$50,499,000

Construction: \$19,706,000 \$45,482,000

O&M: \$104,000/yr \$291,000/yr

Cost (\$/kgal): \$1.17 \$0.90

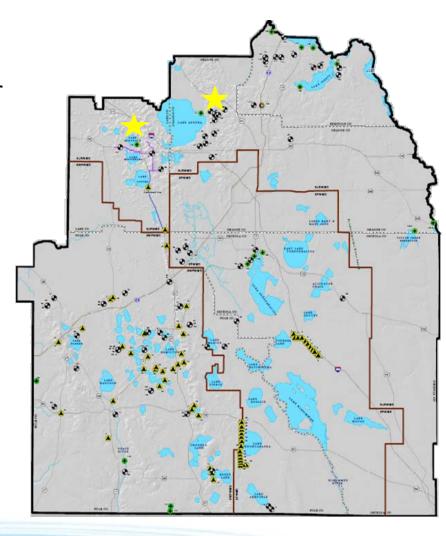
Water Resource Constraints: Availability of

reclaimed water when needed

Partners: Existing agreements - OUC, Orlando, Apopka, Winter Garden. Potential future agreements – entities in South Lake Co.

**Schedule:** Construction schedule contingent on completion of engineering study

Phase 1-3 mgd, Phase 2-9.2 mgd (total)



### 106. AFIRST

### Reclaimed Water - 4.5 mgd

Purpose: Integrate stormwater and reclaimed water. Excess reclaimed water not used with the City will be sent to the City of Apopka via a 6 mile pipeline for reuse and recharge.

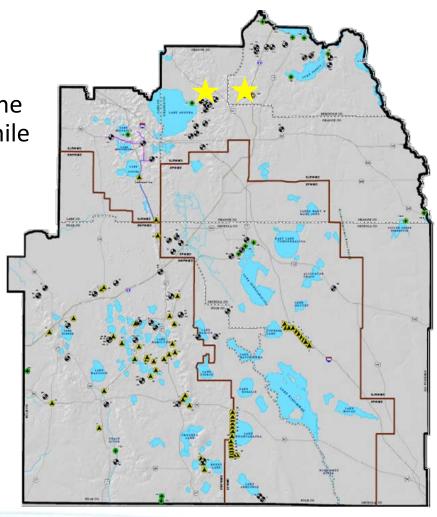
#### **Cost Estimates:**

- ❖ Total capital: \$13,300,000
- **Construction:** \$12,000,000
- Operation and maintenance:
- Unit production cost: \$0.93 / 1,000 gallons

Water Resource Constraints: Pending model results

**Partners**: City of Altamonte Springs, City of Apopka, FDOT, SJRWMD, FDEP

**Implementation Schedule**: This project is currently under construction. Construction will be complete late summer 2015.



059. West Ditch Stormwater for Reuse Augmentation

Reclaimed Water – 1.5 mgd

Purpose: Collect stormwater from Kissimmee's West Ditch City canal and route it through a series of interconnected ponds to augment reclaimed water from Toho Water Authority's (TWA's) South Bermuda Water Reclamation Facility (SBWRF).

#### **Cost Estimates:**

\* Total capital: \$28,187,247

Construction: \$23,489,372

Operation and maintenance: \$445,792/yr

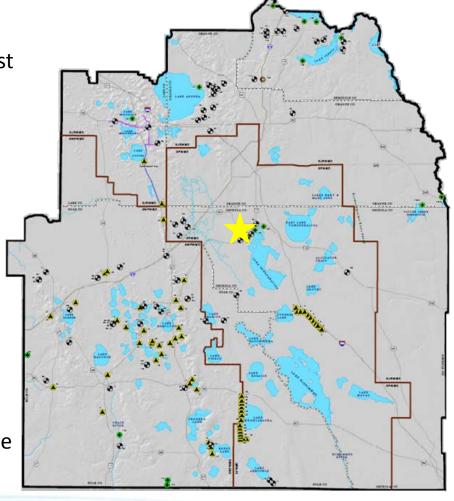
Unit production cost: \$3.22/1,000 gal

Water Resource Constraints: Availability of

reclaimed water when needed

**Partners**: TWA, reclaimed water utilities, Kissimmee (in-kind), SFWMD, and other sources that might be identified through the CFWI solution phase.

**Implementation Schedule**: Begin project work in fiscal year 2020, as identified in TWA's CIP.



060. 160-Acre Site Indirect Potable Reuse

Reclaimed Water - 5.0 mgd

**Purpose**: TWA's 160-Acre RIB for indirect potable reuse. The RIB would be receiving an average 5.0 mgd of reclaimed water to recharge the aquifer.

#### **Cost Estimates:**

❖ Total capital: \$7,649,602

**Construction:** \$6,374,668

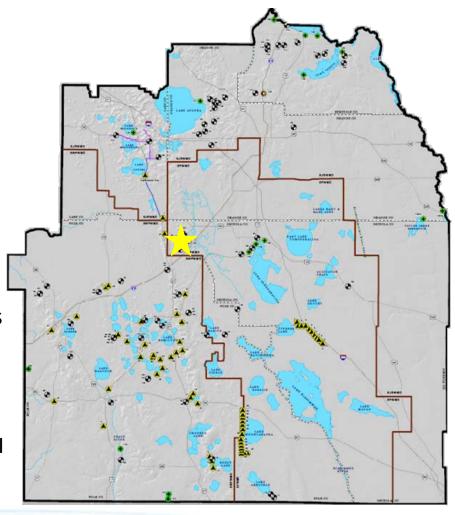
Operation and maintenance: \$94,780/yr

Unit production cost: \$0.29/1,000 gallons

Water Resource Constraints: Availability of reclaimed water

**Partners**: TWA, other utilities, SFWMD and other sources that might be identified through the CFWI solution phase.

**Implementation Schedule**: Begin project in fiscal Year 2019, as identified in TWA's CIP.



100. TECO Polk Power Reuse Project Reclaimed Water Project – 10.00 mgd

**Purpose**: Supply reclaimed water for power generation at TECO Polk Facility.

#### **Cost Estimates:**

- Components: Pipes, Pumps, Treatment, Storage, Disposal Well
- Total capital: \$96,960,725
- Operation and maintenance: \$TBD/yr
- Unit capital cost: \$2.34/1,000 gallons

Water Resource Constraints: SWUCA

**Partners**: TECO, SWFWMD, state grants with an interlocal Reuse Supply Agreements between TECO, Lakeland, Mulberry and Polk County.

#### **Implementation Schedule:**

- Project Design 2009-2014
- **❖** Construction − 2011-2017

