#### Central Florida Water Initiative

Water for Tomorrow



# A summary of the status of the implementation strategy

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#### **Timeline**

Date	Action	
July 18, 2017	Received guidance from the SC to proceed with the implementation strategy (including all outline components as well as all four "options" presented.)	
February 5, 2018	MOC Presentation of overview and methodologies	
February 28, 2018	Final draft due for MOC final review	
March 31, 2018	Final due for Steering Committee Review	

# Projected Conservation by Water Use Category

Water Use Category	Projected Solutions Strategies 2035 Conservation (mgd)	
Public Supply (PS)	27.91	
Agriculture (AG)	4.30	
Landscape/Recreational/Aesthetic (LRA)	2.02	
Domestic Self-Supply (DSS)	1.19	
Commercial/Industrial/Institutional (CII)	1.15	
Power Generation (PG)	0.27	
Total	36.84	

# **Strategy Components**

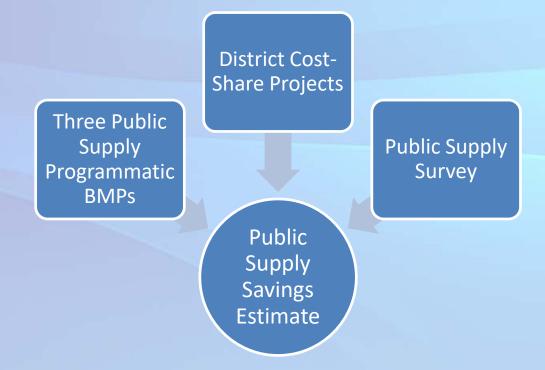
Option Name	Option Description	
Designated Projects	Designated projects include options for conservation projects that could be implemented at some point in the future. This is in addition to projects/ conservation projects previously identified as having been completed or currently underway and include generic projects, regional projects, and entity-specific projects.	
Funding Opportunities	Funding Opportunities are identified for each sector, along with some barriers and challenges.	
Regional Education and Outreach	Consistent conservation messaging throughout the CFWI Planning Area would result in maximum impact. A key component to this is designating a conservation messaging liaison from the Conservation Team. The liaison would be responsible for: identifying targets/deliverables that need to be coordinated; coordinating the development of calendar; developing a scope of work for future communication strategies.	
Guideposts	Guideposts are intended to assist in the development of conservation plans by class of user. Guideposts demonstrate the percent reduction that a class of users, in the aggregate, would need to reach to achieve the CFWI Estimated Conservation Savings goal of 37+ mgd. Guideposts have not been developed for this First Edition of the Implementation Strategy but will be worked on for use in the 2020 RWSP update and next iteration of this strategy.	

# Accounting for Conservation Savings to Date

An Overview of Methodologies by Sector

### **Public Supply**

• The 2015 RWSP identified 26.78 mgd of water conservation potential for public supply.



#### **Public Supply Programmatic BMPs**

- The Florida Water Star Rebates or Requirement
  - Determined from a recent TWA and UF study
- The Extension Agent/Florida Friendly Program
  - FFL program has estimated the quantity of water savings from all FFL program based on agent follow up and questionnaires on behavior change. Estimated savings were shared by Dr. Michael Dukes, UF/IFAS, based on this methodology
- Florida Green Building Coalition (FGBC) Homes
  - Savings were calculated by multiplying typical savings from these indoor and outdoor BMPs by each CFWI county average occupancy rates for single family homes.

#### **Public Supply – Cost Share BMPs**

- The water savings estimates for projects utilizing District cost-share funding were included to the 2010 – 2019 savings estimate for number of implementations.
- In addition to the 10 Quantified BMPs in the 2015 RWSP, the cost share projects also include other BMPs such as AMI Implementation, line flushing, conservation software, behavioral programs, etc.

# Public Supply – Survey - Background

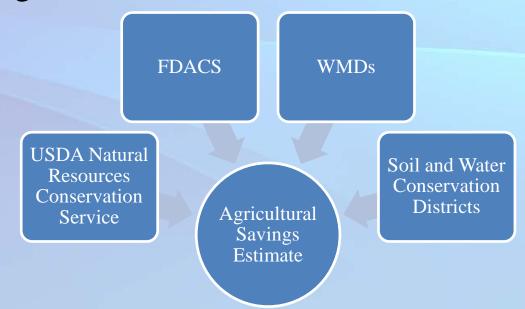
- Survey was conducted between May 20 and November 22, 2016, using an online questionnaire.
- 82 CFWI utilities, each with a capacity of 0.1 mgd or more, were invited to participate in the survey.
- 25 utilities responded to the survey, with 12 responding specifically to the questions on BMPs used in the implementation strategy.

### Public Supply – Survey BMPs

- The 12 utilities responding to the BMP quantification portion of the survey represent 67% of the PWS 2035 demands based on projections in the 2015 plan.
  - The estimated savings for only the 12 utilities responding represents the <u>low</u> end of the savings range.
  - The estimated savings for all CFWI utilities, assuming they have similar BMP savings as the 12 utilities, will represent the <u>high</u> end of the range.
- Savings for three additional BMPs were developed by the subteam:
  - Water efficient clothes washers
  - Water efficient dishwashers
  - Rain Sensors

## Agriculture Self Supply

- The 2015 RWSP identified 4.3 mgd of water conservation potential for agriculture.
- Estimated water conservation reported in this section relies on information from the programs offered by government agencies:
- Methodologies vary by agency for each BMP costshare program.



## Other Self Supply - Background

- Estimates of the water conservation potential for DSS, CII, LRA, and PG categories in the 2015 CFWI RWSP were based on results derived from various segments of the Conserve Florida Water Clearinghouse EZ Guide outputs for Public Supply.
- The EZ Guide methodology for water conservation potential for OSS users assumed that savings within this sector was directly proportional to similar customers or other uses supplied by public supply systems.

Water Use Category	2035 Demand (mgd)	Percent Conservation	Projected 2035 Conservation
DSS	24.42		1.19
CII	95.85	1.2%	1.15
LRA	72.18	2.8%	2.02
PG	22.41	1.2%	0.27
Subtotal	190.44		3.44
<b>Grand Total</b>	214.86		4.63

#### Other Self Supply – Adapted Approach

- The initial savings estimate for the OSS sector was did not account for potential savings in commercial, industrial, or power generation process water or conservation BMPs specific to large LRA type uses.
- The implementation strategy for the OSS water use sector proposes to re-focus the evaluation of the conservation potential from PS-type BMPs to more optimal BMPs based the water demand described in specific permits in each water use category.
- Methodology to quantify savings based on a permit-specific review of conservation plans.

#### **Domestic Self Supply**

- Water use within this category is expected to increase by approximately 20% from 20.36 mgd in 2010 to 24.42 mgd in 2035.
- The 2015 CFWI RWSP identified 1.19 mgd of water conservation potential for this water use sector.
- Though passive conservation is anticipated, water savings to achieve projected conservation to come from outdoor irrigation restrictions, local ordinances, and similar.