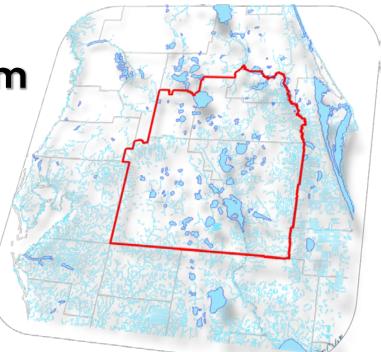
## September 26, 2014

#### Solutions Planning Team Water Conservation

Jim Fletcher Sub-team Leader

Robert Beltran Solutions Team Leader



### Sub-Team Members (30)

- 1) Water Management Districts
  - St. John River
  - South Florida
  - Southwest Florida
- 2) FDACS
- 3) FDEP
- 4) Public Water Supply
- 5) Agriculture
- 6) Environmental Organizations
- 7) Business Community

#### Sub-Team: Goal

- Identify and evaluate water conservation projects and programs that would reduce future demands by a minimum of 42MGD
- The original RWSP findings:
  - 26.8 mgd Public Water Supply
  - 10.9 mgd Agriculture
  - 4.6 mgd Other Self Supply

#### Steering Committee Guidance

Three categories - Agriculture, Public Water Supply, and Other Self Supply

### Sub-Team: Objectives

- Listing of potential water conservation projects/program options
- Identified by quantifying the potential water savings and cost
- Document findings and identify options

## Public Water Supply

#### Data & Tools

- BMP list consolidation and definitions (76)
- EZ Guide and Florida Automated Water Conservation Estimation Tool (FAWCET) used to quantify savings for available BMPs
  - Modeling runs ongoing

#### **Preliminary Summary of Public Water Supply BMPs**

Name of Measure	# Devices	Total Cost (\$M)	Savings (mgd)	Cost \$/Kgal	Analysis Tool
Facility Water Use Assessment/Audit	169	\$0.5	0.1	\$2.41	EZGUIDE
High Efficiency Showerhead Replacement	527,728	\$11.3	8.6	\$0.09	EZGUIDE
High Efficiency Toilet Replacement	373,215	\$74.7	7.4	\$0.74	EZGUIDE
High-Efficiency Faucet Aerator Replacement	1,057,602	\$16.3	7.3	\$0.40	EZGUIDE
High-Efficiency Pre-rinse Spray Valve Replacement	307	\$0.02	0.2	\$0.04	EZGUIDE
High-Efficiency Urinal Replacement	3,808	\$1.4	0.3	\$0.52	EZGUIDE
Irrigation system evaluation (or survey)	99,605	\$6.0	1.2	\$2.65	EZGUIDE
Soil Moisture Shut-off Device	28,617	\$2.9	1.5	\$1.07	EZGUIDE
Smart Irrigation Controller (ET etc.)	2,845	\$1.1	0.3	\$0.86	FAWCET
Water-wise Florida Landscaping (turf buyback)	3,956	\$7.9	0.8	\$1.77	FAWCET
Total		\$122.12M	27.70		

Note: High efficiency clothes washers and dishwasher aren't shown because they did not meet the \$3 cost/kgal threshold

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# Agricultural Water Use

#### Data & Tools

- Mobile Irrigation Lab (MIL) Analysis
- Florida Automated Agriculture Retrofit Model (FAARM) used to quantify savings for available BMPs
- Facilitating Agricultural Resource Management Systems (FARMS) Program – BMP Cost-Share Reimbursement Assistance

### Summary of Ag BMPs

- 42 Ag BMPs identified Seven Categories
  - Irrigation System Retrofit
  - Electronics
  - Water Control
  - Frost Freeze Protection
  - Tailwater/Surface Water
  - Maintenance/Management
  - Other

#### **Agriculture Status**

- Ag goal to reduce 10.9 mgd
- Ag Programmatic Approach
  - Cost-Share Programs Existing and Anticipated
    - Ag Water Savings and Costs per BMP varies, and can vary from one farming operation to the next
  - Tracking Performance
  - Required Resources

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#### On-going Sub-team Discussions

- BMPs: Quantifiable/Unquantifiable
- Education and Outreach
- Regulatory Options
- Other Self Supply
- Chapter Development
- Implementation