Steering Committee Meeting
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 42 MGD

- 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

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

Note: High efficiency clothes washers and dishwasher aren’t shown because they did not meet the $3 cost/kgal threshold
Agricultural Water Use
Data & Tools

- Mobile Irrigation Lab (MIL) Analysis
- Florida Automated Agriculture Retrofit Model (FAARM) used to quantify savings for available BMPs
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
On-going Sub-team Discussions

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