RECOMMENDED UPDATE TO CITY OF HOUSTON’S WATER CONSERVATION PLAN

June 19, 2014
Background

• State of Texas requirements
  – Five-Year Renewal
  – Specific Contents
  – Specified Format
  – City Council Adoption

• Current Plan enacted September 2009
Objectives

• Per Texas Water Development Board*:
  – Strategies for reducing loss or waste of water
  – Improving or maintaining the efficiency in the use of water
  – Increasing the recycling and reuse of water
  – Reducing the consumption of water

* Similar to definition during 2009 Plan development
# Profile of Customer Use

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>No. of Connections</th>
<th>Total Usage 2012 (billons)</th>
<th>Average MGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CII</td>
<td>48,000</td>
<td>33</td>
<td>90</td>
</tr>
<tr>
<td>Single Family</td>
<td>407,255</td>
<td>27</td>
<td>74</td>
</tr>
<tr>
<td>Multi Family</td>
<td>14,710</td>
<td>26</td>
<td>71</td>
</tr>
<tr>
<td>TOTAL</td>
<td>469,965</td>
<td>86</td>
<td>236</td>
</tr>
</tbody>
</table>

**City of Houston Retail Customer Class Demand Shares, 2012**

- Multi Family, 27.8%
- Single Family, 28.7%
- Other, 0.2%
- Irrigation, 5.4%
- City of Houston, 3.0%
- CII, 34.9%
# Recommended 5 and 10 Year Water Savings Targets

<table>
<thead>
<tr>
<th></th>
<th>Historic 5yr average</th>
<th>Baseline</th>
<th>5yr Goal for year 2019</th>
<th>10yr Goal for 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GPCD</td>
<td>144</td>
<td>150</td>
<td>148.5</td>
<td>147</td>
</tr>
<tr>
<td>Residential GPCD</td>
<td>68</td>
<td>72</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Water Loss (GPCD)</td>
<td>29</td>
<td>29</td>
<td>28.4</td>
<td>27.8</td>
</tr>
<tr>
<td>Water Loss (Percentage)</td>
<td>14</td>
<td>14</td>
<td>11.2</td>
<td>10.9</td>
</tr>
</tbody>
</table>
Recommended Implementation Plan

• Water Main Replacement Program
• Mainline Detection Leak Program
• Water Loss Plan
  – Utilize fixed network
  – City Department and Nonrevenue Water Usage
  – Enforcement
• Meter Replacement Program
Recommended Implementation Plan

• **Consumption Awareness Program**
  – Develop web-based portal for commercial customers
  – Information campaign
  – More user friendly portal for single-family customers

• **Water Wise Building Standards**
  – Uniform Plumbing Code, Chapter 16
  – Uniform Plumbing Code, Appendix R
  – Building Code 29

• **Public Education and Information Program**
  – Annual Water Festival
  – School Education Curriculum
  – Community Outreach
  – Gulf Coast Water Conservation Symposium
Other Key Features

- Master and Universal Metering
- Non-Promotional Water Rate Structure
- Implementation and Enforcement
- Contract Customer Requirements
- Region H Notification
- Drought Contingency Plan
- Adoption
- Reporting Requirements
- Utility Profile
Moving Forward

• **6/14** – presentation to Transportation, Technology and Infrastructure Committee

• **July 2014** – Earliest date for Council consideration of support resolution

• **September 2014** – Five year deadline for update
Summary of Updates

- Five and Ten year goals
- Water Loss Program
- Consumption Awareness Program
- Water Wise Building Standards