Secondary Metering and its Future

What is the next step in water conservation after metering?

Utah Water Conservation Forum
Spring Conference
May 17, 2018
Service Meters
25% Conservation

2003 WATER USE
TOTAL IRRIGATION WATER USE

<table>
<thead>
<tr>
<th>MONTHS</th>
<th>USAGE (AC-FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANUARY</td>
<td>200</td>
</tr>
<tr>
<td>APRIL</td>
<td>400</td>
</tr>
<tr>
<td>JULY</td>
<td>800</td>
</tr>
<tr>
<td>OCTOBER</td>
<td>600</td>
</tr>
</tbody>
</table>

Images of a water meter and a water line.
Conservation Issues
Auto-Pay and Bill Equalization
Conservation Issues

Meter Measure Increments

- Real time usage data.
- Identify leaks.
- Catch hoses left on.
- Tiered rates.
- More accurate use data.
Low Impact Development (LID)
Harvest Storm Water for Plants
Source Meters
Conservation Accelerates

Pearson’s Law
“When performance is measured, performance improves. When performance is measured and reported back, the rate of improvement accelerates.”
How to Measure Conservation?

Avg Daily Gallons Used per Resident per Inch of Rain in the Irrigation Season

Average Daily Water Use per Resident in Gallons

<table>
<thead>
<tr>
<th>Year</th>
<th>Avg Daily Use per Person (gal)</th>
<th>Use per Inch of Rain (gal)</th>
<th>Summer Precipitation Factor</th>
<th>Irrigation Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>135.9</td>
<td>10</td>
<td>131</td>
<td>13.08 in</td>
</tr>
<tr>
<td>2010</td>
<td>143.6</td>
<td>11</td>
<td>128</td>
<td>12.81 in</td>
</tr>
<tr>
<td>2011</td>
<td>125.4</td>
<td>7</td>
<td>180</td>
<td>17.96 in</td>
</tr>
<tr>
<td>2012</td>
<td>167.3</td>
<td>34</td>
<td>50</td>
<td>4.99 in</td>
</tr>
<tr>
<td>2013</td>
<td>146.0</td>
<td>14</td>
<td>102</td>
<td>10.19 in</td>
</tr>
<tr>
<td>2014</td>
<td>150.2</td>
<td>14</td>
<td>104</td>
<td>10.41 in</td>
</tr>
<tr>
<td>2015</td>
<td>152.5</td>
<td>17</td>
<td>90</td>
<td>8.99 in</td>
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<tr>
<td>2016</td>
<td>160.4</td>
<td>22</td>
<td>73</td>
<td>7.30 in</td>
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<tr>
<td>2017</td>
<td>160.4</td>
<td>19</td>
<td>82</td>
<td>8.23 in</td>
</tr>
</tbody>
</table>
Pilot Program

Lessons Learned

Hunter Pro C with Solar Sync
- Audit
- $50
- Water Wise Landscape Plan

Lessons Learned
- Professionally Installed
- Free
- Require no Effort
- Go Door to Door
Conservation Issues
Sprinkler Maintenance

5 Cheap and easy ways to fix brown spots in your lawn
- Weber Basin Conservancy District

1. Replace Broken Heads
2. Straighten Tilted Heads
3. Raise Sunken Heads
4. Unclog Nozzles/Filters
5. Adjust Misaligned Heads
Conservation Issues
Water Conservation Program

Rachio 3

- Professionally Installed
- Door to Door in Wind Fan Area
- Free Minor Sprinkler Repair
Conservation Issues
Peak Demand

Total GPM per hour

System Savings
- Pumping
- Trunkline Capacity
- Reservoir Capacity
- Pressure