This presentation premiered at WaterSmart Innovations

watersmartinnovations.com
Water Conservation Lower Rate Increases for Colorado Utility

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Westminster, Colorado
Why are my rates going up again when I keep conserving water?!

• Due to conservation, per capita water use has dropped 21% since 1980.
• YET.... what customers pay for water continues to increase.
• Customers are confused and frustrated.
• What is the impact on rates and tap fees due to conservation?
Potable Water Production

Gallons

Peak Day  Daily Average  Peaking Factor  Linear (Peaking Factor )
1980 Significant Changes

• Rate structure changes
• Rebate programs
• Changes to plumbing codes
• Landscape regulations and Xeriscape
• Education
• Attitude
• Efficiency and conservation

2014
Water and wastewater rates have increased faster than the Consumer Price Index (CPI) over the past 15 years.
Cost per Acre-Foot of Water*

* Costs of water in the Clear Creek/South Platte basins in Colorado
Cost: 7,295 AF *
$30,000/Acre-Feet = $218,850,000

Does not include debt costs
Infrastructure: COSTS/IMPACTS
Impacts to Water Treatment Infrastructure at Buildout

Cost: 52MGD * $2,500,000/MGD = $130,000,000
Impacts to Wastewater Treatment Infrastructure at Buildout

Cost:

\[
\text{4 MGD} \times \frac{\$5,000,000}{\text{MGD}} = \$20,000,000
\]
<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Water Resources</td>
<td>$218,850,000</td>
</tr>
<tr>
<td>Additional WTP capacity</td>
<td>$130,000,000</td>
</tr>
<tr>
<td>Additional WWTP capacity</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>Subtotal of Costs</td>
<td>$368,850,000</td>
</tr>
<tr>
<td>Interest (on debt funding)</td>
<td>$223,106,000</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>$591,956,000</strong></td>
</tr>
</tbody>
</table>
**Ongoing Financial Impacts to City-OPERATING**

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Additional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual water</td>
<td>$2,239,000</td>
<td>$480,400</td>
<td>$2,719,400</td>
</tr>
<tr>
<td>operating costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual wastewater</td>
<td>$3,059,000</td>
<td>$763,300</td>
<td>$3,822,300</td>
</tr>
<tr>
<td>operating costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* No Additional Personnel*</td>
<td>$1,243,700</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Two primary sources of revenue
• Rates pay for operations
• Tap fees pay for capital projects (new infrastructure and water resources)
## Customer Impact: Single Family Rates – Annual Bill

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>Additional Charge with NO Conservation</th>
<th>Total Annual Single Family Bill</th>
<th>Avoided Customer Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and Sewer Rates</td>
<td>$655</td>
<td>$624</td>
<td>$1,279</td>
<td>95%</td>
</tr>
</tbody>
</table>

**Updated 2014:** 94%
## Customer Impact: Single Family Tap Fees

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>Additional Charge with NO Conservation</th>
<th>Total Annual Single Family Tap Fee</th>
<th>Avoided Customer Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and Sewer Tap Fees</td>
<td>$21,229</td>
<td>$16,952</td>
<td>$38,181</td>
<td>80%</td>
</tr>
<tr>
<td><strong>Updated 2014:</strong></td>
<td></td>
<td></td>
<td></td>
<td>68%</td>
</tr>
</tbody>
</table>
Customer Water Rates are LOWER with Conservation

<table>
<thead>
<tr>
<th>2012 Single Family Annual</th>
<th>WITH Conservation</th>
<th>WITHOUT Conservation</th>
<th>Avoided Customer Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rates</td>
<td>$655</td>
<td>$1,280</td>
<td>95%</td>
</tr>
<tr>
<td>Tap Fees</td>
<td>$21,000</td>
<td>$38,000</td>
<td>80%</td>
</tr>
</tbody>
</table>
The cheapest water is (by far) the water we already have?
Thank you.

Questions?

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Stu Feinglas, Water Resources Analyst, City of Westminster
Christine Gray, Management Analyst, City of Westminster
END