City of Napa

2011 Modification of Water Rates

Service Area

>75,000 customers

25,000 connections
Approach for Cost Of Service Analysis

What
- Revenue Requirements
- Operating Costs
- Capital Investments
- Existing Assets

Who
- Customer Classes

How
- Cost Allocation Among Beneficiary Classes

Why
- True Cost of Service and Fair Share
  - Compliance with Proposition 218

Setting Rates

Revenue Requirements
- Operating
- Capital Investment in Infrastructure

Forecast of Future Revenue

\[
\text{Total} \; $$ = \; \text{Consumption (Units)} \times \text{Cost ($ per Unit)}
\]

\[
\text{Fixed} \; = \; \# \; \text{of Units} \times \text{$$/ Unit}
\]
Cost Of Service Analysis

- Compliance with CUWCC BMPs and SBx7-7 conservation requirements
- 165 gpcpd to 132 gpcpd

What will be achieved?

- Inclining Tier Rates to raise awareness of conservation and move towards compliance with 20% by 2020 Regulation SBx7-7
- Inclining Tier Rates charge the cost of service reflecting higher operating costs during peak demands of the summer
- Inclining Tiered Rates will raise awareness about discretionary water use
City of Napa Water Rates

GPCD Path to 2020

2020 Target = 132 gpcd
(2018 CUWCC = 134 gpcd)

- Landscape Water Savings
- Napa State Hospital Recycled
- Rate Impacts

Cost Of Service Analysis - Revenue Requirements

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Revenue Required</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Major Revenue Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>No. of Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential</td>
<td>20,900</td>
</tr>
<tr>
<td>Multi Family Residential</td>
<td>1,400</td>
</tr>
<tr>
<td>Commercial</td>
<td>1,400</td>
</tr>
<tr>
<td>Irrigation</td>
<td>300</td>
</tr>
<tr>
<td>Interruptible Agricultural Services</td>
<td>19</td>
</tr>
<tr>
<td>Pumped Zones</td>
<td>2,200</td>
</tr>
<tr>
<td>Fire Services</td>
<td>550</td>
</tr>
<tr>
<td>City of St Helena</td>
<td>1</td>
</tr>
<tr>
<td>State Hospital</td>
<td>1</td>
</tr>
</tbody>
</table>
Rate Modification

- Structural Change and Increase

Existing since 1997: Single Quantity charge
   No fixed element

Modification:

Fixed quantity charge
$13.25 (includes 3 units)
Tiers for SFR

What will be achieved?

- Tier Rates for single family residential customers 85% of accounts

Water Consumption: 1 Unit = 1,000 gallons

<table>
<thead>
<tr>
<th>Tier Service Charge</th>
<th>Unit Range</th>
<th>Rate Per Unit</th>
<th>Current Units</th>
<th>Current Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Service Charge</td>
<td>Includes 0-3 Units</td>
<td>3 $ 13.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 2</td>
<td>4-20</td>
<td>4.42</td>
<td>17 $ 75.14</td>
<td></td>
</tr>
<tr>
<td>Tier 3</td>
<td>21-40</td>
<td>4.58</td>
<td>20 $ 91.60</td>
<td></td>
</tr>
<tr>
<td>Tier 4</td>
<td>41-75</td>
<td>5.80</td>
<td>5 $ 29.00</td>
<td></td>
</tr>
<tr>
<td>Tier 5</td>
<td>Over 75</td>
<td>7.70</td>
<td>0 $ 0.00</td>
<td></td>
</tr>
<tr>
<td>Tiered Water Totals</td>
<td></td>
<td></td>
<td>45 $ 208.99</td>
<td></td>
</tr>
</tbody>
</table>
Benefits of Reduced Consumption

- **Short Term Impacts**
  - Operating costs do not decrease
  - Infrastructure must be maintained

- **Long Term Benefits**
  - Reduced Capital Investment in Infrastructure
    - no or reduced additional supply
    - no or reduced additional storage

How can customers control their costs?

- Free Water-Wise Home and Business Surveys
- Free Water-Wise Landscaping Workshops, Web Site
- “Cash For Grass” Turf Replacement Rebate
- High-Efficiency Clothes Washer Rebate
- Free Replacement of pre-1992 Toilets w/ WaterSense
- Free Water-Saving Devices

www.cityofnapa.org/water
Compliance

1. **Stage II Disinfection Byproduct Rule (DBPR-II)**
   
   ✓ October 2012
   
   Effects: Capital Improvements to distribution and treatment

2. **SBx7-7** Reduce baseline of 165 gpcpd
   
   ✓ 2015 - reduce per capita consumption by 15% (148 gpcpd)
   ✓ 2020 - reduce per capita consumption by 20% (132 gpcpd)
   
   Effects: Limits Sales and Revenue
   No change to level of service or fireflow requirements

Questions or Comments?
What if we do nothing?

Projected Revenue and Revenue Requirements

With Proposed Rates
**City of Napa Water Rates**  
Pacific Institute Alliance for Water Efficiency CA-NV-AWWA

**Water Rates Workshop – September 11, 2012**

**Cost of Napa Water - Inside City**

**Average Yearly Water Costs for Single-Family Residential Customers**  
(applying each Agency’s current rates to average Napa residential usage)

- **Current Northern Bay Area Average**
- **Average winter use = 9 units**
- **Average summer use = 27 units**

**Recommended Rate Structure – Bill Impact**

**SFR - Inside City (18,900 customers)**

<table>
<thead>
<tr>
<th>Units Consumed Bimonthly</th>
<th>Current Bimonthly Bill</th>
<th>Proposed October 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Recommended Rates</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bimonthly Bill</td>
</tr>
<tr>
<td>3</td>
<td>$12.27</td>
<td>$13.25</td>
</tr>
<tr>
<td>9 (average winter)</td>
<td>$36.81</td>
<td>$39.78</td>
</tr>
<tr>
<td>27 (average summer)</td>
<td>$110.43</td>
<td>$120.45</td>
</tr>
<tr>
<td>55</td>
<td>$224.95</td>
<td>$267.03</td>
</tr>
<tr>
<td>100</td>
<td>$409.00</td>
<td>$575.58</td>
</tr>
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</table>
Recommended Rate Structure

Single Family Residential (SFR)

- Return to service charge and tiers
- Ensure basic level of service is included
- Promote conservation at all levels of summer consumption
- Equitable charges for level of service received

### Recommended Rate Structure for Single Family Residential (SFR)

<table>
<thead>
<tr>
<th>Units</th>
<th>Winter</th>
<th>Summer</th>
<th>Proposed October 2011 Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bimonthly Service Charge (includes 3 units)</td>
<td>9%</td>
<td>4%</td>
<td>$13.25</td>
</tr>
<tr>
<td>4-20</td>
<td>79%</td>
<td>42%</td>
<td>$4.42</td>
</tr>
<tr>
<td>21-40</td>
<td>10%</td>
<td>40%</td>
<td>$4.58</td>
</tr>
<tr>
<td>41-75</td>
<td>1%</td>
<td>12%</td>
<td>$5.80</td>
</tr>
<tr>
<td>76+</td>
<td>0.3%</td>
<td>2%</td>
<td>$7.70</td>
</tr>
</tbody>
</table>

Communication and Outreach Efforts

- Prop 218 Notifications mailed to all account holders and property owners
- Information posted on the web-site at:

  `www.cityofnapa.org/water`

- Interactive bill calculator
- FAQs
- Report of Cost of Service Analysis
- List of customer classification by address
Communication and Outreach Efforts

- Letters to 466 fire service customers

- Outreach and meetings with
  - Chamber of Commerce
  - NV Register Editorial Board
  - Taxpayers Association
  - County Staff / Supervisor

- Information booths and ongoing conservation messaging