Public Hearing on Proposed Water Rates

City Council
September 20, 2011
Purpose of Presentation

- Cost of Service Analysis
- How Rate Increases have been Minimized
- Importance of Rate Adjustments
- Recommended Rates and Reserves Structure
- Public Outreach
City of Napa Water
Public Hearing on Water Rates

City Council – September 20, 2011

Where does the money come from?

Retail Rates $22,790,000 87%
Other Sources $3,310,000 13%

Total Revenue Requirements = $26,100,000

Other Sources

Water Sales to Other Agencies $1,800,000 54%
Connection Fees (Development) $320,000 10%
Interruptible Ag Services $300,000 9%
Solano NBA $235,000 7%
Other $120,000 4%
Penalties $150,000 4%
Interest Income $175,000 5%
Cell Tower Leases $125,000 4%
Bulk Water Sales $85,000 3%

Cell Tower Leases $125,000 4%

Interest Income $175,000 5%

Penalties $150,000 4%

Other $120,000 4%

Where does the money come from?
City of Napa Water
Public Hearing on Water Rates

City Council - September 20, 2011

Where does the money go?

Total Revenue Requirements = $26,100,000
What has been done to keep operating costs down?

- **Staffing levels**
  - reduced 2 full time equivalents since FY10
  - held 5 vacancies through FY11

- **Master Plan in-house**

- **Construction and main improvements in-house**

- **Chemical Pool**
Control of Operating Costs

Napa Water Employees vs. Population

- Population Served
- Full-Time Employees


Population Served:
- 70,000
- 72,000
- 74,000
- 76,000
- 78,000
- 80,000
- 82,000
- 84,000
- 86,000
- 88,000
- 90,000

Full-Time Employees:
- 40
- 45
- 50
- 55
- 60
- 65
- 70
- 75
- 80
Why Do We Need to Invest in Capital NOW?

...If we don’t

Revenue $$ = Capital Investments + Operating Costs
Why NOW?

- Most of system is 40-100 years old
- Without investment there will be more service interruptions
- Old system means higher O&M repair costs
What has been done to Minimize Capital Costs?

Master Plan Recommends: $ 4.5M+ Annually

Reprioritized to cut $1.5M Annually

$ 3M BARE MINIMUM Annual Investment
### $3M BARE MINIMUM includes

<table>
<thead>
<tr>
<th>Capital Improvement</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>Stage II DBP</th>
<th>O&amp;M Costs</th>
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<tbody>
<tr>
<td>Water Main Improvements</td>
<td>$1,840,600</td>
<td>$1,680,000</td>
<td>$2,020,000</td>
<td>$1,990,000</td>
<td>$1,525,000</td>
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<td>Cathodic Protection</td>
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<td>$597,000</td>
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<td>$507,000</td>
<td>$220,000</td>
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<td>$331,700</td>
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<td>$590,000</td>
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<tr>
<td>Watershed</td>
<td>$115,000</td>
<td>$40,000</td>
<td>$30,000</td>
<td>$166,000</td>
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<tr>
<td>Transmission</td>
<td></td>
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<td>$120,000</td>
<td>$127,000</td>
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<tr>
<td>-Dwyer Rd PS</td>
<td></td>
<td></td>
<td>$700,000</td>
<td></td>
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<tr>
<td>-Transmission Valves</td>
<td></td>
<td></td>
<td>$180,000</td>
<td>$210,000</td>
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<tr>
<td>Annual Total</td>
<td>$3,234,300</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
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<td></td>
</tr>
</tbody>
</table>
Minimized Capital Projects

Current Needs Not Included:

- $4.5^{+}M annually Recommended in Master Plan
- Hennessey Secondary Chemical Containment* $100k
- AC Transmission Main Slip Lining/ collar reinforcement $15-25M
- Improvements at Hennessey Treatment Plant* $14M

* Stage II / Regulation  Operating costs
City of Napa Water
Public Hearing on Water Rates

City Council - September 20, 2011

What if we do nothing?

Projected Revenue and Revenue Requirements
City of Napa Water
Public Hearing on Water Rates

City Council – September 20, 2011

Projected Revenue and Revenue Requirements
With Proposed Rates

- 2011
- 2012
- 2013
- 2014
- 2015
- 2016

- O&M
- CIP
- Target WC
- Water Purchase
- Other Transfers
- Debt Service
- Working Capital (WC)
- Revenue
## 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>
<th>Recommended Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Bimonthly Bill</td>
<td>Monthly Increase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bimonthly Bill</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>$12.27</td>
<td>$13.25</td>
<td>$0.49</td>
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<tr>
<td>9 (average winter)</td>
<td>$36.81</td>
<td>$39.78</td>
<td>$1.48</td>
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<tr>
<td>27 (average summer)</td>
<td>$110.43</td>
<td>$120.45</td>
<td>$5.01</td>
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<tr>
<td>55</td>
<td>$224.95</td>
<td>$267.03</td>
<td>$21.04</td>
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<tr>
<td>100</td>
<td>$409.00</td>
<td>$575.58</td>
<td>$83.29</td>
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</table>
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)

Average winter use = 9 units
Average summer use = 27 units

Current Northern Bay Area Average
Customer class

- Outside City
## Recommended Rate Structure - Bill Impact

**SFR - Outside (2,000 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>Recommended Rates</td>
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<tr>
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<td></td>
<td>Total Bimonthly Bill</td>
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<tr>
<td></td>
<td></td>
<td>Monthly Increase from Current</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Price Per Gallon</td>
</tr>
<tr>
<td>3</td>
<td>$17.34</td>
<td>$19.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$0.94</td>
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<td>$0.0064</td>
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<tr>
<td>11</td>
<td>$63.57</td>
<td>$70.50</td>
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<td></td>
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<td>$3.47</td>
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<tr>
<td>35</td>
<td>$202.27</td>
<td>$227.77</td>
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<td>$12.75</td>
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<td>55</td>
<td>$317.90</td>
<td>$387.20</td>
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<td>$0.0070</td>
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<tr>
<td>100+</td>
<td>$578.00</td>
<td>$834.58</td>
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<tr>
<td></td>
<td></td>
<td>$128.29</td>
</tr>
<tr>
<td></td>
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<td>$0.0083</td>
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</tbody>
</table>
Cost of Napa Water - Outside City

Average Yearly Water Costs for OUTSIDE Single-Family Residential Customers
(applying each Agency's outside rates to average Napa residential usage outside City limits)

Average winter use = 11 units
Average summer use = 35 units
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
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
Public Concerns

- Loans
- Garden Bar/ water supply
- Cost of outside services
- St Helena contract
- Bulk water sales
- Shared labor resources within field crews
- Contribution to street resurfacing
- CIP and use of Bond Funds
- Economy
- Protests
Results of Adjusted Rates:

- Safe, reliable, low cost water for our customers
- Reclassify reserves for required major capital investments
- Move towards meeting pending regulations
  - Stage II DBPR
  - SBx7-7 Conservation
- Start to contain skyrocketing O&M costs by heading off more frequent pipe failures
## Reallocate Reserves - How?

<table>
<thead>
<tr>
<th>Current Reserve Funds</th>
<th>Balance ($)</th>
<th>Proposed Reserve Funds</th>
<th>Balance ($)</th>
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</thead>
<tbody>
<tr>
<td>Operating Reserve</td>
<td>$ 1,700,000</td>
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<td>$ -</td>
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<tr>
<td>Rate Stabilization</td>
<td>$ 2,000,000</td>
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<td>$ -</td>
</tr>
<tr>
<td>Drought Response Reserve</td>
<td>$ 2,800,000</td>
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<td>$ -</td>
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<tr>
<td>Capital Improvement Reserve</td>
<td>$ 1,500,000</td>
<td>Capital Improvement Reserve</td>
<td>$ 7,840,000</td>
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<tr>
<td>Renewal and Replacement Reserve</td>
<td>$ 400,000</td>
<td>Renewal and Replacement Reserve</td>
<td>$ 400,000</td>
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<tr>
<td>Emergency Reserve</td>
<td>$ 800,000</td>
<td>Emergency Reserve</td>
<td>$ 960,000</td>
</tr>
<tr>
<td>Long Term Water Supply Reserve</td>
<td>$ 200,000</td>
<td>Long Term Water Supply Reserve</td>
<td>$ 200,000</td>
</tr>
<tr>
<td><strong>Total Reserves</strong></td>
<td><strong>$ 9,400,000</strong></td>
<td><strong>Total Reserves</strong></td>
<td><strong>$ 9,400,000</strong></td>
</tr>
</tbody>
</table>
Why Reallocate Reserves?

- Working capital reserve - $2.4M (45-90 days of operating expenses)

- Debt is at capacity - $3.8M per year

- Capital reserve - $7.84M ($2.5M needed Oct 2011)

- Avoid rate shock in the future
Why is Rate Increase Responsible?

- Water is critical to daily life - infrastructure delivers it

- Avoid increased O&M costs that will drive future rate increases

- Rates remain among the lowest in the Bay Area
Next Steps if Rates Adopted

- October 1, 2011 - Revised Rates take effect
- Revise contract agreements
  - St Helena
  - American Canyon and Calistoga Treat & Wheel
  - 19 Interruptible Agriculture
Council Action Requested

- Open the Public Hearing on water rates.

- Adopt a resolution establishing water rates for single family residential, multi-family residential, commercial and irrigation customers both inside and outside city, fire service charges and pumped zone charges.

- Adopt a resolution establishing reserve levels for the Water Enterprise Fund.
Questions or Comments?
2011 20-Year Master Plan

- Capital Investments focused on protection of existing Transmission and Distribution assets

- Compliance-driven projects require distribution replacements to increase flow regime: DBPR-II

- Hennessey Treatment Plant is 30 years old

- Major transmission mains are 40+ and 60+ yrs old

- 47 miles of pipelines are 60+ years old
2011 Master Plan
Identifies and Prioritizes Capital Needs for the next 20 Years

<table>
<thead>
<tr>
<th>Distribution System Improvements</th>
<th>$2,000,000</th>
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</thead>
<tbody>
<tr>
<td>Meter Replacement (20-yr cycle)</td>
<td>$400,000</td>
</tr>
<tr>
<td>Valve and Hydrant Replacement (50 yr cycle vs 30 yrs)</td>
<td>$500,000</td>
</tr>
<tr>
<td>Tank and Pump Station Repairs</td>
<td>$100,000</td>
</tr>
<tr>
<td>Minimum Annual Investment</td>
<td>$3,000,000</td>
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</tbody>
</table>

Other Major Short Term Capital Projects 3-10 Yrs

- Dwyer Road Pump Station - ($2.1M shared costs)
- Hennessey Treatment Plant Filters - ($6M)
- Hennessey Treatment Plant Ozone - ($8M)
- Clark Street Pump Station - ($1.5M)
- SCADA Improvements - ($3M)

Other Major Capital Projects >10 Yrs

- Transmission Main Slip Lining ($15-25M)
- Milliken Treatment Plant - ($10M)
city of Napa water
public hearing on water rates

City Council - September 20, 2011

Recommended Rate Structure - Bill Impact
Inside City Irrigation

- Tiers are not applied (250 customers)

<table>
<thead>
<tr>
<th>Units Consumed Bimonthly</th>
<th>Proposed – October 2011</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Recommended Rates</td>
</tr>
<tr>
<td></td>
<td>Rate ($/Unit)</td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>$4.64</td>
</tr>
<tr>
<td>200</td>
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</tbody>
</table>
Recommended Rate Structure - Bill Impact

Inside City Commercial

- Tiers are not applied (1,400 customers)

<table>
<thead>
<tr>
<th>Units Consumed Bimonthly</th>
<th>Proposed – October 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recommended Rate</td>
</tr>
<tr>
<td></td>
<td>Rate ($/Unit)</td>
</tr>
<tr>
<td></td>
<td>Total Bimonthly Bill</td>
</tr>
<tr>
<td></td>
<td>Monthly Increase from Current</td>
</tr>
<tr>
<td></td>
<td>Price Per Gallon</td>
</tr>
<tr>
<td>25</td>
<td>$4.50</td>
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<td>$112.50</td>
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<td>120</td>
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<td>$0.0045</td>
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</tbody>
</table>
City of Napa Water
Public Hearing on Water Rates
City Council - September 20, 2011

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

<table>
<thead>
<tr>
<th>Units</th>
<th>Winter</th>
<th>Summer</th>
<th>Proposed October 2011 Rate</th>
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<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>
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<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>
Consumption Projections

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

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

2. **SBx7-7** Mandatory to reduce baseline 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
City of Napa Water
Public Hearing on Water Rates

City Council – September 20, 2011

Operating Costs - $23M

- Labor 28%
- General Fund & Transfers 11%
- Distribution and Treatment Supplies 8%
- Billing, Engineering, Conservation 3%
- Water Supply 27%
- Chemicals 6%
- Debt Service 17%

- 24/7 operation and <30% labor
- Most costs are fixed and non-discretionary

50% Fixed