Proposed Calendar Year 2016 Rates and Charges

Administrative and Finance Committee
June 25, 2015
Lisa Marie Harris, Director of Finance
David Shank, Financial Planning Manager
Agenda

• Overview of CY 2016 rates and charges and fiscal sustainability recommendations
• Cost of Service Report – Carollo Engineers
• Recommended CY 2016 rates and charges
  – Rate and charge drivers/highlights
  – Proposed CY 2016 rates and charges
Summary of Fiscal Sustainability Recommendations

• Created a new fixed charge
  – Supply Reliability Charge

• Allocation of non-commodity revenues to treatment
  – Fully integrated treatment rate into rate and charge structure

• Extension of the Transitional Special Agricultural Water Rate (TSAWR) to December 31, 2020
• Highlights
  – CY 2015 rate and charge increase helped smooth rates
    • Significant Rate Stabilization Fund (RSF) deposit planned – provides for subsequent draws
  – Debt optimization smoothed rates
    • Lowered senior Lien by $14.8M in FY 2016
    • Huge savings if coverage is included - $22.2M reduction in revenue requirement

• Drivers
  – Cost of desalinated water – full year of deliveries
  – MWD transportation rate – 3.3% impacts all but desal
  – Water sales levels
Independent Rate and Charge Review

• Engaged Carollo Engineers in a multi-year process to be an independent cost of service consultant
• Conducted comprehensive cost of service studies
  – CY 2014 and CY 2016
• Independent review of Board policy and policy implementation related to the cost of desalination
  – CY 2015 rates and charges
CY 2016 Rate and Charge Drivers

- Statewide regulations and water demand uncertainty
  - MWD’s mandatory supply allocations
- Cost of desalinated water
- MWD’s rate and charge increases
Regulations and Demand Uncertainty

• Water Demand forecasting extremely challenging
• SWRCB imposed an average 20% reduction
• Regulation translates to conservation levels ranging from 12% – 36% for retail member agencies

Drought Outlook through June

KEY:
- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

http://go.usa.gov/hHTe
• CY 2016 sales forecast is inline with the water use regulations
Carlsbad Desalination Costs

- Drought proof supply
- Excellent progress on the project
  - Expected to be completed in fall 2015
- Expect delivery of 42K AF in CY 2016
  - Represents 10% of water sales
- Financial Impact in CY 2016:
  - Supply - $34.1M increase
  - Transportation - $5.4M increase
**Supply Reliability Charge**

- Methodology defined in Fiscal Sustainability recommendations
  - Includes desal supply costs & IID transfer (including wheeling)
- Member Agency Allocation
  - 5-year rolling M&I deliveries
- CY 2016 charge is $26M
  - Based upon average sales $52/AF

### Supply Reliability Charge Calculation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Desal deliveries A/F (thousands)</td>
<td>42.0</td>
</tr>
<tr>
<td>IID Transfer deliveries A/F (thousands)</td>
<td>100.0</td>
</tr>
<tr>
<td>Desal supply costs ($/AF)</td>
<td>1,905</td>
</tr>
<tr>
<td>IID Transfer costs ($/AF)</td>
<td>1,085</td>
</tr>
<tr>
<td>MWD Tier 1 Untreated rate ($/AF)</td>
<td>594</td>
</tr>
<tr>
<td>Reliable Water Cost ($M)</td>
<td>188.5</td>
</tr>
<tr>
<td>MWD Comparison Cost ($M)</td>
<td>84.3</td>
</tr>
<tr>
<td>Differential ($M)</td>
<td>104.2</td>
</tr>
<tr>
<td>Supply Reliability charge ($M)</td>
<td>26.0</td>
</tr>
<tr>
<td>Projected Supply Reliability Charge $/AF</td>
<td>$52</td>
</tr>
</tbody>
</table>
Quantification Settlement Agreement

- Colorado River QSA supplies key to supply diversification strategy
- Agreements stabilized cost and supply of water in drought
  - 3.7% increase in transfer costs
  - 42% of projected sales
- By 2021, could represent more than 50% of region’s average year supply

IID and Canal Lining Deliveries 2003-2021

![Image: Lining the Coachella Canal]
## Adopted MWD CY 2016 Rates

<table>
<thead>
<tr>
<th>Adopted MWD</th>
<th>CY 2015</th>
<th>CY 2016</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 Supply</td>
<td>$158</td>
<td>$156</td>
<td>-1.3%</td>
</tr>
<tr>
<td>System Access</td>
<td>$257</td>
<td>$259</td>
<td>0.8%</td>
</tr>
<tr>
<td>Water Stewardship</td>
<td>$41</td>
<td>$41</td>
<td>-</td>
</tr>
<tr>
<td>System Power</td>
<td>$126</td>
<td>$138</td>
<td>9.5%</td>
</tr>
<tr>
<td>Treatment</td>
<td>$341</td>
<td>$348</td>
<td>2.1%</td>
</tr>
<tr>
<td>Tier 1 Untreated</td>
<td>$582</td>
<td>$594</td>
<td>2.1%</td>
</tr>
<tr>
<td>Tier 1 Treated</td>
<td>$923</td>
<td>$942</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

**Transportation increase of 3.3%**

- CY 2016 fixed charge decreases
  - Readiness-to-Serve Charge (RTS) - $153M for a decrease of 3.2%
  - Capacity Charge - $10,900/cfs for a decrease of 1.8%
MWD Remains the Largest Share of Water Cost

- MWD Costs: 31.4%
- Desalination: 24.4%
- MWD Exchange Agreement Costs: 24.1%
- IID Water Purchases*: 19.7%
- Canal Water Purchases: 0.3%
- Desalination: 24.4%

MWD Represents 55.5% of the Cost of Water

Excludes MWD’s fixed RTS and CRC charges, which are not recovered on the Melded Supply Rate
*Excludes the debt service for capital projects and recovery of settlement expenditures
Water Authority’s Treatment Costs

- MWD’s 2.1% treatment rate increase mitigated

Total Cost = $47.3M

- MWD: 43%
- Twin Oaks: 24%
- Helix: 8%
- Desal: 25%

0.7% Rate Increase
Meeting Goals and Objectives

- Smooth and predictable rates
  - Mitigating the rate impact of mandatory water use regulations
  - First full year of desalination costs
  - Meeting the RSF target
    - Essential tool for rate and charge smoothing
    - RSF target increases significantly as revenues become more subject to volatility

![Current Board Policy - RSF Fund Balance Requirements](chart.png)
## Proposed CY 2016 Rates & Charges

<table>
<thead>
<tr>
<th>Water Authority Rates and Charges</th>
<th>CY 2014 Previous</th>
<th>CY 2015 Current</th>
<th>CY 2016 Proposed</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable Rates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melded Supply Rate ($/AF)</td>
<td>$732</td>
<td>$764</td>
<td>$780</td>
<td>2.1%</td>
</tr>
<tr>
<td>Melded Treatment Rate ($/AF)</td>
<td>$274</td>
<td>$278</td>
<td>$280</td>
<td>0.7%</td>
</tr>
<tr>
<td>Transportation Rate ($/AF)</td>
<td>$97</td>
<td>$101</td>
<td>$105</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Fixed Charges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage Charge (millions)</td>
<td>$63.2</td>
<td>$63.2</td>
<td>$63.2</td>
<td>0%</td>
</tr>
<tr>
<td>Customer Service Charge (millions)</td>
<td>$26.4</td>
<td>$26.4</td>
<td>$26.4</td>
<td>0%</td>
</tr>
<tr>
<td>Supply Reliability Charge (millions)</td>
<td>-</td>
<td>-</td>
<td>$26.0</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Other Rates and Charges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Untreated Special Agricultural Water Rate ($/AF)</td>
<td>$593</td>
<td>$582</td>
<td>$594</td>
<td>2.1%</td>
</tr>
<tr>
<td>Treated Special Agricultural Water Rate ($/AF)</td>
<td>$867</td>
<td>$860</td>
<td>$874</td>
<td>1.6%</td>
</tr>
<tr>
<td>IAC</td>
<td>$2.68/ME&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$2.76/ME</td>
<td>$2.76/ME</td>
<td>0%</td>
</tr>
<tr>
<td>Standby Availability Charge&lt;sup&gt;2&lt;/sup&gt; per parcel or acre, whichever is greater</td>
<td>$10</td>
<td>$10</td>
<td>$10</td>
<td>0%</td>
</tr>
<tr>
<td>System Capacity Charge&lt;sup&gt;3&lt;/sup&gt;</td>
<td>$4,681/ME</td>
<td>$4,681/ME</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Treatment Capacity Charge&lt;sup&gt;3&lt;/sup&gt;</td>
<td>$119/ME</td>
<td>$119/ME</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<sup>1</sup> ME means meter equivalent as defined in the resolution establishing the Infrastructure Access Charge
<sup>2</sup> Fiscal year charge
<sup>3</sup> Charges will be administratively adjusted effective January 2016.
Proposed CY 2016 M&I Water Rate Breakdown

<table>
<thead>
<tr>
<th>Rates and Charges ($/AF)</th>
<th>Restated CY 2015 Rates</th>
<th>Proposed CY 2016 Rates</th>
<th>Proposed CY 2016 Change in Rate</th>
<th>Percent Change</th>
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<tr>
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<td>$780</td>
<td>16</td>
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<td>Melded Treatment Rate</td>
<td>278</td>
<td>280</td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>Transportation</td>
<td>101</td>
<td>105</td>
<td>4</td>
<td>4.0%</td>
</tr>
<tr>
<td>Storage*</td>
<td>161</td>
<td>161</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Customer Service*</td>
<td>61</td>
<td>61</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Supply Reliability Charge*</td>
<td>52</td>
<td>52</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total Cost of Treated Water</td>
<td>$1,365</td>
<td>$1,439</td>
<td>74</td>
<td>5.4%</td>
</tr>
<tr>
<td>Total Cost of Untreated Water</td>
<td>$1,087</td>
<td>$1,159</td>
<td>72</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Excludes the Water Authority’s IAC and MWD’s RTS and Capacity charges.

* Customer Service, Storage and Supply Reliability Charges converted to $/AF based on sales forecast.
Estimated Breakdown of the CY 2016 Treated Water Rate and Charge Increases

Increase Breakdown*
$74/AF

- Melded Supply Rate 22%
- Melded Treatment Rate 3%
- Transportation 5%
- Supply Reliability 70%

Breakdown of the 5.4% Increase

- Melded Supply Rate 1.19%
- Melded Treatment Rate 0.16%
- Transportation 0.27%
- Supply Reliability 3.78%

*Excludes Water Authority meter charge and MWD pass-through costs. Customer Service and Storage Charges converted to $/AF based on sales forecast.
# Proposed CY 2016 Rate and Charge Summary

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<td>105</td>
<td>4</td>
<td>4.0%</td>
</tr>
<tr>
<td>Storage(^1)</td>
<td>161</td>
<td>161</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Customer Service(^1)</td>
<td>61</td>
<td>61</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Supply Reliability Charge(^1)</td>
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<td>NA</td>
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<th>Proposed CY 2016 Change in Rate</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAC</td>
<td>$2.76/ME/Month</td>
<td>$2.76/ME/Month</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>Standby Availability(^2)</td>
<td>$10/acre or parcel less than 1 acre</td>
<td>$10/acre or parcel less than 1 acre</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>MWD Capacity Charge(^3)</td>
<td>$10,738,140</td>
<td>$12,406,380</td>
<td>$1,668,240</td>
<td>15.5%</td>
</tr>
<tr>
<td>MWD Readiness-to-Serve(^2,3)</td>
<td>$25,043,402</td>
<td>$22,145,912</td>
<td>($2,897,490)</td>
<td>-11.6%</td>
</tr>
</tbody>
</table>

\(^1\) Fixed Charge  
\(^2\) Fiscal Year Charge  
\(^3\) Adopted by the MWD Board on May 12, 2015
Proposed Untreated Water Rate

- **Current Restated Rate**: $1,087
- **Proposed CY 2016 Untreated Water Rate**: $1,159 (6.6%)
- **2011 Rate Forecast Low Rate Scenario**: $1,146
- **2011 Rate Forecast High Rate Scenario**: $1,334

Calendar Year:
- 2014: $986
- 2015: $1,033
- 2016: $1,146
- 2017: $1,210

$/AF
Proposed Treated Water Rate

Treated Water Rate

$1,418
$1,559
$1,648
$1,717
$1,231
$1,280
$1,404
$1,530
$1,200
$1,250
$1,300
$1,350
$1,400
$1,450
$1,500
$1,550
$1,600
$1,650
$1,700
$1,750
$1,800

2011 Rate Forecast
High Rate Scenario

$1,143 (5.4%)

Proposed CY 2016
Treated Water Rate

Current Restated Rate
$1,365

2011 Rate Forecast Low Rate Scenario

Calendar Year
Financial Performance Metrics – Debt Service Coverage Ratios

- Achieves the Board’s policy target of 1.50x in FYs 2016 – 2020
Financial Performance Metrics

Current Board Policy - RSF Fund Balance Requirements

- Rate Stabilization Fund
- RSF Target Ending Balance
- RSF Maximum Allowable Ending Balance
Financial Performance Metrics

- Significant withdrawals from the PAYGO fund are projected
Impact of CY 2016 Rate Increase on Composite Monthly Residential Bill

• 5 Retail Agency Average Composite Cost (CY 2015)
  – Fixed Charge: $21.29 monthly
  – Commodity Charge: $58.05
  – Composite Monthly Residential Bill: $79.34

<table>
<thead>
<tr>
<th>Wholesale Charges</th>
<th>Proposed Rates Monthly Retail Cost</th>
<th>Percent Retail Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreated</td>
<td>$2.48</td>
<td>3.1%</td>
</tr>
<tr>
<td>Treated</td>
<td>$2.55</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Actual rate impact will vary by member agency

Notes:
1. Analysis based on retail rates for the City of Carlsbad, Helix Water District, the City of San Diego, Sweetwater Authority, and Otay Water District.
2. Tier 1 and Tier 2 pricing blocks vary by member agency.
3. Historic water demand used to calculate member agency specific weighting factors.
4. Individual member agency commodity charge calculated using its average single family residential water use (hcf).
5. Composite commodity charge is the sum of the individual member agency's commodity charge times its weighting factor.
**Total: $66.07/month**

- **MWD Costs**: $27.22
- **IID/QSA & Desalination Supply costs**: $14.10
- **Water Authority Capital Costs**: $19.83
- **Water Authority Operating Costs**: $4.92

**Estimated CY 2016 Wholesale Costs per Household***

- **Cost of water purchases is 63% of the wholesale cost of water**
- **The remaining 37% or $24.75/month is for the Water Authority to:**
  - Deliver water and maintain the system
  - Rapidly diversify the region’s water supplies
  - Provide in-region emergency water storage
  - Develop in-region water storage capacity

*Based upon 0.5 AF of consumption a year and includes meter charges and MWD pass-through costs*
Summary

• Extraordinary pressures
  – Mandatory SWRCB water use regulations – 20% average reduction in water usage
  – First full year of desalinated water deliveries
  – MWD rate and charge increases

• Proactive financial management
  – Debt defeasance and restructuring provided significant rate and charge relief
  – Level of rate increases reflect better preparation for this drought
  – Highlights how essential the Rate Stabilization Fund is to rate and charge smoothing

• Rate and charge increases inline with guidance
  – Treated increase 5.4%
  – Untreated increase 6.6%

• Overall rate and charge increase will vary by member agency depending upon the fixed charge allocations
Today’s Board Actions

b. Adopt Ordinance No. 2015-__ an ordinance of the Board of Directors of the San Diego County Water Authority setting rates and charges for the delivery and supply of water, use of facilities, and provision of services, and extending the Transitional Special Agricultural Water Rate Program;

c. Adopt Resolution No. 2015-__ a resolution of the Board of Directors of the San Diego County Water Authority continuing the Standby Availability Charge; and

d. Find the actions exempt from CEQA pursuant to Public Resources Code § 21080(b)(8) and authorize the General Manager to file a notice of exemption.