Recycled Water and Recharge Rates

Workshop 6 – December 16, 2019
**Issued Technical Memos**

- Draft One Water Connection Fees - **Proposed**
- Draft MEU Rates - **Proposed**
- Draft Wastewater Connection Fees - **Deferred**
- Draft Recycled Water Direct and Recharge Rates - **Under Review**
Rate Study Objectives

Establish rates that

- Meet cost/benefit nexus regulatory requirements, Prop 26
- Fully recover the cost of providing the service
- Continue to provide member agencies with a reliable, sustainable, cost effective local resource
IEUA Funding Strategy: Based upon a comprehensive and integrated approach

✓ Draft Analysis Complete
✓ Tech Memo Distributed
✓ Draft Recycled and Recharge Analysis Underway

Water Rates

✓ Draft Analysis Complete
✓ Tech Memo Distributed

Wastewater Rates

✓ Approved rates for Fiscal Years 2020/21 and 2021/22

Connection Fees – One Water

✓ Draft Analysis Complete

Connection Fees – Wastewater

❑ On hold pending sampling study
## 2020 Rate Study
### FY 2020/21 IEUA Proposed Rates/Fees

<table>
<thead>
<tr>
<th>As July 1</th>
<th>Wastewater Connection Fee (EDU)</th>
<th>Monthly Sewer (EDU)</th>
<th>One Water Connection Fee (MEU)</th>
<th>Monthly Water (MEU)</th>
<th>Recycled Water Direct Use (AF)</th>
<th>Recycled Water Recharge (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2019/20 Adopted</td>
<td>$6,955</td>
<td>$20.00</td>
<td>$1,684</td>
<td>$1.04</td>
<td>$490</td>
<td>$550</td>
</tr>
<tr>
<td>FY 2020/21</td>
<td>$7,164</td>
<td>$20.60</td>
<td>$1,735</td>
<td>$1.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2021/22</td>
<td>$7,379</td>
<td>$21.22</td>
<td>$1,787</td>
<td>$1.08</td>
<td>TBD 2020 Rate Study</td>
<td></td>
</tr>
<tr>
<td>FY 2022/23</td>
<td>To be reviewed based on the sewer use evaluation results</td>
<td></td>
<td>$1,841</td>
<td>$1.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2023/24</td>
<td></td>
<td></td>
<td>$1,896</td>
<td>$1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2024/25</td>
<td></td>
<td></td>
<td>$1,953</td>
<td>$1.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Monthly Sewer (EDU) Rates adopted November 20, 2019, effective July 1, 2020**
Recycled Water Rate Structure Alternatives
**Current Rate Structure:** Rates per AF are calculated by dividing revenue requirements by projected usage

### Calculated Direct Use Rates

<table>
<thead>
<tr>
<th>WC Rate Calculation</th>
<th>Current Rates</th>
<th>FY 2020/21</th>
<th>FY 2021/22</th>
<th>FY 2022/23</th>
<th>FY 2023/24</th>
<th>FY 2024/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Revenues from Rates ($Millions)</td>
<td>$18.42</td>
<td>$19.09</td>
<td>$20.09</td>
<td>$20.70</td>
<td>$21.61</td>
<td></td>
</tr>
<tr>
<td>Projected Demands (AF)</td>
<td>36,500</td>
<td>36,700</td>
<td>37,500</td>
<td>37,500</td>
<td>38,000</td>
<td></td>
</tr>
<tr>
<td><strong>Recycled Water Rate per AF</strong></td>
<td><strong>$490</strong></td>
<td><strong>$505</strong></td>
<td><strong>$520</strong></td>
<td><strong>$536</strong></td>
<td><strong>$552</strong></td>
<td><strong>$569</strong></td>
</tr>
</tbody>
</table>

### Calculated Recharge Rates

<table>
<thead>
<tr>
<th>RW Rate Calculation</th>
<th>Current Rates</th>
<th>FY 2020/21</th>
<th>FY 2021/22</th>
<th>FY 2022/23</th>
<th>FY 2023/24</th>
<th>FY 2024/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Revenues from Rates ($Millions)</td>
<td>$1.01</td>
<td>$1.23</td>
<td>$1.57</td>
<td>$1.88</td>
<td>$2.24</td>
<td></td>
</tr>
<tr>
<td>Projected Demands (AF)</td>
<td>14,000</td>
<td>14,200</td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td><strong>Recharge Surcharge Rate per AF</strong></td>
<td><strong>$60</strong></td>
<td><strong>$72</strong></td>
<td><strong>$87</strong></td>
<td><strong>$105</strong></td>
<td><strong>$125</strong></td>
<td><strong>$149</strong></td>
</tr>
<tr>
<td>Direct Usage Rate per AF</td>
<td>$490</td>
<td>$505</td>
<td>$520</td>
<td>$536</td>
<td>$552</td>
<td>$569</td>
</tr>
<tr>
<td><strong>Total Recharge Rate per AF</strong></td>
<td><strong>$550</strong></td>
<td><strong>$577</strong></td>
<td><strong>$607</strong></td>
<td><strong>$641</strong></td>
<td><strong>$677</strong></td>
<td><strong>$718</strong></td>
</tr>
</tbody>
</table>
Recycled and Recharge Usage:

- ~$11 million in revenue shortfalls due to lower than projected deliveries between FYs 2015/16 – 2018/19
**Fixed Rate Component:** Will help to stabilize revenues for IEUA and costs for member agencies

- **During times of low usage,** the fixed charges will hold revenues higher to cover a greater share of fixed costs.
- **During times of high usage,** the fixed charges will mitigate a portion of cost increases for member agencies.

<table>
<thead>
<tr>
<th>Percentage Reduction</th>
<th>Revenues - Current Structure</th>
<th>Revenues - With Fixed Charge</th>
<th>Revenue Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>27375 AF</td>
<td>29200 AF</td>
<td>31025 AF</td>
</tr>
<tr>
<td>20%</td>
<td>31025 AF</td>
<td>32850 AF</td>
<td>34675 AF</td>
</tr>
<tr>
<td>15%</td>
<td>34675 AF</td>
<td>36500 AF</td>
<td>38325 AF</td>
</tr>
<tr>
<td>10%</td>
<td>36500 AF</td>
<td>38325 AF</td>
<td>40150 AF</td>
</tr>
<tr>
<td>5%</td>
<td>Baseline Projection</td>
<td>38325 AF</td>
<td>41975 AF</td>
</tr>
<tr>
<td>5% Increase</td>
<td>36500 AF</td>
<td>40150 AF</td>
<td>43800 AF</td>
</tr>
<tr>
<td>10% Increase</td>
<td>38325 AF</td>
<td>41975 AF</td>
<td>45625 AF</td>
</tr>
<tr>
<td>15% Increase</td>
<td>40150 AF</td>
<td>43800 AF</td>
<td></td>
</tr>
<tr>
<td>20% Increase</td>
<td>41975 AF</td>
<td>45625 AF</td>
<td></td>
</tr>
<tr>
<td>25% Increase</td>
<td>43800 AF</td>
<td>48500 AF</td>
<td></td>
</tr>
</tbody>
</table>

DRAFT
**Fixed Rate Component:** Annual debt service less offsetting revenues and transfers

- Recycled Water fund receives offsetting revenues for debt service from:
  - Property Taxes
  - Transfers from Regional Wastewater Capital Improvement (RC) fund

- Connection Fees for eligible debt service help smooth year-to-year changes in fixed revenue collection

```
<table>
<thead>
<tr>
<th>RW Fixed Charge Revenues, ($ Millions)</th>
<th>FY 2020/21</th>
<th>FY 2021/22</th>
<th>FY 2022/23</th>
<th>FY 2023/24</th>
<th>FY 2024/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term Inter-Fund Loan</td>
<td>3.00</td>
<td>3.00</td>
<td>5.00</td>
<td>6.00</td>
<td>5.50</td>
</tr>
</tbody>
</table>

**Fixed Offsetting Revenues and Transfers**

<table>
<thead>
<tr>
<th>Fixed Offsetting Revenues and Transfers</th>
<th>FY 2020/21</th>
<th>FY 2021/22</th>
<th>FY 2022/23</th>
<th>FY 2023/24</th>
<th>FY 2024/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Tax - Debt and Capital</td>
<td>$(2.17)</td>
<td>$(2.17)</td>
<td>$(2.17)</td>
<td>$(2.17)</td>
<td>$(2.17)</td>
</tr>
<tr>
<td>Transfer from RC Debt Service</td>
<td>(2.54)</td>
<td>(2.54)</td>
<td>(2.54)</td>
<td>(2.67)</td>
<td>(2.67)</td>
</tr>
<tr>
<td>Connection Fees for Debt Service</td>
<td>-</td>
<td>(0.10)</td>
<td>(1.63)</td>
<td>(2.25)</td>
<td>(1.15)</td>
</tr>
<tr>
<td>Fixed Rate Revenue Requirement</td>
<td>$7.41</td>
<td>$7.66</td>
<td>$8.08</td>
<td>$8.32</td>
<td>$8.69</td>
</tr>
</tbody>
</table>
```

*Note: Presented totals may vary from values above due to rounding for presentation purposes.*
**Alternative Rate Structure:** Will set a specific amount of fixed costs to recover each year

- Volumetric rates would be calculated based on the total revenue requirements less fixed revenue requirements

---

### Budget Item

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>FY 2020/21</th>
<th>FY 2021/22</th>
<th>FY 2022/23</th>
<th>FY 2023/24</th>
<th>FY 2024/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenue Requirement</td>
<td>$18.42</td>
<td>$19.09</td>
<td>$20.09</td>
<td>$20.70</td>
<td>$21.61</td>
</tr>
<tr>
<td>Less: Fixed Rate Revenue Requirement</td>
<td>$(7.41)</td>
<td>$(7.66)</td>
<td>$(8.08)</td>
<td>$(8.32)</td>
<td>$(8.69)</td>
</tr>
<tr>
<td><strong>Variable Rate Revenue Requirement</strong></td>
<td><strong>$11.01</strong></td>
<td><strong>$11.43</strong></td>
<td><strong>$12.01</strong></td>
<td><strong>$12.38</strong></td>
<td><strong>$12.92</strong></td>
</tr>
<tr>
<td>Recycled &amp; Recharge Water Demands (AF)</td>
<td>36,500</td>
<td>36,700</td>
<td>37,500</td>
<td>37,500</td>
<td>38,000</td>
</tr>
<tr>
<td>Direct Recycled Variable Water Rate ($/AF)</td>
<td>$302</td>
<td>$311</td>
<td>$320</td>
<td>$330</td>
<td>$340</td>
</tr>
<tr>
<td>Recharge Surcharge ($/AF)</td>
<td>$72</td>
<td>$87</td>
<td>$105</td>
<td>$125</td>
<td>$149</td>
</tr>
<tr>
<td><strong>Total Recharge Variable Rate ($/AF)</strong></td>
<td><strong>$374</strong></td>
<td><strong>$398</strong></td>
<td><strong>$425</strong></td>
<td><strong>$455</strong></td>
<td><strong>$489</strong></td>
</tr>
</tbody>
</table>

*TM Table 18: Direct Use Variable Revenue Requirement*
Rate Structure Alternatives

- **Presented 10/16/2019**
  1. Retain current volumetric rate structure with per AF charges for direct and recharge use
  2. Add a fixed component based on 3-year rolling average total use
  3. Add a fixed component based on EDUs
- **Additional alternatives developed based on feedback from Workshop #5**
  4. Add a fixed component based on EDUs and 3-year rolling average
  5. Add a fixed component based on EDUs and MEUs

**New Alternatives**
Other Fixed Rate Structures: Fixed revenue split based on use of debt proceeds

- Recycled Water fund debt service cost was analyzed to determine the amounts attributable to use
  - 28.75% Recharge use
    - Infrastructure and investment specific to recharge use
  - 71.25% All recycled water use
    - Infrastructure and investments that serve both direct and recharge users

<table>
<thead>
<tr>
<th>RW Fixed Charge Revenues, ($ Millions)</th>
<th>FY 2020/21</th>
<th>FY 2021/22</th>
<th>FY 2022/23</th>
<th>FY 2023/24</th>
<th>FY 2024/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Rate Revenue Requirement</td>
<td>$7.41</td>
<td>$7.66</td>
<td>$8.08</td>
<td>$8.32</td>
<td>$8.69</td>
</tr>
<tr>
<td>Related to Recharge Use</td>
<td>$2.13</td>
<td>$2.20</td>
<td>$2.32</td>
<td>$2.39</td>
<td>$2.50</td>
</tr>
<tr>
<td>Related to All Recycled Water Use</td>
<td>$5.28</td>
<td>$5.46</td>
<td>$5.75</td>
<td>$5.93</td>
<td>$6.19</td>
</tr>
</tbody>
</table>

*Note: Column totals may not tie due to rounding.*
**Fixed Revenue Collection:** Set to reflect recharge water entitlements and recycled water capacity requirements

- For Rate Alternatives 4 and 5 the portion of fixed costs (debt service) related to recharge facilities allocated based on:
  - Contracting agency recharge EDU entitlements

- Portion of fixed costs (debt service) related to all recycled water use allocated based on:
  - **Alternative 4:** 3-year Rolling Average Direct Use
  - **Alternative 5:** Recycled Water MEUs
Rate Structure Alternatives: Comparison of cost recovery under each rate alternative

Cost Recovery by Option, FY 2020/21

- **Total Revenue Requirements**
  - All Usage
  - Recharge

- **Current Structure**
  - Variable Rate $/AF
  - Recharge Surcharge $/AF

- **Alternative 2**
  - Variable Rate $/AF
  - Fixed: 3-yr Rolling Average

- **Alternative 3**
  - Variable Rate $/AF
  - Fixed: EDUs

- **Alternative 4**
  - Variable Rate $/AF
  - Fixed: 3-yr Rolling Average
  - Fixed: EDUs

- **Alternative 5**
  - Variable Rate $/AF
  - Fixed: MEUs
  - Fixed: EDUs

Recharge Surcharge $/AF

- **Total Revenue Requirements**
  - $- $2 $4 $6 $8 $10 $12 $14 $16 $18 $20

- **Cost Recovery by Option, FY 2020/21**
  - Millions

- **Current Structure**
  - Variable Rate $/AF
  - Recharge Surcharge $/AF

- **Alternative 2**
  - Variable Rate $/AF
  - Fixed: 3-yr Rolling Average

- **Alternative 3**
  - Variable Rate $/AF
  - Fixed: EDUs

- **Alternative 4**
  - Variable Rate $/AF
  - Fixed: 3-yr Rolling Average
  - Fixed: EDUs

- **Alternative 5**
  - Variable Rate $/AF
  - Fixed: MEUs
  - Fixed: EDUs
Member Agency Impacts: Revenues under each fixed charge option assessed by member agency

Note: Actual revenues by agency would vary as they would reflect actual rather than projected consumption
Recommended Rate Structure Alternative

- **Alternative 2**: Add a fixed component based on 3-year rolling average total use
  - Current variable rate structure is not sustainable
  - Most program costs are fixed in nature
  - Wet weather patterns = decreased demand = revenue shortfall
  - Adding a fixed component will
    - Mitigate a portion of cost increases during times of high demand
    - Provide revenue stability during times of low demand
    - More equitably recover capital investment
Next Steps:

1. Finalize and distribute Technical Memorandums:
   - One Water Connection Fees
   - Water Resources MEU Rates
   - Direct Use Recycled and Recharge Water Rates

2. Final rate workshop on proposed rates Feb 2020

3. Adopt proposed rate adjustments Mar 2020 to allow for Prop 218

4. Develop long-term projections to assess the impact of the CBP on all rates
Timeline

Issued Technical Memos

- Draft One Water Connection Fees - Proposed
- Draft MEU Rates - Proposed
- Draft Wastewater Connection Fees - Deferred
- Draft Recycled Water Direct and Recharge Rates - Under Review

WKSH #1 - Kickoff
WKSH #2 - Draft Connection Fees
WKSH #3 - Draft Water (MEU) Rates
WKSH #4 - Proposed One-Water Connection Fee and MEU Rates
WKSH #5 - Draft Recycled Rates

WKSH #6 - Refined Draft Recycled Direct and Recharge Rates

IEUA WKSH - Rate Study

Issue Finalized Technical Memos
RATE ADOPTION - Feb/Mar 2020
CBP Impact Analysis: Mar-June 2020