King County's Wastewater Treatment Division has been committed to protecting and improving water quality for more than 50 years.
What the sewer rate pays for:

*Protecting Water Quality* - maintaining and improving regional water quality in compliance with federal, state, and local regulations;

*Producing Capacity* - providing sufficient system capacity to support economic growth;

*Reliability* - ensuring continued reliability of our wastewater conveyance and treatment assets; and

*Sustainability* - creating renewable resources from wastewater.

*Reducing Debt* – increasing the amount of cash-paid capital.
Summary of the Executive’s 2017-2018 Rate Proposal

Monthly Sewer Rate increase from $42.03 to $44.22
• In effect for 2017 and 2018
• Lowest rate increase since 2001
• Reduces future debt
• Maintains excellent bond ratings
• An increase of 5.2% from 2016 rate of 42.03, 2.6% average annual increase

Capacity Charge of $60.80 per month
• Paid by new connections to the system
• 3.6 percent increase 2016 to 2017
• $8,974 with early payment discount of 2.8 percent, $10,944 if paid quarterly for 15 years
Sewer Rate Generates Most of the Utility’s Revenue

Monthly Sewer Rate and Capacity Charge yield $479.3m or 97% of Operating Revenue (millions of $)

- Monthly Rate: $395.3, 82%
- Capacity Charge: $70.4, 15%
- Other Income: $11.0, 2%
- Investments: $2.6, 1%
- Rate Stabilization: $-, 0%

WTD operating revenues for 2017
The Major Uses of Sewer Rate Revenues

Components of the 2017 Sewer Rate of $44.22

- **Debt Service Payments**
  - $22.38
  - 51%

- **Operating Expense**
  - $12.35
  - 28%

- **Direct Capital Payments**
  - $6.40
  - 14%

- **Intergovernmental Services**
  - $3.09
  - 7%

* Intergovernmental services includes activities such as local hazardous-waste fees, insurance, information technology, and environmental lab services.
Operating Expenses: 2017-18 Summary

2017 operating expenses are projected to increase 4.2 percent to $147.4 million
  • Projected increases due to general inflation
  • External painting of South Treatment Plant
  • Fuel reduction efforts highlighted in Strategic Climate Action Plan

2018 operating expenses are projected to increase 3.3 percent to $152.3 million
  • Projected additional increases due to general inflation
  • Projected increases in electricity and chemical costs
Capital Program

- Allocates limited funds among multiple priorities, including Combined Sewer Overflow (CSO) control, Conveyance System Improvement projects (CSI) to meet capacity demands and asset management to maintain facilities and infrastructure.

- Incorporate King County’s Strategic Climate Action Plan (SCAP)

- 2015 Capital spending was $152.8 million, -6% below predicted.

- Planned spending of $175.9 million in 2016

$162.8 million in 2017
Capital Program

• CSO Beach Projects at Murray, Magnolia, Barton and North Beach -- substantial completion expected by year end 2016
• Michigan-Brandon CSO (Georgetown Station) underway. Completion is scheduled for 2022
• CSO Control at Hanford at Rainier and Bayview North scheduled for substantial completion in 2017
• WPTP OGADS (oxygen generation and dissolution system) Replacement: the existing system is early generation equipment, energy intensive and expensive to operate and maintain. Substantial completion is schedule for completion at the end of 2019.
• Joint cost share agreement with Seattle Public Utilities (SPU) in which two WTD CSO sites (3rd Ave W and 11th NW) are addressed with several SPU sites along the north side of the Ship Canal in Ballard.
• Lake Hills and NW Lake Sammamish Interceptor Upgrade is currently in predesign and scheduled for substantial completion in 2021.
Rate Increase Reduces Future Debt

MWPAAC 2015 recommendation
- target 1.40x debt service coverage ratio by 2030
- 3% annual rate increases through 2030,
- $539 million debt reduction by 2030

Proposed debt practice changes
- Cash-fund, on average, 40% of the CIP
- Amortize variable rate debt starting in the 10th year prior to maturity
- 2.6% average annual rate increases through 2030
- $582 million debt reduction by 2030
Rate Increase Reduces Future Debt

**Projected Outstanding Debt**

- **Current Policies:**
  - In 2030, the sewer rate will be $57.79/month.
  - WTD’s debt will be $4.663 billion.

- **Recommended Sewer Rate:**
  - In 2030, the recommended sewer rate would be $60.48/month.
  - WTD’s debt would be reduced to $4.081 billion.

- **Projected Reduction in Debt:**
  - $582 million reduction of WTD’s debt by 2030
  - $199 million reduction of WTD’s debt by 2022
Rate Increases Over Time

Annual Increases in the WTD Sewer Rate

Actual Increases

Forecast Increases

Historical
Recommendation
Current Policies


5.8% 4.6% 4.5% 6.8% 6.4% 5.0% 2.8% 0.7% 2.6% - 2.9% 1.3% 2.5% 2.4% 2.5% 4.9% 3.7% 4.7% 4.0%
Proposed rate of $44.22 per month for 2017-2018

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Anticipated 2018-22 annual average</th>
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</thead>
<tbody>
<tr>
<td><strong>Previous Benchmark</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2016 Adopted Rate (June 2015)</td>
<td>$42.03</td>
<td>$42.03</td>
<td>$43.33</td>
<td>$43.33</td>
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</tr>
<tr>
<td>% change</td>
<td>5.6%</td>
<td>0.0%</td>
<td>3.1%</td>
<td>0.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td><strong>Executive’s 2017 Sewer Rate Proposal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Monthly Sewer Rate</td>
<td>$42.03</td>
<td>$42.03</td>
<td>$44.22</td>
<td>$44.22</td>
<td></td>
</tr>
<tr>
<td>% change</td>
<td>5.6%</td>
<td>0.0%</td>
<td>5.2%</td>
<td>0.0%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Difference from 2016 Adopted Rate</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.89</td>
<td>$0.89</td>
<td>$1.09</td>
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<tr>
<td><strong>Current Debt Policies</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Analysis of March 11, 2016</td>
<td>$42.03</td>
<td>$42.03</td>
<td>$42.62</td>
<td>$42.63</td>
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<tr>
<td>% change</td>
<td>5.6%</td>
<td>0.0%</td>
<td>1.4%</td>
<td>0.0%</td>
<td>1.5%</td>
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<tr>
<td>Difference from 2016 Adopted Rate</td>
<td>$0.00</td>
<td>$0.00</td>
<td>($0.71)</td>
<td>($0.70)</td>
<td>($1.57)</td>
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</table>
2015 showed continued customer growth

Strong Growth in Residential Customer Equivalents Forecast

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 Rate Proposal</td>
<td>736,085</td>
<td>740,502</td>
<td>744,945</td>
<td>748,670</td>
<td>752,787</td>
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<tr>
<td>Percent Change</td>
<td>1.37%</td>
<td>0.60%</td>
<td>0.60%</td>
<td>0.50%</td>
<td>0.55%</td>
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<tr>
<td>Between Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Sewer Rate</td>
<td>730,920</td>
<td>735,310</td>
<td>739,720</td>
<td>743,420</td>
<td>747,510</td>
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<tr>
<td>Proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Change</td>
<td>0.43%</td>
<td>0.43%</td>
<td>0.43%</td>
<td>0.43%</td>
<td>0.43%</td>
</tr>
<tr>
<td>Between Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change between</td>
<td>5,165</td>
<td>5,192</td>
<td>5,225</td>
<td>5,250</td>
<td>5,277</td>
</tr>
<tr>
<td>2017 Rate Proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and 2016 Sewer Rate</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

New connections continue at high levels in 2015

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>2017 Sewer Rate</td>
<td>12,119</td>
<td>12,000</td>
<td>11,000</td>
<td>10,500</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2016 Adoted Sewer</td>
<td>10,500</td>
<td>11,000</td>
<td>11,000</td>
<td>10,500</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
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<tr>
<td>Rate</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
Rate stabilization

- Recognizes current revenues in future periods.
- Helps manage and stabilize rates
- Executive’s proposal maintains a $12 million balance from 2023

Rate Stabilization Reserve, 2015-2023 ($ in millions)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Beginning balance</td>
<td>$34.3</td>
<td>$46.3</td>
<td>$46.3</td>
<td>$46.3</td>
<td>$43.8</td>
<td>$40.2</td>
<td>$32.3</td>
<td>$29.3</td>
<td>$19.9</td>
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<tr>
<td>Additions</td>
<td>12.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Reductions</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
<td>3.6</td>
<td>7.9</td>
<td>3.0</td>
<td>9.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$46.3</td>
<td>$46.3</td>
<td>$46.3</td>
<td>$43.8</td>
<td>$40.2</td>
<td>$32.3</td>
<td>$29.3</td>
<td>$19.9</td>
<td>$12.0</td>
</tr>
</tbody>
</table>
Capacity Charge

- New connections to system pay additional charge to support the creation of new capacity
- A monthly charge for 15 years or up-front with a 2.8 percent discount
- Capacity charge accounts for 15.1% of total revenue in 2015; expected to grow to 17.2% by 2022
- 2017 proposal is $60.80, a 3.6 percent increase; $8,974 paid up-front; $10,944 over 15 years
# 2017 Capacity Charge Proposal

<table>
<thead>
<tr>
<th>Year</th>
<th>Monthly Capacity Charge</th>
<th>% Change</th>
<th>Payments over 15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$55.35</td>
<td>3.5%</td>
<td>$9,963</td>
</tr>
<tr>
<td>2015</td>
<td>$57.00</td>
<td>3.0%</td>
<td>$10,260</td>
</tr>
<tr>
<td>2016</td>
<td>$58.72</td>
<td>3.0%</td>
<td>$10,570</td>
</tr>
<tr>
<td>2017</td>
<td>$60.80</td>
<td>3.0%</td>
<td>$10,944</td>
</tr>
<tr>
<td>2018</td>
<td>$62.62</td>
<td>3.0%</td>
<td>$11,272</td>
</tr>
<tr>
<td>2019</td>
<td>$64.50</td>
<td>3.0%</td>
<td>$11,610</td>
</tr>
<tr>
<td>2020</td>
<td>$66.44</td>
<td>3.0%</td>
<td>$11,959</td>
</tr>
<tr>
<td>2021</td>
<td>$68.43</td>
<td>3.0%</td>
<td>$12,317</td>
</tr>
<tr>
<td>2022</td>
<td>$70.48</td>
<td>3.0%</td>
<td>$12,686</td>
</tr>
</tbody>
</table>

- **Proposed Sewer Rate**: $39.79 to $48.97
- **Proposed Capacity Charge**: $55.35 to $70.48
- **Total for New Connections**: $95.14 to $119.45

---

### Note

The table above illustrates the proposed changes in monthly capacity charges and associated payments over 15 years. The proposed sewer rate and capacity charge are also shown, indicating a gradual increase from 2014 to 2022.
Future Rate Outlook

Rate projections for 2018 to 2022 indicate average annual increases of approximately 2.1% per year.

Factors that could impact projections:

- Ultimate resolution of Brightwater litigation recovery ($144.3 million not factored into rates)
- Bond and investment interest rates
- Growth in RCEs and new connections
If you have additional questions, please contact:

King County Wastewater Treatment Division
Department of Natural Resources and Parks

**Tim Aratani**, Finance Manager
(206) 477-5351 or tim.aratani@kingcouty.gov