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:

- Maintaining and improving regional water quality in compliance with federal, state, and local regulations;
- Providing sufficient wastewater conveyance and treatment capacity to meet the long-term needs of people and businesses in the Wastewater Treatment Division’s (WTD’s) service area;
- Ensuring continued operation and reliability of existing wastewater conveyance and treatment assets; and
- Creating renewable resources from wastewater.
Executive’s 2019 Rate Proposal

Highlights of the 2019 Rate Proposal

• Reflects positive 2017 financial performance
• All West Point restoration and improvement costs included
• Rate Stabilization balance maintained through 2021
• $144.9 Brightwater Settlement devoted to capital funding in 2018 through 2020
• $134 million WIFIA loan for Georgetown starting 2020
• $314 million in debt reduction by 2024
• Provides capital and operations support for safety, resiliency and asset management
Executive’s 2019 Rate Proposal

2019 Sewer Rate of $45.33 per month
- 2.5 percent increase from 2018 rate
- Intent to hold through 2020
- $0.52 less than projected in 2017

2019 Capacity Charge of $64.50 per month
- 3.0 percent increase from 2018
- $11,610 over full 15 years
- With early payment discount, $9,520
Proposed 2019 rate of $45.33 per month

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>2018 Adopted Sewer Rate (June 2017)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rate</td>
<td>$44.22</td>
<td>$45.85</td>
<td>$45.85</td>
<td>$46.64</td>
<td>$47.79</td>
<td>$48.71</td>
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<tr>
<td>% Increase</td>
<td>0.0%</td>
<td>3.7%</td>
<td>0.0%</td>
<td>1.7%</td>
<td>2.5%</td>
<td>1.9%</td>
<td>2.3%</td>
<td>2.02%</td>
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<tr>
<td><strong>2019 Executives Proposed Rate</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rate</td>
<td>$44.22</td>
<td>$45.33</td>
<td>$45.33</td>
<td>$47.37</td>
<td>$47.37</td>
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<td>$49.56</td>
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<tr>
<td>% Increase</td>
<td>0%</td>
<td>2.5%</td>
<td>0.0%</td>
<td>4.5%</td>
<td>0.0%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>1.92%</td>
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<tr>
<td>Change from</td>
<td>$0.00</td>
<td>-$0.52</td>
<td>-$0.52</td>
<td>$0.73</td>
<td>-$0.42</td>
<td>-$0.26</td>
<td>-$0.29</td>
<td>-$0.21</td>
</tr>
</tbody>
</table>
Combined the Sewer Rate and Capacity Charge Generate $498m or 96% of the Utility’s 2019 Revenue
Components of the Proposed 2019 Sewer Rate

2019 Proposed Sewer Rate $45.33

- Debt Service Payments $23.25 (51%)
- Operating Expense $10.01 (22%)
- Direct Capital Payments $8.55 (19%)
- Intergovernmental Services $3.51 (8%)

Intergovernmental services includes services received from other County agencies and $.05 of contribution to liquidity reserve. Total may not add due to rounding.
Positive Financial Performance

• Since 2015 over $1.9 billion in bonds refinanced, resulting in $16.7 million in debt service savings in the 2017-18 biennium
• $335 million refinanced in 2017 alone with $93.7 total debt service savings.
• Strong 2017 capacity charge revenue from new connections and upfront payments
• Moody’s upgraded WTD’s bond rating from Aa2 to Aa1
• WTD secured a $134.5 low-interest loan through the WIFIA program for the Georgetown Wet Weather Treatment Plant saving approximately $30 million in interest costs
• WTD in process of securing $25 million in SRF low-interest loans for the Georgetown Project and Ship Canal Water Quality Project
West Point Restoration

- Immediately following flooding event, WTD worked with County’s Office of Risk Management and Marsh, LLC to initiate the insurance claims process
- Estimate to complete full restoration of the plant is $27.2 million
- Through March 2018 WTD has spent $22.5 million of which $12.5 has been reimbursed
- Reimbursement for majority of restoration costs expected
- WTD in discussions with Emergency Management Division of the Washington State Military Department and Federal Emergency Management Agency for reimbursement of costs not allowed by County’s insurers and some post-restoration costs
- Flooding event did not have a significant impact on the 2018 and 2019 sewer rate.
Conservative practices yield debt reduction

- Funding, on average, 40% of the capital program from cash
- Estimated $314 million less debt through 2024

![Projected Reduction in Outstanding Debt](chart)

- **115% Coverage**
  - $4.247 billion debt
  - $47.54/mo sewer rate by 2024

- **40% Cash Funding**
  - $3.930 billion debt and
  - $49.56/mo sewer rate by 2024

- **$144.9 million Brightwater funds used to pay for capital, 2018-2020**

- **$314 million in debt reduction by 2024**
Rate stabilization balance held through 2021

- Recognizes current revenues in future periods.
- Helps manage and stabilize future rates
- Effective tool in case of unanticipated expenses

<table>
<thead>
<tr>
<th>Rate Stabilization Fund 2018 - 2024 (millions of $)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>Beginning balance</td>
</tr>
<tr>
<td>Additions</td>
</tr>
<tr>
<td>Reductions</td>
</tr>
<tr>
<td>Ending balances</td>
</tr>
</tbody>
</table>
RCE Projections moderate growth after very strong 2016

- Residential Customer Equivalent growth peaked in 2016 at 2.25 percent
- Return to long-term trends projected for the Financial Plan

<table>
<thead>
<tr>
<th>RCEs</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 Rate Proposal</td>
<td>757,243</td>
<td>761,786</td>
<td>765,976</td>
<td>770,725</td>
<td>775,504</td>
<td>780,312</td>
<td>785,150</td>
<td>790,018</td>
</tr>
<tr>
<td>Percent Change</td>
<td>0.60%</td>
<td>0.60%</td>
<td>0.55%</td>
<td>0.62%</td>
<td>0.62%</td>
<td>0.62%</td>
<td>0.62%</td>
<td>0.62%</td>
</tr>
</tbody>
</table>

New Connection projections unchanged from 2018 rate

- During the 1998 to 2008 period the number of new connections averaged 11,200 per year with a peak of 12,700.
- Average connections for 2009-2011, a period dominated by the Great Recession, dropped to a low of 5,700.
- The current forecast has new connections tapering to 10,500 in 2018 and returning to a long-term rate of 10,000 new connections by 2019 and thereafter
Operating Expenses: 2018-2020 Summary

- 2018 operating expenses estimated to increase 7.8% to $159.6 million including $3.4 million Water Works grant funds carryover from 2017

- 2019 operating expenses projected to grow 3.7% to $165.5 million
  - Implementation of redundancy programs at West Point
  - Potential staffing increases to support new facilities and capacity
  - Projected increase in electricity, chemical and diesel prices
  - Additional renewable energy, operating and maintenance costs associated with West Point cogeneration facilities and RINs revenue generation at South Plant
  - Additional environmental lab costs reflecting projected workload increase.
  - Additional “Investment in You” support

- 2020 operating expenses are expected to increase 2.7 percent to $170.0 million reflecting inflationary increases only
Capital Program

- 2017 Capital spending was $192.2 million, yielding an accomplishment rate of approximately 89%
- Continuing evaluation of project scopes, schedules, and budgets
- Planned capital spending of $208.0 million in 2018
  $219.7 million in 2019
- 2019-20 construction spending supports about 2,600 full and part time jobs in the economy
Capital Program

• WTD adopted a new approach to project prioritization called portfolio management, entailing grouping of like-type projects into sub-portfolios

• These projects are then ranked in order of priority based on unique sets of criteria both qualitative and quantitative for each sub-portfolio

• The governing boards then set budget allocations for each sub-portfolio based on high-level strategy and goals, forming the basis of the capital budget

• The resulting capital proposal will be a better and more consistent reflection of WTD’s vision and mission
Capital Program Highlights

North Mercer Island and Enatai Interceptors Upgrade ($116 million)
  - Increasing reliability and capacity of North Mercer Island and Enatai Interceptors
  - Improving service areas in North Mercer Island, the southwest portion of Bellevue, and the Town of Beaux Arts Village

Georgetown Wet Weather Treatment Station ($242 million)
  - Building a Wet Weather Treatment Station (WWTS), conveyance pipelines, and outfall structure to treat Combined Sewer Overflows (CSOs)
  - The WWTS includes an influent pump station, equalization basin, screening facility, CSO treatment process, and disinfection.
  - Secured low interest loan through the WIFIA program

West Duwamish CSO Control ($57.3M)
  - Designing and constructing facilities to control the West Michigan CSO that overflows on average 5.2 times per year and the Terminal-115 CSO that overflows on average 2.6 times per year.
  - Construction completion is currently scheduled for January 2025
Capital Program Highlights

SP Biogas and Heat Systems Improvements ($56M)

- Replaces South Plant heating and gas scrubbing system that has reached the end of its useful life and become increasingly costly to maintain and operate
- Results in an energy efficient system and complies with the higher quality standard for scrubbed biogas set by Puget Sound Energy
- Complies with the higher quality standard allowing the scrubbed gas to be sold to an expanded market. The project is scheduled to reach substantial completion in February 2021

West Point Redundancy Projects (over $200M)

- Replaces West Point raw sewage pumps
- Upgrade computer maintenance management system (CMMS)
- Control system upgrades
- Replace effluent pump variable frequency drives (VFDs)
- Seismic upgrades
Capacity Charge

- New connections to the system pay additional charges to support the creation of new capacity

- Capacity charge revenue accounted for 16.3% of total operating revenues in 2017 (compared to 15.1% in 2016); projected to grow to 18.1% by 2024

- A monthly charge for 15 years or lump sum with a 2.9% discount

- Two studies underway
  - Affordability
  - Rate Allocation
2019 Capacity Charge Proposal

2019 Capacity Charge of $64.50 per month, 3% increase from 2018

<table>
<thead>
<tr>
<th>Capacity Charge</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Rate</td>
<td>$62.60</td>
<td>$64.50</td>
<td>$66.41</td>
<td>$68.40</td>
<td>$70.46</td>
<td>$72.57</td>
<td>$74.68</td>
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<tr>
<td>Amount of Increase</td>
<td>$1.80</td>
<td>$1.90</td>
<td>$2.01</td>
<td>$1.99</td>
<td>$2.06</td>
<td>$2.11</td>
<td>$2.11</td>
</tr>
<tr>
<td>Percent Change</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>2.90%</td>
</tr>
<tr>
<td>Annual Amount</td>
<td>$751</td>
<td>$773</td>
<td>$797</td>
<td>$821</td>
<td>$846</td>
<td>$871</td>
<td>$896</td>
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<tr>
<td>Total payments (15 years)</td>
<td>$11,268</td>
<td>$11,610</td>
<td>$11,954</td>
<td>$12,312</td>
<td>$12,683</td>
<td>$13,063</td>
<td>$13,442</td>
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<tr>
<td>Early Payoff Total*</td>
<td>$9,179</td>
<td>$9,520</td>
<td>$9,806</td>
<td>$10,100</td>
<td>$10,402</td>
<td>$10,705</td>
<td>$11,008</td>
</tr>
</tbody>
</table>

*Assumes the current early payoff discount rate of 2.9 percent.
Capacity Charge

• Rate Study
  – Amount of the charge per RCE has been updated continually, but allocation to different building types has not been comprehensively evaluated since 1990
  – There have been significant changes in the types of new buildings and equipment and how much water they use (e.g., micro-housing, small efficiency dwelling units, detached accessory dwelling units, etc.)
  – Beginning in 2017 and continuing through 2018, WTD is conducting a study on how the capacity charge is allocated to different customer groups

• Affordability
  – Characterize the affordability challenges of capacity charge customers
  – Collect and analyze data and engage stakeholders
  – Identify potential approaches and estimate impacts with respect to a set of criteria important to decision-makers and stakeholders
  – The first phase of the project is scheduled to be completed in Q3 2018
Future Rate Outlook

Rate projections for 2019 to 2024 indicate average annual increases of approximately 1.9% per year

Based on preliminary long-term projections, average annual rate increases of the sewer rate are 2.9% for 2019 to 2030

Uncertainties in projections:

- Outlook for changes in bond and investment interest rates
- Outlook for continued growth in RCEs and new connections
- Changes in regulatory requirements
- Outcome of Systemwide Plan
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@kingcounty.gov