

# KING COUNTY WASTEWATER TREATMENT DIVISION

## 2019 Monthly Sewer Rate Proposal



**Metropolitan Water Pollution Abatement Advisory Committee**

**April 25, 2018**



## **PRESENTER**

**Tim Aratani, Finance Manager  
King County Wastewater Treatment Division**

## **TODAY'S AGENDA**

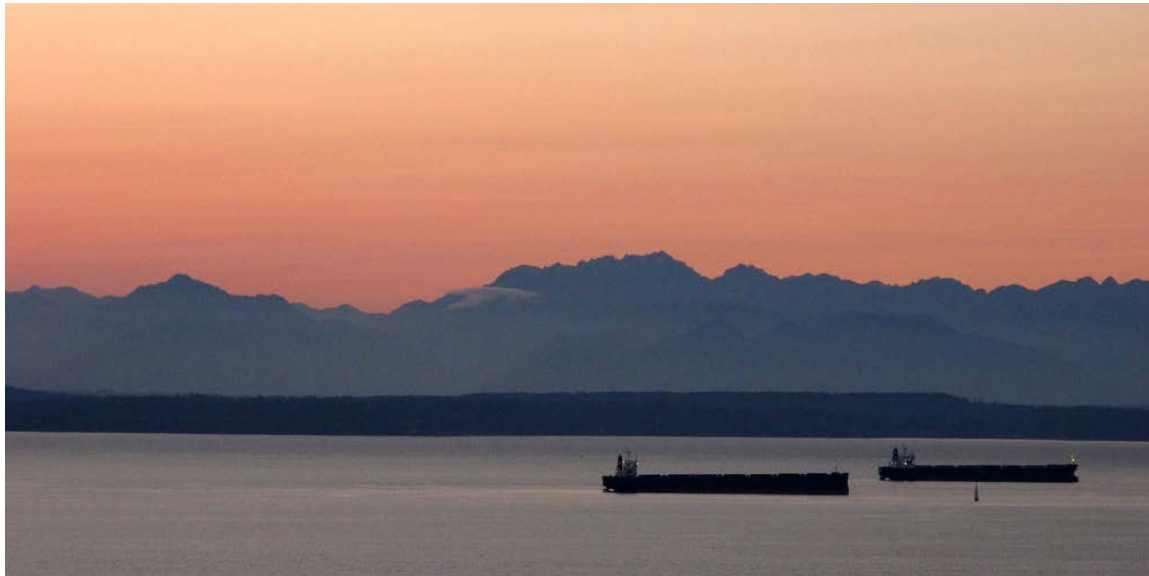
### **Overview of the Executive's 2019 Sewer Rate and Capacity Charge Proposal**

- **Summary of 2019 Proposal**
- **West Point Update**
- **Brightwater Settlement**
- **Debt Reduction**
- **Capacity Charge**

**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

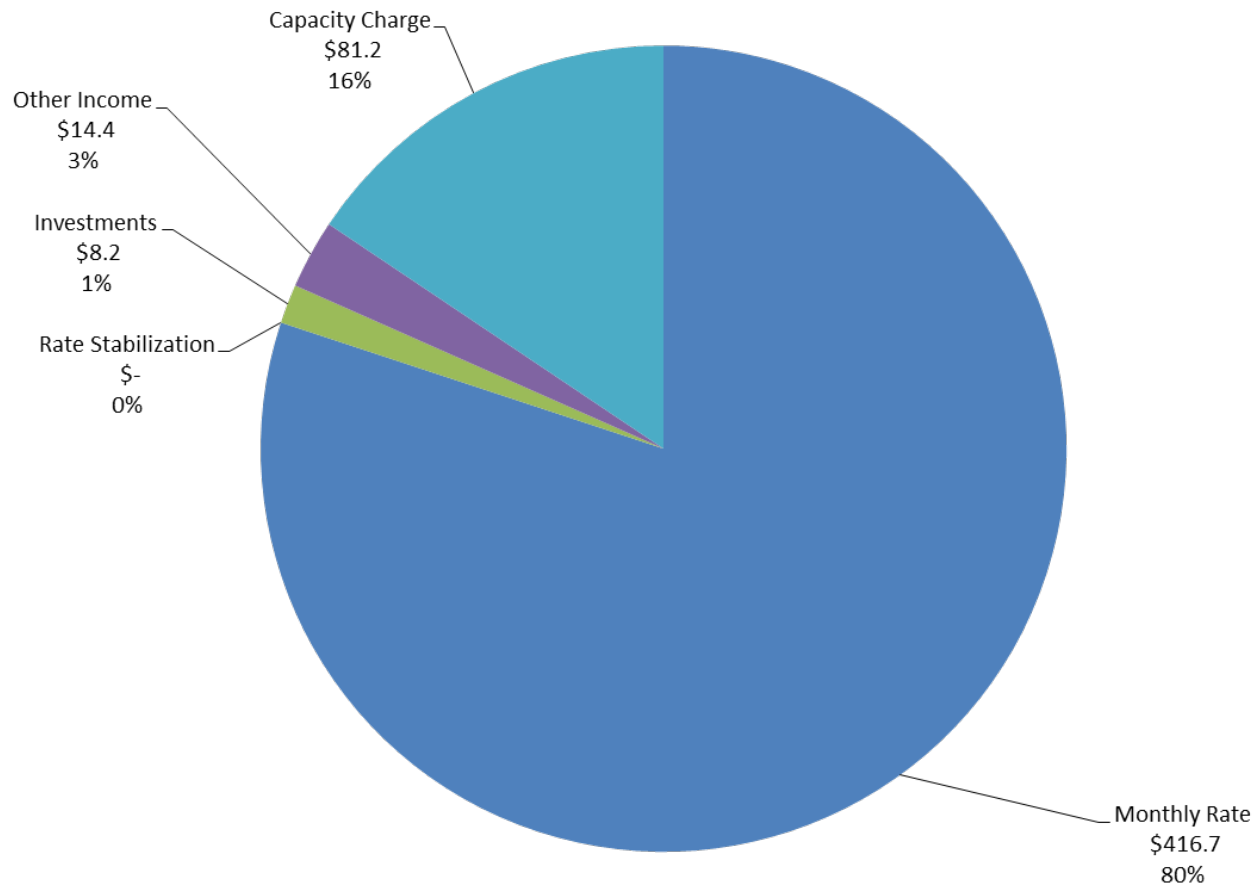
## **2019 Capacity Charge of \$64.50 per month**

- 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

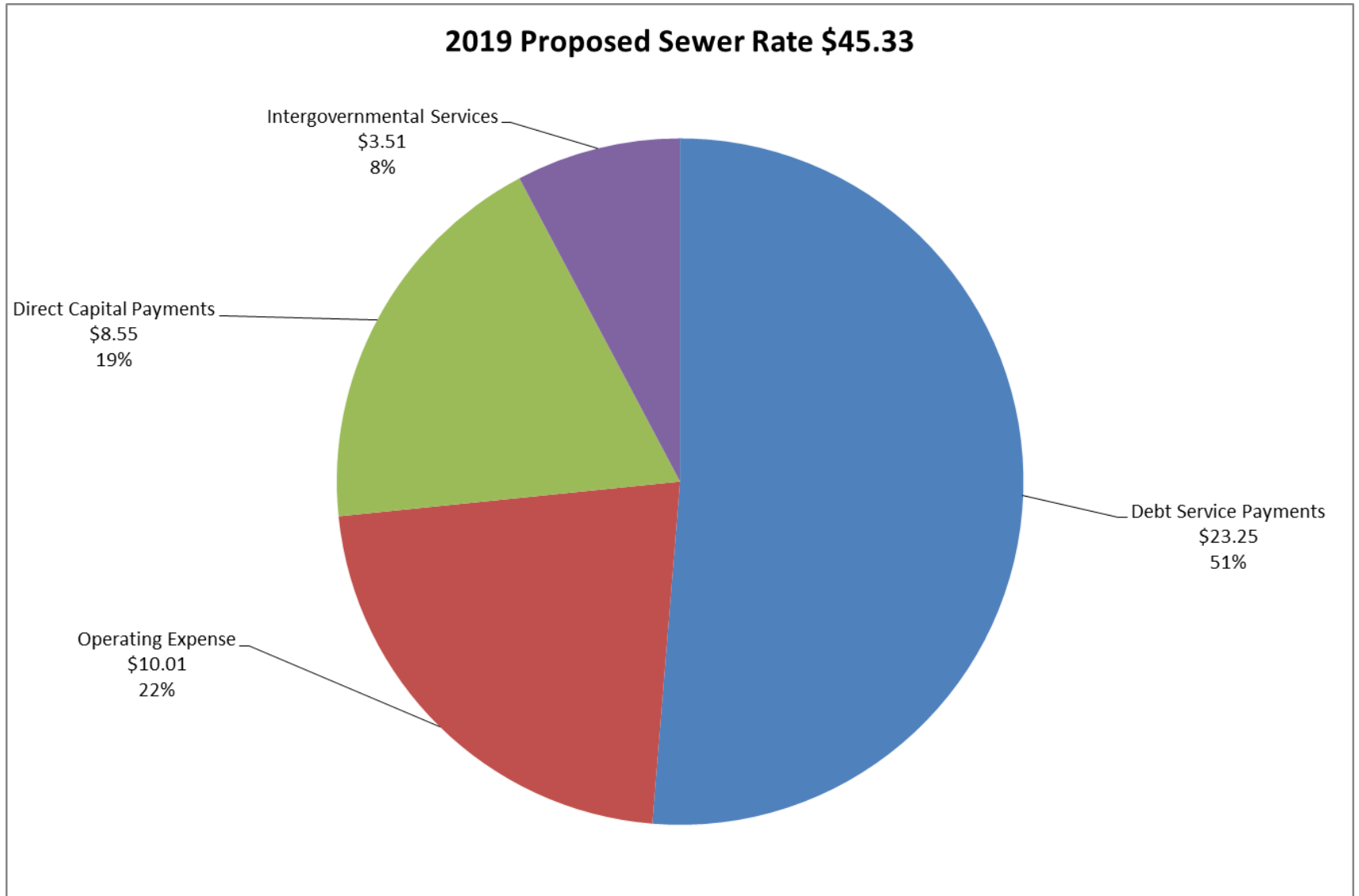
								Average Annual % Ch	
		2018	2019	2020	2021	2022	2023	2024	2019-24
<b>2018 Adopted Sewer Rate (June 2017)</b>									
Rate		\$44.22	\$45.85	\$45.85	\$46.64	\$47.79	\$48.71	\$49.85	2.02%
% Increase		0.0%	3.7%	0.0%	1.7%	2.5%	1.9%	2.3%	
<b>2019 Executives Proposed Rate</b>									
Rate		\$44.22	\$45.33	\$45.33	\$47.37	\$47.37	\$48.45	\$49.56	1.92%
% Increase		0%	2.5%	0.0%	4.5%	0.0%	2.3%	2.3%	
Change from 2018 Proposal		\$0.00	-\$0.52	-\$0.52	\$0.73	-\$0.42	-\$0.26	-\$0.29	-\$0.21

# Combined the Sewer Rate and Capacity Charge Generate \$498m or 96% of the Utility's 2019 Revenue



WTD operating revenues for 2019 Proposed \$520.4 million

# Components of the Proposed 2019 Sewer Rate



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

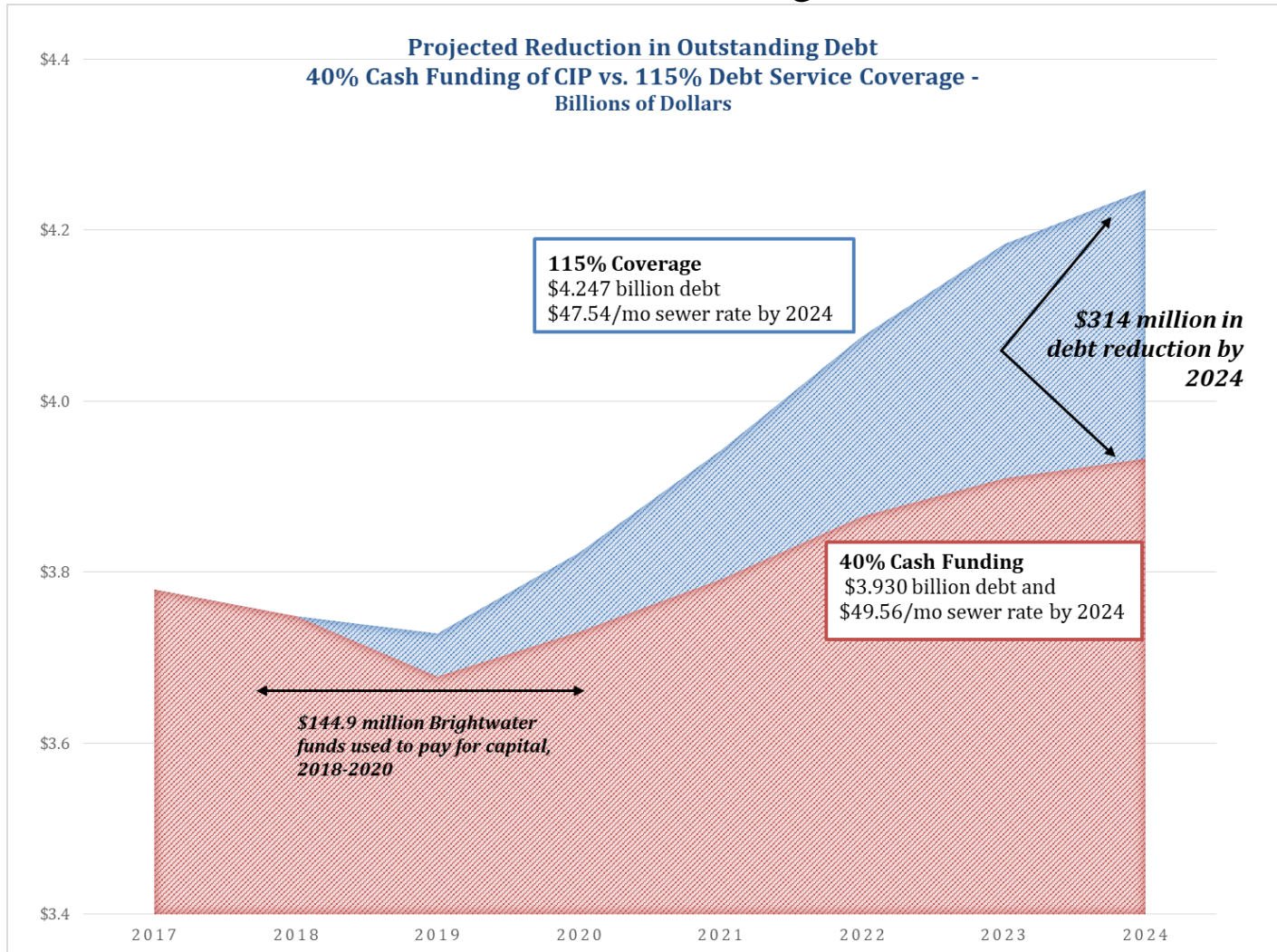
- Since 2015 over \$1.9 billion in bonds refinanced, resulting in \$16.7 million in debt service savings in the 2017-18 biennium
- \$335 million refinanced in 2017 alone with \$93.7 total debt service savings.
- Strong 2017 capacity charge revenue from new connections and upfront payments
- Moody's upgraded 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



# 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

Rate Stabilization Fund 2018 - 2024 (millions of \$)

	2018	2019	2020	2021	2022	2023	2024
Beginning balance	\$46.30	\$46.30	\$46.30	\$46.30	\$46.30	\$39.90	\$12.00
Additions	0	0	0	0	0	0	0
Reductions	0	0	0	0	-14.4	-19.9	0
Ending balances	\$46.30	\$46.30	\$46.30	\$46.30	\$31.90	\$12.00	\$12.00

## **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

RCEs	2017	2018	2019	2020	2021	2022	2023	2024
2019 Rate Proposal	757,243	761,786	765,976	770,725	775,504	780,312	785,150	790,018
Percent Change	0.60%	0.60%	0.55%	0.62%	0.62%	0.62%	0.62%	0.62%

## **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

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

\*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

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