



King County

Department of Natural Resources and Parks
Wastewater Treatment Division



2023 Sewer Rate Process

Preliminary Rate-setting Operational & Capital investments

King County Wastewater Treatment Division

MWPAAC General Meeting

February 23, 2022

Broad policy goals

- **Protect water quality** while preparing our regional system to be resilient for the impacts of climate change and population growth
- **Work with partners** to create a regulatory framework that builds on past successes, ensures accountability, encourages innovation, and capitalizes on the latest science
- **Build a more just, equitable community** where each action we take helps dismantle the system of racism that persists in King County



Policy-driven investments

- Increase **reliability** at West Point and offsite locations
- Comply with **regulatory requirements**
- Respond to growth-related **demand** on the system
- Advance the most critical **asset management** projects
- Protect **water quality** and the environment consistent with the Clean Water Healthy Habitat Strategic Plan
- Increase resiliency to **climate change** consistent under the Strategic Climate Action Plan
- Address disparities in service delivery in alignment with the **Equity & Social Justice** Strategic Plan



West Point resiliency and reliability



Capital improvement projects at West Point Treatment Plant focus on protecting ratepayer investments through improving system reliability, protecting worker and public safety and the environment, and increasing efficiency.

- **Power quality improvement project**
- **Raw sewage pump replacement**
- **Biogas pipe replacement**
- **Power monitoring upgrades**
- **Seismic upgrades**

Nutrient Permit regulations

- Ecology issued its Puget Sound Nutrient General Permit regulating the amount of nitrogen that wastewater treatment plants can discharge.
- We are committed to achieving better faster and results. Along with many others, King County appealed the permit.
- We are committed to complying with all regulations. Initial costs for studies and monitoring are included in the 2023 rate plan.



Asset Management

- Manage over 60,000 assets including treatment plants, pumps and motors, pipelines and storage tanks, pump and regulator stations, offices and shop buildings, vehicles and technology, software and databases.
- Address the backlog of work and fund the highest priority items.
- Coordinate maintenance activities with affected groups to promote efficiency (maintenance, operations, etc.).
- Identify opportunities to improve energy efficiency resulting in cost savings (heat and biogas system improvement, etc.).



Agenda

1. Review Adopted 2022-2031 Sewer Rate Plan
2. Transition to 2023-2032 Proposal Preparation
3. New Operating Costs
4. New Capital Costs and Preliminary Rate Sensitivity
5. Next steps

2022-2031 Adopted Sewer Rate Plan

- Responded to feedback from RWQC, MWPAAC, Sound Cities Association, and local sewer agencies
- Annualized rate increases – smoother rate pattern for contract agencies and customers
- Financial capacity to accelerate asset management projects
- Funds a significant increase to the capital program, including power quality projects at West Point
- Provides net cash that can be used to refinance debt at lower interest rates

| 2022-2031 Rate Plan | | | | | | | | | |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Adopted Rate Plan | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
| Rate Increase % | 4.00% | 4.00% | 4.00% | 5.00% | 6.00% | 6.00% | 6.00% | 6.00% | 7.50% |
| Monthly Sewer Rate | \$51.25 | \$53.30 | \$55.44 | \$58.22 | \$61.72 | \$65.43 | \$69.36 | \$73.53 | \$79.05 |
| Rate Increase \$ | \$1.98 | \$2.05 | \$2.14 | \$2.78 | \$3.50 | \$3.71 | \$3.93 | \$4.17 | \$5.52 |

Forecast Assumptions in Adopted 2022-2031 Plan

| Forecast Assumptions: Adopted Rate Plan | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| General Cost Inflation | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Labor Cost Inflation | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% |
| Expenditure Growth | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Capital Cost Inflation | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| CIP Accomplishment Rate [1] | 85.0% | 85.0% | 85.0% | 85.0% | 85.0% | 85.0% | 85.0% | 85.0% | 85.0% | 85.0% | 85.0% |
| Revenue Bond Rate (30 Year Term) | 3.50% | 4.50% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| Blended Variable Rate | 1.25% | 1.50% | 2.00% | 2.50% | 3.00% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% |

[1] The Joint Ship Canal Water Quality Project and Georgetown Wet Weather Treatment Station at 100% Accomplishment Rate

Current Conditions - Transition to 2023-2032 Proposal Preparation

Economic Conditions:

- Increasing inflationary pressure
- Supply chain shortages, delays, and related cost increases
- Labor supply shortage and cost increases


Regulatory:

- Puget Sound Nutrient General Permit finalized December 2021
- Project milestones nearing, more costs to be included in 2023-2032 rate plan

Emerging Capital Projects:

- Newly identified priority asset management projects to maintain aging facilities
- Further development of West Point Power Quality Improvement project approach and costs

New Operating Costs



Update of
2023 Cost
Increases

- **Asset Management Strike Team (13 FTEs):** Catch-up on critical asset management projects
- **Long-Term Lease for Jameson and ArcWeld Building Employees:** Original plan was to demolish and replace the existing buildings, but a viable lease and remodel opportunity for another property was identified
- **General Wage Increase:** Tentative agreement reached with Coalition of Unions
 - 2021 – 1.5% (to be applied retroactively)
 - 2022 – 3.0%
 - 2023 – 3.0%
 - 2024 – 3.0%
- **Central Rate Increases:** Mid-biennium increases driven by multiple factors including changes in the insurance market, restoration of cuts, higher demand, and inflationary pressures
 - Insurance, Central Finance, Information Technology, General Fund Overhead



Rate
Development
Goals –
Operating
Costs

- **Increase reliability at off-site locations and West Point Treatment Plant**
 - Include increased staffing to:
 - Provide engineering support for capital projects and to initiate the Capital Asset Management Program.
 - Perform preventative maintenance and services on HVAC and electrical systems.
 - Manage cost controls, scheduling and coordination of emergency projects at West Point.
 - Operating Cost is ~\$1M.
 - These operating investments help to limit or avoid overflows into Puget Sound.



**Rate
Development
Goals –
Operating
Costs**

- **Comply with increasing regulations**
 - Include staffing to:
 - Serve as a nitrogen expert for compliance with the Puget Sound Nutrients General Permit.
 - Prepare, analyze, and sample for nutrients.
 - Provide additional compliance investigators within King County's Industrial Waste Program to ensure the County can fulfill its responsibilities under its NPDES permits.
 - Operating Cost is ~ \$5.6M.



Rate
Development
Goals –
Operating
Costs

- **Respond to growth-related demand on the system**
 - Provide additional staffing in Engineering and Technical Services and Project Management.
 - Provide staff support for new CSO treatment and storage facilities, and the Local Public Agency group that responds to partner agency requests.
 - Operating Cost is ~\$5.8M.
- **Advance the most critical asset management projects**
 - Ensure Asset Management Program is fully staffed.
 - Provide additional staffing to support system-wide condition assessments.
 - Increase staffing to manage construction, including critical asset management projects.
 - Operating Cost is ~\$2.6M.

New Capital Costs and Preliminary Rate Sensitivity

Preliminary Sewer Rate Sensitivity - Background

How We Started: Solicited **early input on a baseline** sewer rate forecast for 2023-2032 and reviewed summary of significant rate drivers and policy topics in December 2021.

Current Status: Updated project forecasts were completed by project managers mid-February. The updated forecasts inform the capital funding plan. **Leadership review of policy and investment alternatives is currently underway.**

How to Use This: This early sensitivity analysis was prepared in January and shared with the Rates & Finance Committee on February 3. It offers preliminary rate impact implications to inform a general **order of magnitude** understanding of policy direction on rate drivers.

Key Assumptions:

- The current Adopted Sewer Rate Plan is the basis for the preliminary sensitivity test.
- Many of these capital cost estimates are in **very preliminary** condition and will be refined further ahead of the proposal.
- Potential new operating costs are not included in the rate sensitivity and would be incremental, adding 11 cents to the monthly rate per \$1 million of new operating costs.

This is NOT the Proposed 2023 Sewer Rate and 2023-2032 Rate Plan, rather an early sensitivity to inform initial policy direction.

New Capital Costs Tested in Rate Sensitivity

Preliminary Rate Driver Sensitivity Evaluation

Added to Test Rate Sensitivity

Under Consideration - Not Tested In this Sensitivity

| | |
|---|--|
| 1 | West Point Power Quality \$97m increase 2021-2025 [~\$160m current total estimate] |
| 2 | New Tier 1 Priority Asset Management Projects \$438m increase 2022-2032 |
| 3 | Capacity: Flows & Loads Study and CSI Plan Interim Project Estimates Were Requested Pending Treatment Planning Program findings \$386m increase 2023-2032 |
| 4 | Near Term Planning & Minor Capital Investments - First General Nutrient Permit \$55m added 2022-2026 [none in adopted plan] |
| 5 | Combined Sewer Overflow Projects Included In Ten-Year Forecast* Adopted Rate Plan: 2027 start year, \$486m or 11% of \$4.3bn Prelim. Sensivity 2024 start, \$1.68bn 40% of \$4.3bn [\$1.2 bn increase to forecast] |

Shown on next slide

**Example timeline of 2040 completion used in the forecast anticipates CSO Consent Decree modifications. Actual timeline and project sequencing will be determined following completion of Consent Decree negotiations.*

About \$2 bn total costs added in sensitivity pre-accomplishment rate adjustment.

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Under Consideration for Rate Plan – Not in Sensitivity Test

Preliminary Rate Driver Sensitivity Evaluation

Added to Test Rate Sensitivity

Under Consideration - Not Tested In this Sensitivity

- | | |
|---|---|
| 1 | Time to increase project delivery staff capacity or integrate alternative delivery model for sharp CIP increase (2022 64% increase over 2021 actual, 2031 260% over 2021) |
| 2 | Updated Forecasts Existing Projects (February) |
| 3 | Next General Nutrient Permit: Potential major capital upgrades including a fourth treatment plant (under consideration at 3 mg/L limit) |
| 4 | Codigestion - Solid Waste Fund Cost Sharing TBD \$10m near term start-up estimate, \$70m full implementation estimate |
| 5 | Seattle City Light (SCL) Power Reliability - Timing and Cost TBD |
| 6 | Lower Duwamish Clean Up (Timing and potential insurance claims TBD) |
| 7 | Any Suquamish Tribe Settlement Agreement impacts in addition to Uninterruptible Power Supply replacement |

Preliminary Sewer Rate Sensitivity – Comparison

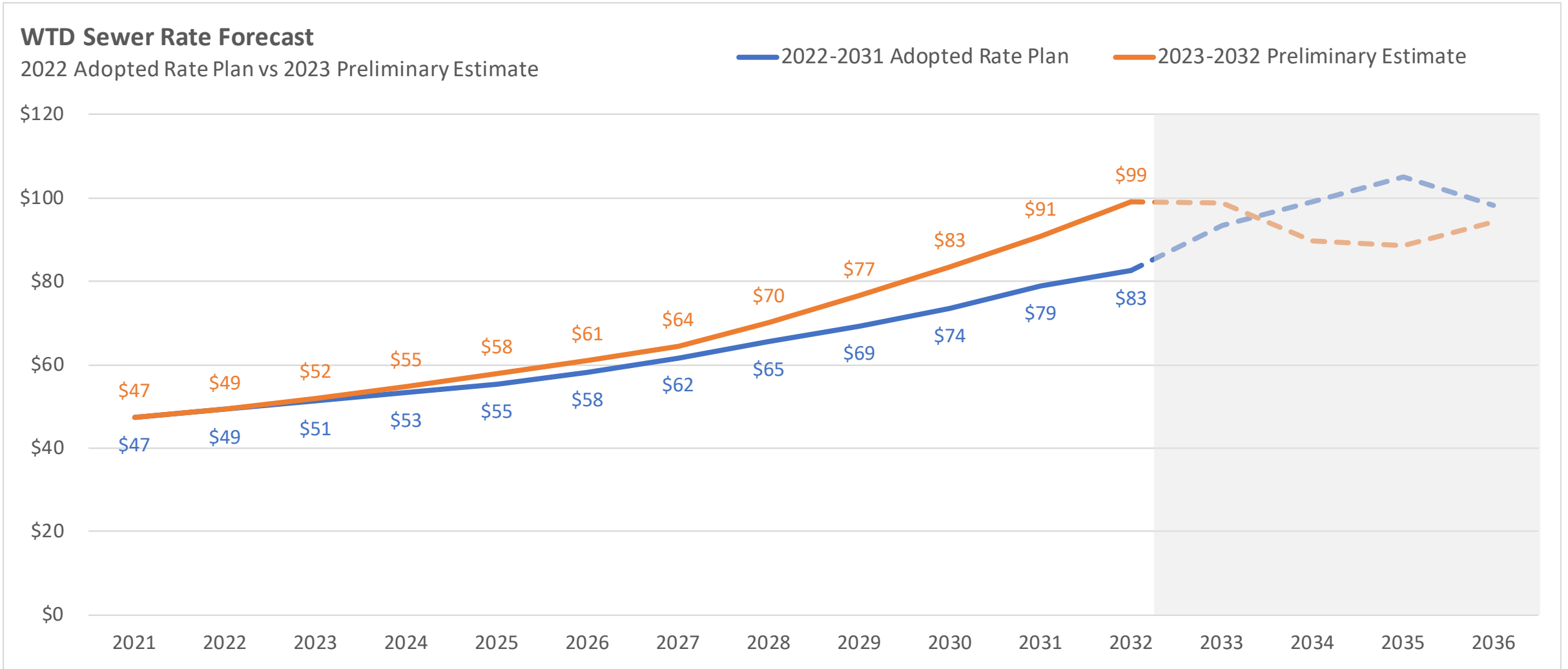
- Preliminary Sensitivity shows a 5.5% increase in 2023 compared to the 4.0% forecast in the adopted rate plan.
- Rate would be about \$10 higher than the adopted rate plan by 2031.

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| 2023-2032 Rate Plan | | | | | | | | | | 2022 Process |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Preliminary Sensitivity | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
| Rate Increase % | 5.50% | 5.50% | 5.50% | 5.50% | 5.50% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% |
| Monthly Sewer Rate | \$51.98 | \$54.84 | \$57.86 | \$61.05 | \$64.41 | \$70.21 | \$76.53 | \$83.42 | \$90.93 | \$99.12 |
| Rate Increase \$ | \$2.71 | \$2.86 | \$3.02 | \$3.19 | \$3.36 | \$5.80 | \$6.32 | \$6.89 | \$7.51 | \$8.19 |

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Preliminary Sewer Rate Sensitivity – Comparison



This is NOT the Proposed 2023 Sewer Rate and 2023-2032 Rate Plan, rather an early sensitivity to inform initial policy direction.

Next Steps before Executive Briefing & Proposal

| MONTH | ACTIVITIES |
|----------|--|
| February | WTD CIP Portfolio development continues |
| | 2021 year-end finalization by end of month |
| | Feb. 3 – Rates & Finance Subcommittee meeting |
| | <ul style="list-style-type: none"> • Discuss updates on 2023 rate-setting policy direction, if possible |
| | WTD continues discussions with DNRP Director's Office: Present sewer rate and capacity charge estimates |
| | WTD continues discussions with the County's Office of Performance, Strategy and Budget: Present sewer rate and capacity charge estimates |
| | Feb. 23 – Full MWPAAC meeting |
| | <ul style="list-style-type: none"> • Discuss updates on 2023 rate-setting policy direction, if possible |
| March | Early March – Brief King County Executive on DNRP/WTD 2023 Sewer Rate and Capacity Charge Proposal |
| | Early March – WTD transmits 2023 Sewer Rate and Capacity Charge Proposal to DNRP Director's Office |
| | March 3 – Rates & Finance Subcommittee meeting |
| | <ul style="list-style-type: none"> • Review key points of meeting with DNRP Director's Office and Executive's Office, if possible • Discuss key points for draft MWPAAC letter on sewer rate recommendation to Executive for consideration and action <u>at</u> March 23 full MWPAAC meeting |
| | Mid-March – DNRP Director's Office transmits 2023 Sewer Rate and Capacity Charge Proposal to King County Executive |
| | March 16 – Draft MWPAAC sewer rate recommendation letter is emailed to MWPAAC members one week in advance of MWPAAC's March 23 general meeting |
| | March 23 – MWPAAC General meeting |
| | <ul style="list-style-type: none"> • Present DNRP/WTD 2023 Sewer Rate and Capacity Charge proposal |



Presenters

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Questions?



King County

Department of Natural Resources and Parks
Wastewater Treatment Division