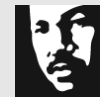


# Executive's Proposed 2022 Sewer Rate and Capacity Charge

## Regional Water Quality Committee

May 5, 2021

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**King County**

Department of Natural Resources and Parks  
**Wastewater Treatment Division**

# Executive's Proposed Sewer Rate & 10-year Rate Plan

## 4% rate increase for 2022

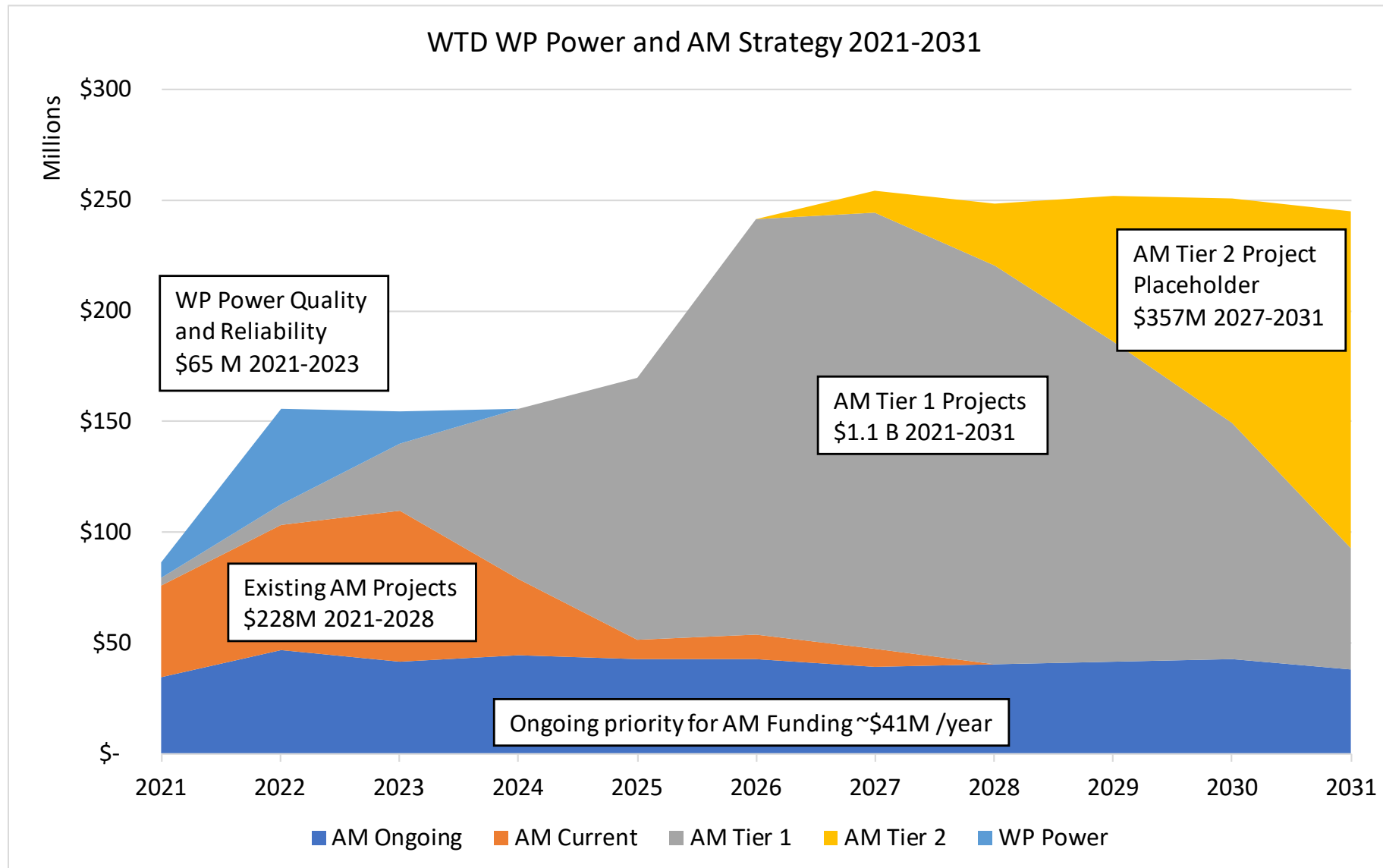
- Responds to feedback from RWQC, MWPAAC, Sound Cities Association, and local sewer agencies
- Annualized rate increases provide a smoother, more predictable rate pattern
- Makes it financially possible to accelerate asset management projects provided staffing capacity is available
- Supports an aggressive capital program including power reliability projects at West Point
- Makes more cash available to refinance to lower interest rates, an important strategy to mitigate COVID-19 related financial impacts

2022-2031 Rate Plan	Adopted 2020	Set in 2021									
Proposed	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Rate Increase %	4.50%	4.00%	4.00%	4.00%	4.00%	5.00%	6.00%	6.00%	6.00%	6.00%	7.50%
Monthly Sewer Rate	\$47.37	\$49.27	\$51.25	\$53.30	\$55.44	\$58.22	\$61.72	\$65.43	\$69.36	\$73.53	<b>\$79.05</b>
Rate Increase \$	\$2.04	\$1.90	\$1.98	\$2.05	\$2.14	\$2.78	\$3.50	\$3.71	\$3.93	\$4.17	\$5.52
All-In Debt Service Coverage	1.55x	1.44x	1.48x	1.46x	1.45x	1.47x	1.48x	1.50x	1.53x	1.48x	1.53x

# Capital Program Assumptions

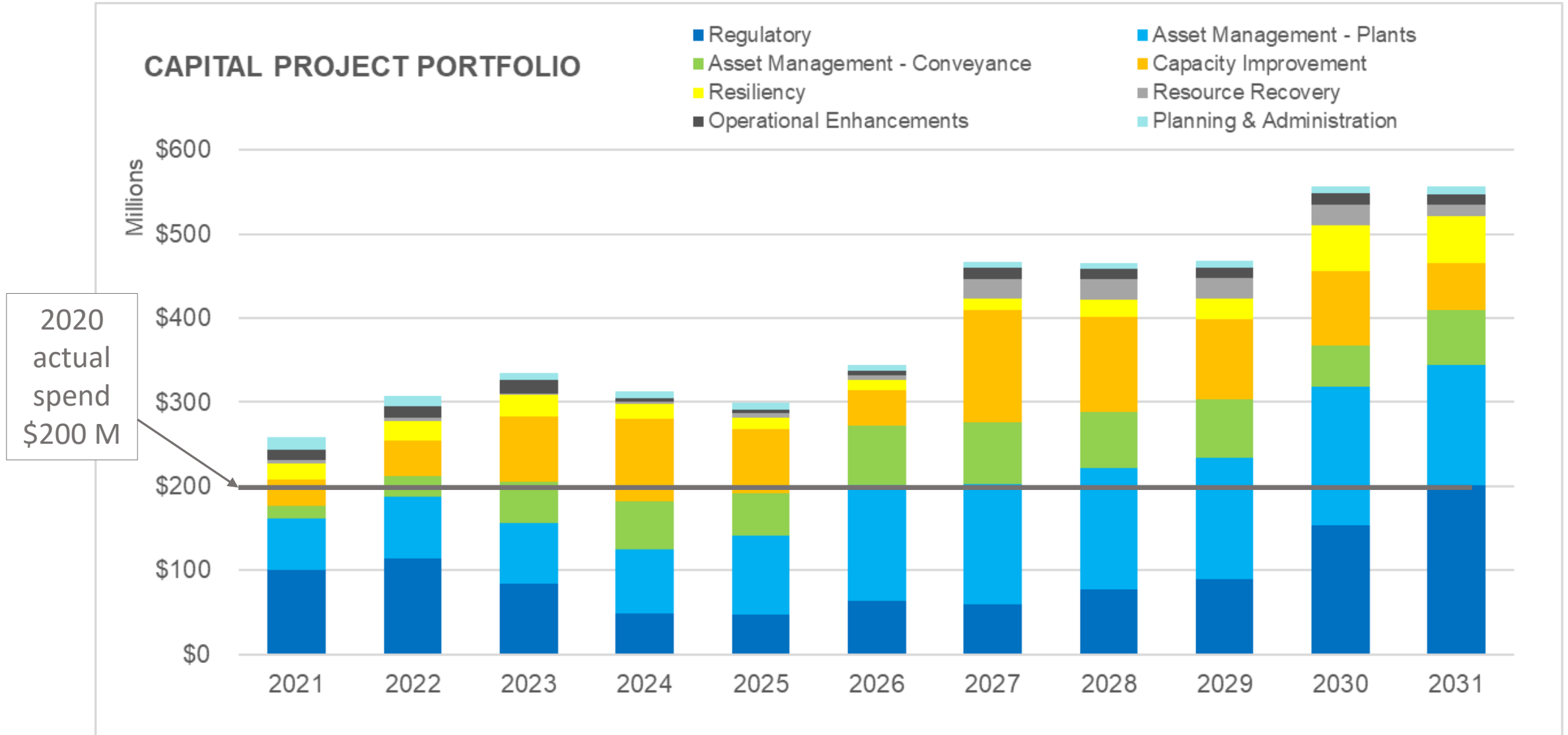
1. **Baseline:** Adopted 2021-2026 Capital Improvement Plan
2. **Combined Sewer Overflow (CSO):** Example timeline of 2040 completion used in forecast pending the outcome of CSO Consent Decree modifications.
3. **Puget Sound Nutrient General Permit Preliminary Draft:** Permit conditions are not yet defined and so cost estimates are not included in this rate plan.
4. **West Point Power Reliability:** Sewer rate proposal includes the recommended suite of investments to address power reliability issues at West Point.
5. **Critical Asset Management Catch-Up:** Tier 1 critical inventory list substantially complete in the ten-year forecast and progress made on Tier 2. Supplemental budget request will be submitted for staffing to scale up delivery of these projects.

# Critical Asset Management Catch-Up and West Point Power Reliability Projects

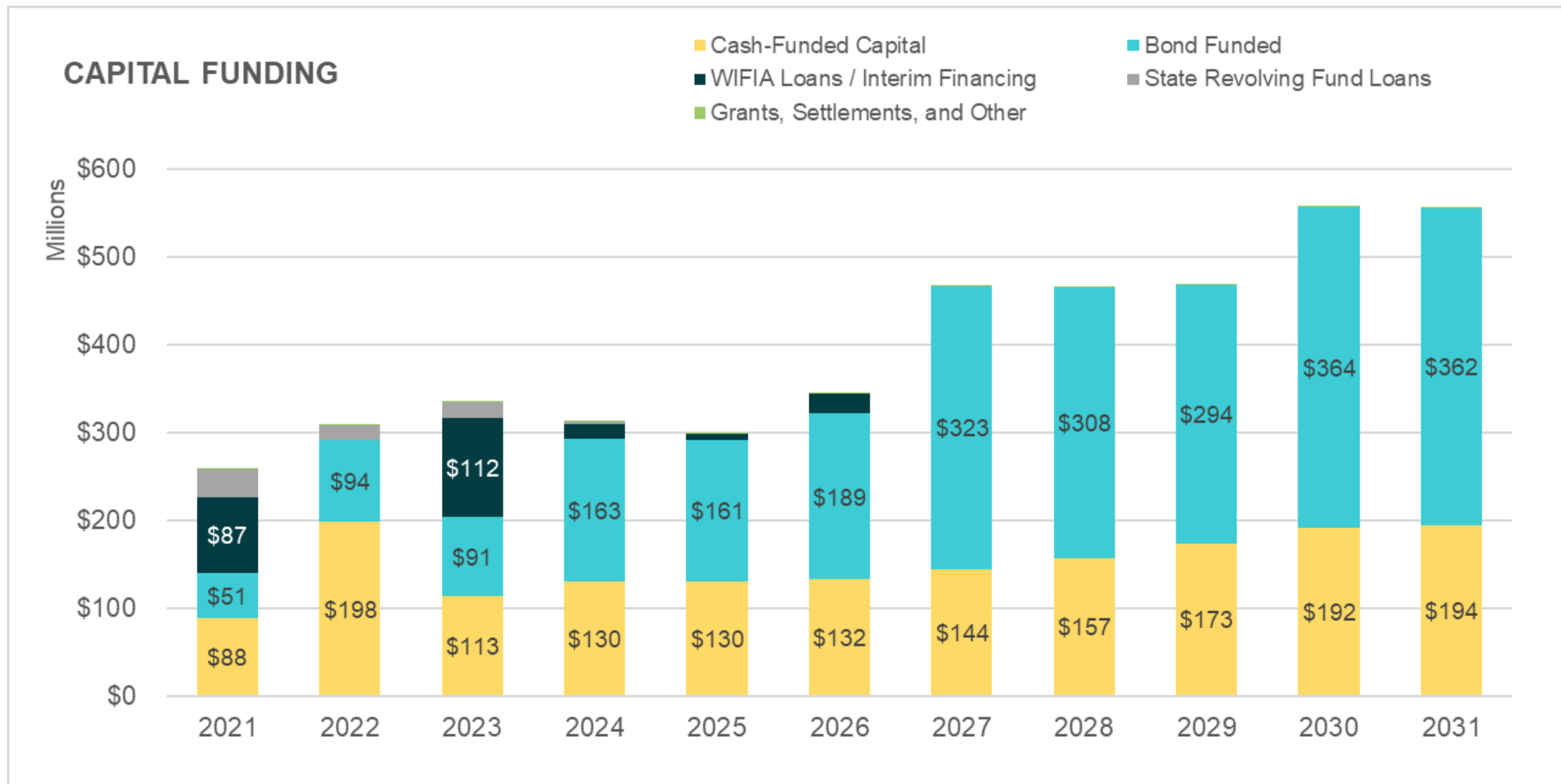


*\*Detailed category descriptions key on slide 21 (Appendix)*

# Capital Plan by Portfolio Category

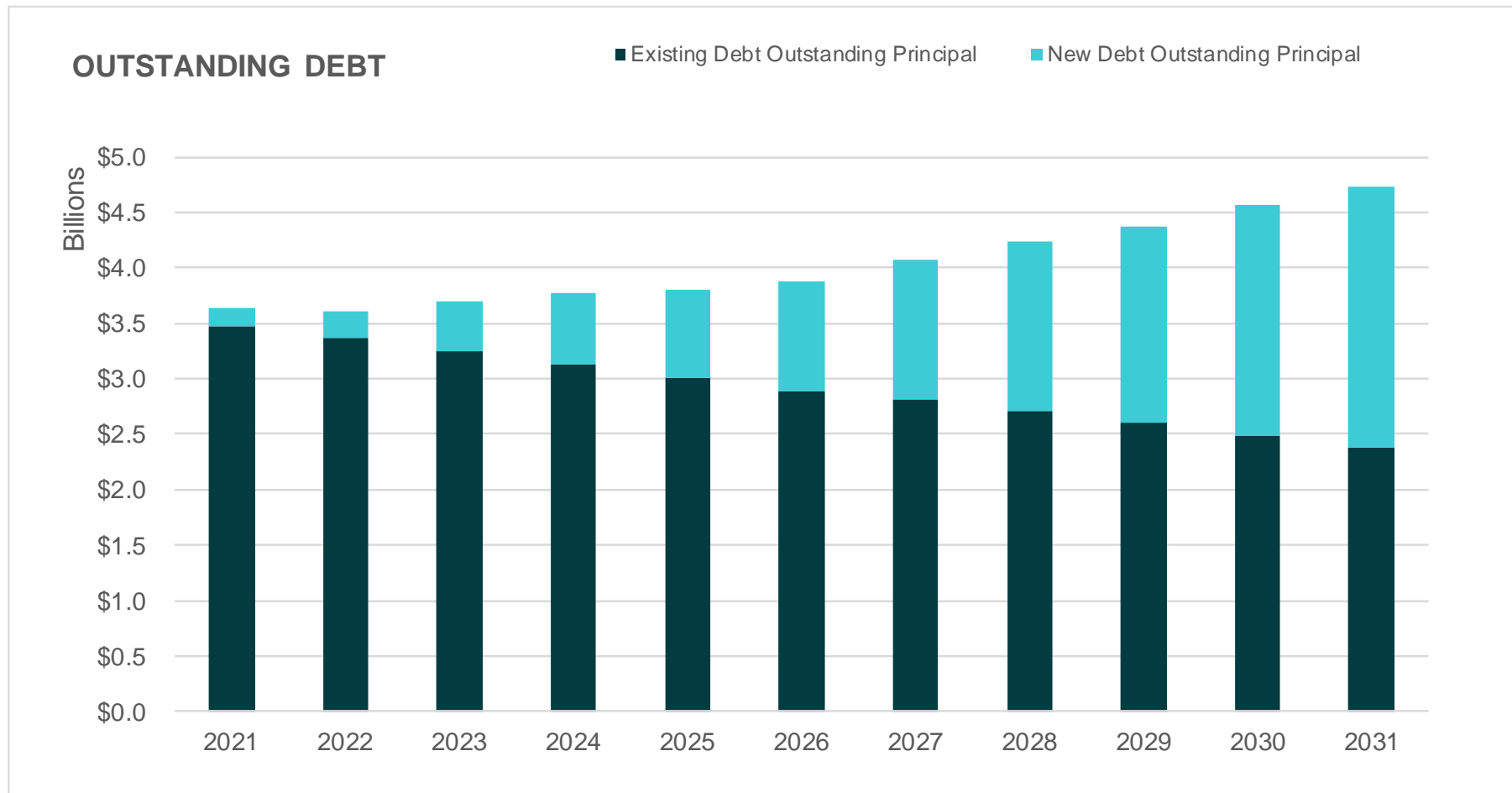


# Capital Funding Analysis: 2022-2031 Plan

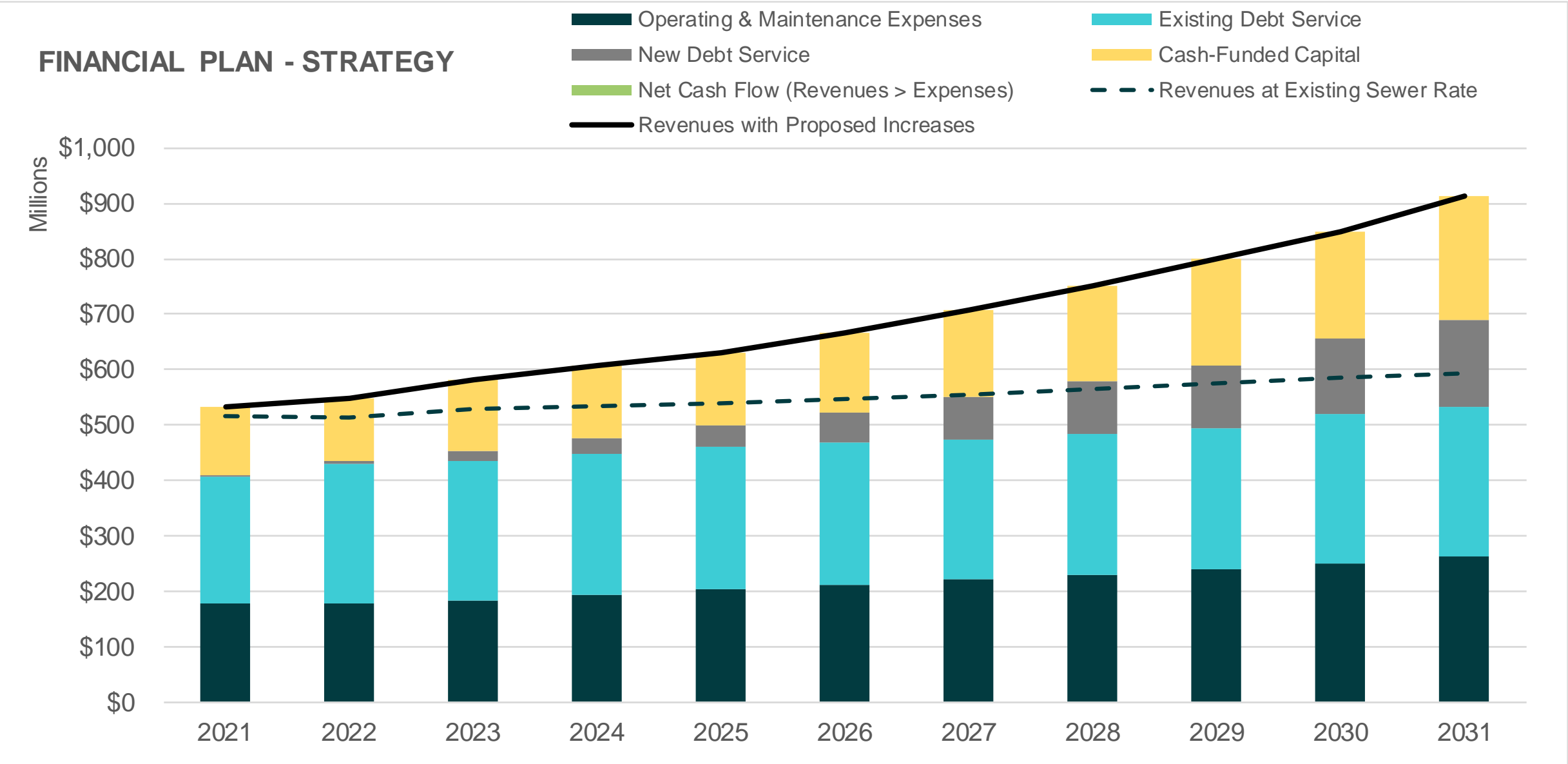


# Debt Balances Forecast

- \$1.1 billion of existing debt is paid down through 2031
- \$2.4 billion is added to fund capital investments
- The net change is a \$1.3 billion increase – projected 2031 balance \$4.7 billion
- Debt associated with Brightwater construction is projected to complete payoff in the years 2035 through 2047



# Revenue Requirement: 2022-2031 Plan





# Executive's Proposed Capacity Charge

The capacity charge is assessed to new connections in order that growth pays for growth and an equitable share of the cost of the system.

- Current 2021 Capacity Charge \$68.34
- **Executive's Proposed 2022 Capacity Charge \$70.39**

The charge is updated for data and underlying assumptions every three years (KC code):

- The next update will be the 2023 charge (undertaken in early 2022).
- The charge is inflated at three percent in interim years, consistent with WTD capital cost inflation assumptions.

Capacity Charge	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Capacity Charge</b>	\$68.34	\$70.39	\$72.50	\$74.68	\$76.92	\$79.23	\$81.60	\$84.05	\$86.57	\$89.17	\$91.84
<b>Increase %</b>	3.0%	<b>3.0%</b>	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
<b>Increase \$</b>	\$1.99	\$2.05	\$2.11	\$2.18	\$2.24	\$2.31	\$2.38	\$2.45	\$2.52	\$2.60	\$2.68
<b>Annual Total</b>	\$820	\$845	\$870	\$896	\$923	\$951	\$979	\$1,009	\$1,039	\$1,070	\$1,102
<b>Total Pmts (15 yrs)</b>	\$12,301	\$12,670	\$13,050	\$13,442	\$13,845	\$14,261	\$14,688	\$15,129	\$15,583	\$16,050	\$16,532
<b>Upfront Payment*</b>	\$10,080	\$10,382	\$10,693	\$11,014	\$11,345	\$11,685	\$12,035	\$12,397	\$12,768	\$13,151	\$13,546

\*Discount rate of 2.6%

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# Appendix

# King County Wastewater Treatment Division (WTD)

## Service

- Regional Wholesale Wastewater Treatment
- Regional Conveyance

## Customers

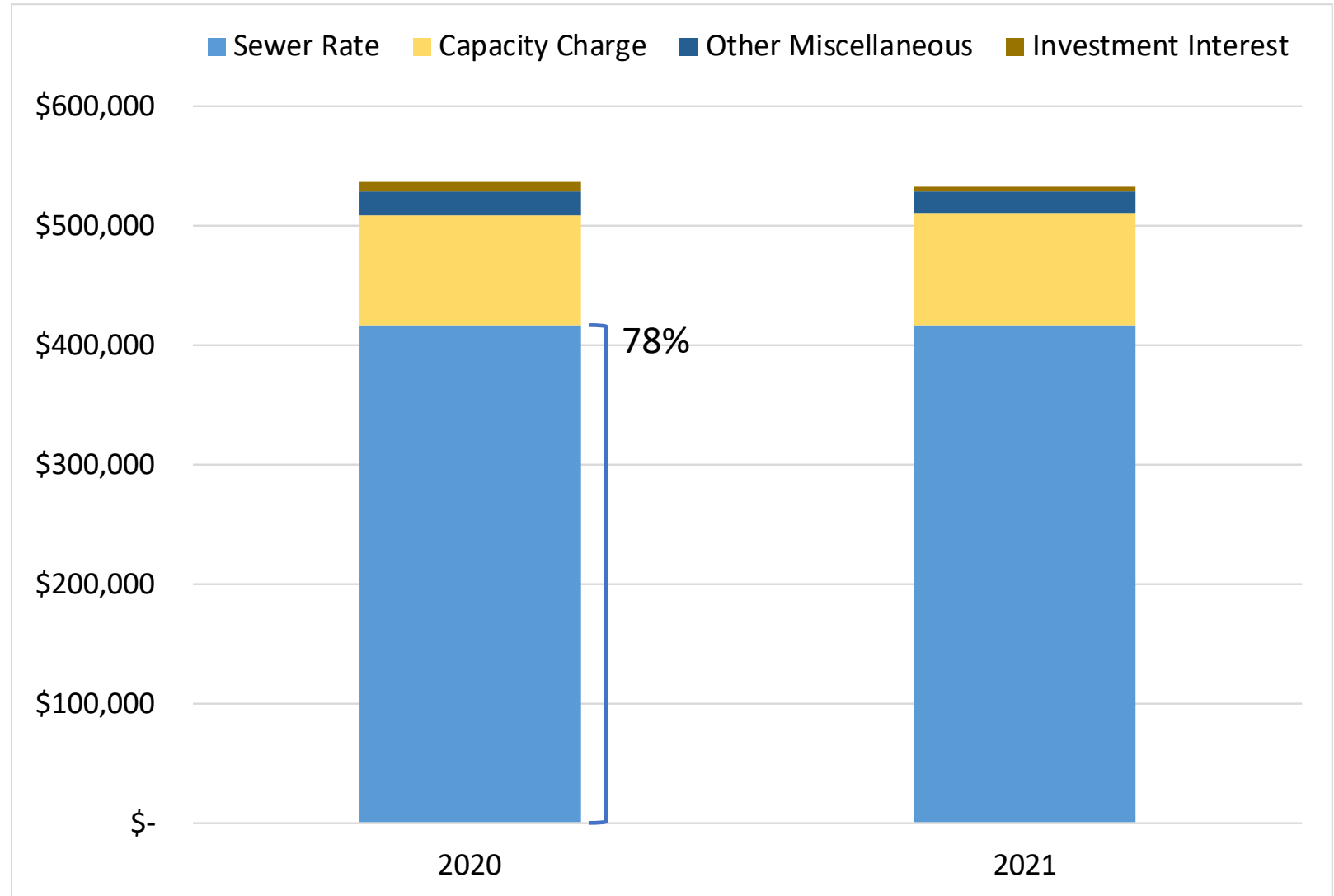
- WTD maintains service contracts with Local Sewer Agencies (LSAs) including 17 cities and 16 sewer districts in King County, south Snohomish County, and northern Pierce County, and the Muckleshoot Tribe
- LSAs have the direct retail account service relationship with homes and businesses.
- WTD coordinates with the LSAs through the Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) and the Regional Water Quality Committee (RWQC).

## Billing Basis

- LSAs report billing units to WTD quarterly – Residential Customer Equivalents (RCEs)
  - 1 unit per Single Family Residential (SFR) account
  - All non-single family (commercial, multi-family, industrial) billed units are based on converting reported water use to an RCE using 750 cubic feet per month per RCE.
    - An industrial waste high strength surcharge is added to high strength flows

# WTD Revenue Composition

- Sewer rate revenue represents 78 percent of total operating revenue
- Single Family Residential (SFR) customers make up 55 percent of the sewer rate customer base
- Remaining 45 percent of RCEs are comprised of Commercial and Multi-Family customers in a combined rate class
- Capacity charge revenue represents 17 percent of total operating revenue



# Reference: Slide 7 Legend

**Ongoing (Dark Blue):** High-priority minor (low cost) asset replacements or refurbishments.

**Existing (Orange):** Highest-priority large asset replacements or refurbishments that are currently appropriated and in project delivery.

**West Point Power (Light Blue):** Costs to provide the West Point Treatment Plant with more reliable power in response to increasing power disruptions. The project will either modify on-site power cogeneration at West Point, install a large battery system to help buffer the power supply, or both, which will enable plant equipment to continue operating during power disruptions. This work is expected to be completed by February 28, 2023

**Tier 1 (Gray):** Equipment or pipeline that is currently in poor condition, unserviceable, or for which spare parts cannot be found. Consequences of failure include sewage overflows, other operating permit violations, or operational disruptions for which there would be no easy workarounds. Because wear and tear and corrosion are progressive, every year of delay means that the risk of failure increases.

**Tier 2 (Yellow):** Equipment or pipeline that is old, showing wear, or has corrosion that indicates it will fail in the future. In the case of equipment, the equipment is currently doing its job, but due to its age will likely perform poorly or fail in the near future. Tier 2 failure has the same consequences as Tier 1 but is less likely to occur now. Tier 2 also includes equipment that may be in worse condition but is not located in a critical process—i.e., equipment may be more likely to fail, but the consequences would not be as severe. The risk of delay is the same as Tier 1.

# Capital Program Project Highlights

## ***Joint Ship Canal Water Quality***

Joint [Ship Canal Water Quality Project](#) with City of Seattle is a 2.7-mile tunnel project to meet City and County separate consent decree obligations. Project is expected to prevent an average of 75 million gallons of uncontrolled sewage overflows annually and currently is in construction with an anticipated completion date of 2025.

## ***Georgetown Wet Weather Treatment Station***

[Georgetown Wet Weather Treatment Station](#) project, a consent decree project, includes construction of a CSO treatment facility between Brandon Street and South Michigan Streets Regulator Stations, related pipes, and a new outfall structure to release the treated water into the Duwamish River. Facility will treat up to 70 million gallons a day of combined rainwater and wastewater that would otherwise have discharged directly to the Duwamish without treatment during storm events. Construction completion anticipated in 2022.

## ***West Point Power Quality Improvements***

The Executive issued a [Declaration of Emergency](#) that was extended by Council to address power reliability at West Point Treatment Plant. The project will either modify on-site power cogeneration at West Point, install a large battery system to help buffer the power supply, or both, which will enable plant equipment to continue operating during power disruptions. Completion anticipated by February 28, 2023.

# Capital Program Project Highlights (cont'd)

## ***North Mercer Island/Enatai Sewer Upgrade***

This project will increase the reliability and capacity of the existing [North Mercer Island Interceptor and Enatai Interceptor](#) (large sewer line) components of the regional wastewater system to convey the 20-year peak (sudden and/or sustained increase) wastewater flows projected through the year 2060. Project construction will include approximately 17,210 linear feet of new sewer pipeline and related features and will upgrade the County's North Mercer Pump Station on Mercer Island. Project anticipated to start construction in 2021 and completion in 2025.

## ***Interbay Sewer and Odor Control Upgrade***

The County will [upgrade an aging sewer pipe in Seattle's Interbay neighborhood](#). The existing pipe was built in 1967 and is nearing the end of its service life. New odor-control technology will be added to the system while the sewer pipe upgrade is underway. When complete, the sewer will provide reliable service for another 50 years or more. Construction is anticipated to be complete by 2024.