2023 Sewer Rate Process

Capital Program Cash-Funding

King County Wastewater Treatment MWPAAC Rates & Finance

December 2, 2021

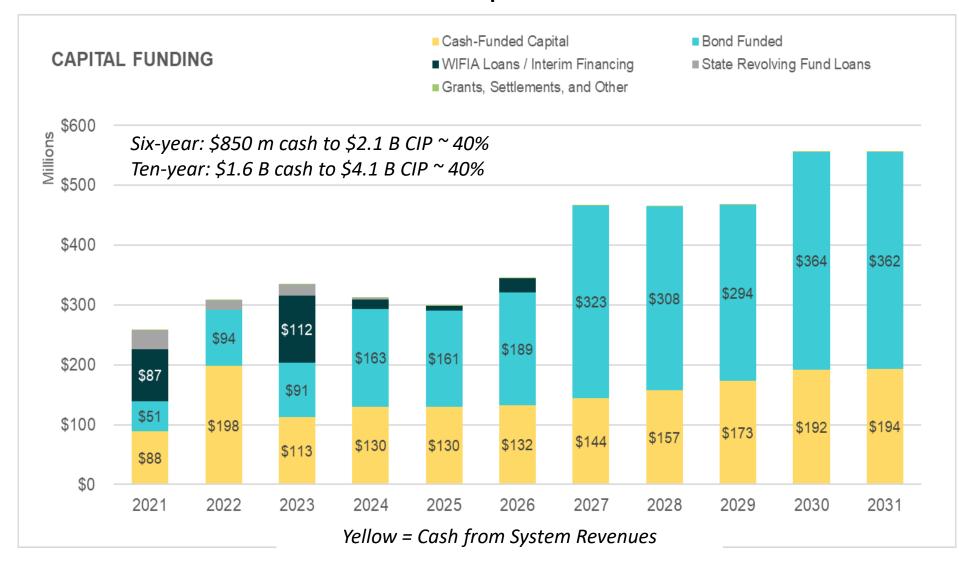
Agenda

- 1. Role in Capital Funding and Sewer Rate Setting
- 2. 2017 Implementation Debt Reduction Initiative
- 3. Cash Funding and Debt Service Coverage
- 4. Defeasance of Tax-Exempt Bonds
- 5. Rating Agency Perspective
- 6. Takeaways and Next Steps

Cash Funding Capital Projects

- Utilities must determine how much cash to generate from annual revenue to fund capital expenditures sometimes referred to as pay-as-you-go capital (yellow)
- Borrowing is required for CIP costs remaining after cash funding (blue)
- Issuing debt requires increased revenue to repay principal and interest for the term (usually 30 years)

2022-2031 Adopted Rate Plan



System Revenue for Cash Funding

2023

2024

2025

2026

2027

2028

2029

2030

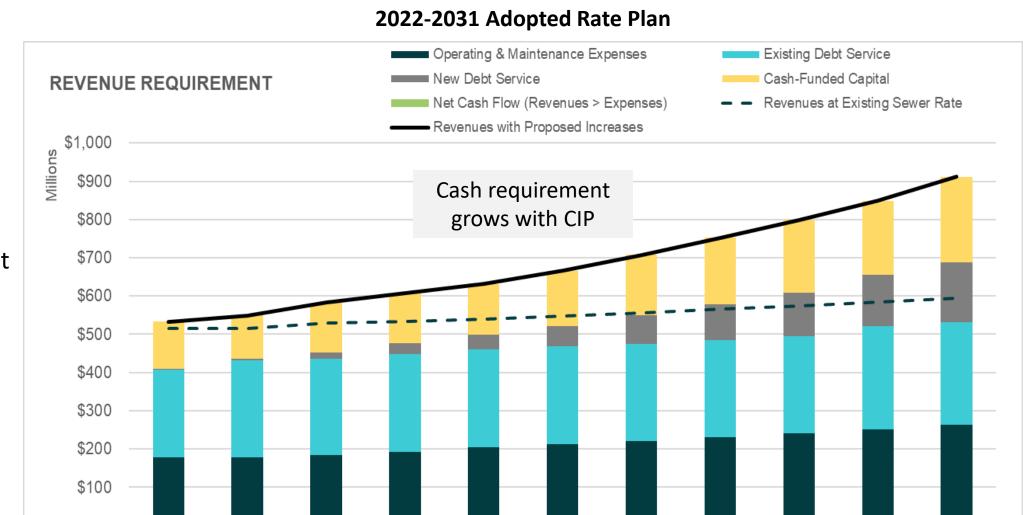
2031

- The sewer rate
 must be set to
 generate revenue
 above operating
 expenses and
 existing debt
 service to meet a
 cash funding target
 (yellow)
- Reducing cash funding (yellow) results in higher borrowing and resulting debt service (grey)

\$0

2021

2022



2017 Implementation – Debt Reduction Initiative

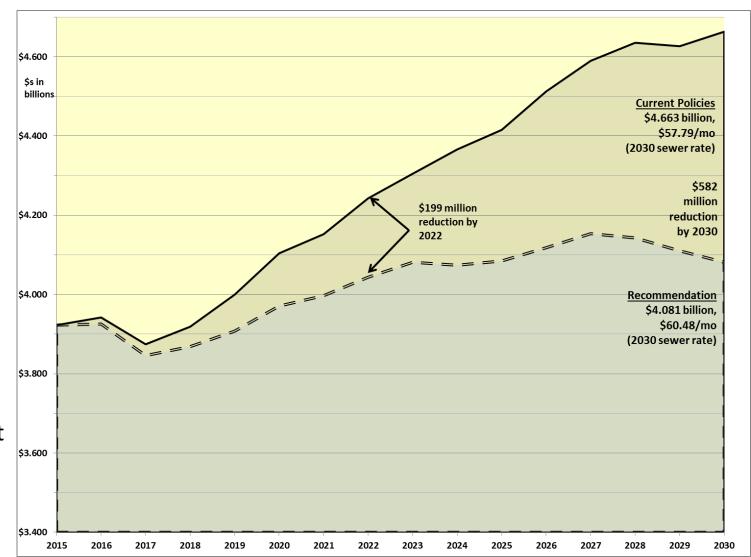
The sewer rate was historically set based on meeting debt service coverage (DSC) requirements. Any cash-funded capital was a result of the revenue generated to meet DSC.

In a December 2015 letter, MWPAAC recommended increasing the DSC target from 1.15x to 1.40x to reduce growth in its debt balance

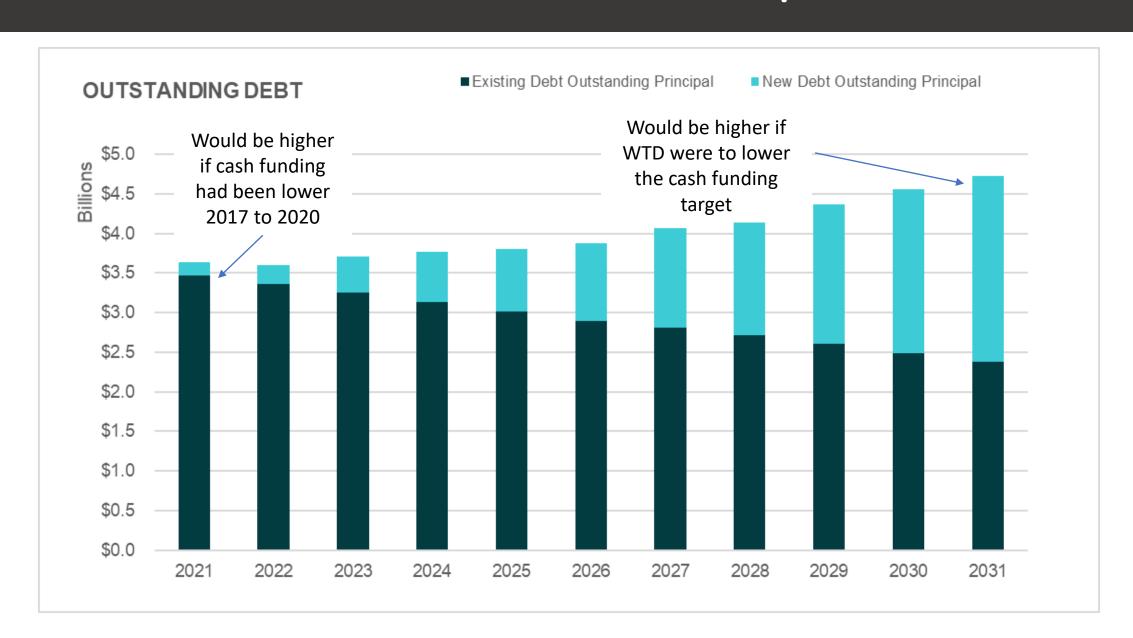
 2013 MWPAAC Debt Review Committee convened in response to concerns about the amount of debt issued to fund Brightwater and expected new debt for future capital

In response to MWPAAC's recommendations, the 2017 adopted rate plan set the sewer rate at a level sufficient to generate cash to fund forty percent of planned capital expenditures, similar to, though in place of a DSC target.

Projected Outstanding Debt: 2017 Sewer Rate Issue Paper

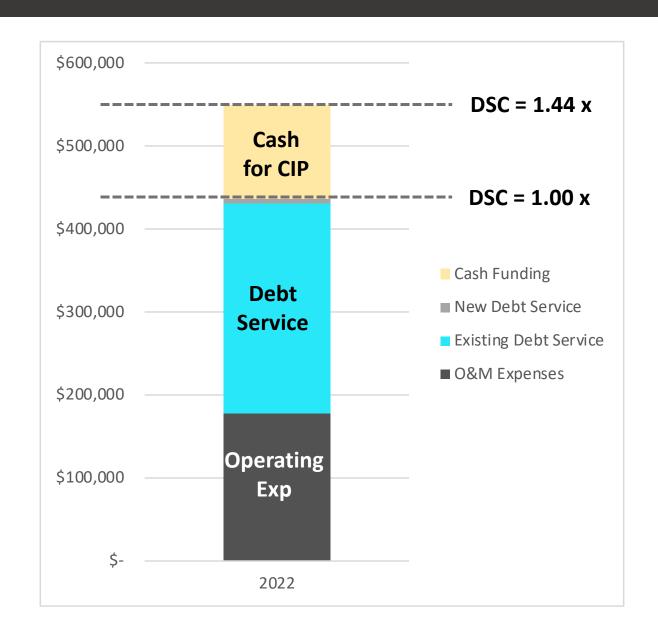


Debt Balances – 2022 -2032 Adopted Rate Plan



Cash Funding Relationship to DSC

- Revenue generated for cash funding CIP contributes to DSC performance
- DSC answers for bond holders "How many times can net revenue cover the debt service I am owed?"
- 1.00 x (times) equals the debt service, factors above demonstrate a cushion. (Operating Revenues Operating Expenses) / (Debt Service)
- Bond covenants define a minimum coverage above 1.00 x and rating agencies prefer DSC that is above minimums.



Cash from Operating Revenue Necessary to Defease Tax-Exempt Bonds



2017 tax reform disallows advanced refundings of municipal *tax-exempt* bonds. Advanced refundings allowed agencies to pay off higher interest rate debt years earlier than the optional redemption date.



Defeasance is an alternative way to achieve tax-exempt bond savings: Operating revenue (cash) is deposited into an escrow account that pays the debt service on higher interest rate outstanding bonds. New bonds are issued at lower cost to finance the capital program. As a result, interest payments are reduced and debt balances unchanged.



On November 10, WTD used \$143 million of operating cash to defeasace outstanding high interest rate bonds. New bonds were issued this summer at lower interest rates and fund the portion of the 2021 capital program that would have been funded by the \$143 million of cash. This optimization saves ratepayers more than \$25 million in interest cost over the life of the debt (through 2031)

How Defeasance Works

Capital Funding No Defeasance					
CIP	100	100	100	100	100
Cash from Sewer Rate Revenue New Debt Proceeds	40 60	40 60	40 60	40 60	40 60
Total Funding	100	100	100	100	100
Beginning Debt Balance Plus New Issuance less: Defeasance Outstanding Debt Balance Y-E	500 60 - 560	560 60 -	620 60 - 680	680 60 - 740	740 60 -
Conital Funding 100% Use of Cash			680	740	800

More new bonds issued at lower interest rates

Cash used to defease existing debt (higher interest rate)

Capital Funding 100% Use of Cash for Defeasance										
CIP	100	100	100	100	100					
Cash from Sewer Rate Revenue	40	40	40	40	40					
New Debt Proceeds	100	100	100	100	100					
Total Funding	140	140	140	140	140					
Beginning Debt Balance	500	560	620	680	740					
Plus New Issuance	100	100	100	100	100					
less: Defeasance	(40)	(40)	(40)	(40)	(40)					
Outstanding Debt Balance Y-E	560	620	680	740	800					

Same outstanding debt balance – new lower interest rate bonds replace higher interest rate existing bonds

The 40% funding target outcomes are not changed with defeasance.

Rating Agency Perspective (DSC)

Moody's assigned it's Aa1 Stable rating July 2021: DSC "satisfactory," below sector median

"...combined debt service coverage (including subordinate lien obligations) was stable at 1.5x, in line with its five-year average of 1.48x. While combined coverage compares below the Moody's rated wastewater sector median of 2.1x, we view it as satisfactory, given the substantial size of the system (\$177.7 million 2020 O&M) compared to the national median of \$11.6 million."

DSC is trending upward in the industry - growing attention to financial capacity to address aging infrastructure

- Moody's median DSC tracking shows a 30% increase between 2009 and 2019 (WTD increased slower at 19%)*
- The four years reported with cash funding implementation, DSC has averaged 1.54 compared to 1.36 average in the four years preceding the 2017 implementation

History of WTD DSC and Bond Ratings:

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WTD All-in DSC Ratio	1.24x	1.33x	1.30x	1.32x	1.28x	1.33x	1.33x	1.36x	1.41x	1.51x	1.49x	1.58x	1.56x
S&P Rating	AA+												
Moody's Rating	Aa3	Aa3	Aa2	Aa1	Aa1	Aa1	Aa1						

^{*} Moody's May 2020 Sector Profile - Medians

Rating Agency Perspective (Debt & Assets)

Standard and Poor's assigned it's AA+ long term rating in July, tempering positive criteria is WTD's high leverage

"Extremely high existing leverage (as measured by the system's 96% debt-to-capitalization ratio, as of Dec. 31, 2020) further tempered by the WTD's \$2.3 billion CIP, which we understand will require approximately \$1.5 billion of additional debt through 2027 (and does not include any potential costs related to the proposed nutrient removal permit);"

S&P August 2019 Ratings Median Data Report indicates WTD highly leveraged based on Debt to Capitalization Ratio (how much is owed against assets – similar to home equity)

King County WTD: 98%*

• Northwest Utilities: 30%

• National "Very Large" Utilities: 47%

*2018 data consistent with year of data in the report

Takeaways and Next Steps

A meaningful cash funding approach is critical to:

- Upholding WTD's bond ratings
- Debt service coverage performance
- Limiting growth in debt balances
- Allowing WTD to defease tax-exempt debt for interest savings

MWPAAC 2022 rate letter requested evaluation of alternatives such as a depreciation-anchored approach

- Opportunity with financial policies review to engage on industry alternatives, alignment to cash funding goals, and potential outcomes
- Assess at that time or earlier if there is a preferred alternative

