

# 2021 Rate-Setting Capital Funding Analysis

King County Wastewater Treatment  
MWPAAC Rates & Finance

August 6, 2020

2022 Rate-Setting	Topic
August 6	Capital Funding Analysis
September 3	Operating Forecast
October 1	Rate Strategy & Goals – 6 and 10 Year & Reserves Management
November 5	Projected Year-End Update & COVID19 Revenue Impact Estimates
December 3	TBD

# Agenda

1. Capital Funding – Impact on the Sewer Rate
2. Capital Expenditures - Portfolio
3. Capital Funding Plan
4. Debt Portfolio
5. Defeasance
6. Appendix: Definitions

*“How does the Capital Funding Analysis impact the Sewer Rate?”*

**Revenue Requirement**

Operating Expenditures

Existing Debt Service

New Debt Service

Cash-funded Capital / Debt Service Coverage

Maintain minimum reserve levels

Capital Funding  
Driven Revenue  
Needs



\*DSC “nests” with cash funding

**= Total Revenue Requirement**

*(Deduct)*

Capacity Charge Revenue

Investment Earnings & Misc Revenue

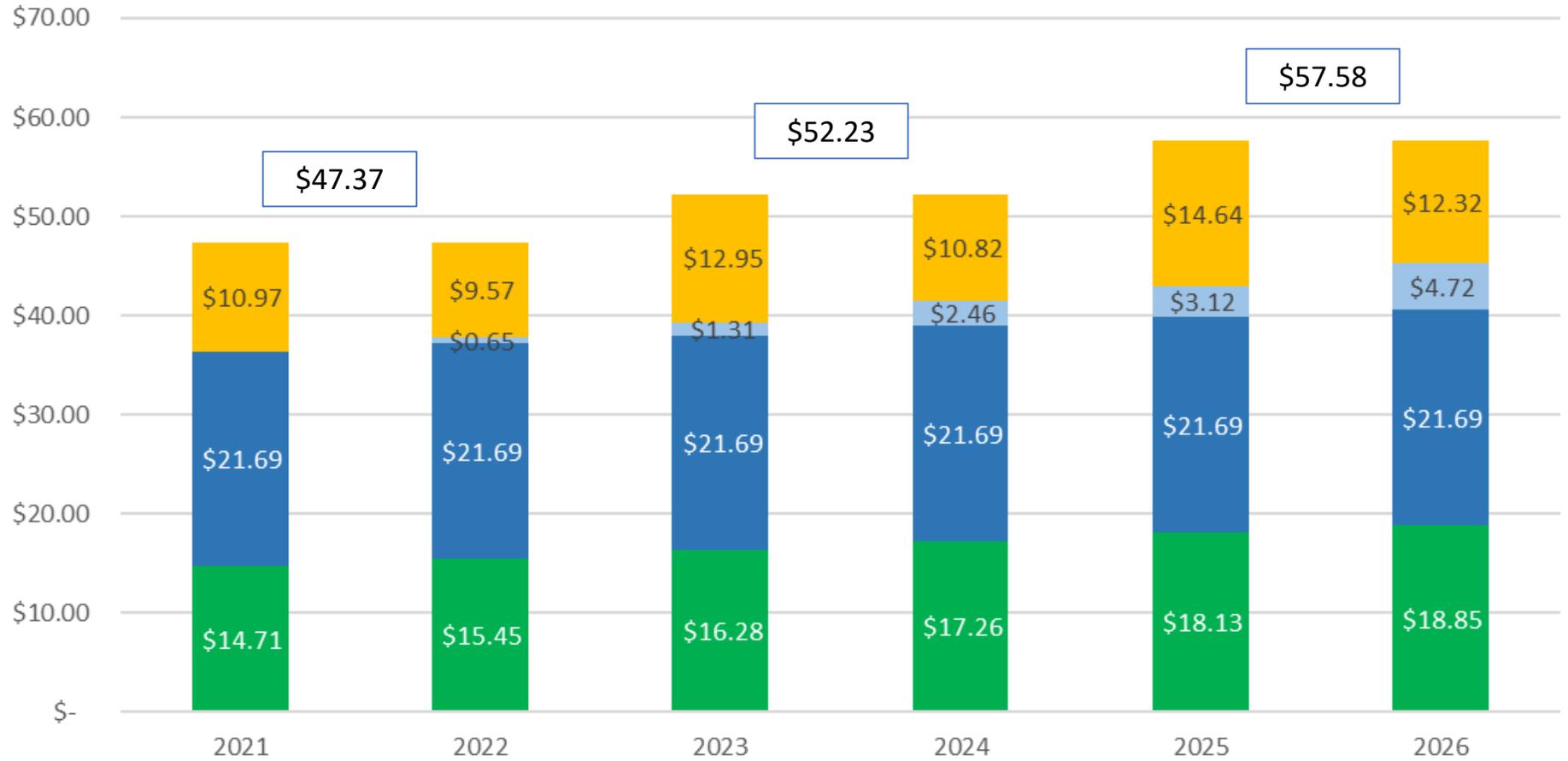
Use of Reserves

**= Sewer Rate Revenue Requirement**

Sewer Rate  
Requirements  
\*Capital Drivers\*

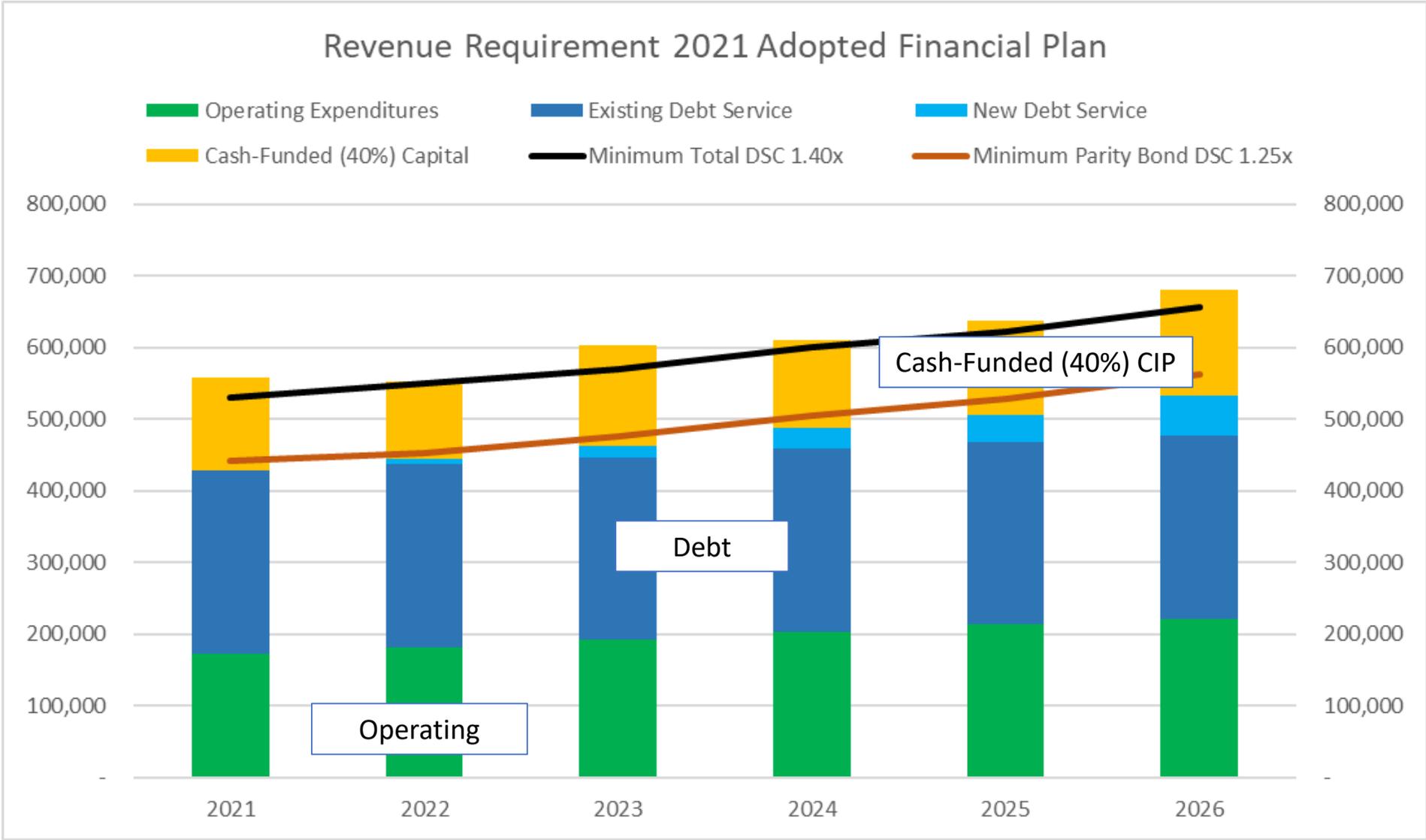
## Rate Components 2021 Adopted Financial Plan

■ Operating Expenditures   
 ■ Existing Debt Service   
 ■ New Debt Service   
 ■ Cash/Direct-Funded Capital



Sewer Rate Components

Revenue Requirement Components



# Debt Service Coverage (DSC)

## WHAT is it?

- DSC answers for bond holders “How many times can your net revenue cover the debt service you owe me?” 1.00x (times) equals the debt service, factors above 1.00x, i.e. 1.25x demonstrate a cushion.  $(\text{Operating Revenues} - \text{Operating Expenses}) / (\text{Debt Service})$

## WHY do we measure it?

- Investors and rating agencies value higher DSC ratios because they reduce the risk that agencies will not having sufficient revenue to pay debt service.
- Bond covenants and debt ordinances define the minimum annual DSC requirement, as well as an additional DSC threshold required to issue new debt.

## HOW does it affect rates?

- Rate setting threshold of minimum 1.40x established in 2017 based on MWPAAC/WTD debt review recommendations. The revenue associated with a factor above 1.00x stays with the agency and often “nests” with the cash-funded capital target.

	Minimum Covenants/Code	Minimum for Rate-Setting	2019 Actual	Rating Agencies Recom. for Aa		2018 Median for Aa Sewer Utilities
				Moody's	S&P <sup>1</sup>	
<b>All-in Debt Service Coverage</b>	1.15x	1.40x	1.57x	>1.70x	>1.40x	2.20x

<sup>1</sup>S&P's guidance is based on a 1 to 5 points scale, instead of rating. We use their recommendation based on 2 points as comparison

## Capital Funding Analysis

### Expenditures

Capital Improvement Program (Portfolio)

Asset Management - Conveyance

Asset Management - Plant

Capacity Improvement

Operational Enhancements

Planning & Administrative Capital

Resiliency

Regulatory

Resource Recovery

### Funding Sources

Low Cost Loan & Grant Proceeds

Direct Rate Funding (Cash)

Accumulated Reserves

Bond Funding (balancing resource)

Capital  
Funding  
Sewer Rate  
Drivers

## Capital Portfolio: 2021 from Adopted Financial Plan

Capital Improvement Program (\$ '000)	2020	2021	2022	2023	2024	2025	2026
Asset Management - Conveyance	\$ 16,614	\$ 27,713	\$ 38,160	\$ 49,361	\$ 56,644	\$ 55,969	\$ 82,412
Asset Management - Plant	50,528	62,250	72,917	100,622	118,895	126,141	166,868
Capacity Improvement	34,074	49,927	77,554	97,117	88,153	41,322	42,062
Operational Enhancements	13,760	17,672	17,771	16,074	5,597	5,679	5,817
Planning/Administration	14,255	18,135	16,210	9,936	9,548	9,780	9,576
Resiliency	9,420	22,663	24,455	36,827	27,020	34,821	26,639
Regulatory	100,582	101,512	91,838	78,458	74,709	80,739	145,365
Resource Recovery	3,705	6,880	2,451	4,976	7,167	4,744	1,761
<b>Total Spend Plan</b>	<b>\$ 242,938</b>	<b>\$ 306,751</b>	<b>\$ 341,357</b>	<b>\$ 393,371</b>	<b>\$ 387,734</b>	<b>\$ 359,195</b>	<b>\$ 480,501</b>
After Accomplishment Rate Adjust.	\$ 221,260	\$ 271,838	\$ 298,544	\$ 338,722	\$ 331,392	\$ 305,911	\$ 408,914

# Funding Plan

Resources for Capital Funding (\$ '000)	2020	2021	2022	2023	2024	2025	2026
Construction Fund Beg. Balance:	\$ 132,794	\$ 233,132	\$ 144,654	\$ 31,580	\$ 5,060	\$ 5,058	\$ 5,057
<b>Cash</b>							
Direct Cash Funding	14,693	129,155	107,089	140,080	122,250	131,403	147,557
Insurance Settlements and Other	1,450	500	500	500	500	500	500
Issuance Costs/Res.Transactions	(1,219)	4,673	(1,145)	(18,200)	(16,316)	(10,724)	(24,325)
<b>Debt Proceeds</b>							
State Revolving Fund Loans	51,357	380	-	-	-	-	-
WIFIA Loans	-	-	52,412	82,088	-	-	96,499
Commercial Paper / VRD	53,277	48,652	26,614	(61,818)	24,169	20,501	(46,902)
Revenue Bonds	202,041	-	-	169,552	200,787	164,230	235,587
Capital Spending	\$ (221,260)	\$ (271,838)	\$ (298,544)	\$ (338,722)	\$ (331,392)	\$ (305,911)	\$ (408,914)
Construction Fund End. Balance:	\$ 233,132	\$ 144,654	\$ 31,580	\$ 5,060	\$ 5,058	\$ 5,057	\$ 5,060

- \$100M of additional borrowing in 2020 at record low interest rates, with other borrowings, sufficient to fund the capital program with no new revenue bonds through 2022.
- Potential negative revenue impacts from COVID19 would require either a rate increase or delay of capital program (e.g. further delay of pipe rehabilitation and equipment replacement, etc.)
- Minimum balance of \$5 million as authorized by Motion 13798

# Types and Uses of Debt

	Parity Bonds <sup>1</sup>	Parity Lien Obligations	Junior Lien Obligations <sup>2</sup>	Multi-Modal LTGO/Sewer Revenue Bonds	State Revolving Fund and Public Works Trust Fund Loans
Common Name	Revenue Bonds	LTGO or "Double-Barreled" Bonds	Variable Rate Debt (VRD)	Variable Rate Debt (VRD)	SRF Loans
Lien	Parity Lien		Junior Lien		
	First Lien (or "Senior" Lien)	Second Lien	Third Lien	Fourth Lien	Fifth Lien
Pledge	Sewer revenues	Sewer revenues and King County taxes	Sewer revenues	Sewer revenues and King County taxes	Sewer revenues
Interest Rate	Fixed	Fixed	Variable	Variable	Fixed
Ratings	Aa1/AA+	Aaa/AAA	Aa2/AA	Aaa/AAA	n.a.
Final Maturity	2052	2039	2043	2046	2054
Amount Outstanding 2019	\$2,236,565,000	\$581,150,000	\$300,000,000	\$246,320,000	\$226,220,944
Uses	Primary long term financing for CIP	Use County's higher ratings and "spare" pledge capacity	Reduced interest costs with short-term debt (max. is 20% of total debt)		Opportunity to borrow at below-market interest rates
Future Plans	Issue \$1.1bn in the next 6 years to finance CIP, including WIFIA		Maintain at ~15% of total debt		Continue applying and maximizing its use

<sup>1</sup>Includes the WIFIA loan agreement with the EPA for \$134.5 million at an interest rate of 3.06% and 30-year term (Georgetown). A second WIFIA loan for \$96.5 million (Ship Canal) is also expected to be approved

<sup>2</sup>Includes the recently approved Commercial Paper program. This is another type of short term debt to be used as bridge between construction of projects and draws from WIFIA loans (if interest rates are favorable)

# Defeasance Transactions

Debt Service  
Savings



2017 tax reform disallows advance refundings of municipal *tax-exempt* bonds. Advanced refundings allowed agencies to pay off higher interest rate debt



Defeasance is an alternative way to achieve tax-exempt bond savings: Operating cash is used to “prepay” high interest debt while new bonds are issued at lower cost to finance the capital program



Defeasances in 2018 and 2019 have achieved savings of \$41 million in lower debt service through 2033



In December of 2020 WTD plans to defease an additional \$80 million of high interest debt and save \$50 million through 2051

# Appendix A: 2020 Revenue Bonds Issuance Summary<sup>1</sup>

Series	2020A (Tax-Exempt) = \$204 Million			2020B (Taxable) = \$187 Million			
Component	New Money 1	New Money 2 (defeasance capacity)	Callable Refunding of 2010	Taxable Advanced Refunding of 2012B	Taxable Advanced Refunding of 2012C	Taxable Advanced Refunding of 2013A	Taxable Advanced Refunding of 2016B
Bond Proceeds	100,000,000	80,241,196	24,055,000	55,450,000	22,295,000	60,120,000	48,880,000
All-in TIC	2.49%	2.96%	1.72%	1.78%	1.81%	1.70%	2.29%
Use of Funds	CIP	CIP	Refunding	Refunding	Refunding	Refunding	Refunding
Net PV Savings	n.a.	31,942,381	9,030,398	10,581,406	5,078,038	10,611,077	10,271,907
Net PV Savings (%)	n.a.	40%	32%	21%	25%	20%	24%

- The rating agencies (Moody's and Fitch) affirmed WTD's Aa1 and AA+ ratings with a stable outlook in June

- WTD was able to issue long-term, fixed rate bonds at a record low 2.49% of interest in July

- Refunding transactions unlocked savings of \$46 million through 2039 (present value), with potentially \$32 million more estimated from the 2020 planned defeasance

<sup>1</sup>Does not include separate issuance of junior lien sewer revenue refunding bonds (put bonds) on June 30 for \$200.6 million, which replaced short term variable rate debt

# Terms/Definitions:

- Revenue Requirement: annual operation and maintenance expense and capital-related costs incurred in meeting various aspects of providing utility service
- Capital Funding Analysis: a strategic mix of alternative funding sources balanced to capital expenditures projections
- Debt Service Coverage (DSC): ratio between net revenues and debt service payments in a given year. Represents an issuer's "safety margin" to service its debts and is usually a requirement from investors included in the bond's contract
- Parity Bond: bond issues that have the same priority or level of "seniority"
- Revenue Bond: type of municipal bond supported only by a specific revenue stream or project (e.g. wastewater rates)
- Limited Tax General Obligation (LTGO) Bonds: type of municipal bond backed the taxing authority of the issuer (e.g. King County's property taxes)
- Double-Barreled bonds: bonds secured by both a defined source of revenue **and** a taxing authority
- WIFIA: the Water Infrastructure Finance and Innovation Act is an EPA program that provides long-term, low-cost loans to water and wastewater projects
- Variable Rate Debt (VRD): municipal bonds with "floating" coupon payments that are adjusted at specific intervals, i.e., the interest rate is reset periodically to reflect current market conditions

# Next Steps

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