

2021 Sewer Rate Proposal Alternatives Update: MWPAAC Rates & Finance April 2, 2020

The 2021 sewer rate proposal was presented to the Executive on March 4, before significant progression of COVID 19 impacts and response. Additional rate plan alternatives have been prepared to reduce the rate increase for 2021 in response to affordability concerns related to the developing COVID 19 economic environment and feedback provided by MWPAAC at the March 5 rate proposal briefing.

It is important to note that there are additional risks to revenue and borrowing cost projections related to the economic impacts from COVID 19, and the forecast assumptions *have not* been adjusted to anticipate potential impacts. Significant deviation from these projections is likely and estimates of potential magnitude are provided following the rate plan alternatives.

The two additional rate proposal alternatives maintain the WTD capital program funding proposal over the forecast period (along with the caveats of the proposal materials i.e. nutrient removal regulation and CSO costs).

A sensitivity analysis has been prepared to demonstrate the impacts to WTD if no rate increase were adopted for the biennium, with potential impacts summarized.

Previously Presented:

- The 2020 Forecast Prepared in Spring 2019
 - Funds:
 - The current CIP without the 2019 First and Second Omnibus approvals
- The Proposed 2021 Rate Plan presented to the Executive March 4, 2020
 - Funds:
 - The current CIP with the 2019 First and Second Omnibus and updated project cost estimates
 - An inventory of unfunded priority asset management projects
 - Elliott West CSO Control project and the treatment plant planning program to respond to potential new nutrient regulation
- The Current CIP Program Rate Plan
 - Funds:
 - The current CIP with the 2019 First and Second Omnibus and updated project cost estimates
 - No funding capacity for asset management high priority inventory or Elliott West CSO Control and the treatment plan planning program

Newly Prepared:

- Alternative 1: WTD Proposed Rate Plan with Rate Increase Spread Evenly Between 2021 and 2022
 - Funds:
 - The proposed investments with two annual rate increases in 2021 and 2022.
- Alternative 2: WTD Proposed Rate Plan with New Investments Share of the Rate Increase Delayed to 2022.
 - Funds:
 - The proposed investments with the portion of the rate increase attributable to new investments delayed to 2022.

- Alternative 3: WTD Proposed Rate Plan with New Investments Share of the Rate Increase Delayed Beyond the Biennium
 - Funds:
 - The proposed investments with a lower biennial rate increase that results in higher rate increases for the remainder of the rate plan.
- Sensitivity Analysis: No Rate Increase in the 2021-2022 Biennium
 - Funds:
 - A 2021-2022 **capital program reduction** of \$106.5 million from the rate proposal,
 - \$78 million of existing CIP projects
 - \$28 million of newly proposed asset management high priority inventory, Elliott West CSO Control, and the treatment plan planning program
 - Reduction to prioritized operating investments
 - Potential reduction to WTD capital program staff

Updated Rate Plan Alternatives

2020 Rate Plan

Adopted ORD 18915	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rate Increase %	0.0%	4.5%	0.0%	4.5%	0.0%	4.8%	0.0%	5.6%	4.5%	2.8%	5.1%
Rate	\$45.33	\$47.37	\$47.37	\$49.50	\$49.50	\$51.90	\$51.90	\$54.80	\$57.28	\$58.86	\$61.84
Rate Increase \$	\$0.00	\$2.04	\$0.00	\$2.13	\$0.00	\$2.40	\$0.00	\$2.91	\$2.48	\$1.58	\$2.98

2021 Proposed Rate Plan - Asset Management Inventory Catch-Up, Strategic CSO Investments, Treatment Planning & Plant Optimization Programs

Proposed	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rate Increase %	0.0%	9.5%	0.0%	10.0%	0.0%	10.0%	0.0%	10.0%	0.0%	10.0%	0.0%
Rate	\$45.33	\$49.64	\$49.64	\$54.60	\$54.60	\$60.06	\$60.06	\$66.07	\$66.07	\$72.67	\$72.67
Rate Increase \$	\$0.00	\$4.31	\$0.00	\$4.96	\$0.00	\$5.46	\$0.00	\$6.01	\$0.00	\$6.61	\$0.00

Funds Current Program With 2019 Supplemental and Existing Project Cost Increases [1] - No New Investments in AM or Treatment Plant Programs

Current Program	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rate Increase %	0.0%	6.0%	0.0%	6.25%	0.0%	6.25%	0.0%	6.25%	0.0%	6.25%	0.0%
Rate	\$45.33	\$48.05	\$48.05	\$51.05	\$51.05	\$54.24	\$54.24	\$57.63	\$57.63	\$61.24	\$61.24
Rate Increase \$	\$0.00	\$2.72	\$0.00	\$3.00	\$0.00	\$3.19	\$0.00	\$3.39	\$0.00	\$3.60	\$0.00

[1] First and Second Omnibus and existing project cost increases are attributable in large part to five projects (\$227.3M CIP total increase): Interbay Force Main and Odor Control, Jameson/Arcweld Building Replacement, Alki Permanent Standby Generator, Coal Creek Siphon and Trunk Parallel, and North Mercer Island & Enatai Interceptors.

Alternative 1: Proposed Program with Rate Increase Spread Evenly Between 2021 & 2022

Proposed Program Alt Increase Plan	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rate Increase %	0.0%	4.5%	4.5%	10.25%	0.0%	10.25%	0.0%	10.25%	0.0%	10.25%	0.0%
Rate	\$45.33	\$47.37	\$49.50	\$54.58	\$54.58	\$60.17	\$60.17	\$66.34	\$66.34	\$73.14	\$73.14
Rate Increase \$	\$0.00	\$2.04	\$2.13	\$5.07	\$0.00	\$5.59	\$0.00	\$6.17	\$0.00	\$6.80	\$0.00

Alternative 2: Proposed Program with New Investments Share of the Rate Increase Delayed to 2022

Proposed Program Alt Increase Plan	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rate Increase %	0.0%	6.0%	3.5%	10.00%	0.0%	10.00%	0.0%	10.00%	0.0%	10.00%	0.0%
Rate	\$45.33	\$48.05	\$49.73	\$54.70	\$54.70	\$60.18	\$60.18	\$66.19	\$66.19	\$72.81	\$72.81
Rate Increase \$	\$0.00	\$2.72	\$1.68	\$4.97	\$0.00	\$5.47	\$0.00	\$6.02	\$0.00	\$6.62	\$0.00

Alternative 3: Proposed Program with New Investments Share of the Increase Delayed Beyond Biennium

Proposed Program Alt Increase Plan	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rate Increase %	0.0%	6.0%	0.0%	11.25%	0.0%	11.25%	0.0%	12.00%	0.0%	12.00%	0.0%
Rate	\$45.33	\$48.05	\$48.05	\$53.46	\$53.46	\$59.47	\$59.47	\$66.61	\$66.61	\$74.60	\$74.60
Rate Increase \$	\$0.00	\$2.72	\$0.00	\$5.41	\$0.00	\$6.01	\$0.00	\$7.14	\$0.00	\$7.99	\$0.00

Sensitivity Analysis: No Rate Increase 2021-2022 \$106.6 million of project costs delayed

Sensitivity No Rate Increase 2021 2022	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rate Increase %	0.0%	0.0%	0.0%	16.00%	0.0%	14.00%	0.0%	14.00%	0.0%	14.00%	0.0%
Rate	\$45.33	\$45.33	\$45.33	\$52.58	\$52.58	\$59.94	\$59.94	\$68.34	\$68.34	\$77.90	\$77.90
Rate Increase \$	\$0.00	\$0.00	\$0.00	\$7.25	\$0.00	\$7.36	\$0.00	\$8.39	\$0.00	\$9.57	\$0.00

WTD Financial Risk Evaluation – COVID-19

Revenue:

1. Mass telecommute will likely result in diversion of metered water use from commercial accounts in the WTD service area to residences both within and outside of the WTD service area. Expected contraction in water use-based commercial Residential Customer Equivalents (RCEs) will eventually impact WTD sewer rate revenue collection. Additional detail provided in the Sewer Rate Revenue Section below.
2. Capacity charge prepayments could slow.
3. With the Federal Reserve cutting interest rates, there is risk to the investment pool and the interest earnings forecast.

Cost of Debt:

4. Market volatility could impact the availability and cost of debt when WTD goes out for defeasance/new money issuance in 2020. Though, the WTD rate forecast uses conservative interest rate assumptions, the impacts are not fully known. See Cost of Debt below.

Sewer Rate Revenue

The sewer rate comprises approximately 77% of total operating revenues. Over half of these revenues are based on the number of single-family residences and will not be impacted by any changes in residential water consumption. The slowdown in economic activity associated with COVID-19 and mass telecommuting are expected to lead to a decrease in water consumption by the commercial and industrial class customer base.

Due to the lag in how we bill customers (rolling average RCEs based on the four calendar quarters beginning five quarters prior to the current quarter), the 2020 revenue is expected to have limited risk.

Order of Magnitude Potential Revenue Impacts

WTD Revenue Sensitivity Analysis	2020	2020-2022	Notes:
<i>\$ in thousands</i>			
RCE Reduction	(20,894)	(87,798)	Estimated peak impact 2021 due to billing lag
Reduced Capacity Charge Prepayment	(11,151)	(30,197)	Q1 2020 reflects significant decline already
Investment Income	(755)	(1,683)	Use of fund balance, interest rate reduction
Total	(40,300)	(119,677)	

Cost of Debt

The sewer rate model has been run to evaluate the 2020 impact to a set of alternative debt-related assumptions based on the initial COVID-19 market activity. These include:

- 1) No interim financing for Georgetown or Ship Canal (\$3.6M in savings)
- 2) No early refunding of variable rate debt. Overall variable rate increased to 3% from 2.34% in 2020 to reflect market disruptions
- 3) No defeasance/new money issue in 2020; no \$720K in annual savings through 2030
- 4) Access to Georgetown & Ship Canal WIFIA Loans as costs are incurred

The general finding is that under the same proposed rate plan we maintain all target outcomes with the exception of dipping slightly under the 40% cash funding CIP target. This test assumes return to pre-COVID-19 financial conditions after 2020 which might not be the reality. The intention is to test our current year ability to respond.