



# Wastewater Rate Study

## Hilton Creek Community Services District Proposition 218 Hearing

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ROBERT D. NIEHAUS, INC.

JUNE 13, 2023

# Agenda

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- Discuss Proposition 218
- Talk about why rate increases are needed
- Show finances under current revenues and proposed revenues
- Explain cost of service analysis
- Show proposed rates
- Show rate impacts

# What is Proposition 218?

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- Customers have the right to protest any increase in fees
- Customers should not pay more than the fair share of cost of service
- Public agencies cannot make a profit

# Why are rate increases needed?

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- Rising operating costs
- Capital needs
- Regulatory concerns
- Additional qualified staff
- Emergency reserves
- Last rate study more than 20+ years ago!

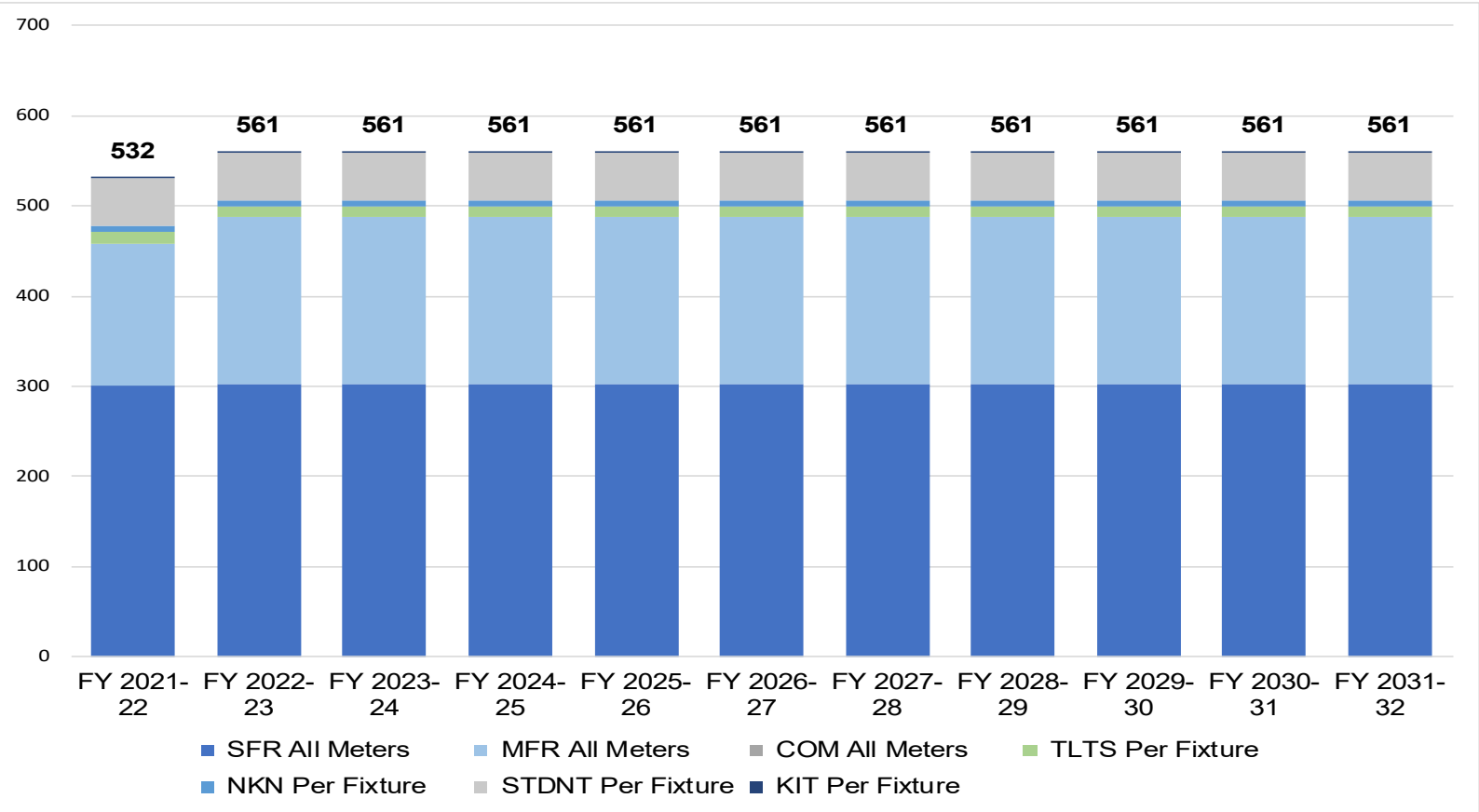
# Financial Plan

# Current Rates (revenue)

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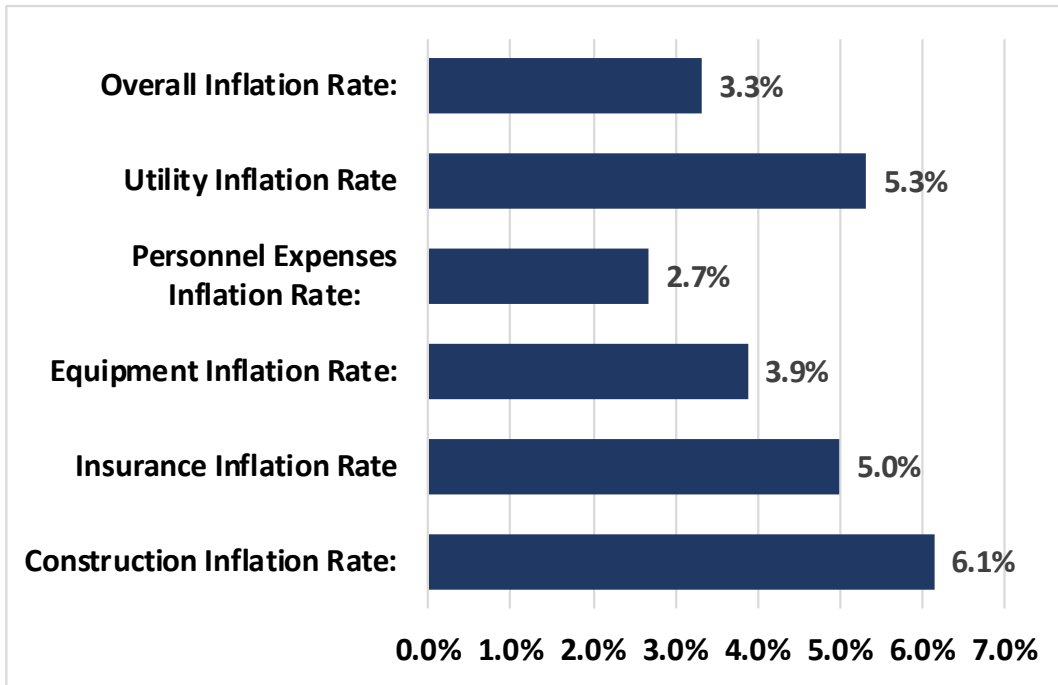
Bi-Monthly Bill	
Category	Current
Single-Family Residential	\$110.62
Multi-Family Residential	\$110.62
Commercial	\$110.62
Toilets	\$80.98
No Kitchen Nightly	\$47.32
Students	\$3.92
Kitchen	\$107.90

# Billing Unit Growth (revenue)



# Financial Plan (expense drivers)

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## Needed Capital Expenditures:

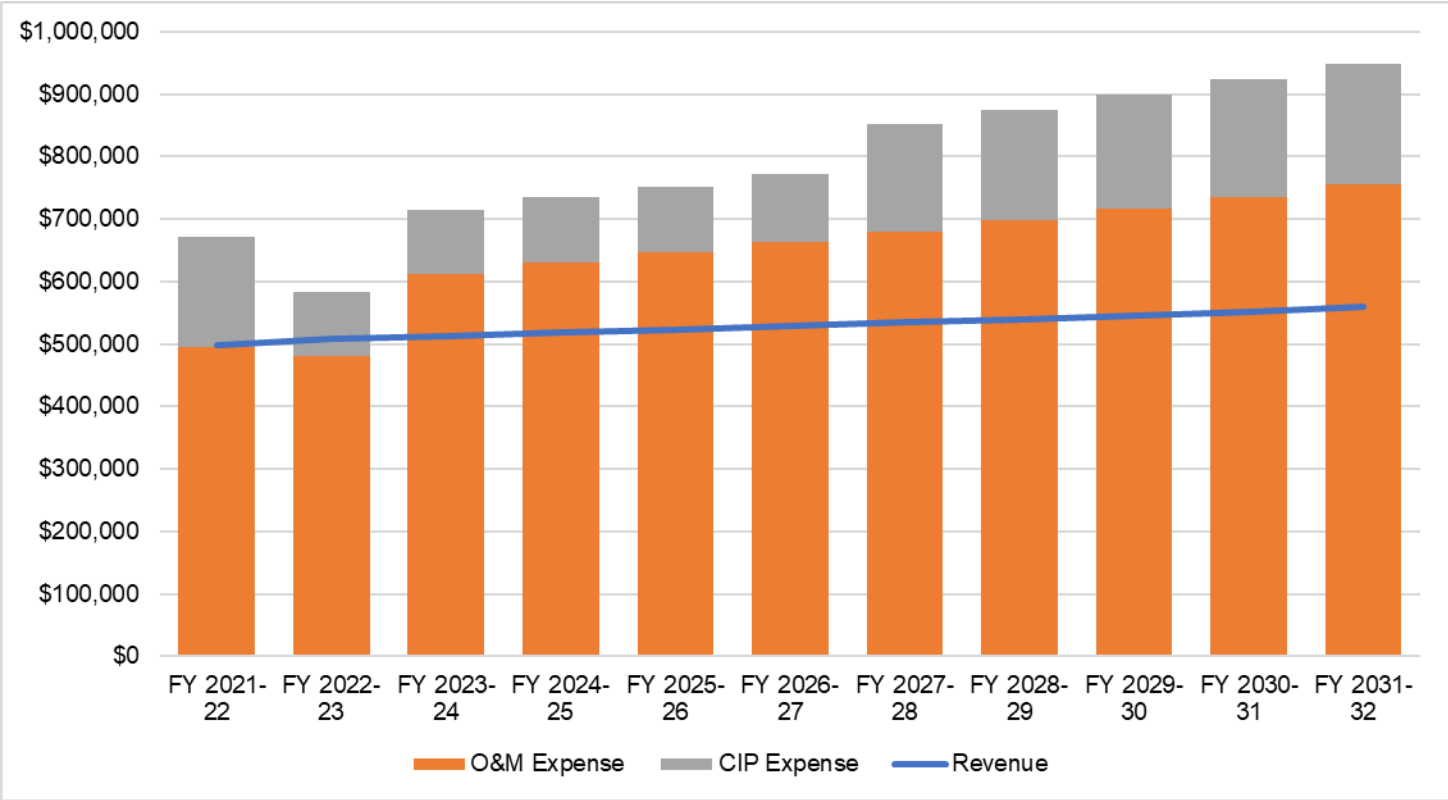
Sludge dewatering  
Emergency generator plant  
Aeration blowers

## Reserve Targets:

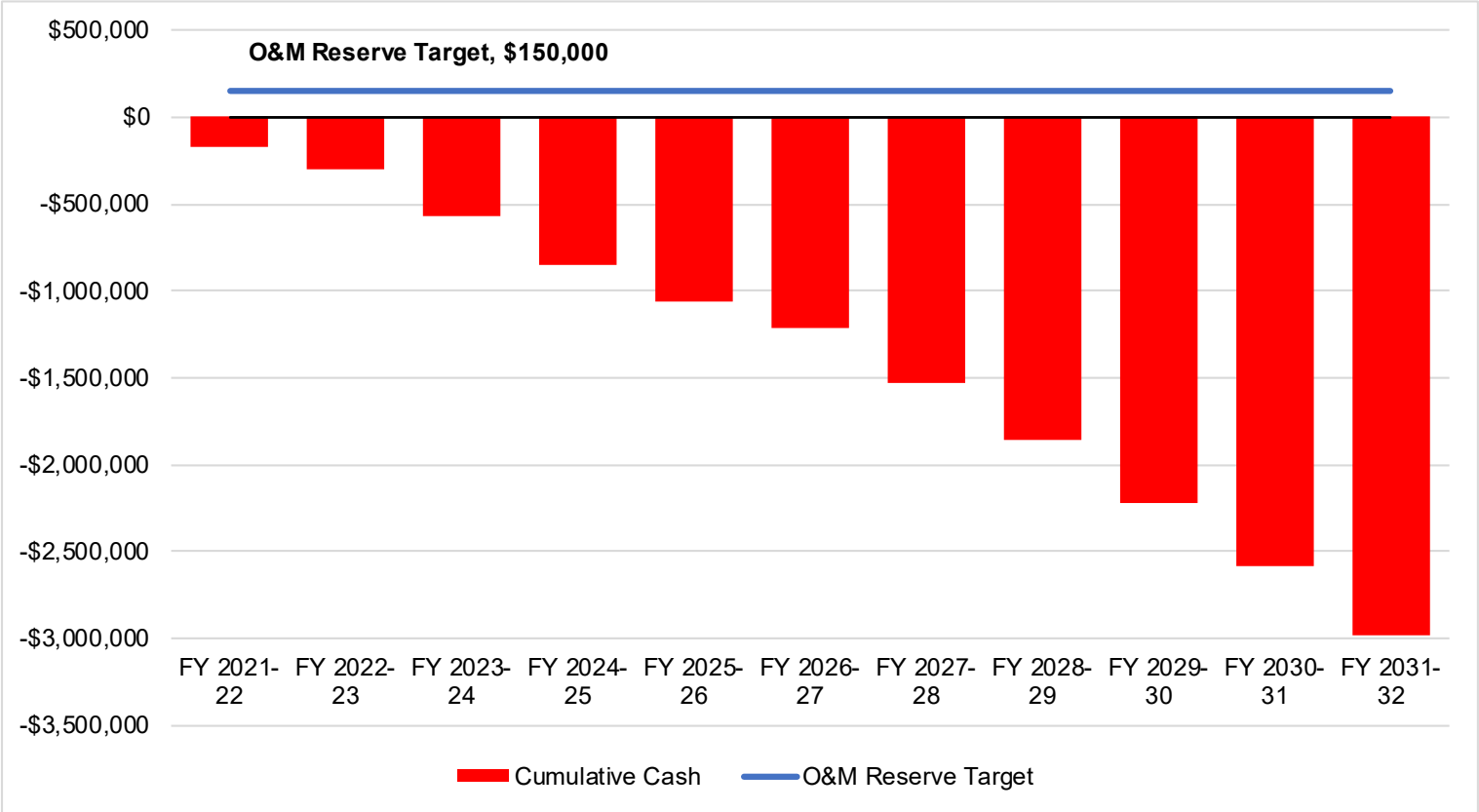
3 months of operating (for emergencies)



# Financial Plan (no increase)

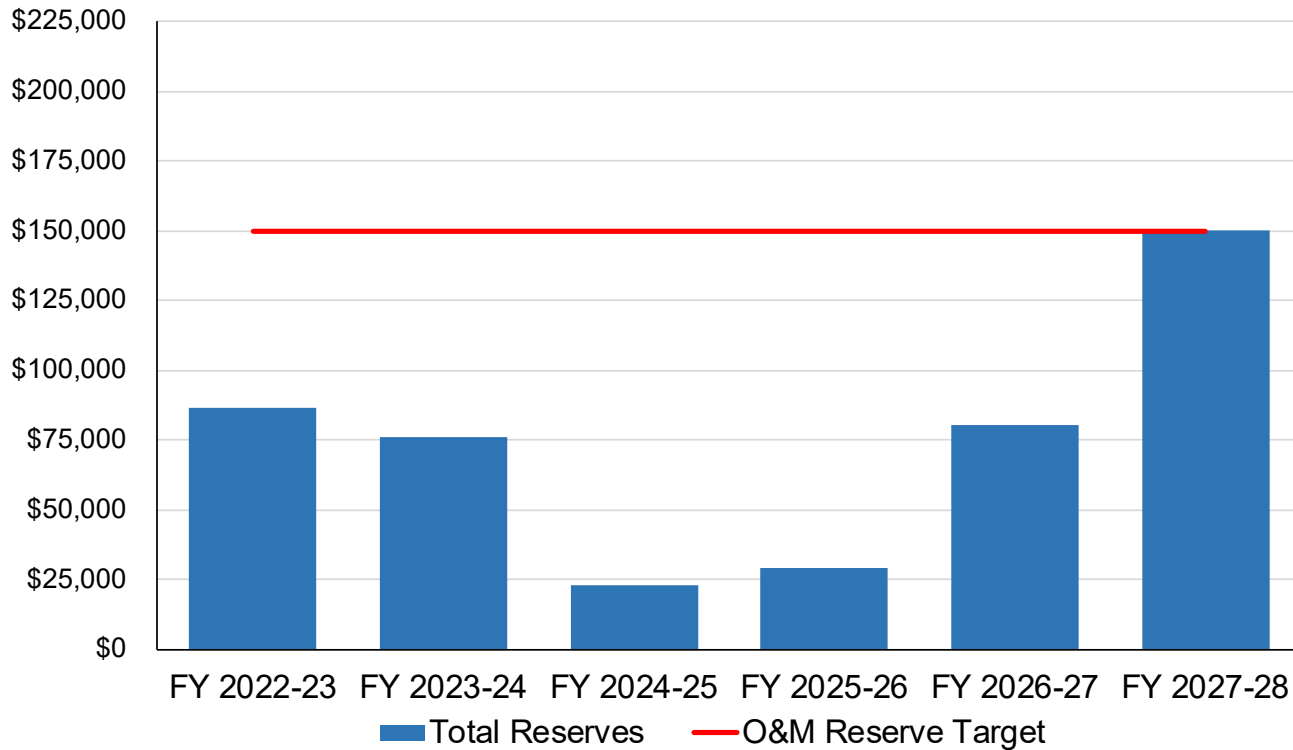


# Cash Flow (no increase)



# Revenue Adjustments

Proposed Adjustment	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Revenue Adjustment	25.0%	20.0%	15.0%	10.0%	5.3%



Initial increases offset the need for future rate increases, overall increases are lower  
 Initial increases solve cash flow issues  
 Rates derived from the financial plan represent a maximum increase, the District can still do lower, just not higher



# Revenue Requirements

Revenue Requirements	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
<b>Revenue Requirements</b>					
O&M Expenses	\$480,491	\$611,784	\$629,580	\$646,100	\$663,071
Debt Service	\$0	\$0	\$0	\$0	\$0
PAYGO	\$102,009	\$102,009	\$105,431	\$106,387	\$109,945
<b>Total Revenue requirements</b>	<b>\$582,500</b>	<b>\$713,793</b>	<b>\$735,010</b>	<b>\$752,486</b>	<b>\$773,016</b>
<b>Revenue Offsets</b>					
Other Operating Revenues	\$0	\$0	\$0	\$0	\$0
Non-operating Revenues	(\$155,000)	(\$160,006)	(\$165,173)	(\$170,508)	(\$176,014)
<b>Total Revenue Offsets</b>	<b>(\$155,000)</b>	<b>(\$160,006)</b>	<b>(\$165,173)</b>	<b>(\$170,508)</b>	<b>(\$176,014)</b>
<b>Adjustments</b>					
Adjustments for Cash Balance	(\$10,259)	(\$53,098)	\$5,956	\$51,393	\$69,939
Adjustments for Mid-Year Increase	\$0	\$0	\$0	\$0	\$0
<b>Total Adjustments</b>	<b>(\$10,259)</b>	<b>(\$53,098)</b>	<b>\$5,956</b>	<b>\$51,393</b>	<b>\$69,939</b>
<b>Total Revenue Requirements</b>	<b>\$417,241</b>	<b>\$500,689</b>	<b>\$575,793</b>	<b>\$633,372</b>	<b>\$666,941</b>



# Cost of Service

# Cost of Service Analysis

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Mass Balance Analysis – Determine the relative strength and flow of customer classes (COS Units)

- No water use data
- Total flow ~26.7 MGY
- EPA averages for flow and strength

Fixture	Unit Size	Daily Flow per Unit in Gallons	BOD in milligrams per Liter	TSS in milligrams per Liter
Single Family Residential	1	150	175	175
Multi-Family Residential	1	150	175	175
Commercial	1	100	150	150
Studio/Hotel Rooms	1	100	175	175
Students (School)	1	10	150	150
Commercial Kitchen	1	50	1,082	209
Toilets	15	4	124	650

Average Use of Kitchen x3 meals

Toilets assumed to be used 15 times a day



# Cost of Service Analysis

O&M Cost Allocation	Volume	BOD	TSS	Sewer Service	Total Percentage
<b>Sewer Collection</b>	50%	25%	25%	0%	100%
<b>Pumping</b>	50%	25%	25%	0%	100%
<b>Sewer Treatment</b>	25%	38%	38%	0%	100%
<b>Customer Accounts</b>	0%	0%	0%	100%	100%
<b>Administrative and General</b>	34%	25%	25%	16%	100%

Asset Cost Allocation	Volume	BOD	TSS	Sewer Service	Total Percentage
<b>Sewer Treatment</b>					
Structures	100%	0%	0%	0%	100%
Sewer Treatment Plant	25%	38%	38%	0%	100%
<b>Collection and Disposal</b>	50%	25%	25%	0%	100%
<b>Sewer General</b>	43%	24%	24%	9%	100%

Cost Allocation Summary	Cost of Service	Volume	BOD	TSS	Sewer Service
<b>O&amp;M Expense</b>	\$480,491	\$162,179	\$121,877	\$121,877	\$74,557
<b>Debt Service</b>	\$0	\$0	\$0	\$0	\$0
<b>PAYGO</b>	\$102,009	\$46,282	\$25,505	\$25,505	\$4,717
<b>Total Revenue Requirements</b>	\$582,500	\$208,460	\$147,382	\$147,382	\$79,274
<b>% Distribution</b>		35.8%	25.3%	25.3%	13.6%
<b>Non-Rate Revenues Offset</b>	(\$155,000)				
<b>Total Revenue Requirements</b>	\$427,500	\$152,990	\$108,165	\$108,165	\$58,180
<b>Cash Reserve Adjustment</b>	(\$10,259)				
<b>Revenue Requirements for Rates</b>	<b>\$417,241</b>	<b>\$149,319</b>	<b>\$105,569</b>	<b>\$105,569</b>	<b>\$56,784</b>
<b>Category</b>	<b>Cost of Service</b>	<b>Volume</b>	<b>BOD</b>	<b>TSS</b>	<b>Sewer Service</b>
Revenue Requirements for Rates	\$417,241	\$149,319	\$105,569	\$105,569	\$56,784
Unit of Service	-	37,120	40,539	41,463	1,986
<b>Unit Cost</b>	<b>-</b>	<b>\$4.02</b>	<b>\$2.60</b>	<b>\$2.55</b>	<b>\$28.59</b>



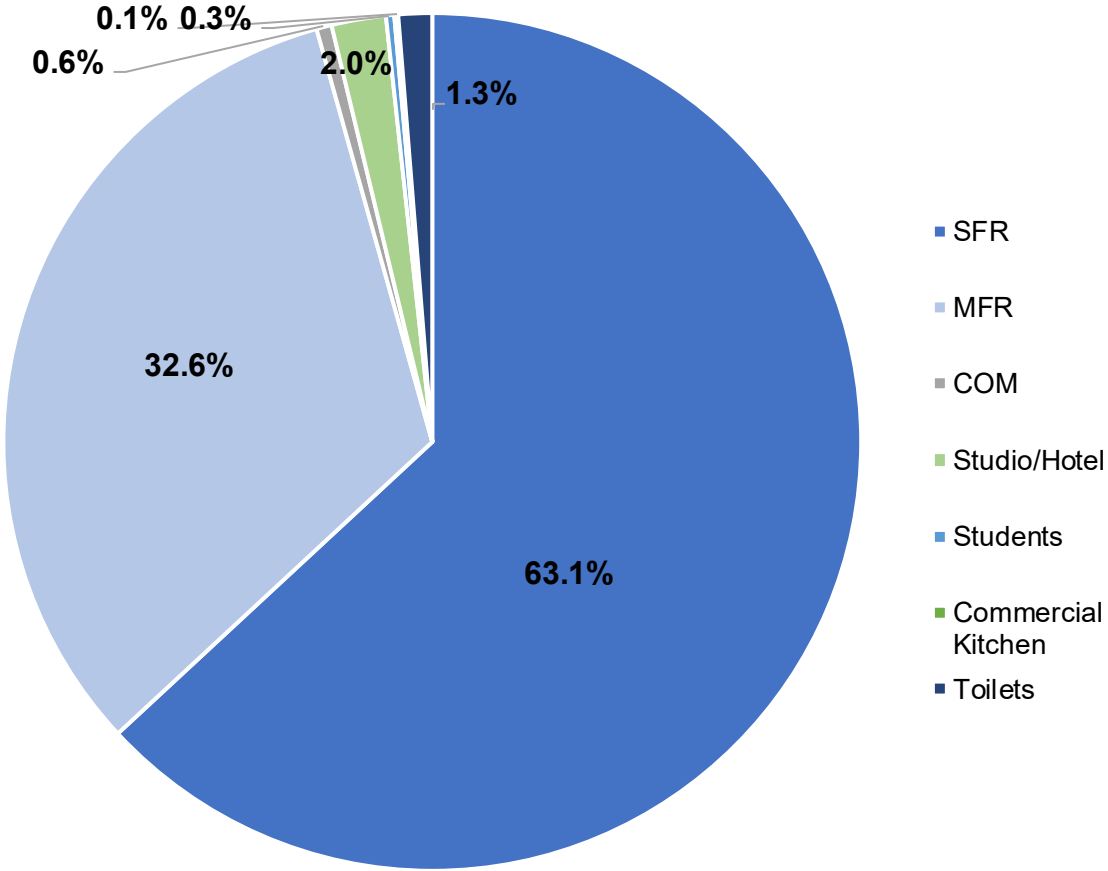
# Cost of Service Analysis

Customer Class	Volume Unit	\$4.02/Unit Total	BOD Unit	\$2.60/Unit Total	TSS Unit	\$2.55/Unit Total	Sewer Service Unit	\$28.59/Unit Total	Total Cost of Service
Single-Family Residential	22,032	\$88,624	24,069	\$62,680	24,069	\$61,283	1,806	\$51,637	\$264,224
Full-sized MFR Units	13,541	\$54,470	14,793	\$38,525	14,793	\$37,665	150	\$4,289	\$134,949
Commercial	195	\$785	183	\$476	183	\$465	24	\$686	\$2,413
Studios/Hotel Rooms	878	\$3,533	960	\$2,499	960	\$2,443	-	\$0	\$8,475
School/Church	128	\$513	119	\$311	119	\$304	6	\$172	\$1,300
Kitchen	24	\$98	165	\$429	32	\$81	-	\$0	\$608
Toilets	322	\$1,296	249	\$649	1,307	\$3,327	-	\$0	\$5,272
<b>Total</b>	<b>37,120</b>	<b>\$149,319</b>	<b>40,539</b>	<b>\$105,569</b>	<b>41,463</b>	<b>\$105,569</b>	<b>1,986</b>	<b>\$56,784</b>	<b>\$417,241</b>





# Cost of Service Analysis Allocation



Fixture	COS
SFR	63.1%
MFR	32.6%
COM	0.6%
Studio/Hotel	2.0%
Students	0.3%
Commercial Kitchen	0.1%
Toilets	1.3%



# Cost of Service Analysis

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Customer Class	Volume/Strength	Cost per Bill	Customer service	Cost per Bill	Total Bill
Residential (1st Unit)	\$212,587	\$117.71	\$55,926	\$28.59	<b>\$146.30</b>
Second MFR Unit	\$130,660	\$117.71	\$0	\$0.00	<b>\$117.71</b>
Commercial	\$1,726	\$35.97	\$686	\$28.59	<b>\$64.56</b>
Studios/Hotel Rooms	\$8,475	\$78.47	\$0	\$0.00	<b>\$78.48</b>
School/Church	\$1,128	\$3.55	\$172	\$0.54	<b>\$4.09</b>
Kitchen	\$608	\$101.39	\$0	\$0.00	<b>\$101.39</b>
Toilets	\$5,272	\$79.88	\$0	\$0.00	<b>\$79.88</b>

# Proposed Rates

# Rate Recommendations

Bi-Monthly Bill	
Category	Current
Single-Family Residential	\$110.62
Multi-Family Residential	\$110.62
Commercial	\$110.62
Toilets	\$80.98
No Kitchen Nightly	\$47.32
Students	\$3.92
Kitchen	\$107.90

Proposed Rates	FY 2023-24
SFR/MFR 1st. Unit	\$146.30
MFR 2nd Unit+	\$117.71
Commercial	\$64.56
Studios/Hotel Rooms	\$78.48
School/Church	\$4.09
Kitchen	\$101.40
Toilets	\$79.88



# 5-year Rate Plan

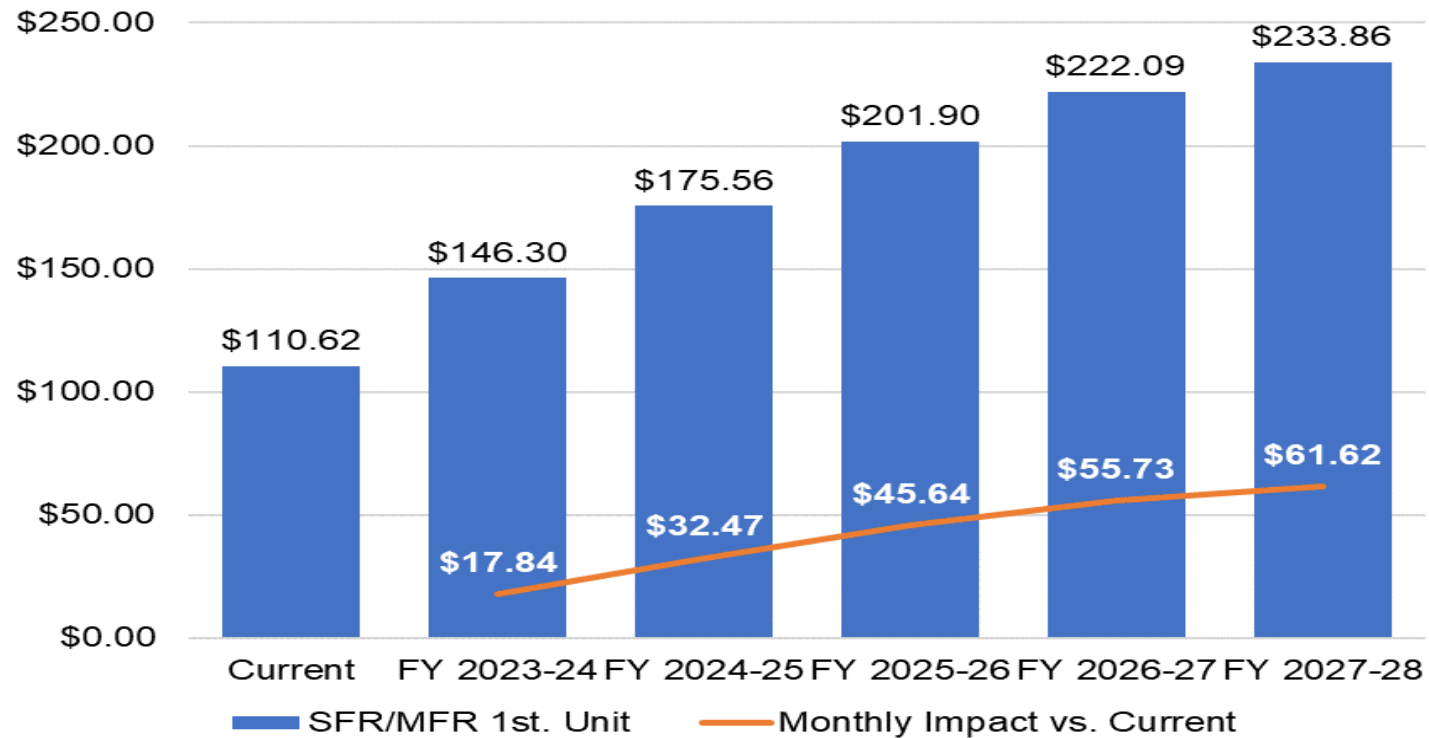
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Proposed Rates	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
SFR/MFR 1st. Unit	\$146.30	\$175.56	\$201.90	\$222.09	\$233.86
MFR 2nd Unit+	\$117.71	\$141.26	\$162.44	\$178.69	\$188.16
Commercial	\$64.56	\$77.47	\$89.09	\$98.00	\$103.19
Studios/Hotel Rooms	\$78.48	\$94.17	\$108.30	\$119.13	\$125.44
School/Church	\$4.09	\$4.90	\$5.64	\$6.20	\$6.53
Kitchen	\$101.40	\$121.68	\$139.93	\$153.92	\$162.08
Toilets	\$79.88	\$95.86	\$110.24	\$121.26	\$127.69

# Rate Impacts

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Initial residential impact ~ \$17.84 per month  
Commercial impacts vary by fixture





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Thank you

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