

TOWN WASTEWATER RATE STUDY

Nipomo Community Services District

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Rate Study Objectives

- Goal is to establish any new rates in accordance with industry practice and legal framework
- Develop five-year financial plans to fund Operation and Maintenance (O&M) expense, the Capital Improvement Program (CIP), new debt service, and reserves
- Create schedule of wastewater rates that
 - Are fair and equitable
 - Provide predictable revenue
 - Comply with Proposition 218 and other Legal Requirements
 - Meet debt service coverage requirements

Assumptions

1. SFR account growth at 0.5%, or about 14 new homes annually. No other account growth.
2. Interest earnings on cash reserves is 1.0% annually
3. Inflation occurs at an overall 3% annually
4. Proposed date of first increase is September 1, 2021 then on each July 1 thereafter
5. Reserves are funded at current District Policy



Reserve Policy

- Operating Fund Reserve
 - 6 months (50 percent) of O&M expense
- Capital Replacement Reserve
 - Average of 10-year CIP
- Rate Stabilization Reserve
 - Fixed value plus interest earnings

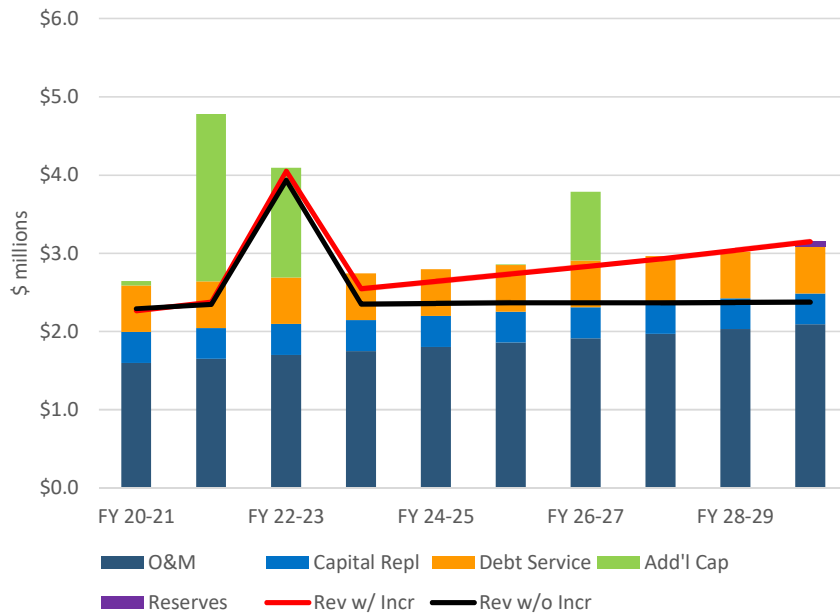
■ Reserves as of June 30, 2020

Reserve Type	Wastewater	
	Reserve Balance	Reserve Target
Operating Fund Reserve	\$300,000	\$800,000
Capital Replacement Reserve	\$4,896,809	\$810,000
Rate Stabilization	\$606,650	\$321,000
Total	\$5,803,459	\$1,931,000

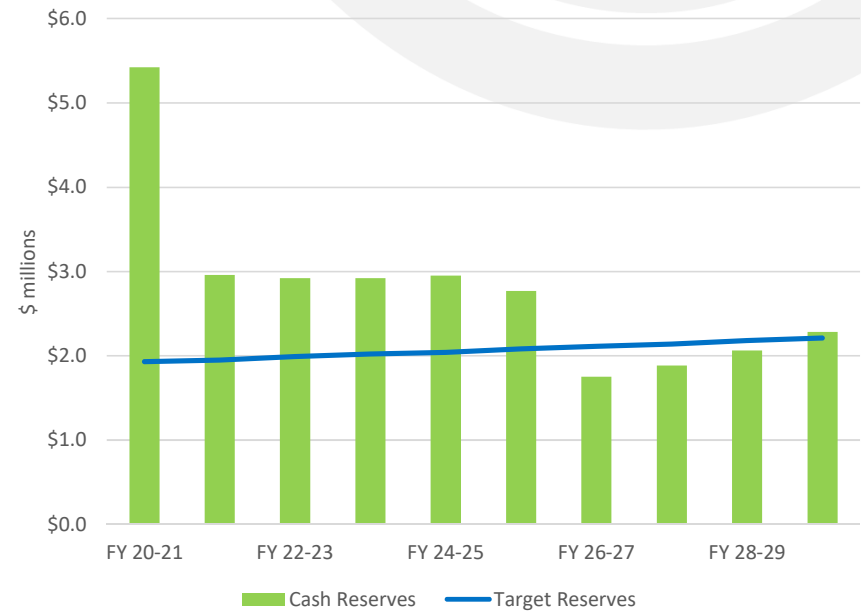
Wastewater Enterprise – 3.3% Annual Increases

First increase Sept 1, then each July 1

Wastewater Financial Plan



Cash Reserves Versus Target Reserves



Cost of Service

- A method to assign utility costs to user classifications based on how they use the wastewater system
 - [Water Environment Federation \(WEF\) for wastewater industry methodology](#)
- Design rates to recover costs assigned to users in proportion to their use of the wastewater system

COS Recovered from Fixed and Variable Charges

Description	Total	Strength					
		Flow	BOD	SS	Capacity	Customer	Collection
Total Costs of Service	\$2,290,900	\$107,199	\$104,045	\$104,045	\$1,116,068	\$69,790	\$789,753

Diagram illustrating the breakdown of Total Costs of Service (COS) into Variable and Fixed charges:

- Variable Charges:** Flow (\$107,199), BOD (\$104,045), and SS (\$104,045).
- Fixed Charges:** Capacity (\$1,116,068) and Customer (\$69,790).
- Variable Charges:** Collection (\$789,753).

Wastewater Fixed and Variable Charges

- Fixed Charges

- Includes Capacity and Customer Costs
- Applicable to all customers

Meter Size	Bi-monthly Capacity Charge ^[1]	Meter Capacity Ratio	Bi-monthly Meter Charge	Bi-monthly Customer Charge ^[1]	Total Bi-monthly Charge
inches					
Up to 1 inch	\$51.42	1.0	\$51.42	\$3.28	\$54.70
1.5	\$51.42	3.0	\$154.26	\$3.28	\$157.55
2.0	\$51.42	4.8	\$246.82	\$3.28	\$250.11
3.0	\$51.42	9.0	\$462.79	\$3.28	\$466.07
4.0	\$51.42	15.0	\$771.32	\$3.28	\$774.60
6.0	\$51.42	30.0	\$1,542.64	\$3.28	\$1,545.92
8.0	\$51.42	48.0	\$2,468.22	\$3.28	\$2,471.50

- Variable Charges

- Includes Flow, BOD, SS, and Collection costs
- Costs divided by water volume

Customer Classification	Flow, BOD SS, & Coll Costs	Billable Volume HCF	Commodity Rate \$/HCF
Non-Residential			
Commercial - Low Strength	\$53,722	13,728	\$3.91
Commercial - Medium Strength	\$16,900	3,892	\$4.34
Commercial - High Strength	\$37,770	6,678	\$5.66

Proposed Wastewater Rates

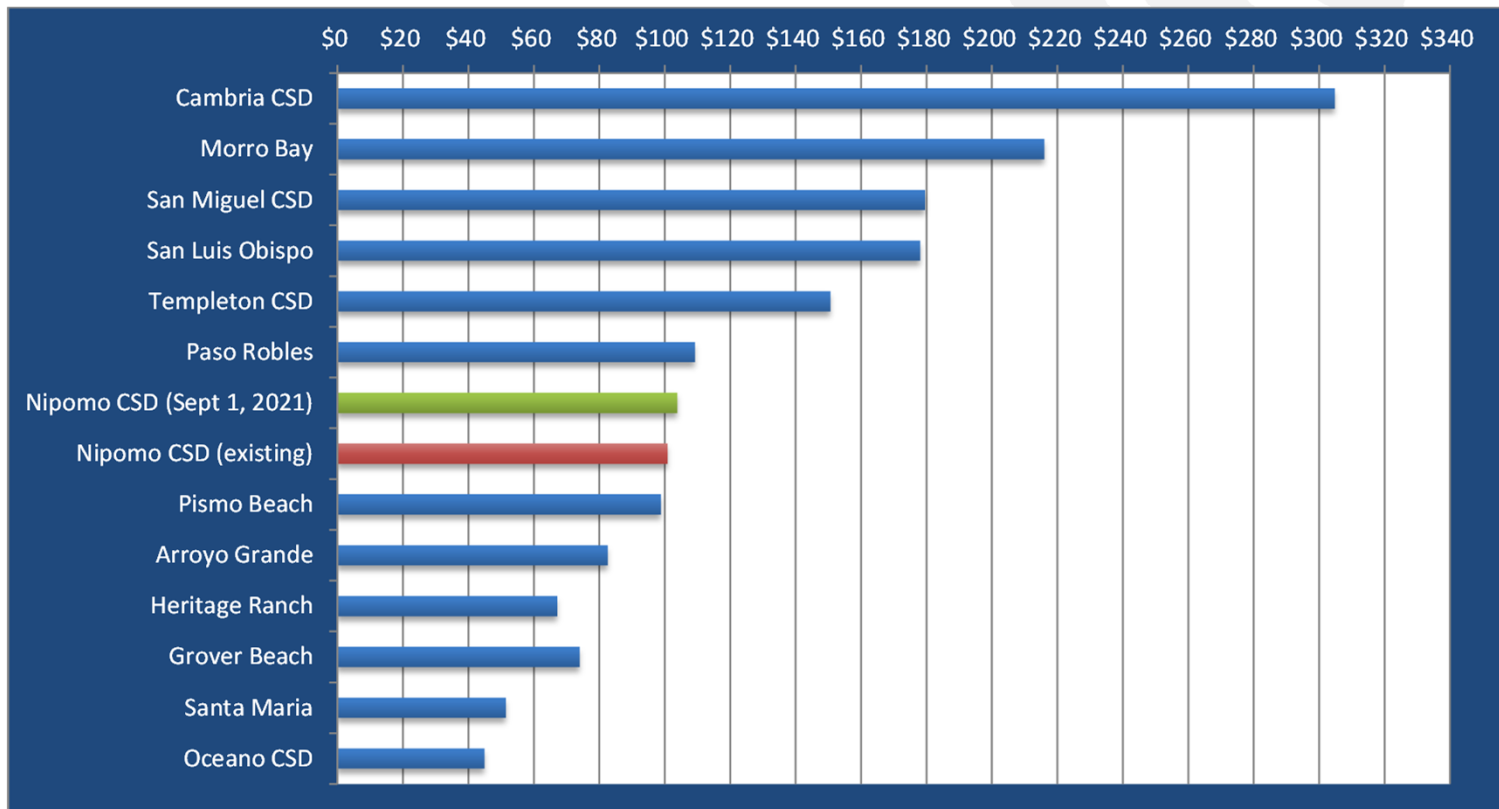
Description	Current	Date of Increase									
		Sep 1, 2021	% Incr	July 1, 2022	% Incr	July 1, 2023	% Incr	July 1, 2024	% Incr	July 1, 2025	% Incr
Residential Fixed Charges											
Single Family	\$100.87	\$103.84	2.9%	\$107.27	3.3%	\$110.81	3.3%	\$114.47	3.3%	\$118.24	3.3%
Multi-family	\$84.14	\$86.62	2.9%	\$89.48	3.3%	\$92.43	3.3%	\$95.48	3.3%	\$98.63	3.3%
Non-Residential Meter Charges											
Up to 1 inch	\$39.83	\$54.70	37.3%	\$56.51	3.3%	\$58.37	3.3%	\$60.30	3.3%	\$62.29	3.3%
1.5	\$115.63	\$157.55	36.3%	\$162.75	3.3%	\$168.12	3.3%	\$173.66	3.3%	\$179.40	3.3%
2	\$183.84	\$250.11	36.0%	\$258.36	3.3%	\$266.88	3.3%	\$275.69	3.3%	\$284.79	3.3%
3	\$343.01	\$466.07	35.9%	\$481.45	3.3%	\$497.34	3.3%	\$513.76	3.3%	\$530.71	3.3%
4	\$570.39	\$774.60	35.8%	\$800.16	3.3%	\$826.57	3.3%	\$853.85	3.3%	\$882.02	3.3%
6	\$1,138.85	\$1,545.92	35.7%	\$1,596.94	3.3%	\$1,649.64	3.3%	\$1,704.07	3.3%	\$1,760.31	3.3%
8	\$1,820.99	\$2,471.50	35.7%	\$2,553.06	3.3%	\$2,637.32	3.3%	\$2,724.35	3.3%	\$2,814.25	3.3%
Non-Residential Usage Rates (\$ per HCF)											
Low Strength	\$3.89	\$3.91	0.6%	\$4.04	3.3%	\$4.18	3.3%	\$4.31	3.3%	\$4.46	3.3%
Medium Strength	\$4.32	\$4.34	0.5%	\$4.49	3.3%	\$4.63	3.3%	\$4.79	3.3%	\$4.94	3.3%
High Strength	\$5.59	\$5.66	1.2%	\$5.84	3.3%	\$6.04	3.3%	\$6.23	3.3%	\$6.44	3.3%
Mixed Use Usage Rates (\$ per HCF)											
Standard Comm with 0% High Strength	\$3.89	\$3.91	0.5%	\$4.04	3.3%	\$4.17	3.3%	\$4.31	3.3%	\$4.45	3.3%
Standard Comm with 10% High Strength	\$4.08	\$4.09	0.2%	\$4.22	3.3%	\$4.36	3.3%	\$4.51	3.3%	\$4.66	3.3%
Standard Comm with 20% High Strength	\$4.25	\$4.26	0.2%	\$4.40	3.3%	\$4.55	3.3%	\$4.70	3.3%	\$4.85	3.3%
Standard Comm with 30% High Strength	\$4.42	\$4.44	0.5%	\$4.59	3.3%	\$4.74	3.3%	\$4.89	3.3%	\$5.06	3.3%
Standard Comm with 40% High Strength	\$4.61	\$4.61	0.0%	\$4.76	3.3%	\$4.92	3.3%	\$5.08	3.3%	\$5.25	3.3%
Standard Comm with 50% High Strength	\$4.78	\$4.78	0.0%	\$4.94	3.3%	\$5.10	3.3%	\$5.27	3.3%	\$5.44	3.3%
Standard Comm with 60% High Strength	\$4.96	\$4.96	0.0%	\$5.12	3.3%	\$5.29	3.3%	\$5.47	3.3%	\$5.65	3.3%
Standard Comm with 70% High Strength	\$5.13	\$5.13	0.0%	\$5.30	3.3%	\$5.47	3.3%	\$5.65	3.3%	\$5.84	3.3%
Standard Comm with 80% High Strength	\$5.30	\$5.31	0.2%	\$5.49	3.3%	\$5.67	3.3%	\$5.85	3.3%	\$6.05	3.3%
Standard Comm with 90% High Strength	\$5.48	\$5.48	0.0%	\$5.66	3.3%	\$5.85	3.3%	\$6.04	3.3%	\$6.24	3.3%
Standard Comm with 100% High Strength	\$5.59	\$5.66	1.3%	\$5.85	3.3%	\$6.04	3.3%	\$6.24	3.3%	\$6.44	3.3%

Monthly Sewer Bill Comparison

Classification	Average Bi-monthly Water Use	Current Bill			Sep 1, 2021 Proposed Bill			Percent Change
		Service Charge	Volume Charge	Current Bill	Service Charge	Volume Charge	Proposed Bill	
Residential	HCF							
Single Family				\$100.87			\$103.84	2.9%
Multi-family				\$84.14			\$86.62	2.9%
Non-Residential - 1" Meter								
Commercial - Low Strength	50	\$39.83	\$194.50	\$234.33	\$54.70	\$195.67	\$250.37	6.8%
Commercial - Medium Strength	70	\$39.83	\$302.40	\$342.23	\$54.70	\$303.96	\$358.66	4.8%
Commercial - High Strength	35	\$39.83	\$195.65	\$235.48	\$54.70	\$197.96	\$252.66	7.3%
Non-Residential - 1.5" Meter								
Commercial - Low Strength	80	\$115.63	\$311.20	\$426.83	\$157.55	\$313.07	\$470.61	10.3%
Commercial - Medium Strength	65	\$115.63	\$280.80	\$396.43	\$157.55	\$282.25	\$439.79	10.9%
Commercial - High Strength	200	\$115.63	\$1,118.00	\$1,233.63	\$157.55	\$1,131.18	\$1,288.72	4.5%
Non-Residential - 2" Meter								
Commercial - Low Strength	170	\$183.84	\$661.30	\$845.14	\$250.11	\$665.27	\$915.37	8.3%
Commercial - Medium Strength	100	\$183.84	\$432.00	\$615.84	\$250.11	\$434.23	\$684.33	11.1%
Commercial - High Strength	200	\$183.84	\$1,118.00	\$1,301.84	\$250.11	\$1,131.18	\$1,381.28	6.1%
Non-Residential - 3" Meter								
Commercial - Low Strength	200	\$343.01	\$778.00	\$1,121.01	\$466.07	\$782.67	\$1,248.74	11.4%

Sewer Bill Comparison with Other Communities

40 HCF per bi-month (SFR average)





QUESTIONS?



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