



Agenda Report

MEETING DATE: Tuesday, March 9, 2021

TO: City Council

FROM: PUBLIC WORKS & UTILITIES DIRECTOR PALMISANO
Christian Di Renzo, Assistant Director of Public Works & Utilities

SUBJECT: Consideration of Utility Rate Study Results for the Water, Wastewater, and Solid Waste Enterprise funds, and Authorization to proceed with Public Notification and Setting a Public Hearing for the Adoption of New Utility Rates.

STATEMENT OF ISSUES:

The last rate study for the Enterprise Utilities occurred in 2015. The item before City Council is asking to consider a presentation of the water, wastewater, and solid waste enterprise utility rates study and cost of service findings recently completed for FY 2022-26; provide approval to commence with public notification in compliance with Prop. 218; and to set a public hearing.

RECOMMENDED ACTION:

- a) Consider a presentation by staff on the findings of the revenue requirements study for the water, wastewater, and solid waste enterprise utilities as conducted by Raftelis Financial Inc.;
- b) Resolution directing staff to proceed with the noticing of proposed water rates to property owners and customers in accordance with Proposition 218 State Law; and set the date of May 25, 2021 for the tabulation of protests and conduct a public hearing of proposed rates pending the results of the protest.

DISCUSSION:

EXECUTIVE SUMMARY

- Without a rate increase the Wastewater Enterprise Fund will begin to experience a structural deficit by FY 2024 and draw down on net working capital reserves until those are exhausted in FY 2026. Moreover, without a rate increase the Solid Waste Fund will exhaust its working capital reserves in FY 2023.
- Utility rates have not been considered since 2015.
- The suspension of utility rate increases which would have taken place on July 1, 2020, resulted in approximately a combined \$2 million revenue loss for the first year.

- Nationwide, from 2009 to 2019, annual water rate increases have averaged 5.5%, outpacing inflation.
- A comprehensive independent utility rate study was completed and its findings presented to City Council the week of February 1, 2021.
- The average low-usage (up to 6 units of water consumption) Single-Family Residential (SFR) bill is projected to decrease by \$1.55 the first year; whereas the average typical (up to 8 units of water and with a 68-gallon garbage cart) SFR bill is projected to increase by \$2.10 in the first year.
- Increased replacement and rehabilitation of the water system pipes, wells and components (the Capital Improvement Program) are needed as recommended by the Water Master Plan. Nationwide, water infrastructure was given a D grade in 2017 by the American Society of Civil Engineers, while sewer infrastructure fared little better with a D+.

Water, Wastewater, and Solid Waste System Background:

Drinking Water. The Public Works & Utilities Department provides safe and reliable water for drinking, irrigation, and fire protection to Watsonville and unincorporated Santa Cruz County residents, businesses and visitors. These essential services are accomplished by dedicated in-house certified staff operators (on-call 24 hours a day). Behind the scenes, the Department is responsible for all water production, treatment, disinfection, water quality testing, regulatory compliance, field customer service, and emergency response. The water system is supported by other staff in the Public Works & Utilities Department for the Capital Improvement Program projects and for utility billing and customer service. The system includes approximately 178 miles of water pipelines, 6 water storage reservoirs, 15,000 service connections (water meters), one surface water treatment plant, 2,000 fire hydrants, and 12 groundwater wells.

Wastewater. The Public Works & Utilities Department also operates a Wastewater Division responsible for treating the City's sewage and that of three surrounding sanitation districts: Santa Cruz County's Freedom and Salsipuedes districts, and Monterey County's Pajaro district. Approximately 5.5 million gallons per day of sewage undergoes secondary treatment for discharge to the Monterey Bay National Marine Sanctuary, or undergoes tertiary treatment (recycled water) for agricultural crop irrigation. The wastewater collection system includes more than 170 miles of pipeline and over 20 pump stations.

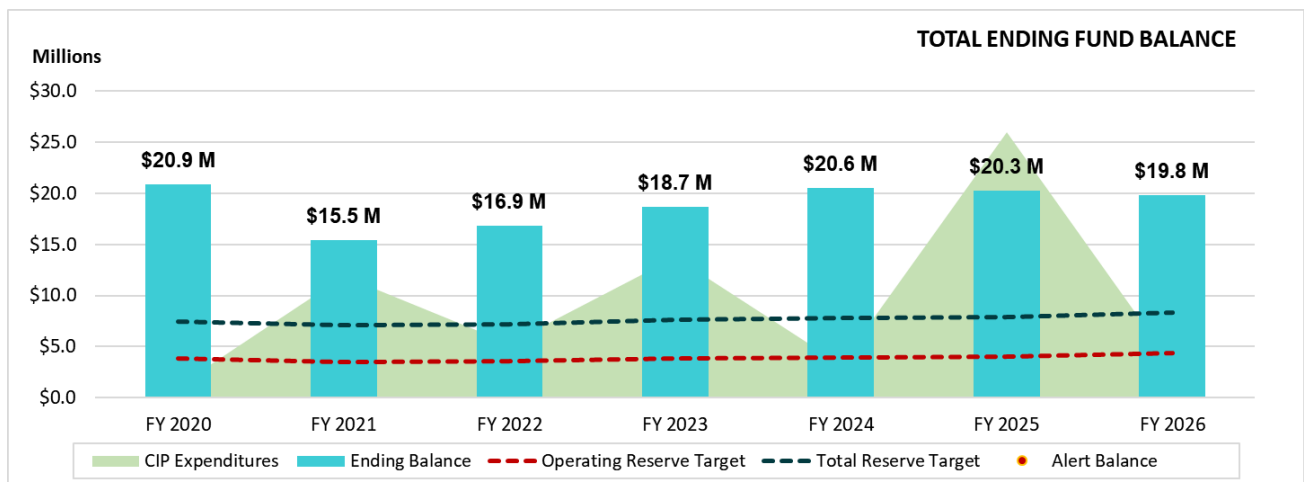
Solid Waste. As an enterprise fund, the Solid Waste Fund is independent of the City's general fund and is supported by non-tax revenue, primarily from solid waste rate revenue charged for the collection and processing (including disposal) of municipal solid waste (MSW), recyclable materials and compostables (food and yard waste). This operation consists of 52 employees and collects and disposes of the City's refuse, recycling, and green waste. Within the Fund, there are five major "lines of service" which include (1) residential, (2) commercial, (3) roll-off debris/recycling box, (4) multi-family and (5) service to the School District. Furthermore, it operates a landfill, a popular public drop-off facility located at 320 Harvest Drive, and completes over 10,000 miles of street sweeping each year.

FUNDING REQUIREMENTS:

Water Utility

The FY 2021 Operations and Maintenance (O&M) budget for the Water Enterprise Fund is approximately \$14 million distributed among the Operations (distribution and treatment), Customer Service, and Billing functions. The revenue requirement for the Water Enterprise Fund is tempered by the accumulation of an appreciable reserve balance mostly due to the 2015 revenue increases deemed necessary in anticipation of significant treatment costs due to the State’s newly-adopted Chromium VI Maximum Contaminant Level (MCL) of 10ppb (parts per billion). While the promulgation of the new MCL was set aside in 2017 as a result of a legal challenge, it is currently undergoing the Office of Administrative Law process and is anticipated to go in effect at the end of 2021.

Staff is poised to ascertain the most efficient and cost-effective course of action to comply with this new threshold and anticipates a significant draw-down of fund balance to cash (PAYGO) finance treatment infrastructure and ongoing operating costs. The recommended annual rate increase is of 1%.



Water Utility Capital Needs Summary

The City completed its very first Water and Wastewater Master Plans in 2019 with the assistance of Carollo Engineering. The scope of the Water Master Plan consisted of the following tasks:

- Develop water demand projections and determine the impact of recent water consumption and resultant effect on system demand and peaking factors based on the most recent 10 years.
- Incorporate the City’s General Plan and subsequent amendments for land use projections and housing density into the water demand analysis.
- Develop a calibrated hydraulic model, using current water demands to analyze the City’s water supply and distribution system.

- Conduct a risk analysis to provide the basis for a prioritized pipeline and facilities rehabilitation and replacement program.
- Develop and prioritize recommendations for system improvements over the next 30 years as part of the City's Capital Improvement Program (CIP).

Some of the most significant capital projects identified as a result of the Master Plan study include the following:

- A new reservoir on Airport Boulevard anticipated for FY 2022 at the cost of \$12 million
- A new well on Airport boulevard anticipated for FY 2022 at the cost of \$3 million
- Chromium 6 treatment plants in FY 2025 at the cost of \$25 million
- Replacement of Freedom Reservoirs, build a new well and associated pump station. This multi-year project would span 2027-29 at an estimated cost of \$40 million.
- Additionally, the City budgets \$2 million each year for its pipeline replacement CIP

In total, the Master Plan identified the need for \$106 million in capital investment over the next 30 years.

Wastewater Utility

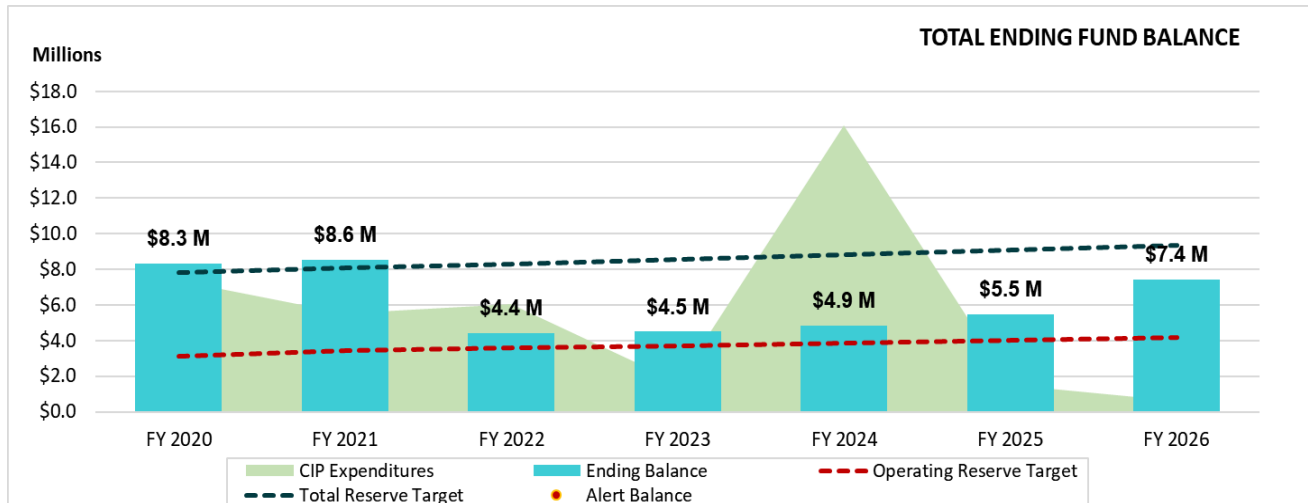
The FY 2021 O&M budget for the Wastewater Enterprise Fund is approximately \$13.8 million with 78% allocated to the treatment facility. The fund carries two long-term debt issues: a \$4.6 million obligation incurred in FY 2020 for the completion of the Airport/Freedom sewer trunk main which it shares equally with the Freedom Sanitation District; and a State Revolving Fund loan (SFR) incurred for the Manana Lane trunk main improvements. The two obligations represent an annual debt service expenditure of \$156,000 to the utility.

The wastewater treatment plant (WWTP) which has been in operation since 1959 is about to experience the convergence of several major capital improvement needs which, if neglected, could prove catastrophic. The Wastewater Master Plan identified the following critical projects:

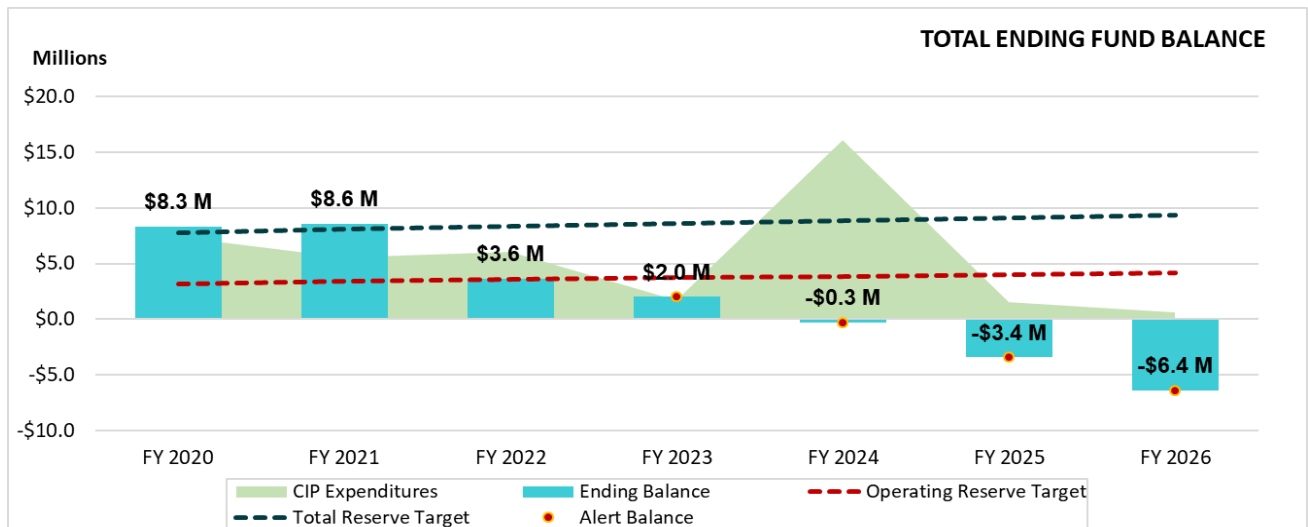
- Complete replacement of the WWTP's electrical infrastructure, including the PG&E transformer, and standby generators, at a cost of \$15.5 million to be undertaken in FY 2023
- Complete replacement of the WWTP's Headworks and influent pump station at a cost of \$15 million and proposed to be constructed in FY 2027
- Reconstruct five pump stations and rehabilitate seven others at a cost of \$9 million and proposed to be undertaken within the next ten years

Due to the scale of the projects identified above, staff envisions it will seek low interest, long-term financing options as a funding mechanism. That being said, of primary importance is ensuring the Wastewater Enterprise Fund generates sufficient net operating income to satisfy debt service coverage requirements should they be needed (usually 1.25); ensure sufficient operating reserves per recommendation of the rate consultant; and

fund increases to contractual services, materials, labor, while investing in the aging collection system as well. The revenue requirement needs of this utility reflect a 7.5% annual increase for each of the next five years. The impact these rate increases would yield on reserves and debt coverage is reflected in the graph below:



In the absence of any rate adjustments, the Wastewater Enterprise Fund would begin running operating deficits annually resulting in a gradual depletion of fund balance reserves until these are exhausted in FY 2024 as reflected in the graph below.



Solid Waste Utility

While the Water and Wastewater Enterprise Utilities are facing a landscape replete with significant capital infrastructure needs, the Solid Waste Enterprise has and will continue to experience cost drivers mostly outside of staff's control. When it comes to solid waste collection, the costs for providing garbage, recycling, and organics collection services are

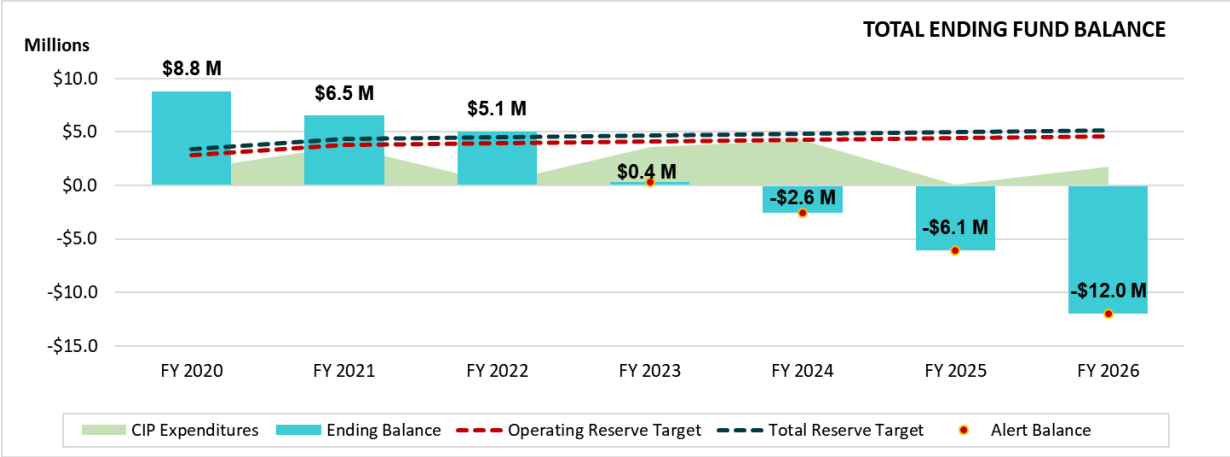
largely fixed and generally comparable. Moreover, the actual cost to provide service is typically only minimally impacted by the container size and primarily driven by the cost of collection. It required the exact same truck and driver resources – the core of the collection expense – to collect garbage, recycling, or organics regardless of the size of the container.

Key “primary drivers” for revenue adjustments include:

- **Hauling contract with Monterey Regional.** The City expends \$1.75 million each year to dispose of its municipal solid waste at the Monterey Regional landfill. This amount is forecasted to increase by \$1 million over the next five years based on Monterey Regional’s \$5 per ton annual increase.
- **Complete decline in materials sales revenue.** Rapid and significant decline in global markets for certain recyclable materials (i.e., China’s “Sword Policy”) began in late 2017 and has accelerated since that time. The inability to readily dispose of recycling material as an additional revenue stream has fundamentally altered the equation for the operation. The Solid Waste Enterprise expends an additional \$300,000 each year to dispose of its approximately 6,000 tons of recyclable waste.
- **Closure of the City’s Phase III landfill.** Costs for the City’s closure of Phase III of the landfill are estimated at \$2.7 million and anticipated to be expended in FY 2023.
- **Continued enactment of new regulations.** Over the past several years a number of new laws have been enacted having significant impacts on how waste is collected, recycling efforts and disposal requirements, and invariably the cost of providing services. Notable examples of regulatory changes include the following:
 1. In 2011, a new change to AB 939 was signed into law (AB 341) that established a statewide goal of diverting 75% of the solid waste stream from landfill by 2020. It also required jurisdictions to implement mandatory commercial and multi-family residential complex (5 units or more) recycling programs.
 2. In September 2014, AB 1826 became law requiring all businesses generating 8 cubic yards or more of food waste (referred to as “organic waste” in the statute) per week, to participate in a food scrap diversion program beginning April 1, 2016. AB 1826 also required the City to begin offering a full-scale commercial food scrap recycling program on or before January 1, 2016.
 3. In 2016 the State approved SB 1383 which requires jurisdictions to provide organics recycling service to nearly all residents and businesses. The first phase of SB 1383 goes into effect on January 1, 2022, requiring significant advanced planning for implementation. This new regulation is anticipated to add approximately \$400,000 in annual operating costs, and up-front costs ranging from \$400,000 to \$900,000 based on whether the City retains its 3-cart system or has to

deploy an additional 4th cart for dedicated food scrap disposal and a corresponding dedicated side-loader refuse vehicle.

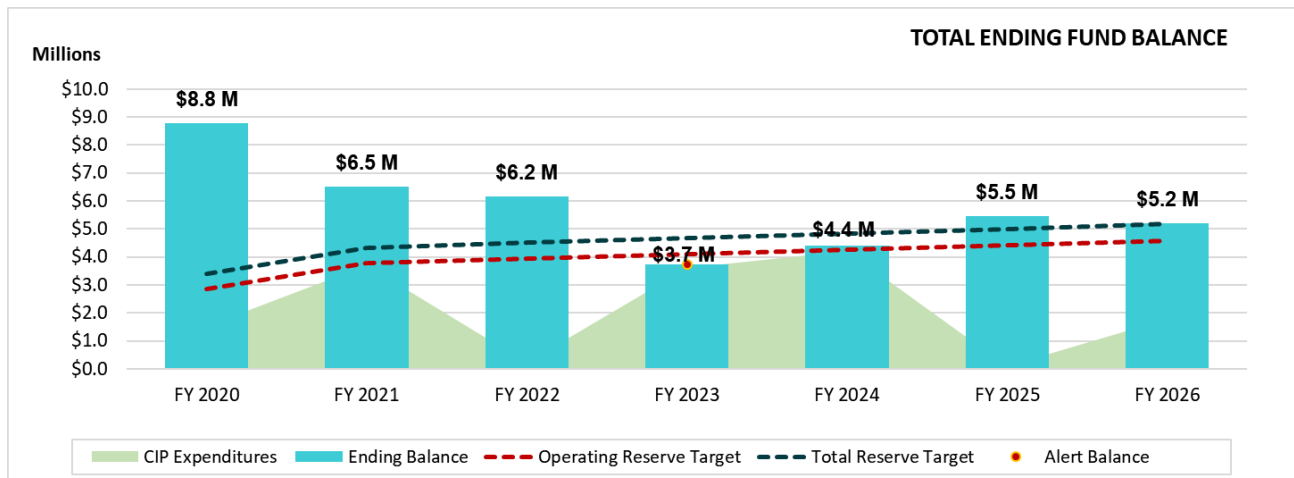
A key consideration impacting the level of the proposed rate adjustments is the use and replenishment of Solid Waste Fund reserves. Under existing rates (see graph below), the projected total Solid Waste Fund position would be virtually exhausted by for FY2023, negative \$2.6 million for FY2024 and worsening each year thereafter. Without adjustments to existing rates, all solid waste fund reserves would be exhausted between FY 2023 and FY2024.



To mitigate the ongoing depletion of fund reserves and to ensure sufficient revenue to continue providing these essential solid waste services while anticipating and adjusting to future operational demands, the recommended rate adjustments based on the Raftelis study are accordingly:

- 7.5% rate increase effective July 1, 2021
- 7.5% rate increase effective July 1, 2022
- 7.5% rate increase effective July 1, 2023
- 5% rate increase effective July 1, 2024
- 5% rate increase effective July 1, 2025

These rate adjustments would generate a cumulative \$16.7 million between 2021 and 2025. The financial plan for the Solid Waste Enterprise Utility would look accordingly:



Results and Recommendations of the Study:

Raftelis Financial Consultants Inc., previously retained to complete the 2015 utility revenue study, was engaged again to assist the City with the 2020 revenue study. Raftelis has suggested a series of recommendations for conformance with industry best practices and to facilitate a more streamlined rate structure.

Notably, the study recommended the following:

- O&M Reserve — for Operating Cash Flow 25% of operating expenses (or 3 months of expenses)
- Capital Replacement Reserve — for Working Capital 2% of net assets.

Also recommended were the following:

- Utilization of AWWA’s meter capacity ratios
- Removal of additional unit charge for multi-family dwellings, and

Bill Impacts:

The Department of Public Works & Utilities is unreservedly committed to providing essential services in the most efficient and cost-effective manner possible, and is highly sensitive to the hardships the pandemic has had on our community. Modifications to the water rate structure included expanding the Tier 1 bandwidth to 6 units rather than 5 and the Tier 2 bandwidth to 12 units rather than 10 (a unit corresponds to 748 gallons). This means that customers in either Tier 1 or Tier 2 will have a greater likelihood of paying the same tier rate for their consumption before being assessed the next billable unit rate.

The financial study estimates that 46% of residential bills reflect Tier 1 water consumption. Additionally, with the adoption of AWWA’s meter capacity ratios, the fixed charge for 5/8” or 3/4” meters will decrease by \$4.78 per month in the first year resulting in a decrease of \$1.55 to the overall bill for a low impact single-family customer. Due to the changes, a low impact single-family household will see no increase to their overall bill in the first year

despite the proposed rate increases (see below). The typical single-family residential household should experience a modest \$2.10 increase in the overall bill in the first year.

Low impact single-family customer (1–2 person household)

Utility Service	Current Monthly Bill (FY 2020)	Proposed Monthly Bill (FY 2022)	Proposed Monthly Bill (FY 2023)	Proposed Monthly Bill (FY 2024)	Proposed Monthly Bill (FY 2025)	Proposed Monthly Bill (FY 2026)
Water	\$57.27	\$52.46	\$52.99	\$53.52	\$54.05	\$54.59
Wastewater	\$42.84	\$46.06	\$49.51	\$53.22	\$57.22	\$61.51
Solid Waste	\$35.60	\$35.64	\$38.31	\$41.19	\$43.25	\$45.41
Total	\$135.71	\$134.16	\$140.81	\$147.93	\$154.52	\$161.51

Typical single-family residential household

Utility Service	Current Monthly Bill (FY 2020)	Proposed Monthly Bill (FY 2022)	Proposed Monthly Bill (FY 2023)	Proposed Monthly Bill (FY 2024)	Proposed Monthly Bill (FY 2025)	Proposed Monthly Bill (FY 2026)
Water	\$66.33	\$62.80	\$63.43	\$64.06	\$64.69	\$65.35
Wastewater	\$42.84	\$46.06	\$49.51	\$53.22	\$57.22	\$61.51
Solid Waste	\$57.41	\$59.82	\$64.30	\$69.13	\$72.58	\$76.21
Total	\$166.58	\$168.68	\$177.24	\$186.41	\$194.49	\$203.07

Combined commercial monthly bill: medium restaurant*

Utility Service	Current Monthly Bill (FY 2020)	Proposed Monthly Bill (FY 2022)	Proposed Monthly Bill (FY 2023)	Proposed Monthly Bill (FY 2024)	Proposed Monthly Bill (FY 2025)	Proposed Monthly Bill (FY 2026)
Water	\$274.20	\$293.17	\$296.21	\$299.27	\$301.93	\$305.01
Wastewater	\$183.13	\$238.53	\$256.27	\$275.60	\$296.16	\$318.33
Solid Waste	\$260.91	\$285.42	\$306.82	\$329.83	\$346.33	\$363.64
Total	\$718.24	\$817.12	\$859.30	\$904.70	\$944.42	\$986.98

*Water: 1.5" meter and 40 ccf monthly water use
Wastewater: Commercial high strength customer
Solid Waste: 2 cubic yard weekly container service

Next Steps and Proposition 218 Requirements:

Upon incorporation of any City Council recommendations and direction to send Proposition 218 notices, pursuant to California Constitution Article XIII D, Section 6, staff will prepare and send notices to all property owners that receive water, wastewater, and solid waste service from the City. There will be a 45-day public notice period at which time, property owners and customers may send written protests for consideration by the City Council. The Utilities Rate Study Report will be on file in the City Clerk’s office during this period.

Protests will be tallied at the public hearing set for May 25, 2021. Notwithstanding a majority protest, City Council can consider verbal testimony and decide to approve the rates. At the May 25, 2021 City Council meeting, staff will propose a resolution amending the utilities fee schedule to include the new rates. If the rates are approved, and amended fee schedule adopted, the proposed water, wastewater, and solid waste rates would become effective on July 1, 2021 and for every year thereafter with the final adjustment occurring July 1, 2025.

STRATEGIC PLAN:

This project is consistent with the City Council’s Strategic Goals:

02-Fiscal Health

03-Infrastructure & Environment

FINANCIAL IMPACT:

The proposed financial plan and associated rate increases will enable the City’s three Enterprise Utilities to meet their current and future fiscal obligations, to properly operate and maintain critical infrastructure, to fund capital projects and meet future debt service obligations, and to comply with new regulations. There is no impact to the General Fund.

ALTERNATIVE ACTION:

No alternative action is recommended. The proposed utility rate increases are deemed those necessary by staff to ensure the fiscal viability of the three enterprise utilities.

ATTACHMENTS AND/OR REFERENCES (If any):

- 1) Form of Proposition 218 Notice