



City of Santa Barbara
Public Works Department

Memorandum

DATE: January 20, 2022

TO: Water Commission

VIA: Joshua Haggmark, Water Resources Manager

FROM: Dana Hoffenberg, Water Resources Analyst

SUBJECT: Wastewater Rate Study Update

RECOMMENDATION

That the Water Commission receive a presentation on the City's wastewater rate study. The presentation will review the development of the draft revenue requirement analysis, and subsequent system revenue adjustment needs, and provide a brief overview of the cost of service analysis and preliminary study results.

BACKGROUND

The City's wastewater system plays an essential role in protecting public health and the environment. Maintaining the City's wastewater system requires a proactive commitment to investing in the capital infrastructure and resources necessary to keep this vital system operating 24 hours a day, 365 days per year. The City's complex wastewater system includes 256 miles of sewer mains, seven lift stations, 25 creek crossings, over 7,000 access structures (manholes and cleanouts), two miles of pressurized force mains, and the El Estero Water Resource Center— all of which must operate seamlessly to process approximately 2 billion gallons of wastewater annually. The El Estero Facility Plan identifies over \$95 million in capital improvements needed over the next 20 years.

Wastewater utilities are dependent on user rates as the primary funding source for the operations, maintenance, and capital improvements needed to keep the utilities functioning reliably and in compliance with federal and state regulations. Using rate revenue to make regular investments in the City's wastewater collection system and El Estero Water Resource Center (El Estero) is critical to protecting the health and safety of the community and environment.

On September 28, 2021, City Council authorized staff to contract with HDR Engineering, Inc. (HDR) to complete a wastewater rate study, capacity charge study, and a 10-year financial plan. The City has provided HDR with the preliminary data needed to move into the revenue requirement phase of the study which determines how much revenue the utility must collect to adequately fund the wastewater system. After the revenue requirement phase is complete,

HDR will move into cost-of-service analysis and rate design, which allocates the revenue requirement across customer classes.

DISCUSSION

On a long-term basis, revenues must be sufficient to meet the cost of the City's wastewater system including operations and maintenance expenses, capital improvements, mandated standards of treatment, principal and interest payments on existing debt, and other obligations.

HDR is performing a multi-year rate study with the intention to set rates for the next three fiscal years. Looking forward over the rate study period, the wastewater system will need to maintain rates that support upcoming projects identified in the El Estero Facility Plan and [Wastewater System Annual Report](#), and other capital improvements to the collection system. Approximately \$51.6M in necessary capital investments to El Estero and the collection system have been identified over the three year rate study period (FY23 – FY25). A combination of financing (long-term borrowing) and pay-as-you-go funding will be utilized to meet these capital improvement needs.

Preliminary analysis indicates that annual revenue increases of approximately six percent will be sufficient to meet the needs of the wastewater system. It is important to note that revenue increases do not equate to rate increases, or bill impacts, to individual customer classes of service. During the cost-of-service analysis phase of the project, the revenue requirement (e.g., costs) are proportionally allocated to each customer class, which may result in rate increases that are lower and/or higher than six percent for each class.

The need for a six percent revenue increase can be broken into three main categories. On average over the three year rate study period, approximately half of the increase, or 3.0 – 3.5% can be attributed to inflation and increases in operations and maintenance costs. The City's capital improvement plan contributes about 1.5 – 2.0% of the needed increase. Increased construction costs, exacerbated by the COVID-19 pandemic, have contributed to higher costs of the capital improvement program. As capital investments and operations and maintenance costs increase, so do the City's reserve requirements. Approximately 1.0-1.5% of the increased revenue requirement are attributed to the need to fund increasing City Policy reserves.

NEXT STEPS

In the next phase of the study, HDR will complete a cost-of-service analysis followed by rate design. Staff is planning to present the proposed wastewater rates at the regularly scheduled Water Commission meeting on February 17, 2022, followed by the Finance Committee in spring 2022.



Wastewater Rate Study Preliminary Results

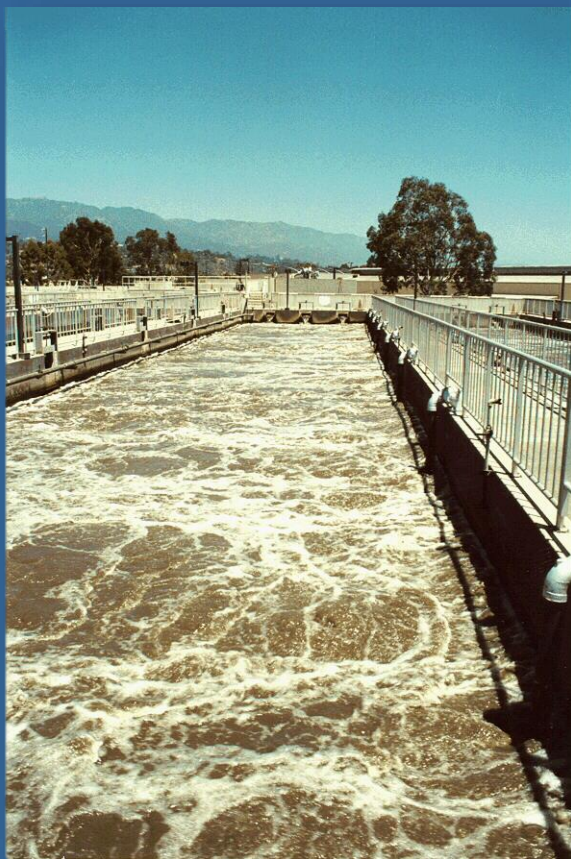
January 20, 2022





Wastewater Rate Development Key Themes

- Ensuring public safety and environmental protection through investment
- Affordability
- Infrastructure Reliability and Resiliency
 - Continued investments in Treatment and Collection Infrastructure
 - Sewer Lateral Inspection Program
- Organizational structure and future staffing levels
- Inflationary increases for operating and capital costs



Continuation of Past Financial Planning Practices

- Rate study is continuation of City's review and development of cost-based rates
- Current and past rate modelling continue to evaluate a ten-year outlook period
 - Rates have been proposed for the next three years
- Long-Term planning
 - Rate model (10-year plan updated every 3 years)
 - Capital infrastructure plan (30-year outlook)
 - Wastewater rate setting methodology aligned with industry best practices



FINANCING AND CHARGES FOR WASTEWATER SYSTEMS



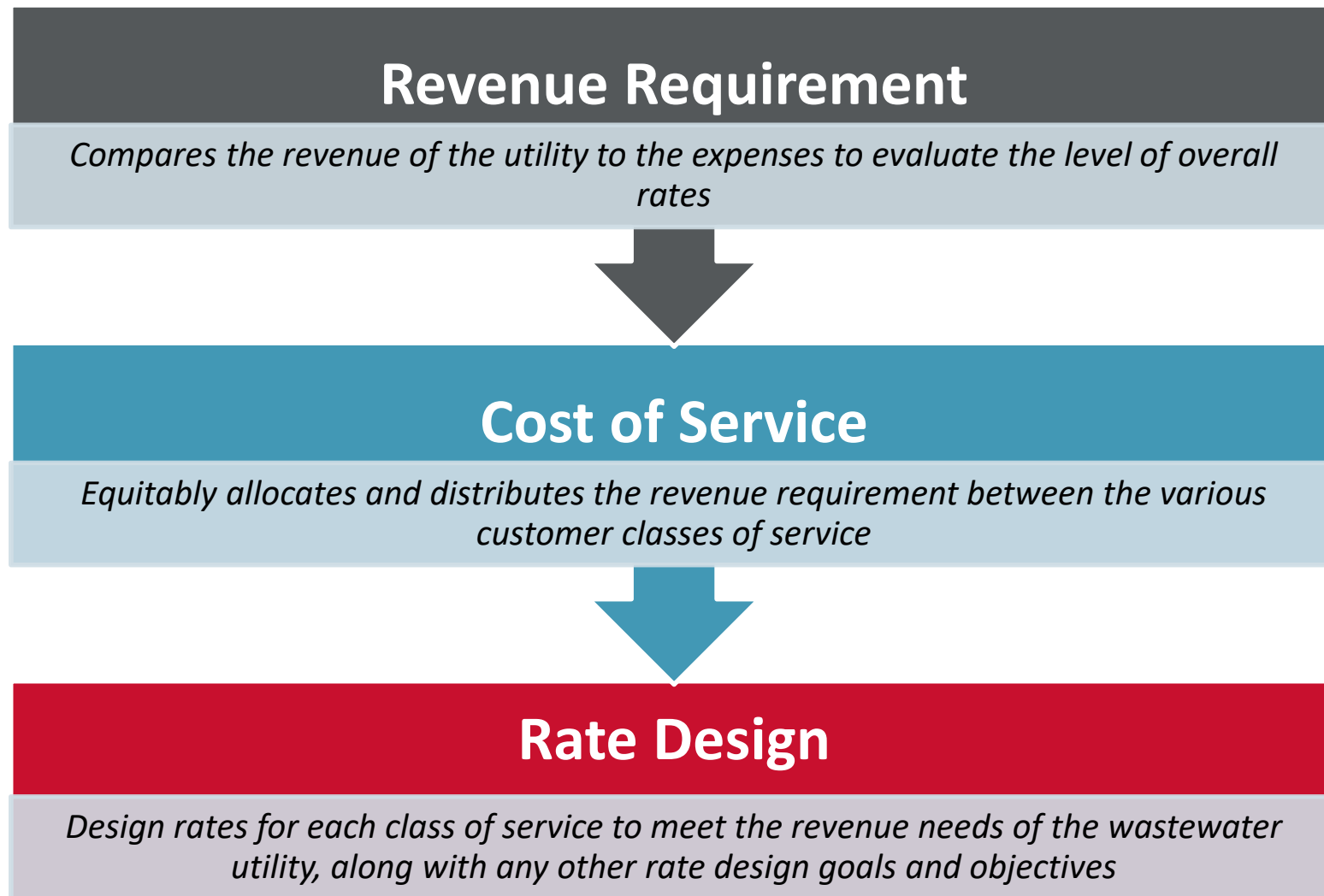
wef Manual of Practice No. 27
FOURTH EDITION

Goals of the Wastewater Rate Update

- Provide sufficient revenue to operate and maintain the City's wastewater infrastructure
- Meet the intent of Proposition 218
 - Develop proposed rates that are proportional and cost-based rates
- Reflect prudent financial planning criteria
 - Maintain target debt service coverage (DSC) ratio
 - Prudent level of rate funding for capital projects
 - Meet Council minimum reserve balances
- Develop the study using generally accepted methodologies tailored to the City's system and customer characteristics



Establishing Cost-Based Wastewater Rates





Revenue Requirement





Key Policy Discussion Areas



Adequately fund annual operating costs

- Costs continue to increase since the last rate study
- City is impacted by recent inflationary trends
- Maintain prudent reserve levels



Providing sufficient capital funding for

- Necessary Improvements at El Estero Water Resource Center
 - Collection system improvements
 - Analysis includes low interest loan borrowing for specific projects



Cost-Based Rates

- Balance the impacts to rates to adequately fund annual O&M and capital improvement needs
- Maintain adequate debt service coverage ratios
- Develop proposed rates for next three fiscal years (FY 23 – FY 25)



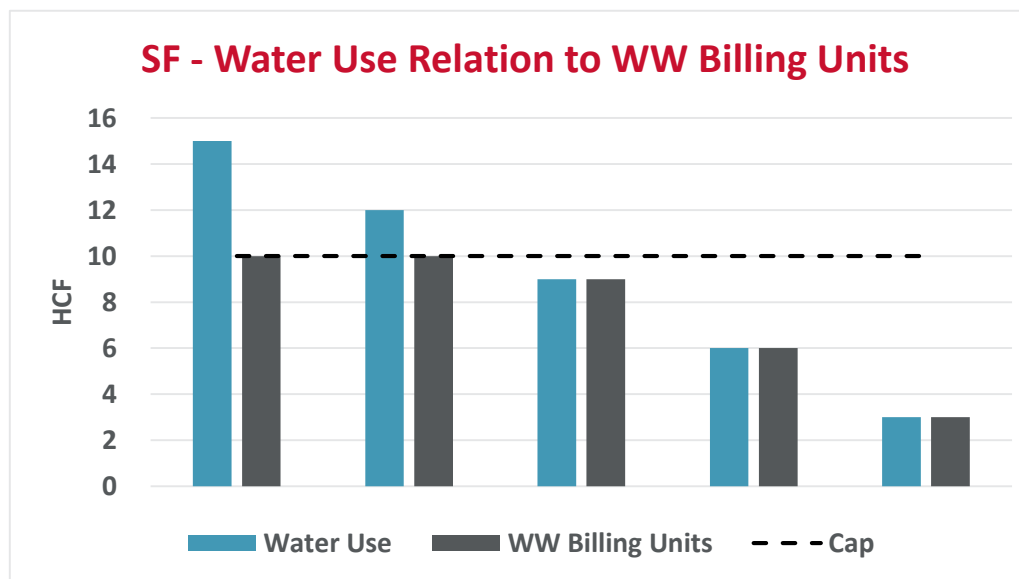
Revenue Requirement Key Assumptions

- Revenues based on recent customer characteristics and current adopted rates
- Assumed minimal customer growth and minor reduction (-0.2%/yr) in annual billed wastewater volumes annually
 - Billed volumes are based on water consumption; further/future water conservation measures impact wastewater revenues
- O&M based on the FY 2022 budget
 - Adjusted projected FY 2023 O&M for known changes
 - Community Choice Energy
 - Sea level rise planning
 - Impact of cost increase for chemical supply
 - Increased regulatory sampling
- Annual inflationary increase of approximately 3.5% annually
- Capital improvements based on current capital plan
 - Includes long-term debt issuance (low interest loans) for funding
 - Rate funding and available reserves fund remaining capital needs



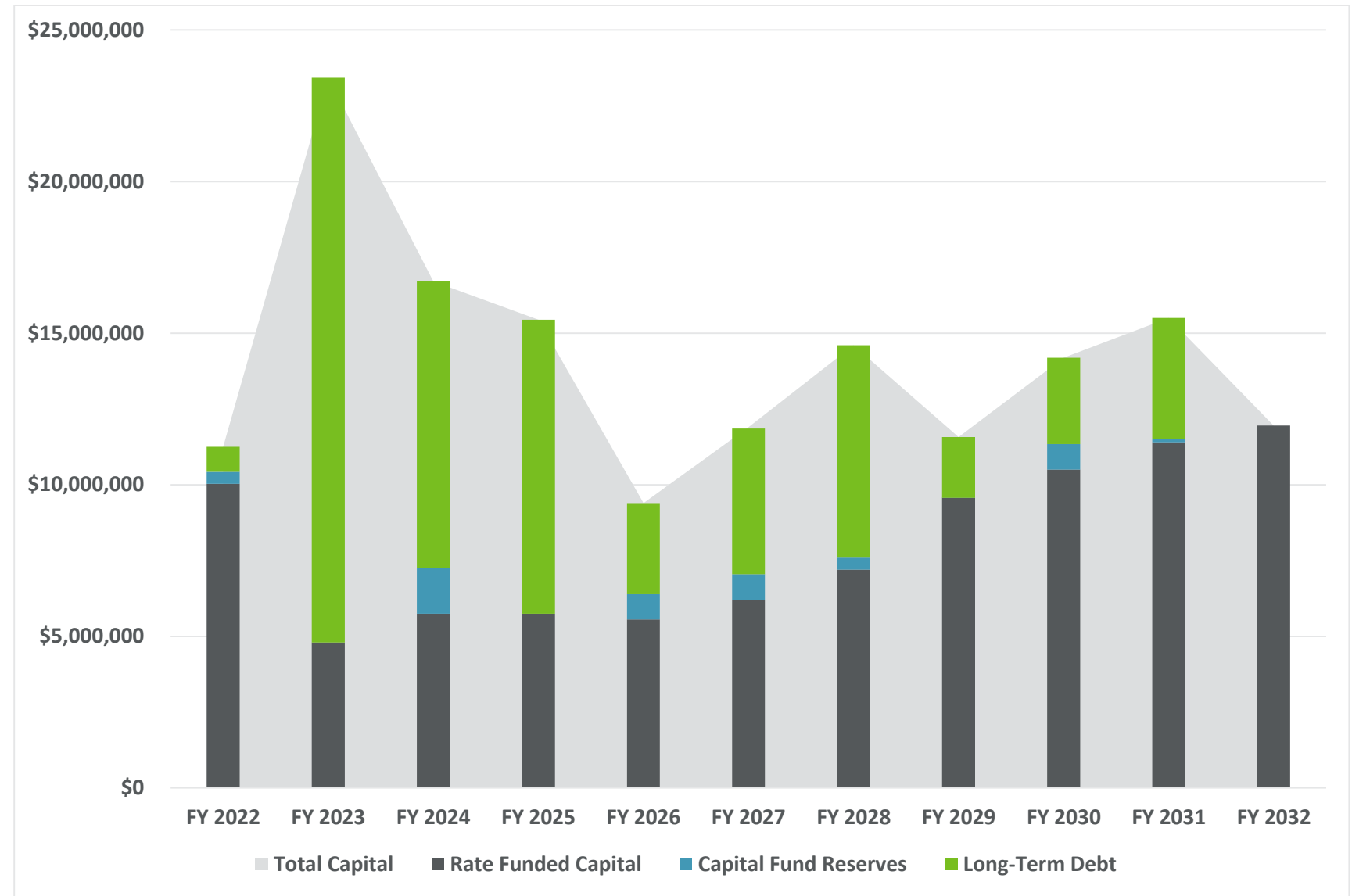
Overview of Wastewater Billing Units

- Single Family - Billing units are based on water usage up to 10 HCF per month
- Multi-Family (1 – 4 Units) – Billing units are based on water usage up to 10 HCF per month per dwelling unit
- Multi-Family (5+ Units) – Billing units are based on water usage with no cap
- Non-Residential – Billing units are based on water usage with no cap, subject to a minimum charge





Summary of the Capital Funding Analysis

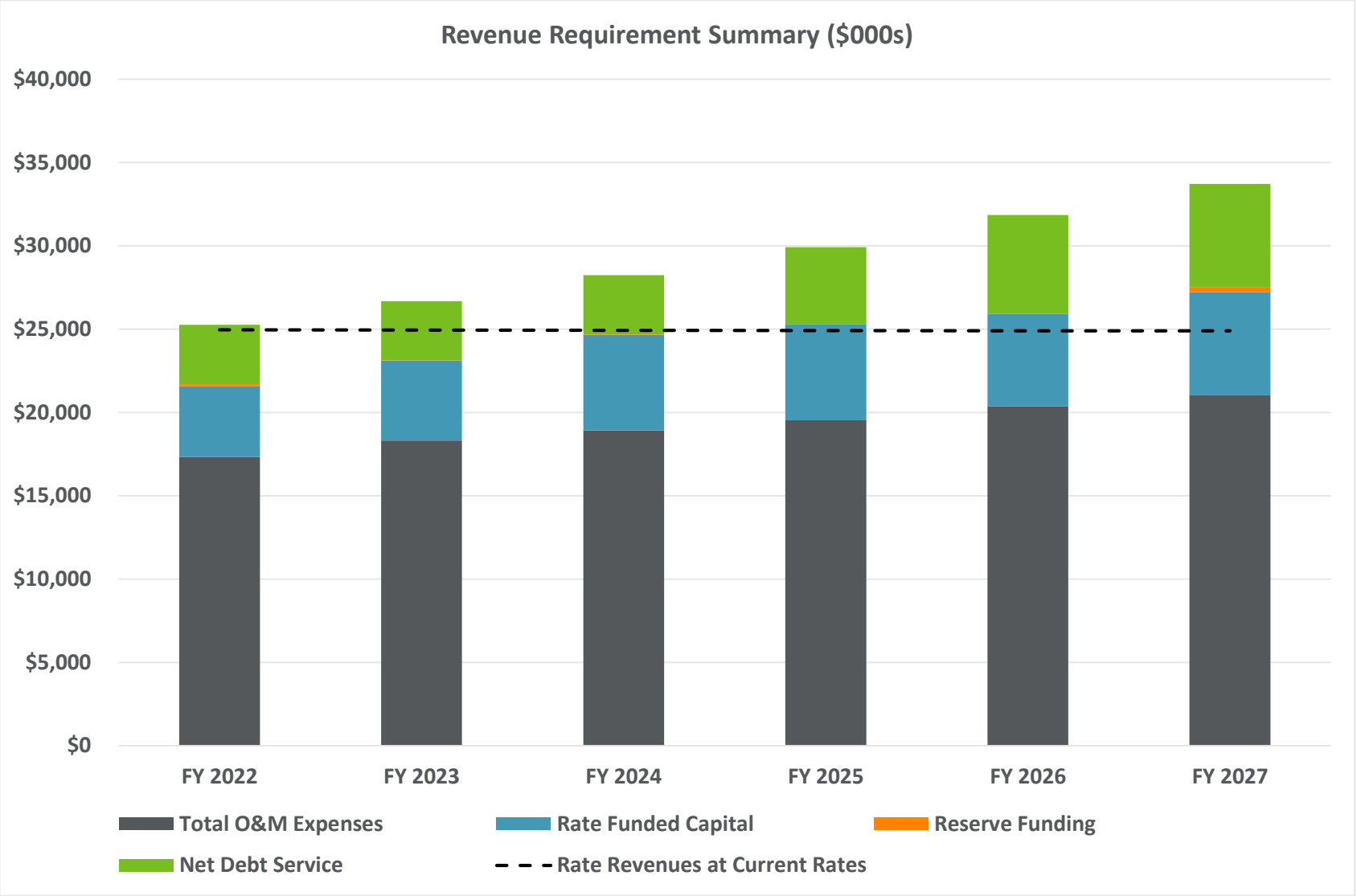


Examples:

- El Estero WRC Electrical Upgrade (FY 2022 – FY 2025, \$29M)
- Braemar Lift Station (FY 2023, \$7M)



Summary of the Revenue Requirement Analysis (\$000s)





Preliminary Revenue Requirement Summary

- Annual rate adjustments are necessary to fund the wastewater utility
 - **O&M** – annual inflationary impacts and staffing adjustments
 - **Capital** – increase of funding for annual renewal, replacement and necessary improvements
 - **Reserves** – maintain reserves at Council policy levels
 - **Maintain** adequate financial metrics needed to issue future planned long-term debt
- Average single family customer rate impact estimated to range from **\$3.50 to \$4.50 per month** over the three-year rate setting period
- Actual rate/bill impacts will be determined after full cost-of-service analysis



Cost of Service and Rate Design

- Preliminary analysis is complete
 - Working with City team to review and discuss analysis and results
- Allocate costs based on why costs are incurred
 - Volume, strength, or customer (fixed) related
- Proportionally distribute allocated costs to each customer class of service
 - Residential, commercial, high strength
 - Distribution factors are based on each customer class's annual volumes, strength of wastewater, and number of customers or equivalent
- Maintaining current rate structures
 - Level of the rates will adjust based on overall revenue requirement and cost of service results
- Will present results at next Water Commission meeting





Next Steps

Review draft wastewater
cost of service and rate
design results



Finalize technical analyses



Review Capacity Charge
Draft Analyses



Present findings and
recommendations to
Commission in February

Tentative Project Schedule

- February 17: Water Commission - Rate and Fee Recommendations
- March 17: Water Commission - Tentative
- April 2022: Finance Committee - Presentation
- April - June 2022: Public Rate Notice
- After Public Notice – Public information meeting (Mid May)
- June 2022: Public hearing



Thank You and Discussion

