

Proposed Sewer Service Charges for Fiscal Years 2021 - 2025

Summary

Union Sanitary District periodically must increase its rates to continue providing safe, reliable, and environmentally responsible wastewater services to its customers. These are challenging times for everyone, and the District understands that nobody likes increased rates. The proposed rate increases are the product of several years of studies and evaluations of infrastructure investment needs which were initiated long before the current COVID-19 crisis. Simply put, rate increases today will save customers the higher costs of deferring them to a later date. It's important to note several factors influencing this increase:

- The District carefully and thoughtfully considered many options before taking this action; increased costs are unavoidable despite the current financial environment.
- The improvements funded by the increase must be completed to ensure uninterrupted service and the ability to meet mandatory permit requirements.
- A delay in the rate study would have required a larger rate increase with serious long-term impacts to rate payers.
- Over half of the rate increase is directed to the District's capital program and will fund several required projects. The capital program requires over a full decade of construction and adequate funds to address critical needs.
- There are substantial savings to the customers by proceeding now versus delaying 12 months. It is currently estimated that each year these projects are delayed costs approximately an additional \$12,500,000 per year.
- The yearly increases range from about \$33 to \$41 annually for single family residences and from about \$32 to \$37 annually for multiple family residences.
- Even with the increases, USD remains at the low end of sewer service charge rates of Bay Area wastewater agencies.
- The proposed increases represent the maximum rates the District can impose every year.

The District is committed to helping rate payers understand the increases and answering any concerns and questions. Also, the District has been and will be continuing to monitor the evolving COVID-19 situation and state and county orders and will be working to ensure the health and safety of residents and compliance with the law through this process. We will provide updates, such as how to participate in meetings electronically, as we move forward.

Background

For over a century, Union Sanitary District (USD) has provided wastewater services that improve water quality and protect public health for Fremont, Newark, and Union City. Pursuant to the Proposition 218 notice sent to all property owners in March of 2020, USD will hold a public hearing on May 11, 2020 to consider a new cost of service analysis that covers proposed rate increases for Fiscal Years 2021 through 2025.

State law requires the District to establish rates sufficient to cover operating expenses, including interest on debts, and expenses necessary for the replacement and construction of facilities. The proposed rates are based on results of the most recent, comprehensive study of the cost of providing sewer service from July 2020 through June 2025. Per state law, this study calculated rates by determining the equitable allocation of costs for sewer service between residential, commercial, and industrial users.

As an example, single-family and multiple-family residential rates are proposed to increase as shown below every year on July 1 beginning in July 2020:

SINGLE FAMILY RESIDENTIAL RATES				MULTIPLE FAMILY RESIDENTIAL RATES*		
Current Rate \$421.37	Proposed Annual Rates	Difference from previous year		Current Rate \$365.32	Proposed Annual Rates	Difference from previous year
FY 2021	\$454.57	\$33.20		FY 2021	\$400.58	\$35.26
FY 2022	\$490.93	\$36.36		FY 2022	\$432.63	\$32.05
FY 2023	\$530.21	\$39.28		FY 2023	\$467.24	\$34.61
FY 2024	\$569.97	\$39.76		FY 2024	\$502.28	\$35.04
FY 2025	\$611.58	\$41.61		FY 2025	\$538.95	\$36.67
*Examples of Multiple Family Residential Units include Condominiums, Townhomes, and Apartments						

Planning for Critical Infrastructure Needs

The District maintains a large number of facilities and equipment, much of it built in the late 1970's and some dating back to the 1960's. Although USD's infrastructure has been well-maintained over the years, major components of the 33-acre treatment plant have reached the end of their useful life and are functionally obsolete, will be unable to treat wastewater to meet future government requirements, or do not meet current seismic standards.

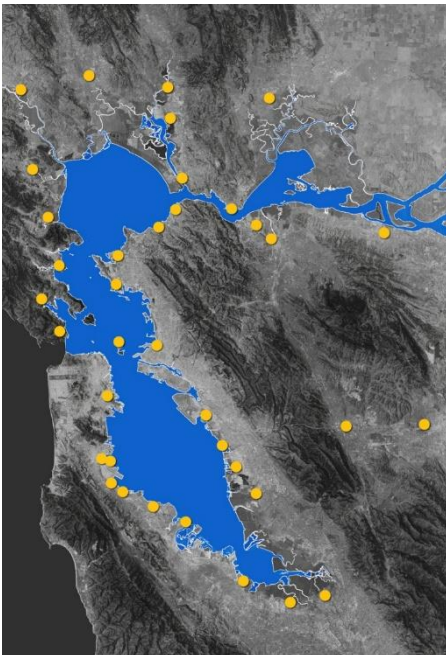


USD's 33-acre Union City wastewater treatment plant looking west (2019 photo)

Managing Nutrients in the SF Bay

Nutrients such as nitrogen, ammonia, and phosphorus have been a nationwide concern for many years. Though San Francisco Bay has a long history of high nutrient levels, elements such as tidal

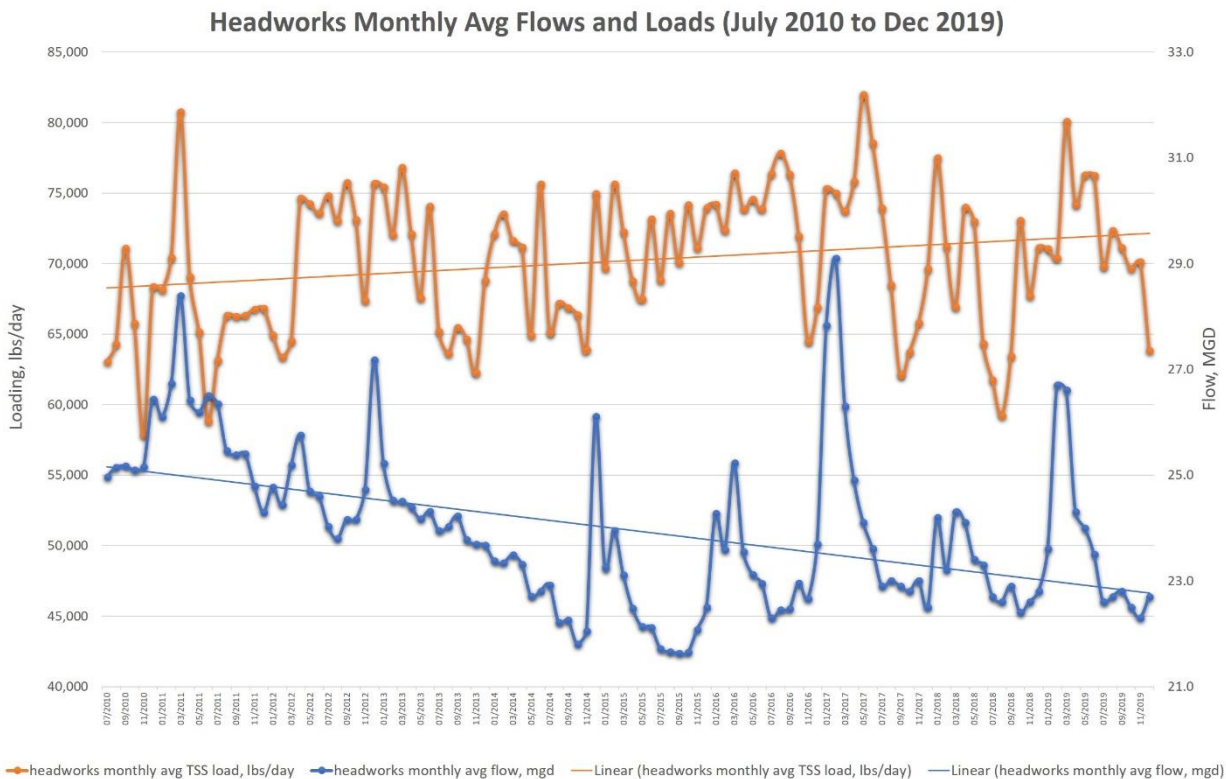
action, turbidity (cloudiness that hinders algal growth), and the presence of clams have reduced adverse impacts. However, turbidity has lessened, and clam populations are declining in parts of the Bay due to an abundance of predators. There is concern that the Bay could reach a tipping point that would affect its health. USD is one of 37 regional wastewater agencies that discharge to the Bay contributing to research that increases understanding of how nutrient levels impact its water quality. Wastewater treatment plants in the Bay Area represent about two-thirds of nutrient loads because they were not originally designed to remove nutrients due to technology and funding barriers. Nutrient reduction requirements and more stringent state and federal treatment standards requiring expensive upgrades are expected to affect all 37 treatment plants surrounding the San Francisco Bay within the next decade.



Sites of 37 Bay Area wastewater agencies expected to receive more stringent state and federal treatment standards in the near future

Increased Solids in Wastewater

Solids in the wastewater USD receives have been increasing over the last several years due to reduced water use and a growing population in the service area. These higher solids levels strain infrastructure and make treatment more complicated and costly. Prudent planning and phasing of infrastructure projects rather than postponing action is estimated to save ratepayers millions of dollars. The District addresses these issues in its Capital Improvement Program, which is currently estimated to total more than \$1 billion dollars over the next 20 years.



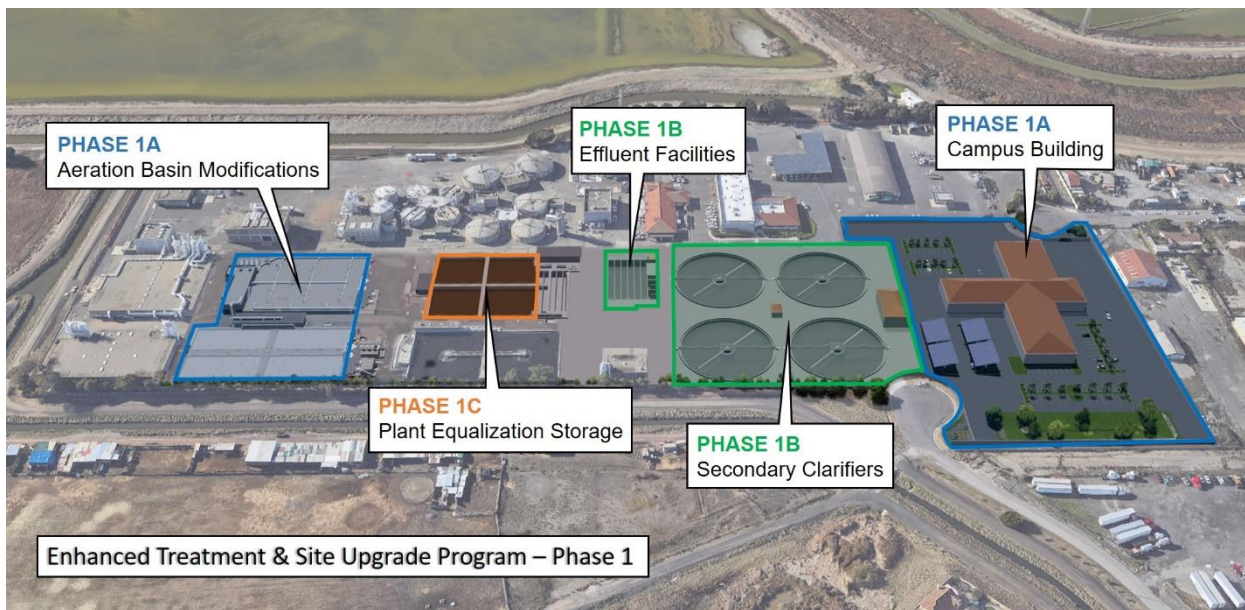
Enhanced Treatment and Site Upgrade Program (ETSU)

As the provider of an essential service, the District must responsibly maintain its infrastructure to avoid catastrophic failures, minimize service disruptions, and protect the environment. USD conducted thorough evaluations of its infrastructure needs with the primary goal of utilizing existing assets to their fullest extent to decrease construction costs and reduce impacts on rates. These evaluations resulted in USD's Enhanced Treatment and Site Upgrade Program report. The report is available at unionsanitary.ca.gov/etsu.

The ETSU Program includes projects that not only upgrade and bring infrastructure up to current standards, but also prepare for future treatment processes such as nutrient removal (nitrogen, phosphorus, and ammonia), preserve capacity for a growing Bay Area, and manage the effects of a changing environment. These infrastructure improvements will improve the quality of the treated

wastewater, which will support future reclaimed water initiatives if deemed feasible in partnership with ACWD.

ETSU Project Phases



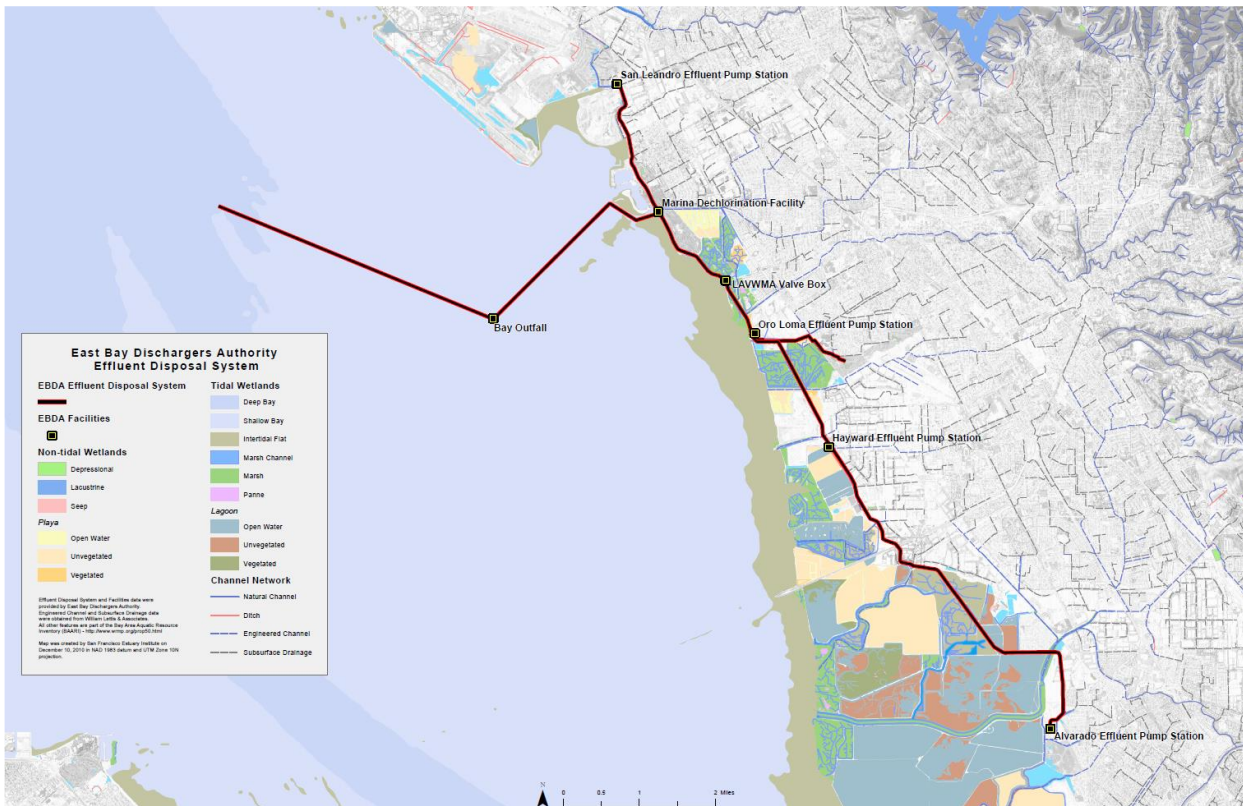
Along with the report’s recommended treatment process enhancements, the existing Administration and Control Buildings were found to require significant upgrades to meet current building standards. The existing maintenance building is nearing the end of its useful life and has been identified for replacement. The costs of retrofitting the current Administration and Control buildings and constructing a new Maintenance Building were compared to the cost of constructing all new buildings. Life-cycle costs for constructing all new buildings were estimated to be 20 percent less than retrofitting existing buildings, with construction costs between the two alternatives essentially equivalent. Available land for treatment improvements is limited at the 33-acre plant site. Construction of a new combined-use Campus building on Plant property will result in a much smaller footprint and allow treatment process enhancements to be built in optimal locations where existing buildings now stand. This will significantly minimize disruptions to staff productivity and customer service.

Additional Drivers for Rates

East Bay Discharge Authority (EBDA)

USD is a member of EBDA, a Joint Powers Authority (JPA) that was formed in 1974 in response to changes made to the Clean Water Act that restricted release of treated wastewater in shallower areas of the San Francisco Bay. USD and other member agencies (City of Hayward, City of San Leandro, Oro Loma Sanitary District, and Castro Valley Sanitary District) share a large-diameter pipeline that discharges treated wastewater in the deeper waters of the Bay just south of the Oakland Airport (the pipeline ranges from 5 feet to 8 feet in diameter).

EBDA members recently adopted a new 20-year agreement. As the member using the largest amount of capacity in the shared line, USD's operating costs and capital responsibilities have increased, which impacts the District's Operating and CIP budgets. It is estimated USD's annual operating costs will increase by approximately \$450,000 annually (approximately \$9 million over 20 years), and capital costs will increase by \$15 million over 20 years.



EBDA System

Wet-Weather Effluent Management

USD currently provides treated water to the Hayward Marsh, which is owned and operated by the East Bay Regional Park District (EBRPD) and located just north of Highway 92. During dry weather, approximately 2.6 million gallons per day (MGD) of treated wastewater is pumped to the Hayward Marsh as a fresh water source. During wet weather, the treatment plant has processed up to 65 MGD, with the majority of flows above 42.9 directed to the Marsh. The Park District has decided to convert the Hayward Marsh to a tidally influenced salt marsh in the very near future, and USD must find a wet weather effluent discharge alternative.



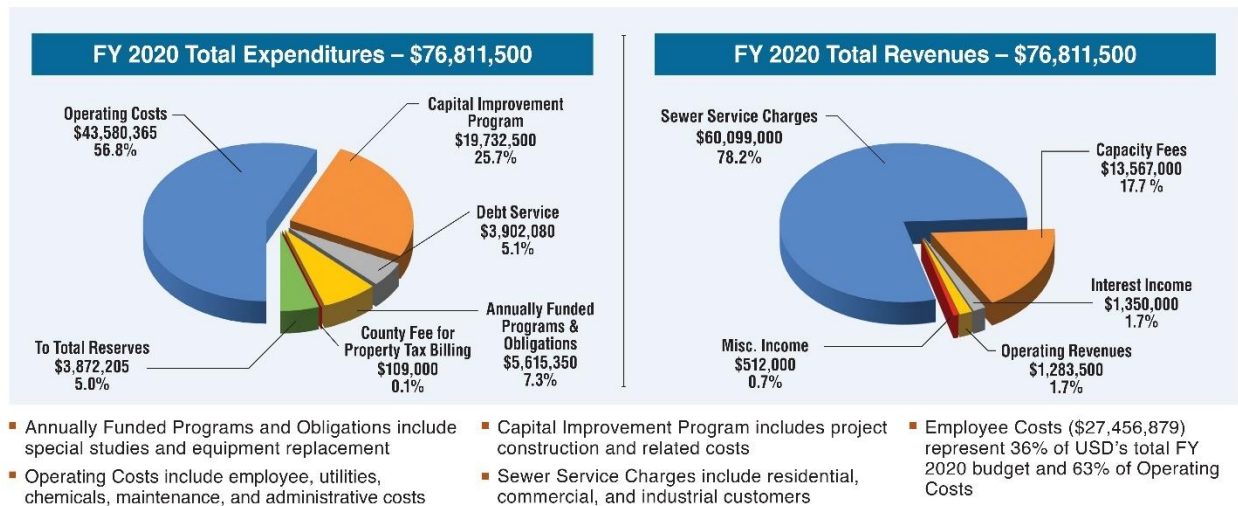
Overflowing sewer manhole during wet weather

USD has an emergency outfall into a creek adjacent to the treatment plant. The use of this emergency outfall is tightly restricted via a permit from the State Water Quality Resources Control Board (SWQCB) with guidance from the Environmental Protection Agency (EPA). To allow more frequent

use and replacement of the Hayward Marsh wet weather capacity, the water quality of USD's effluent would have to improve, demonstrating a reduction in nutrients and ammonia. This will require significant upgrades to existing plant facilities and processes.

Operating Costs

The District's current operating budget is approximately \$76.8 million. Revenue is raised from two primary sources: (1) Sewer service charges paid by residential customers, businesses, and other users of the system; and (2) Charging new development their proportionate share of infrastructure costs.



In addition to funding USD's capital improvement program, rate increases are implemented in part to address other rising costs. Approximately 36% of the District's total budget is attributable to personnel expenses, which is customary for a service-based organization that relies on the expertise of its staff. Like any other business operating in the Bay Area, USD faces rising cost of living expenses. The District does not participate in Social Security, and all USD employees pay 27% of USD's total pension costs, as well as a portion of their health care costs.

Chemicals, electricity, and fuel also account for a significant portion of the District's budget. Those costs have similarly increased. Chemical costs alone were over \$1.9 million in FY 2019. The District uses renewable energy wherever possible and works toward energy-independence, however, in FY 2019, USD's purchased power costs were over \$1.8 million.

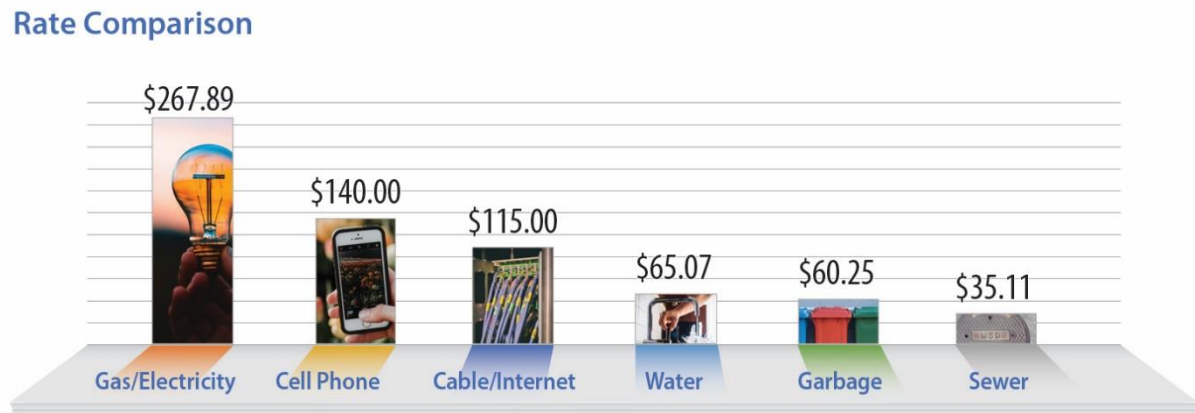
Wastewater treatment is an energy-intensive process; a "living organism" that requires oxygen to function properly. Increased solids arriving at the treatment plant require more oxygen to support the biological process utilized to treat waste. Large industrial blowers are used to supply up to 30,000 cubic feet of air per minute, which consumes a great deal of electricity.

Efficiency and Technology

Two of the many factors helping to reduce impacts on rates are efficient service and use of technology. By implementing technology to streamline permitting, plant operations, maintenance management, and engineering services, the District has been able to maintain more conservative staffing levels, thus helping to control costs. USD also partners with neighboring agencies to purchase chemicals and equipment at discounted prices.

Compared to Other Utilities and Services, USD’s Rates are the Lowest

A typical household in USD’s service area pays considerably more for services like those below:



Sewer Rate shown is USD’s FY 2020 single-family residential rate (July 1, 2019 – June 30, 2020) Other monthly utility rates are based on a typical residential household and were obtained from service providers where possible. Gas and electricity rate is based on an annual average for a 1,500 square foot home in USD’s service area. Cell phone monthly bill is based on a typical calling plan for a family of four.

USD Rates in Perspective

The District conducts an annual rate comparison survey of 36 Bay Area wastewater agencies. Today, only two have lower rates. If USD's proposed rate increases beginning in FY 2021 are approved, the District will remain at the lower end of the comparison.

BAY AREA ANNUAL SEWER SERVICE CHARGES 2019-2020

