



Union Sanitary District

Union City, California

Adopted Operating and CIP Budget
FY 2022



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INTRODUCTION



Rebar Layout Digester 7 Roof

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Board of Directors



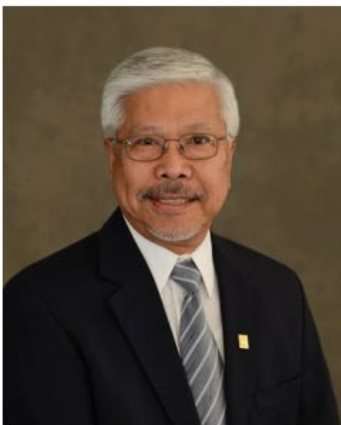
Tom Handley



Pat Kite



Anjali Lathi



Manny Fernandez



Jennifer Toy

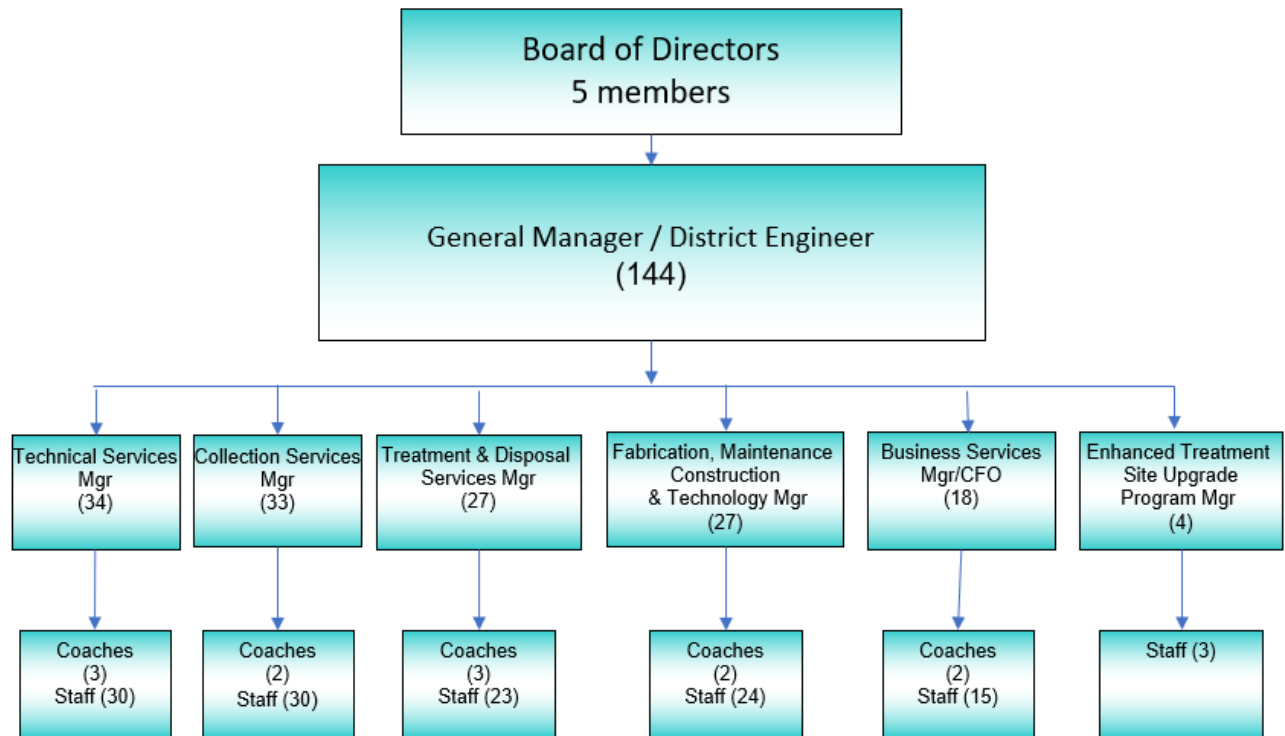
Principal Officials

Board Member	Position	City Represented	Year Elected	Term Expires
Pat Kite	President	Newark, Ward 2	1991	2024
Anjali Lathi	Vice President	Fremont, Ward 3	2002	2024
Manny Fernandez	Secretary	Union City, Ward 1	2011	2024
Tom Handley	Director	Fremont, Ward 3	2007	2022
Jennifer Toy	Director	Fremont, Ward 3	1998	2022

Staff

Paul Eldredge	General Manager/District Engineer
Armando Lopez	Treatment & Disposal Services Manager
Robert Simonich	Maintenance & Technology Services Manager
Mark Carlson	Business Services Manager/Chief Financial Officer
Sami Ghossain	Technical Services Manager
James Schofield	Collection Services Manager

Karen W. Murphy - General Counsel





VISION/MISSION STATEMENT

April 10, 2017

To safely and responsibly collect and treat wastewater, and to recover resources from process waste streams, while protecting human health and improving the environment in a way that benefits the Tri-Cities and all USD stakeholders.

How we continue to accomplish our Vision:

Commitment to safety:

- Continually reviewing our safety program for opportunities to improve
- Focusing on protecting employees and the community in all our activities
- Allocating resources to ensure safe operations (equipment, training, staff)
- Collaboratively promoting a safe work environment

Responsibility:

- Being accountable for our actions and decisions
- Being fiscally prudent
- Maintaining and upgrading infrastructure
- Anticipating and meeting future District and stakeholder needs
- Compliance with laws and regulations (local, state, federal)
- Effective asset management
- Effective use of technology
- Looking for innovative ways to reduce or reuse our waste streams

Collect, treat, and recover/reuse wastewater:

- Providing capacity in the collection system and plant
- Regulating connections
- Increasing efforts for resource recovery (biogas, biosolids, etc.)
- Exploring ways to maximize water reclamation and reuse potential

Human health and environmental stewardship

- Preventing sewer spills and back-ups
- Limiting health risks through treatment of wastewater
- Responding to emergencies
- Enhancing water quality in the San Francisco Bay estuary
- Meeting or exceeding all water and air quality standards
- Promoting pollution prevention and pretreatment through outreach and educational programs
- Maximizing use of green energy sources when feasible
- Working towards energy neutrality



VISION/MISSION STATEMENT

April 10, 2017

We benefit our stakeholders by:

Community

- Complying with all local, state, and federal regulations, protecting the environment and controlling odors
- Communicating with the public and bringing awareness about wastewater issues
- Responding to emergencies and providing mutual aid
- Participating in community outreach activities
- Contributing to the wastewater treatment profession by participating in professional associations, partnering with other agencies and organizations, and sharing best practices
- Working cooperatively with cities and other government agencies

Customer

- Providing award-winning, reliable service
- Being fiscally responsible and cost effective, and providing value
- Promptly responding to customers' needs
- Being professional and courteous
- Proactively and creatively meeting customer needs
- Supporting businesses through permitting, education and by providing capacity

Employees

- Providing a safe work environment
- Recognizing employee contributions
- Encouraging cooperation and collaboration
- Demonstrating equality and fairness
- Valuing employee input, and offering opportunities for involvement and creativity
- Providing training and resources
- Providing competitive wages and benefits in a stable work environment
- Communicating and sharing information openly and honestly



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer

SUBJECT: Fiscal Year 2021/2022 Proposed Operating and CIP Budget

Union Sanitary District (USD) staff is pleased to present the proposed annual budget for Fiscal Year (FY) 2022 to the Board of Directors. This budget, covering the period from July 1, 2021 through June 30, 2022, was developed based on direction provided by the Board of Directors.

District Highlights

The District continues to focus on the operation and maintenance of its infrastructure and assets, capital project construction, planning, and effective use of technology. The District reports the following notable items that will be part of the budget for FY 2022:

Updated Capacity Fees Schedule – The District retained Bartle Wells Associates (BWA) to update its wastewater capacity charges. Recommendations were developed with input from District staff and represent a comprehensive update based on the latest information available. Key objectives included developing updated capacity charges based on a methodology that will recover the full cost of infrastructure and assets benefiting new development, comply with legal requirements, and are fair and equitable to both existing customers and new development.

Enhanced Treatment & Site Upgrade Project – The District is implementing the \$350 million ETSU Phase 1 Group of Projects as part of an overall Program to support the next 20 to 40 years of operation. The key drivers for ETSU Phase 1 projects include addressing aging infrastructure, improving water quality in the San Francisco Bay through nutrient removal upgrades, and hardening of infrastructure to support resiliency efforts to manage wet weather events and continuing to provide USD's critical services without interruption. Design of the first group of projects is underway. These include improvements to the aeration basins and relocation of operations, maintenance, and administrative facilities. Construction of these first projects is planned to

commence during FY 2022. The design of the second group of projects is also now underway. Construction of all of the Phase 1 projects is expected to last through 2027.

Project Financing – As part of the ETSU project mentioned above, the District was able to secure \$189 million in low cost EPA Water Infrastructure Finance and Innovation Act (WIFIA) financing. The District entered into the highly competitive process in mid-2020 and was notified of its eligibility in early 2021. These funds will account for 49% of the total project costs. In addition to the WIFIA financing, the District is currently engaged in a \$110 million bond issuance to complete the financing for Phase 1A of the ETSU project as well as several other District CIP projects.

Old Alameda Creek Intermittent Wet Weather Discharge Permit - On December of 1, 2020, the District's revised National Pollutant Discharge Elimination System (NPDES) permit to intermittently discharge to Old Alameda Creek during significant wet weather events went into effect. The revised NPDES permit allows the District to responsibly discharge in the adjacent Old Alameda Creek when flows at the District exceed the contracted capacity with the East Bay Discharge Authority (EBDA), providing the District a permitted and reliable hydraulic relief of its completely treated final effluent. The Old Alameda Creek NPDES Permit is valid for the customary 5 year permit cycle, expiring on November 30th, 2025.

Stewardship and Service - The District continued its record of outstanding stewardship and service. Once again, USD received the Platinum Award from the National Association of Clean Water Agencies for Peak Performance for operating without exceeding the limits or conditions of the District's permit. This is a tribute to the outstanding work by District Operations and Maintenance teams. The District continues to average less than one spill per hundred miles of pipeline per year, ranking the District among the best in the State, while doing so in a very cost-effective manner.

Financial State of the District

The District continues to exercise fiscal prudence when considering how to best manage increasing expenses with the least impact possible on the rate payers. A complex financial model is utilized to run a multitude of "what if" scenarios. Scenario-based modeling allows the District to analyze different financing plan scenarios to assist the District in making sound financial decisions on future operating and infrastructure needs and the long-term sustainability of prospective policies and programs. It is because of this cautionary approach that the District has continued to keep its rates as low as possible and remain financially stable.

Revenue - Sewer Service Charges are expected to increase by \$14.2 million in FY 2022 to \$74.7 million. Of this amount, approximately \$4.1 million is the result of a revenue deferral in FY 21. The balance can be attributed to the current year rate increase of 8%. Capacity fees are expected to decrease by \$762 thousand or 13.3% over FY 2021. The entire region has experienced a slowdown in development largely attributed to the impacts of Covid 19. While there is still strong activity in the development sector, with a number of large projects in the planning stages, the District has chosen to be conservative in its forecasting of capacity revenue.

Interest earnings are expected to increase over FY 2021 by \$362 thousand, however, this is attributable to an anticipated \$110 million bond issuance early in the year. The overall interest yield on the Districts investments is expected to fall below 1% for the year.

Expenditures - Total District expenditures for the coming fiscal year are projected to increase by \$14.2 million or 14.5%. Operating expenses are anticipated to increase by \$1.8 million or 4.1%. Within the operating category, Salaries and Benefits are expected to increase \$1.9 million or 6.1%. Increases are primarily due to certain positions being budgeted for a full year in FY 2022, the addition of a full time limited term operator as well as negotiated increases to salaries. Continued increases in pension and health insurance rates are also factors.

The balance of the operating budget is remaining relatively flat with an overall decrease of \$18 thousand. For FY 2022 the District is seeing increases in chemical and insurance costs and decreases in overall utilities, supplies, and repair and maintenance. The District continues to find ways to reduce costs through planning and wise stewardship.

The Capital Improvement Program is budgeted to increase \$507 thousand or 1.2% over FY 2021. This is the second year of higher capital costs as the District enters into an ten year \$713 million capital program of which \$350 million is for the ETSU project. Capital project spending will continue to focus on rehabilitation and replacement of key elements of the wastewater treatment plant, transport and collections system.

In keeping with the Districts continued efforts toward prudent fiscal planning, the creation of a 115 Pension Trust is planned for FY 2022. It is currently estimated that this long term fiscal planning tool will save the District over \$24 million in interest costs over the next 27 years.

Special Projects Fund expenditures will increase \$1.2 million over FY 2021. Some of the more significant special projects are the continued set aside of \$1.5 million for property acquisitions as opportunities become available; \$940 thousand for upcoming election costs; feasibility studies for Digester 8, energy resiliency, sea level rise and thermal dryer projects.

Balanced Budget, Reserves and Rates

USD has long operated with a balanced budget and FY 2022 is no exception. District reserves continue to be stable, although as the District's operating budget increases, more of the District's reserves are dedicated to ensuring operating needs are met. Although funds will be taken from both the Sewer Service Fund and Capacity Fund reserves in FY 2022, these are planned capital activities and are part of the long term capital investment strategy of the District.

Conclusion

Given the past fiscal stewardship practiced by the District's Board and staff, the District is well poised to take on the proposed 20 year capital plan that will continue to make Union Sanitary District a leader in wastewater management.

I would like to express my appreciation to all the employees of the District whose hard work is not taken for granted and whose dedication is reflected in the daily delivery of services to the District's customers. The District is firmly committed to meeting every challenge brought forth through innovative and creative problem-solving and embracing continual improvement in all that it does.

Respectively Submitted,

DocuSigned by:

Paul R. Eldredge

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Paul R. Eldredge, P.E.
General Manager, District Engineer
Union Sanitary District

ABOUT USD



Aeriation Basin Order Scrubbers

About USD

Union Sanitary District (USD) is a California Independent Special District. USD was formed in 1918 to protect public health and the environment by providing the services of collecting, treating, and disposing of wastewater from residences, businesses and industries. We're proud to deliver this very complex, highly-regulated service to the communities we serve.

In our founding year of 1918, USD's boundaries encompassed 3,300 acres in what was known as Southern Alameda County. The area was primarily farm and ranch land well into the twentieth century, and septic tanks were typically used for wastewater disposal.

Today, USD's service area covers over 60 square miles (about 38,400 acres) and serves over 350,000 residents in the cities of Fremont, Newark, and Union City, with over 113,000 residential, commercial, and industrial connections. Total flow to our Alvarado Treatment Plant in Union City was over 8.4 billion gallons in 2020, and averages between 22 and 24 million gallons every day with a permitted capacity of up to 33 million gallons per day.

USD is a member of the East Bay Discharge Authority (EBDA). Founded in 1974, EBDA is a five-member Joint Powers Authority (JPA) formed to plan, design, construct, and operate regional facilities to collect, transport and discharge treated effluent to deep waters of San Francisco Bay. Treated effluent from the District's Alvarado Wastewater Treatment Plant is pumped to the EBDA System and discharged into the Bay southwest of Oakland International Airport. Frequent testing of the treated wastewater confirms compliance with regional permit requirements. The other member agencies are Castro Valley Sanitary District, Oro Loma Sanitary District, City of Hayward, and City of San Leandro.

The Communities we Serve

The District provides wastewater collection, treatment and disposal services to the residents and businesses of the cities of Fremont, Newark, and Union City, commonly referred to as the Tri-City Area, with a combined population of 356,823. Information obtained from each city is presented below.

The City of Fremont

Located on the southeast side of the San Francisco Bay, Fremont is a city of over 234,000 people and 76,000 households, with an area of 92-square miles. Fremont remains the fourth most populous city in the Bay Area and California's 15th largest city. With its moderate climate and its proximity to major universities, shopping areas, recreation and cultural activities, employment centers, major airports, and the Bay Area Rapid Transit system, Fremont captures metropolitan living at its best.

Fremont is conveniently served by Interstates 680 and 880, as well as rail transport lines including Altamont Commuter Express (ACE), Amtrak Capitol Corridor, and the Bay Area Rapid Transit (BART) system. Fremont also has easy access to the San Jose Airport, Oakland Airport, San Francisco Airport,

and the Port of Oakland. Fremont is home to a broad variety of innovative firms including over 1,200 high tech, life science, and clean technology firms. The city has a broad range of quality, affordable business locations; a superior workforce; and a wide variety of tax benefits and incentive programs for businesses.

Fremont is one of the most ethnically and culturally diverse cities in the Bay Area. Residents are attracted to Fremont for its nationally recognized high-ranking public schools, its numerous well-kept parks, and a variety of recreational amenities, including beautiful Lake Elizabeth, Central Park, and Mission San José (California's 14th mission). Fremont is described as a wonderful community to live, work, and play.

The City of Newark

Newark has an area of 13 square miles, a population of over 48,000. Newark was incorporated in 1955 and is located 35 miles south of San Francisco and next to many high-tech hubs, including easy access to highways 880, 580, 680, and the Dumbarton Corridor. This makes Newark an ideal location to live or do business. Newark has evolved throughout the years from its days enriched in agriculture, manufacturing, and railroad to today's expansion of high-tech, biotech, and the health sciences.

Although Newark has grown significantly, it still manages to keep a small, hometown community charm which is what citizens say they love about the city. The City of Newark has a wide variety of programs and services to meet the community's needs.

The City of Union City

Union City is 18 square miles in area, boasting a diverse and unified people, excellent educational institutions, unsurpassed quality of life, strong economy, and world-renowned location in The San Francisco Bay Area. Incorporated in 1959, the city proudly maintains a small-town feel despite being in the center of the Bay Area, with San Francisco and Silicon Valley just minutes away. Union City has grown into an ethnically diverse community of over 73,000 residents, and the highly regarded New Haven Unified School District serves about 13,000 K-12 students. The community offers a variety of housing, with affordable and upscale homes available in many charming neighborhoods throughout the city. The transit-oriented Station District, located around the Union City BART station, boasts housing and business development opportunities with easy, convenient access to major public transit running throughout the Bay Area. Union City also offers 33 wonderful parks, sports fields, community centers, and a variety of recreation programs and social services for residents of all ages. Region-wide, the Tri-City area is experiencing significant impacts as a result of COVID-19.

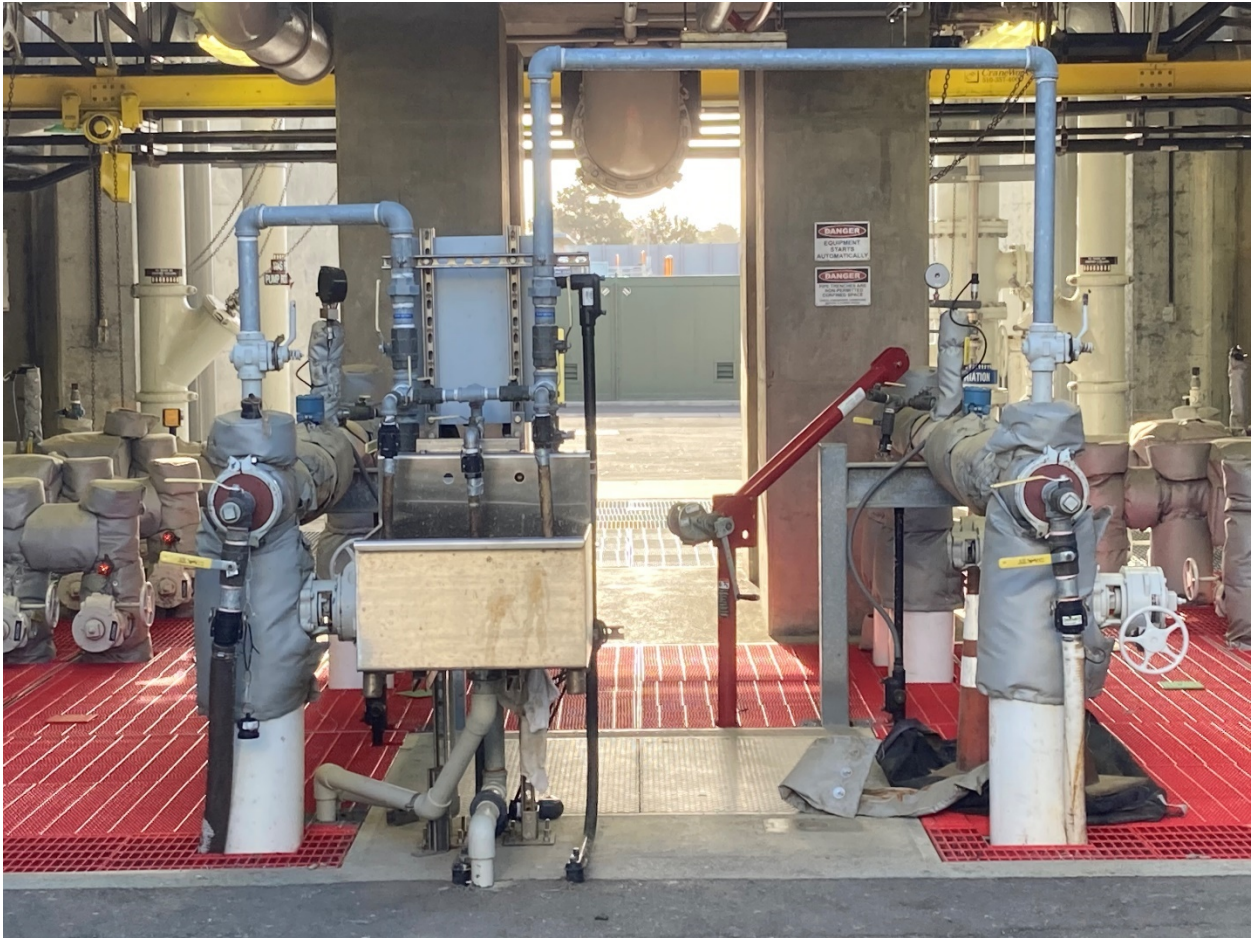
Unemployment rates for the cities of Fremont, Newark and Union City on June 30, 2020 were 10.5%, 12.8%, and 13.4% respectively, compared with 2.6%, 2.7%, and 3.0% one year earlier.

*Information obtained from the respective city's website

SERVICE AREA MAP



BUDGET DOCUMENT & PROCESS



Solids Thickening Pump Station

BUDGET PROCESS

The fiscal year budget is one of the most important documents prepared by the District. Through the process of planning and preparing the budget, the District is given the opportunity to determine how best to utilize its resources for the coming fiscal year. The budget document also provides direction for management and staff on a number of fiscal issues.

Union Sanitary District adopts an annual budget. The budget document contains information on revenues and expenditure appropriations for the Fiscal Year beginning July 1 and ending June 30. In addition to the operating budget, the Board adopts an annual Capital Improvement Plan (CIP), which is part of a larger 20 year plan. These projects become an integral part of the proposed operating/capital budget.

The budget is prepared in accordance with fiscal policies/guidelines and objectives as established by the Board in Policy #2015. The time frames provided in the budget calendar reflect early involvement of District staff and the Board in review and discussion of policy direction, goals and objectives concurrent with development of financial projections and service level requirements. With this approach, the necessary components that guide the process are incorporated into the proposed budget prior to formal submission to the Board. Readers may be interested to know that all appropriations, excluding Capital Projects, lapse at year-end. This means that this budget only contains new appropriations for the Fiscal Year.

Key budget dates are shown below:

Date	Process
Early January 2021	Budget discussions begin with all departments including FY 20/21 midyear and year end projections
March 9, 2021	Midyear presentation to Board with discussions on FY 21/22 budget drivers
May 11, 2021	Budget workshop held with Board
May 24, 2021	Presentation of the FY 21/22 proposed budget to the Board
June 28, 2021	Adoption of the FY 21/22 budget by the Board

BUDGET REPORTING

For budgetary reporting purposes, Union Sanitary District uses the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recognized when they become measurable and available. “Measurable” means the amount of the transaction can be determined and “available” means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. Expenditures are recognized in the accounting period in which the liability is incurred. Non-cash expense items such as depreciation expense for fixed assets and accrued compensated absences are excluded from the budget. Principal payments for District debt are included in the budget.

The District operates under two funds for budgetary purposes. Those funds are:

Sewer Service Fund – This fund accounts for the general operations, maintenance, and administration of Union Sanitary District. For purposes of internal accounting only, the District maintains separate funds within the Sewer Service Fund to track revenue and expenditures as they relate to operations; special projects; Other Post-Employment Benefits (OPEB); 115 Pension Trust contributions; vehicle, equipment, and information systems acquisitions; and maintenance of plant, pump, and structural components.

Capacity Fund – This fund accounts for capacity related fees collected by the District and their related expenditures. Capacity fees are charged by the District to assure that development customers that connect to the system pay their proportional share of the sewer and treatment plant required to convey and treat their wastewater. Sewer capacity charges are governed by California Government Code Section 66013.

FINANCIAL STATEMENT REPORTING

The District operates as a proprietary fund-type and uses the modified accrual basis of accounting. All proprietary fund-types are accounted for on a flow of economic resources measurement focus. Under this measurement focus, all assets and liabilities associated with the operation of these funds are included on the statement of net position. Where appropriate, net total assets (i.e. fund equity) are segregated into contributed capital and retained earnings. Proprietary fund-type operating statements present increases (revenues) and decreases (expenses) in net position.

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FINANCIAL SECTION



Primary Effluent Pumps for the Aeration Basin

Budget Summary – All Funds

	Actual * FY 18/19	Actual * FY 19/20	Budget FY 20/21	Projected FY 20/21	Adopted Budget FY 21/22	Variance to 20/21 Budget	% Change
Revenues							
Sewer Service Charge	\$ 57,330,651	\$ 60,216,148	\$ 60,500,000	\$ 62,250,000	\$ 74,716,000	\$ 14,216,000	23.5%
Capacity Fees	16,158,027	14,179,464	5,712,200	3,927,900	4,949,820	(762,380)	-13.3%
Work Group Revenues	1,321,729	1,285,438	1,293,500	1,192,200	1,260,900	(32,600)	-2.5%
Interest	2,657,281	3,115,507	1,150,000	1,290,000	1,512,000	362,000	31.5%
Other Revenues	866,298	174,673	75,000	32,745	50,000	(25,000)	-33.3%
Net Loan Proceeds	-	37,000,000	-	-	110,000,000	110,000,000	-
Total Revenues	78,333,986	115,971,230	68,730,700	68,692,845	192,488,720	123,758,020	180.1%
Expenditures by Type							
Operating	37,204,183	41,518,799	45,186,355	43,756,720	47,020,403	1,834,048	4.1%
Internal Funds	3,071,521	2,091,781	2,647,022	2,463,156	5,886,401	3,239,379	122.4%
Debt Service	3,862,731	3,584,921	4,684,773	4,379,920	12,019,092	7,334,319	156.6%
Special Projects	913,255	1,288,761	2,723,000	928,993	3,960,104	1,237,104	45.4%
Capital Projects	6,593,915	12,695,833	42,682,500	39,197,003	43,189,200	506,700	1.2%
Total Expenditures	51,645,605	61,180,095	97,923,650	90,725,792	112,075,200	14,151,550	14.5%
Revenues Over (under) Expenditures	\$ 26,688,381	\$ 54,791,135	\$ (29,192,950)	\$ (22,032,947)	\$ 80,413,520	\$ 109,606,470	
EXPENDITURES BY OPERATING GROUP							
Board of Directors	\$ 142,215	\$ 141,278	\$ 180,354	\$ 178,354	\$ 187,043	\$ 6,689	3.7%
General Manager	800,880	919,583	1,066,753	1,058,833	1,194,988	128,235	12.0%
Business Services***	9,187,579	9,910,103	11,155,858	10,668,365	21,905,486	10,749,628	96.4%
Collection Services	7,441,010	7,233,990	7,701,282	7,678,993	7,835,953	134,671	1.7%
Technical Services	6,104,798	6,577,565	6,815,278	6,670,324	7,208,954	393,676	5.8%
Treatment & Disposal Services	11,233,736	13,020,113	15,187,206	14,167,249	15,921,122	733,916	4.8%
Fabrication, Maint & Construction	9,228,217	9,392,869	10,411,419	10,177,678	10,672,350	260,931	2.5%
Capital Projects **	6,593,915	12,695,833	42,682,500	39,197,003	43,189,200	506,700	1.2%
Special Projects **	913,255	1,288,761	2,723,000	928,993	3,960,104	1,237,104	45.4%
Sub Total by Group	\$ 51,645,605	\$ 61,180,095	\$ 97,923,650	\$ 90,725,792	\$ 112,075,200	\$ 14,151,550	14.5%

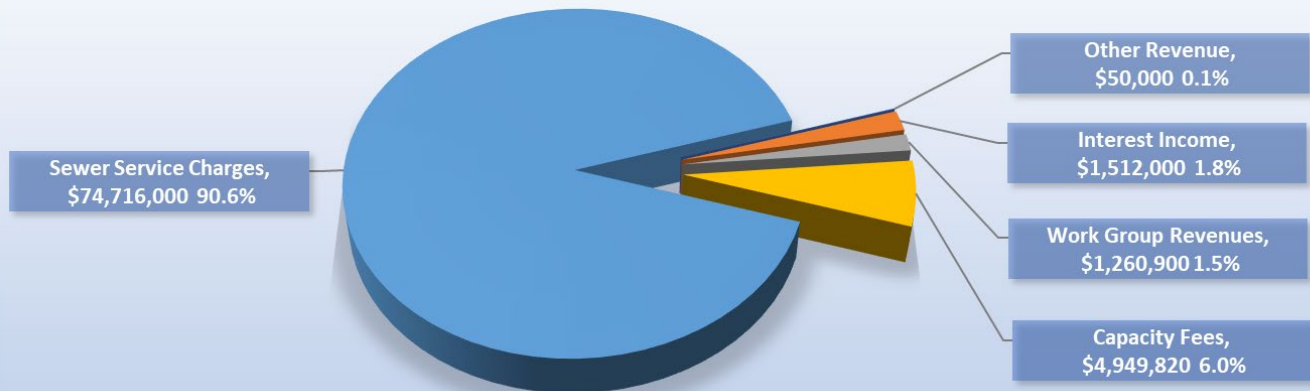
* Actual numbers based on modified accrual basis to reflect budget accounting

** Capital Projects and Special Projects are managed by multiple departments on a collaborative basis

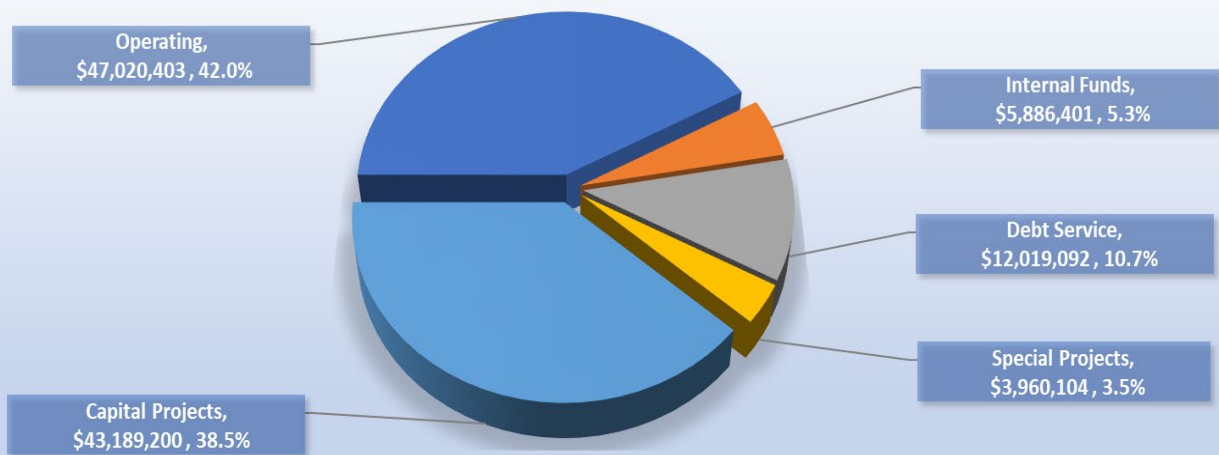
*** Business Services handles debt payments and pension management. The increase from FY 21 results from the anticipated 2021A debt pymt of \$7.5m and the Pension 115 Trust contribution of \$3m.

District Wide Revenue & Expenditures

Total Revenues (does not include bond proceeds)
\$82,488,720



Total Expenditures \$112,075,200



Combined Budget by Fund Sewer Service & Capacity Funds

	Sewer Service Fund	Capacity Fund	Total
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Revenues			
Sewer Service Charge	\$ 74,716,000	\$ -	\$ 74,716,000
Capacity Fees	-	4,949,820	4,949,820
Work Group Revenues	1,260,900	-	1,260,900
Interest	1,272,000	240,000	1,512,000
Other Revenues	50,000	-	50,000
Net Loan Proceeds	110,000,000	-	110,000,000
Total Revenues	187,298,900	5,189,820	192,488,720

Expenditures			
Operating	47,020,403	-	47,020,403
Internal Funds	5,886,401	-	5,886,401
Debt Service	8,370,401	3,648,691	12,019,092
Special Projects	3,960,104	-	3,960,104
Capital Projects	28,240,200	14,949,000	43,189,200
Total Expenditures	93,477,509	18,597,691	112,075,200

Revenues Over (less than) Expenditures	\$ 93,821,391	\$ (13,407,871)	\$ 80,413,520
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EXPENDITURES BY OPERATING GROUP			
Board of Directors	\$ 187,043	\$ -	\$ 187,043
General Manager	1,194,988	-	1,194,988
Business Services**	18,256,795	3,648,691	21,905,486
Collection Services	7,835,953	-	7,835,953
Technical Services	7,208,954	-	7,208,954
Treatment & Disposal Services	15,921,122	-	15,921,122
Fabrication, Maint & Construction	10,672,350	-	10,672,350
Capital Projects *	28,240,200	14,949,000	43,189,200
Special Projects *	3,960,104	-	3,960,104
Sub Total by Group	\$ 93,477,509	\$ 18,597,691	\$ 112,075,200

* Capital Projects and Special Projects are managed by multiple departments on a collaborative basis.

** Business Services manages all debt payments for the District.

REVENUES

	Actual * FY 18/19	Actual * FY 19/20	Budget FY 20/21	Projected FY 20/21	Adopted Budget FY 21/22	Variance to 20/21 Budget	% Change
Revenues							
Sewer Service Charge	\$57,330,651	\$ 60,216,148	\$ 60,500,000	\$62,250,000	\$ 74,716,000	\$ 14,216,000	23.5%
Capacity Fees	16,158,027	14,179,464	5,712,200	3,927,900	4,949,820	(762,380)	-13.3%
Work Group Revenues	1,321,729	1,285,438	1,293,500	1,192,200	1,260,900	(32,600)	-2.5%
Interest	2,657,281	3,115,507	1,150,000	1,290,000	1,512,000	362,000	31.5%
Other Revenues	866,298	174,673	75,000	32,745	50,000	(25,000)	-33.3%
Net Loan Proceeds	-	37,000,000	-	-	110,000,000	110,000,000	-
Total Revenues	\$78,333,986	\$115,971,230	\$ 68,730,700	\$68,692,845	\$192,488,720	\$123,758,020	180.1%

* Actual numbers based on modified accrual basis to reflect budget accounting

Sewer Service Charges - The principal revenue source for the Sewer Service Fund is the annual Sewer Service Charges, which are projected to increase over the prior year budget by \$14,216,000 or 23.5%. This increase is a combination of several items. The first is the one time deferred amount from the prior year of \$4,080,283 that's being collected in FY 2022. The second is the FY 2022 scheduled rate increase of 8%. Single Family Dwellings (SFD) will increase from \$454.37 in FY 2021 to \$490.93 in FY 2022. Similarly, the annual Multi-family Dwelling rate will increase from \$400.58 in FY 2021 to \$432.63 in FY 2022. Residential rates account for approximately 75% of total sewer service charge revenues. For non-residential customers, rates are calculated annually using flow based on water usage and sewage strength.

The District collects 97% of the sewer service charge revenue on the Teeter plan through the Alameda County property tax bill. As a result, there has been no impact to revenue collection for the District due to Covid-19.

Capacity Fees - The principal revenue source for the Capacity Fund is Capacity Fees, which are expected to decrease by \$762,380 or 13.3% to the prior year budget. These fees are collected in accordance with the provisions of California Assembly Bill (AB) 1600 and are intended to mitigate the impacts of new development. In the case of the District, these fees are collected from new development as a requirement of connecting to the sewer system. As such, they can only be used for capital projects that preserve or increase the system's capacity to serve that new development. The entire region has experienced a slowdown in development largely attributed to the impacts of Covid 19. While there is still strong activity in the development sector, with a number of large projects planned, the District has chosen to be conservative in its forecasting of capacity revenue.

Work Group Revenues - These revenues consist of field inspection fees, plan check fees, permits, external work orders, and services provided to the City of Fremont's Urban Runoff program. Because these items tend to vary based on external demands, anticipated revenues are typically

estimated in a conservative manner. For FY 2022 these revenues are expected to have a small decrease of \$32,600 or 2.5% compared to the prior year budget.

Interest Revenues – Investment earnings are expected to increase by \$362,000 or 31.5% to the prior year budget. This increase is directly attributable to the anticipated bond issuance of \$110 million dollars in September of 2021 and the resulting cash on hand. These funds will be invested in the California LAIF pool until they are utilized for project expenditures. Absent the bond earnings, interest revenue would decrease by \$290,000. Investment rates are expected to remain low for the budget year.

Loan Proceeds - The District anticipates issuing \$110 million in Revenue Bonds in the fall of 2021. These bonds will provide \$80 million for the ETSU Phase 1A project and an additional \$30 million for other CIP projects.

EXPENDITURES

	Actual *	Actual *	Budget	Projected	Adopted	Variance to	
	FY 18/19	FY 19/20	FY 20/21	FY 20/21	Budget	20/21 Budget	% Change
Expenditures by Type							
Operating	\$37,204,183	\$ 41,518,799	\$ 45,186,355	\$43,756,720	\$ 47,020,403	\$ 1,834,048	4.1%
Internal Funds	3,071,521	2,091,781	2,647,022	2,463,156	5,886,401	3,239,379	122.4%
Debt Service	3,862,731	3,584,921	4,684,773	4,379,920	12,019,092	7,334,319	156.6%
Special Projects	913,255	1,288,761	2,723,000	928,993	3,960,104	1,237,104	45.4%
Capital Projects	6,593,915	12,695,833	42,682,500	39,197,003	43,189,200	506,700	1.2%
Total Expenditures	51,645,605	61,180,095	97,923,650	90,725,792	112,075,200	14,151,550	14.5%
EXPENDITURES BY OPERATING GROUP							
Board of Directors	142,215	141,278	180,354	178,354	187,043	6,689	3.7%
General Manager	800,880	919,583	1,066,753	1,058,833	1,194,988	128,235	12.0%
Business Services	9,187,579	9,910,103	11,155,858	10,668,365	21,905,486	10,749,628	96.4%
Collection Services	7,441,010	7,233,990	7,701,282	7,678,993	7,835,953	134,671	1.7%
Technical Services	6,104,798	6,577,565	6,815,278	6,670,324	7,208,954	393,676	5.8%
Treatment & Disposal Services	11,233,736	13,020,113	15,187,206	14,167,249	15,921,122	733,916	4.8%
Fabrication, Maint & Const	9,228,217	9,392,869	10,411,419	10,177,678	10,672,350	260,931	2.5%
Capital Projects **	6,593,915	12,695,833	42,682,500	39,197,003	43,189,200	506,700	1.2%
Special Projects **	913,255	1,288,761	2,723,000	928,993	3,960,104	1,237,104	45.4%
Sub Total by Group	\$51,645,605	\$ 61,180,095	\$ 97,923,650	\$90,725,792	\$112,075,200	\$ 14,151,550	14.5%

* Actual numbers based on modified accrual basis to reflect budget accounting

** Capital Projects and Special Projects are managed by multiple departments on a collaborative basis

Overall, District expenditures are expected to increase by \$14.2 million or 14.5%. The following pages discuss the significant change in expenditures for FY 2022.

Operating Expenses							
	Actual * FY 18/19	Actual * FY 19/20	Budget FY 20/21	Projected FY 20/21	Adopted Budget FY 21/22	Variance to 20/21 Budget	% Change
Salaries & Benefits							
Salaries	\$ 17,525,644	\$ 19,019,548	\$ 19,009,118	\$ 19,182,936	\$ 20,024,866	\$ 1,015,748	5.3%
Pension	4,275,816	5,025,687	6,198,861	6,201,861	6,973,738	774,877	12.5%
Health Care Benefits	2,912,814	2,969,243	3,751,220	3,751,220	3,919,896	168,676	4.5%
Workers Compensation	290,765	395,340	382,581	382,581	360,417	(22,164)	-5.8%
Training	272,599	174,798	423,300	168,350	340,450	(82,850)	-19.6%
Other	445,951	488,684	601,842	564,257	599,962	(1,880)	-0.3%
Sub Total Salaries and Benefits	25,723,589	28,073,300	30,366,922	30,251,205	32,219,329	1,852,407	6.1%
Utilities	2,226,132	2,138,842	2,622,050	2,626,100	2,486,050	(136,000)	-5.2%
Biosolids	771,995	910,169	1,481,000	1,011,143	1,496,000	15,000	1.0%
Supplies	2,013,480	2,256,859	2,228,720	2,059,803	2,206,940	(21,780)	-1.0%
Chemicals	2,153,023	2,582,245	2,639,500	2,508,388	2,795,252	155,752	5.9%
Repair & Maintenance	2,985,223	3,397,476	3,778,343	3,396,846	3,689,612	(88,731)	-2.3%
Other	1,330,741	2,159,908	2,069,820	1,903,235	2,127,220	57,400	2.8%
Total Operating Expenditures	\$ 37,204,183	\$ 41,518,799	\$ 45,186,355	\$ 43,756,720	\$ 47,020,403	\$ 1,834,048	4.1%

Salaries and Benefits

District wide, personnel expenses are budgeted to increase \$1,852,407 or 6.1% over the prior year budget. The major items are discussed below:

- Salaries are budgeted to increase \$1,015,748 or 5.3%. The increase results from, prior year wage agreements, classified scheduled step increases, two full time limited term ETSU positions that were approved and budgeted for a portion of the prior year and are now budgeted for the full year and the addition of a full time limited term operator.
- Pension expenses are budgeted to increase of \$774,877 or 12.5% to the prior year budget based upon rates provided by CalPERS. The District prepays the annual Unfunded Liability Payment in July of each year, rather than paying in 12 monthly installments, generating a cost savings of \$145,000.
- Health Care Benefit costs will increase by \$168,676 or 4.5% over the prior year budget based on premium information provided by the District's health care provider.
- Workers Compensation costs will decrease \$22,164 or 5.8% due to an improved experience modification (x-mod). Significant efforts have been undertaken by the District to not only maintain, but to improve safety awareness.
- Training will decrease by \$82,850 or 19.6% largely due to the lingering impacts of Covid 19 on travel and as well as an emphasis on remote access learning.
- Other salary and benefits costs will decrease by \$1,880 to the prior year budget. Other salary and benefit costs consist of Medicare and unemployment taxes, membership fees and certain safety program expenditures.

Other Operating Expenditures

Other Operating expenses are budgeted, in total, to decrease \$18,359 to the prior year budget. The major items are discussed below:

- Utilities are decreasing \$136,000 or 5.2%. In the prior year (FY 21), PGE was indicating significant rate increases, but at budget time had not provided exact rate impacts. In anticipation of the increase, the District budgeted for the worst case. The actual increase was slightly lower than anticipated leading to a reduction in the 2022 budget.
- Biosolids disposal is remaining relatively flat with a \$15,000 increase. In 2021, the District conducted an RFP for biosolids hauling resulting in an 18 month contract with 3 one year extensions contract.
- Supplies are decreasing \$21,780 or 1.0%. Despite price increases, the District continues to find ways to keep supply costs down through focused purchasing and supply management.
- Chemicals are budgeted to increase \$155,752 or 5.9%. The main increases are for Hydrogen Peroxide, Hypochlorite and Polymers. These chemicals are used in the treatment of plant flows and for odor controls.
- Repair and Maintenance costs are decreasing by \$88,731 or 2.3% to FY 2021. This account varies year over year depending on the anticipated need of plant and equipment maintenance
- Other expenditures, which consists of rents, professional fees, permits, insurance costs and small asset purchases are budgeted to increase \$57,400 or 2.8% in the aggregate. A detailed analysis shows increases in insurance, contractor services and professional fees with reductions in certain consulting costs.

INTERNAL FUNDS							
Fund Description	Actual FY 18/19	Actual FY 19/20	Budget FY 20/21	Projected FY 20/21	Adopted Budget FY 21/22	Variance to 20/21 Budget	% Change
Other Post Employment Benefits - Fund 40	\$ 1,333,416	\$ 1,392,371	\$ 1,208,354	\$ 1,208,354	1,421,401	\$ 213,047	17.6%
115 Pension Trust - Fund 45 (New Fund)	-	-	-	-	3,000,000	\$ 3,000,000	100.0%
Vehicles & Equip Replacement - Fund 50	725,877	42,258	77,868	101,802	125,000	47,132	60.5%
Information Systems Replacement - Fund 60	690,885	412,483	960,800	953,000	940,000	(20,800)	-2.2%
Plant and Pump Station Replacement - Fund 70	321,343	244,669	400,000	200,000	400,000	-	0.0%
Total	\$ 3,071,521	\$ 2,091,781	\$ 2,647,022	\$ 2,463,156	\$ 5,886,401	\$ 3,239,379	122.4%

Other Post Employment Benefits (OPEB) – Fund 40

OPEB expenditures for the District are increasing \$213,047 or 17.6% to the prior year. The increase is largely related to a new policy, Pension and OPEB Policy 2095, adopted by the District in 2021 to increase and maintain the program funding percentages between 90% and 100%. These additional funds will work toward achieving that policy goal.

115 Pension Trust - Fund 45

115 Pension Trust, fund 45, is a new fund to facilitate the policy discussed in the paragraph above. Similar to OPEB, the long term goal is to increase the funding percentage of the District pension plan. Annually, the Board determines an amount to contribute into a qualified 115 Trust. This Trust accumulates funds, along with the related investment income, to be used for paying future qualified pension expenses. This strategy is expected to save the District \$24 million dollars over the next 27 years in pension costs.

Vehicle and Equipment Replacement – Fund 50

For FY 2022 the District is planning on purchasing an Air Release Valve Vacuum Truck to replace a vehicle that is being retired.

Information Systems Replacement – Fund 60

The following schedule details the budgeted expenditures for Information Systems. This list changes from year to year depending on the projects and equipment needs of the department.

Renewal & Replacement - Information Systems	
Project/System	
Small Equipment (Laptops, Switches, Routers, etc.)	\$ 409,000
Non-Residential Billing Replacement Phase 2	125,000
Permit Tracking System Replacement	125,000
GIS	88,000
Electronic Records Management	63,000
IT Security	40,000
ERP Replacement (Begin Planning)	37,500
Portal Proficy Replacement	37,500
Neo Gov Expansion	15,000
Total	\$ 940,000

Plant and Pump Station Replacement – Fund 70

The following schedule details the budgeted expenditures for the Plant and Pump Stations. These expenditures are determined based on plant wide assessments conducted each year.

Renewal & Replacement - Plant and Pump Station	
Unplanned Maint/Replacement of EBDA pump station	\$ 215,000
New Assets (2 polymer skids for GBT's, purchase 3 rebuild kits for NPS & IPS, 1 Sampler)	185,000
Total	\$ 400,000

Debt Service							
Debt	Status	FY Issued	Maturity	Payments FY Start	FY 21/22 Principal & Interest		
					Payment Sewer Srvc	Payment Capacity	Total Payment
2020A Revenue Bonds	Issued	19/20	2050	19/20	\$ 1,937,829	\$ 2,569,237	\$ 4,507,066
2021A Revenue Bonds	Anticipated	21/22	2052	21/22	6,432,572	1,079,454	7,512,026
					<u>\$ 8,370,401</u>	<u>\$ 3,648,691</u>	<u>\$ 12,019,092</u>

2021A Revenue Bonds - During FY 2022 the District anticipates issuing bonds in the amount of \$110 million dollars. Approximately \$80 million dollars of the issuance will be used to fund Phase 1A of the ETSU program. The balance of \$30 million will be used to fund three CIP projects scheduled to begin in FY 2022.

Water Infrastructure Finance and Innovation Act (WIFIA) Loan - In the fall of 2020, the District applied to be considered for an WIFIA loan to fund a portion of the \$350 million ETSU project. In January 2021, the District was invited to the second phase of the loan process and anticipates being awarded a \$189 million dollar loan in the fall of 2021. The District will have eight years to fully draw down the loan at which time the principal and any capitalized interest will begin repayment.

The debt payment budgeted above for the 2021A bonds is an estimate. The actual debt payment will be determined once the issuance is complete and final terms of the bonds are established.

Special Project Expenditures					
DESCRIPTION	Adopted Budget FY 20/21	Estimated Actual FY 20/21	Estimated Carryover	New \$ (Provision)	Adopted Budget FY 21/22
Administrative & Regulatory					
Anticipated Biosolids Coalition Membership Dues	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ 25,000
Anticipated Election Costs	-	-	-	940,104	940,104
GIS JPA	30,000	30,000	-	30,000	30,000
HR NEOGov Onboarding System	10,000	-	-	-	-
Property Acquisition	1,500,000	-	1,500,000	-	1,500,000
Public Information Program	70,000	60,000	10,000	55,000	65,000
Public Outreach Programs	150,000	100,000	50,000	75,000	125,000
Sub-Total Administrative & Regulatory	1,785,000	215,000	1,560,000	1,125,104	2,685,104
Studies & Other					
ACWD/SFPUC Joint Reclaimed Water Study	75,000	12,601	-	-	-
Alvarado Sub-Surface Investigation (Plant Groundwater Monitoring)	8,000	5,364	2,636	7,364	10,000
Capacity Fee Study	25,000	20,000	-	-	-
CIP Front End Specs Update	10,000	-	5,000	-	5,000
Cogen Replacement and Ventilation Study	-	-	-	125,000	125,000
Cost of Service Analysis (COSA)	-	7,098	-	-	-
Digester 8 Feasibility Study	-	-	-	100,000	100,000
Energy Resiliency Study	-	-	-	100,000	100,000
Financial Master Plan	40,000	-	-	-	-
Fiscal Model Update	25,000	15,000	10,000	20,000	30,000
Forcemain Condition Assessment	30,000	30,000	-	5,000	5,000
Forcemain Geotech Investigation at Alameda Creek	100,000	100,000	-	30,000	30,000
Headworks Degritting	-	-	-	200,000	200,000
Irvington Basin MP Update	270,000	210,000	60,000	20,000	80,000
Local Limits Study	-	-	-	70,000	70,000
Odor Control Pilot Study	305,000	292,079	12,921	7,079	20,000
Old Alameda Creek Report of Waste Discharge (ROWD)	50,000	21,851	-	-	-
Pump Stations Asset Condition Assessment	-	-	-	250,000	250,000
Seal Level Rise Study Update	-	-	-	150,000	150,000
Thermal Dryer Feasibility Study	-	-	-	100,000	100,000
Sub-Total Studies & Other	938,000	713,993	90,557	1,184,443	1,275,000
Total Special Projects	\$ 2,723,000	\$ 928,993	\$ 1,650,557	\$ 2,309,547	\$ 3,960,104

The special projects fund accounts for expenditures that are outside the year over year operating costs of the District and also do not meet the definition of a capital project. Many of the items are assessments of plant and system conditions or feasibility studies for future capital projects. A discussion of some of the major items follows:

Anticipated Election Costs - These funds have been set aside for the upcoming Board Elections to be held at the time of the primary elections in March of 2022.

Property Acquisition - Each year the District sets aside funds for property acquisition should one or more properties of interest become available. The primary purpose of property acquisition is for future plant or pump station expansion.

Digester 8 Feasibility Study- This study is to determine the feasibility of removing several of the current digesters and replacing them with a larger and newer digester. This project could potentially save the district money for long term repair and maintenance costs on the older digesters and provide more capacity with a larger digester.

Energy Resiliency Study - This study will evaluate the feasibility of different energy projects (solar, wind, batteries, and cogeneration) at the Plant, pump stations, lift stations, and other District parcels located in the service area.

Headworks Degritting - This study will evaluate several projects at the Plant and determine site and system requirements, construction sequence, operational constraints, and extent of the projects' scope. Projects include the Degritting at Headworks, Odor Scrubber Replacement at the East and West Primary Clarifier Buildings and Headworks, Primary Clarifiers 1-4 Seismic Upgrade, and Plant 1 and 2 Water Improvements. One key system evaluation will be the primary sludge piping system as a result of adding the new degritting process at the Headworks Building and eliminating the existing degritters in the Degritter Building.

Pump Station Assessment - This study will conduct a condition assessment of the pump and lift stations' major assets and recommend the renewal and replacements of these assets based on their remaining useful life. This study will be updated every five years.

Sea Level Study Update - This study will evaluate the current sea level rise projections and the effect the projections will have on the District's facilities. The study will recommend measures for the District to mitigate the impact.

Thermal Dryer Feasibility Study - This study will evaluate the feasibility of USD installing and operating a thermal dryer. A thermal dryer uses natural or biogas to heat dewatered biosolids to reduce the water content and create Class A biosolids which expands the possible re-use options for the biosolids.

FUND BALANCE



New Control Pumps and Piping for Digester 7

RESERVE/ALLOCATION BALANCES	
Operating Cash Flow	\$ 24,068,200
Structural Renewal & Replacement	50,075,000
Emergency	7,250,000
Short Term Liquidity	5,000,000
Parity Debt (does not include 2021A requirements)	2,887,200
Risk Management	1,000,000
Industrial Customer Stabilization	1,400,000
Unspent Debt Issuance (does not include 2021A funds)	7,740,000
Total Restricted/Allocated Balances	\$ 99,420,400

Reserves listed above are discussed below:

Operating Cash Flow – Sewer Service Charge revenues are collected by the Alameda County Tax Collector’s Office and remitted to the District in two major installments in December and April of each year. For the District to pay its ongoing expenditures throughout the year, it reserves between three and six months (25-50%) of gross operating expenditures at the start of each fiscal year.

Structural Renewal & Replacement – To maintain the ability to renew and replace infrastructure, this reserve is funded at the average annual renewal/replacement capital costs based on the 10-year CIP. This is a conservative approach.

Emergency – In order to help mitigate the financial impacts of an emergency or catastrophic event, the District has an Emergency Reserve. The target for FY 2022 is \$7.25 million.

Short-Term Liquidity – The District maintains a minimum amount of immediately available funds, to cover the rolling 6-month average monthly payroll, plus a rolling 6-month average of the monthly accounts payable, held in a local bank account, in cash deposits.

Parity Debt Reserve- This fund was recently established to cover debt covenants associated with the recent Series 2020A bond issuance. This amount will be increased accordingly when the proposed 2021A bond issuance is completed.

Risk Management - The District is a member of and purchases liability insurance from the California Sanitation Risk Management Association (CSRMA). The deductible of \$500,000 reduces the amount of premiums charged to the District. To account for an event that is either not covered by insurance or under the deductible amount, the District reserves two times the annual deductible amount, based on claims history.

Industrial Customer Stabilization- The District has several Significant Industrial Users (SIUs). This reserve allows the District to implement appropriate responses and actions should one or more of

these SIUs significantly scale back or cease operations unexpectedly, resulting in a rapid loss of revenue to the District.

Unspent Debt Issuance – These funds represent the unspent 2020A bond issuance. They are maintained in a separate investment account and are being drawn down for specifically identified projects as they progress.

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CAPITAL IMPROVEMENT PLAN



Looking West Across the Aeration Basins

Capital Improvement Plan

Capital improvements are construction or renovation activities that add value to the District's fixed assets (pipelines, buildings, facilities, and equipment) or significantly extend their useful life. Each year, the District reviews its 20 year Capital Improvement Program (CIP) based on factors such as growth, regulatory requirements, planning documents, and existing asset management needs. The rehabilitation, replacement, improvement, and expansion of the District's facilities continue to be the key drivers for the proposed Fiscal Year 2022 CIP. The District funds an extensive CIP plan that is designed to preserve, maintain, and enhance assets, meet regulatory requirements, accommodate the community's needs, and protect public health and the environment.

In the next 12 to 18 months the District expects to have over 45 individual capital projects underway that will be completed in the next 1 to 7 years totaling in excess of \$440 million dollars. The following pages provide a description of those projects followed by a breakout summary of the CIP projects for the next five years. The appendix contains a detailed summary of the entire 20 year CIP budget.

CIP Project Descriptions	
Cathodic Protection Improvements	The Cathodic Protection Improvements project will replace the existing cathodic protection systems at the Plant, pump stations, and force mains. The purpose of the cathodic protection systems is to prevent the corrosion of buried steel, ductile iron, and cast iron pipelines, fittings, and other structures. District staff surveys and tests all of the cathodic protection systems annually and will hire a consultant to determine if any of the systems need to be replaced.
ETSU - Campus Building	This project will replace the Administration, Control, and Facilities Maintenance Buildings with one combined campus building.
Field Ops Bldg. Seismic Upgrade and Leak Repairs	This project will include seismic retrofits and leak repairs to the Field Operations Building.
FMC Storage	This project will provide equipment and materials storage for the FMC Work Group.
Solar Panels/Inverters Replacement at Carport	This project will replace the solar panels and/or power inverters of the Solar Carport System located at the Plant. The schedule of replacement is based on a 20-year useful life for the solar panels and a 10-year useful life for the power inverters.
Solar Panels/Inverters Replacement at Irvington	This project will replace the solar panels and power inverters for the photovoltaic system located at the Irvington Pump Station. The schedule of replacement is based on a 20-year useful life for the solar panels and a 10-year useful life for the power inverters.
Cast Iron/Pipe Lining	This project will install cured-in-place pipe (CIPP) inside existing deteriorated sewer mains without trenching. District staff will review the CCTV inspection of the sewer mains and identify the mains that are candidates for CIPP rehabilitation. This includes budgets for multiple phases of work.
Central Avenue Sanitary Sewer Relocation	This project will relocate an existing sewer main on Central Avenue in the City of Newark to accommodate the City's plans to construct an overpass above the railroad crossing.

Gravity Sewer Rehab/Replacement	This project will rehabilitate and/or replace existing deteriorated sewer mains by open cut trenching. District staff will review the CCTV inspection of the sewer mains and identify the mains that are candidates for rehabilitation/replacement by the open cut trenching method. This includes budgets for multiple phases of work.
RCP Sewer Rehab (Alvarado Basin)	This project will rehabilitate deteriorated sewer trunk mains located in the Alvarado Basin that are primarily reinforced concrete pipe (RCP) by the CIPP method. The project timing will correspond with the completion of the condition assessment phase of the drainage basin's master plan update.
RCP Sewer Rehab (Irvington Basin)	This project will rehabilitate deteriorated sewer trunk mains located in the Irvington Basin that are primarily reinforced concrete pipe (RCP) by the CIPP method. The project timing will correspond with the completion of the condition assessment phase of the drainage basin's master plan update.
Cherry St PS	This project will include electrical and mechanical improvements to the Cherry Street Pump Station.
Forcemain Corrosion Repairs - Phase 3	This is the third of four phases to repair or replace corroded steel fittings, pipes, and valves in the manholes along the east force main between Irvington Pump Station and Newark Pump Station.
Forcemain Corrosion Repairs - Phase 4	This is the fourth of four phases to repair or replace corroded steel fittings, pipes, and valves in the manholes along the west force main between Irvington Pump Station and Newark Pump Station.
Irvington PS Pumps and VFDs	This project will replace the wastewater pumps, variable frequency drives, piping, backup generator, and other equipment at the Irvington Pump Station.
Newark and Irvington PS Chemical System Improvements	This project will replace the odor control systems, chemical storage and pumping systems, and other miscellaneous work at Newark Pump Station and Irvington Pump Station.
Pump Station Asset Condition Assessment R&R	These are budget placeholders for replacing equipment at the pump and lift stations based on recommendations from the 2015 Pump Station Master Plan (which will now be called Pump Station Asset Condition Assessment Study) and any subsequent updates.
Sanctuary West Pump Station	This is a budget placeholder for the replacement of the Cherry Street Pump Station when the Sanctuary West housing development is constructed.
Transport System Misc. Projects	These are budget placeholders for transport system needs.
Wet Weather Flow Management	This is a budget placeholder for projects related to USD's wet weather flow management needs.
Aeration Blower 11 and East Blower Bldg Improvements	This project will install a second high speed aeration blower, upgrade the building ventilation system, and make structural repairs in the East Blower Building.
Alvarado Influent PS Improvements	This project will replace the wastewater pumps, variable frequency drives, piping, valves, electrical switchboard, and other miscellaneous improvements to the Alvarado Influent Pump Station.
Alvarado Influent Valve Box Gate Valves 1-2	This project will replace the force main knife gate valves at the Alvarado Influent Valve Box and the Headworks Valve Box.
Centrifuge Building Improvements	This project will replace the horizontal and inclined conveyors in the Centrifuge Building.
Centrifuge Replacement	This project will replace the centrifuges in the Centrifuge Building.
Centrifuge System Equipment Replacement	This project will replace pumps, conveyors, piping, and electrical equipment in the Centrifuge Building.
Cogen Engine No. 1 60K Block Replacement	This project will replace the engine block after the current engine block on Cogen No. 1 has operated for 60,000 hours.

Cogen Engine No. 2 60K Block Replacement	This project will replace the engine block after the current engine block on Cogen No. 2 has operated for 60,000 hours.
Digester No. 1 Insp & Rehab	This project will conduct a condition assessment and rehabilitate Primary Digester No. 1 and its associated equipment, piping, and valves.
Digester No. 2 Insp & Rehab	This project will conduct a condition assessment and rehabilitate Primary Digester No. 2 and its associated equipment, piping, and valves.
Digester No. 4 Insp & Rehab	This project will conduct a condition assessment and rehabilitate Primary Digester No. 4 and its associated equipment, piping, and valves.
Digester No. 6 Insp & Rehab	This project will conduct a condition assessment and rehabilitate Primary Digester No. 6 and its associated equipment, piping, and valves.
Digester No. 7	This project will construct new Primary Digester No. 7, hot water boiler, and iron salt chemical storage and feed system.
Emergency Outfall Outlet Improvements	This project will replace a portion of the final effluent discharge piping system at the Old Alameda Creek and construct a redundant pipeline and a new concrete apron around the final effluent discharge opening at the Creek.
ETSU - Aeration Basin Modifications	This project will modify Aeration Basins 1 through 7 to improve the plant's activated sludge system.
ETSU - Aeration Basin No. 8	This project will construct new Aeration Basin 8 to increase the plant's activated sludge system's capacity.
ETSU - Aeration Internal Lift Pumps	This project will replace the three carbon steel lift pumps at Lift Station 2.
ETSU - Blower 7-10 Replacement	This project will replace Blowers 7 through 10 with high speed aeration blowers.
ETSU - Secondary Clarifiers	This project will construct four new secondary clarifiers.
ETSU - Switchboard 4 Replacement	This project will replace 480-volt Switchboard 4.
ETSU - Effluent Facilities	This project will replace the chlorine contact tank, final effluent pump station, and reclaimed water pump station.
ETSU - Plant Equalization Storage	This project will construct primary effluent equalization storage at the existing Secondary Clarifiers 1 through 4 structures.
Flares Replacement	This project will replace the digester gas flare system when the Bay Area Air Quality Management District requires the flares shall meet the latest emissions limits.
Headworks Screens Replacement	This project will replace the two mechanical screens and one manual bar rack with three new mechanical screens.
MCC Replacement	This project will replace electrical motor control centers that have reached the end of their useful life.
Miscellaneous Improvements	This project will rehabilitate or replace miscellaneous structural and electrical improvements at various facilities at the plant.
Odor Scrubber System Improvements	This project will replace the odor control systems at the Headworks Building, Primary Clarifiers 1 through 4 Building, Alvarado Influent Pump Station, Centrifuge Building, WAS Thickening Building, Gravity Thickeners, and Degritter Building.
Plant 1 and 2 Water System Improvements	This project will construct a booster pump station to improve the capacity and pressure of the plant's 1 and 2 water systems.
Plant 5kV Switchgear	This project will replace the plant's 4,160-volt switchgear located in the Main Electrical Building.
Plant 12kV Switchgear	This project will construct a new 12,000-volt utility switchgear located near the Veasy Street entrance and replace the plant's existing 12,000-Volt utility switchgear located in the Main Electrical Building.

Plant Asset Condition Assessment R&R	These are budget placeholders for replacing equipment at the plant based on recommendations from the 2018 Plant Asset Condition Assessment Study, and any subsequent updates.
Plant Fiber Optic Network	These are budget placeholders for construction of underground communication duct banks to provide a route for the plant's fiber optic communication infrastructure.
Plant Mechanical and Electrical Projects	These are budget placeholders for the mechanical and electrical assets at the plant.
PLC Replacement	These are budget placeholders to replace the processor modules in the plant's programmable logic controllers located at all process areas.
Primary Clarifier (1 - 4) Seismic Upgrade	This project will upgrade the Primary Clarifiers 1 through 4 Building's structure to address seismic deficiencies identified in the 2016 Seismic Study.
Primary Clarifier Rehab (5-6)	This project will replace the clarifier mechanisms, modify the ventilation system, and rehabilitate the structural components of the Primary Clarifiers 5 and 6 Building, including Sludge Pump Room 3.
Secondary Digester No. 1 Insp & Rehab	This project will conduct a condition assessment and rehabilitate Secondary Digester No. 1 and its associated equipment, piping, and valves.
Secondary Digester No. 2 Insp & Rehab	This project will conduct a condition assessment and rehabilitate Secondary Digester No. 2 and its associated equipment, piping, and valves.
Seismic Retrofit of Conc. Structures	These are budget placeholders for the seismic retrofit of concrete structures at the plant.
Site Drainage Improvements	This project will construct additional site waste pump station and piping system depending on the outcome of the Plant Site Drainage Study Update.
Sodium Hypochlorite Loop Improvements	This project will replace portions of the sodium hypochlorite piping system for the odor control system.
Standby Power Generation System Upgrade	This project will replace the plant's standby generators, Substation 2, and the Odor Control Building's switchgear.
Switchboard 3 Replacement	This project will replace Switchboard 3 located in the Main Electrical Building.
Thickeners 1 and 2 Rehabilitation	This project will replace the thickener mechanism and rehabilitate the concrete at Thickeners 1 and 2.
WAS Thickeners	This project will replace the gravity belt thickeners, pumps, motor control center, and programmable logic controller in the WAS Thickener Building.

UNION SANITARY DISTRICT CIP FISCAL YEAR 21/22 - 20 YEAR FORECAST SUMMARY

Project Name	% Fund 80	% Fund 90	Rank	Total Project Cost	Spent in Prior Years	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27 to FY 31	FY 32 to FY 36	FY 37 to FY 41	Total
Admin Facilities														
Additional CS (Vehicle) Storage	100%	-	3	250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250	\$ -	\$ -	\$ 250
Cathodic Protection Improvements	100%	-	2	4,080	180	550	-	500	-	300	600	1,100	850	3,900
ETSU - Campus Building	100%	-	1	70,430	1,311	13,000	38,539	17,580	-	-	-	-	-	69,119
Field Ops Bldg. Seismic Upgrade and Leak Repairs	100%	-	1	3,300	-	-	-	-	200	-	3,100	-	-	3,300
FMC Storage	100%	-	3	300	-	-	-	300	-	-	-	-	-	300
Plant Paving	100%	-	3	1,750	-	-	-	-	-	-	950	600	200	1,750
Radio Repeater Antenna Replacement	100%	-	2	150	-	-	-	-	-	-	150	-	-	150
Solar Panels/Inverters Replacement at Alvarado	50%	50%	3	300	-	-	-	-	-	-	-	300	-	300
Solar Panels/Inverters Replacement at Carport	50%	50%	2	900	-	100	-	-	-	-	600	-	200	900
Solar Panels/Inverters Replacement at Irvington	50%	50%	2	2,100	-	300	-	-	-	-	-	1,800	-	2,100
				83,560	1,491	13,950	38,539	18,380	200	300	5,650	3,800	1,250	82,069
Collection System														
Cast Iron/Pipe Lining	100%	-	2	6,803	8	-	530	-	560	-	1,860	1,420	2,425	6,795
Central Avenue Sanitary Sewer Relocation	100%	-	1	1,085	35	50	1,000	-	-	-	-	-	-	1,050
Gravity Sewer Rehab/Replacement	100%	-	2	20,803	136	650	-	1,698	-	1,807	3,968	6,956	5,588	20,667
RCP Sewer Rehab (Alvarado Basin)	100%	-	1	4,900	-	-	-	-	200	2,200	2,500	-	-	4,900
RCP Sewer Rehab (Irvington Basin)	100%	-	1	9,678	78	2,200	2,500	-	-	-	4,900	-	-	9,600
RCP Sewer Rehab (Newark Basin)	100%	-	1	4,900	-	-	-	-	-	-	4,900	-	-	4,900
				48,169	257	2,900	4,030	1,698	760	4,007	18,128	8,376	8,013	47,912
Transport System														
Alameda Creek Crossing Lift Station	50%	50%	2	10,612	-	-	-	-	-	-	6,648	3,964	-	10,612
Cherry St. PS	-	100%	1	490	90	200	200	-	-	-	-	-	-	400
Equalization Storage @ Newark	-	100%	2	24,400	-	-	-	-	-	-	24,400	-	-	24,400
Forcemain Corrosion Repairs - Phase 3	100%	-	1	1,010	10	250	750	-	-	-	-	-	-	1,000
Forcemain Corrosion Repairs - Phase 4	100%	-	1	1,050	-	-	250	800	-	-	-	-	-	1,050
Forcemain Rehabilitation	100%	-	3	50,000	-	-	-	-	-	-	900	49,100	-	50,000
Irvington PS Pumps and VFDs	50%	50%	2	13,400	-	100	-	1,550	8,250	3,500	-	-	-	13,400
Newark and Irvington PS Chemical System Improve	45%	55%	2	7,840	140	2,500	5,200	-	-	-	-	-	-	7,700
Newark PS Pumps and VFDs	50%	50%	2	9,800	-	-	-	-	-	-	9,800	-	-	9,800
Pump Station Asset Condition Assessment R&R	100%	-	3	21,086	-	-	1,432	-	3,632	872	4,365	5,248	5,537	21,086
Sanctuary West Pump Station	-	100%	2	3,000	-	-	1,500	1,500	-	-	-	-	-	3,000
Transport System Misc. Projects	100%	-	3	4,750	-	-	250	250	250	250	1,250	1,250	1,250	4,750
Wet Weather Flow Management	100%	-	2	1,100	-	-	100	1,000	-	-	-	-	-	1,100
				148,538	240	3,050	9,682	5,100	12,132	4,622	47,363	59,562	6,787	148,298
Treatment Plant														
Aeration Blower 11 and East Blower Bldg Improve	-	100%	2	1,610	210	1,400	-	-	-	-	-	-	-	1,400
Alvarado Influent PS Improvements	50%	50%	2	7,221	2,221	5,000	-	-	-	-	-	-	-	5,000
Alvarado Influent Valve Box Gate Valves 1-2	100%	-	2	550	-	-	-	50	500	-	-	-	-	550
Centrifuge Building Improvements	50%	50%	2	1,270	770	500	-	-	-	-	-	-	-	500
Centrifuge Replacement	50%	50%	2	18,300	-	-	-	-	-	1,100	17,200	-	-	18,300
Centrifuge System Equipment Replacement	100%	-	2	13,600	-	-	-	-	-	900	12,700	-	-	13,600
Cogen Engine No. 1 60K Block Replacement	50%	50%	1	2,300	-	-	-	-	1,050	-	-	1,250	-	2,300
Cogen Engine No. 2 60K Block Replacement	50%	50%	1	3,600	-	-	1,000	-	-	-	1,150	-	1,450	3,600
Cogen Retrofit	50%	50%	2	2,100	-	-	-	-	-	-	2,100	-	-	2,100
Control Box No. 1 Improvements	100%	-	2	6,715	-	-	-	-	-	-	6,715	-	-	6,715
Degritter Building Roof (Seismic) Replacement	100%	-	2	4,990	-	-	-	-	-	-	3,660	1,330	-	4,990
Degritting at Headworks and Improvements	50%	50%	2	16,510	-	-	-	-	-	-	16,510	-	-	16,510
Diffuser Replacement	100%	-	3	1,600	-	-	-	-	-	-	-	1,600	-	1,600
Digester No. 1 Insp & Rehab	100%	-	2	10,700	-	-	200	1,400	2,800	-	-	6,300	-	10,700
Digester No. 2 Insp & Rehab	100%	-	1	9,380	3,330	150	-	-	-	-	-	5,900	-	6,050
Digester No. 3 Insp & Rehab	100%	-	3	4,235	-	-	-	-	-	-	413	3,822	-	4,235
Digester No. 4 Insp & Rehab	100%	-	3	4,320	-	-	-	-	420	3,900	-	-	-	4,320
Digester No. 5 Insp & Rehab	100%	-	3	4,480	-	-	-	-	-	-	4,480	-	-	4,480
Digester No. 6 Insp & Rehab	100%	-	3	14,750	-	-	200	1,000	4,650	-	-	-	8,900	14,750
Digester No. 7 Insp & Rehab	100%	-	3	5,100	-	-	-	-	-	-	-	-	5,100	5,100

UNION SANITARY DISTRICT CIP FISCAL YEAR 21/22 - 20 YEAR FORECAST SUMMARY

Project Name	% Fund 80	% Fund 90	Rank	Total Project Cost	Spent in Prior Years	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27 to FY 31	FY 32 to FY 36	FY 37 to FY 41	Total
Digester No. 7	-	100%	1	28,500	25,000	3,500	-	-	-	-	-	-	-	3,500
Emergency Outfall Outlet Improvements	50%	50%	1	1,900	500	1,400	-	-	-	-	-	-	-	1,400
ETSU - Aeration Basin Modifications	60%	40%	1	45,013	4,350	3,563	17,200	9,400	10,500	-	-	-	-	40,663
ETSU - Aeration Basin No. 8	40%	60%	1	15,200	-	4,000	7,500	3,700	-	-	-	-	-	15,200
ETSU - Aeration Internal Lift Pumps	60%	40%	1	3,725	-	425	1,600	900	800	-	-	-	-	3,725
ETSU - Blower 7-10 Replacement	60%	40%	1	11,200	-	1,500	4,900	2,800	2,000	-	-	-	-	11,200
ETSU - Secondary Clarifiers	60%	40%	1	111,185	110	3,700	10,350	36,000	50,125	10,900	-	-	-	111,075
ETSU - Switchboard 4 Replacement	60%	40%	1	1,650	-	-	150	1,000	500	-	-	-	-	1,650
ETSU - Effluent Facilities	60%	40%	1	38,175	-	800	975	17,025	10,475	8,900	-	-	-	38,175
ETSU - Plant Equalization Storage	25%	75%	1	32,000	-	-	-	1,000	1,500	4,249	25,251	-	-	32,000
ETSU - Nutrient Removal (Level 2 Year-round)	50%	50%	3	226,204	-	-	-	-	-	-	-	4,738	221,466	226,204
Flares Replacement	100%	-	2	6,170	-	-	670	5,500	-	-	-	-	-	6,170
Headworks Gates	100%	-	2	4,000	-	-	-	-	-	-	4,000	-	-	4,000
Headworks Screens Replacement	60%	40%	1	2,480	2,380	100	-	-	-	-	-	-	-	100
MCC Replacement	100%	-	2	965	-	50	400	-	-	-	515	-	-	965
Miscellaneous Improvements	100%	-	2	1,500	-	250	1,250	-	-	-	-	-	-	1,500
Odor Scrubber System Improvements	100%	-	2	47,965	-	-	-	-	610	1,242	14,518	22,046	9,549	47,965
Plant 1 and 2 Water System Improvements	100%	-	2	1,120	-	-	-	-	-	100	1,020	-	-	1,120
Plant 5kV Switchgear	100%	-	2	4,113	-	-	-	370	2,620	1,123	-	-	-	4,113
Plant 12kV Switchgear	100%	-	1	14,100	-	500	3,500	-	1,000	5,100	4,000	-	-	14,100
Plant Additional Power Source	50%	50%	3	10,000	-	-	-	-	-	-	-	-	10,000	10,000
Plant Asset Condition Assessment R&R	100%	-	2	27,299	-	-	100	150	4,086	475	6,772	10,576	5,140	27,299
Plant Fiber Optic Network	50%	50%	2	4,898	-	-	-	-	-	110	2,788	2,000	-	4,898
Plant Mechanical and Electrical Projects	100%	-	2	9,500	-	-	500	500	500	500	2,500	2,500	2,500	9,500
PLC Replacement	100%	-	2	2,250	-	-	250	-	300	-	350	400	950	2,250
Primary Clarifier (1 - 4) Seismic Upgrade	100%	-	1	6,050	-	-	682	3,758	1,610	-	-	-	-	6,050
Primary Clarifier Rehab (5-6)	75%	25%	2	22,575	-	-	-	-	1,445	9,680	11,450	-	-	22,575
Secondary Digester No. 1 Insp & Rehab	100%	-	3	8,136	-	-	334	3,089	-	-	-	4,713	-	8,136
Secondary Digester No. 2 Insp & Rehab	100%	-	3	8,581	-	-	-	-	-	353	3,258	-	4,970	8,581
Seismic Retrofit of Conc. Structures	100%	-	2	2,700	-	-	-	300	-	300	600	900	600	2,700
Site Drainage Improvements	50%	50%	2	6,226	-	-	-	400	830	2,776	2,220	-	-	6,226
Sodium Hypochlorite Loop Improvements	100%	-	2	1,300	-	50	650	600	-	-	-	-	-	1,300
Standby Power Generation System Upgrade	100%	-	1	33,240	2,340	500	16,000	12,100	2,300	-	-	-	-	30,900
Standby Power Generator No. 4	-	100%	3	21,599	-	-	-	-	-	-	-	2,057	19,542	21,599
Switchboard 3 Replacement	100%	-	2	2,228	-	200	1,428	600	-	-	-	-	-	2,228
Thickeners 1 and 2 Rehabilitation	100%	-	2	2,513	-	-	-	200	1,619	694	-	-	-	2,513
Thickeners 3 and 4 Rehabilitation	100%	-	3	3,281	-	-	-	-	-	-	-	3,281	-	3,281
WAS Thickeners	100%	-	1	14,860	860	500	8,000	5,500	-	-	-	-	-	14,000
Waste Recycling and Alternative Energy	-	100%	3	10,500	-	-	-	-	-	-	10,500	-	-	10,500
Grand Total				928,232	42,071	28,088	77,839	107,342	102,240	52,402	154,670	73,413	290,167	886,161
				\$ 1,208,499	\$ 44,059	\$ 47,988	\$ 130,090	\$ 132,520	\$ 115,332	\$ 61,331	\$ 225,811	\$ 145,151	\$ 306,217	\$ 1,164,440

UNION SANITARY DISTRICT CIP FISCAL YEAR 21/22 - 20 YEAR FORECAST SUMMARY

Project Name	% Fund 80	% Fund 90	Rank	Total Project Cost	Spent in Prior Years	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27 to FY 31	FY 32 to FY 36	FY 37 to FY 41	Total
Total Administrative				\$ 83,560	\$ 1,491	\$ 13,950	\$ 38,539	\$ 18,380	\$ 200	\$ 300	\$ 5,650	\$ 3,800	\$ 1,250	\$ 82,069
Total Collection System				48,169	257	2,900	4,030	1,698	760	4,007	18,128	8,376	8,013	47,912
Total Transport				148,538	240	3,050	9,682	5,100	12,132	4,622	47,363	59,562	6,787	148,298
Total Treatment Plant				928,232	42,071	28,088	77,839	107,342	102,240	52,402	154,670	73,413	290,167	886,161
Grand Total				1,208,499	44,059	47,988	130,090	132,520	115,332	61,331	225,811	145,151	306,217	1,164,440
Repair & Replacement (Fund 800) Total				821,133	14,201	31,378	106,460	100,225	79,021	44,061	139,602	136,068	170,117	806,932
Capacity (Fund 900) Totals				387,366	29,859	16,610	23,630	32,295	36,311	17,270	86,209	9,083	136,100	357,508
				\$ 1,208,499	\$ 44,059	\$ 47,988	\$ 130,090	\$ 132,520	\$ 115,332	\$ 61,331	\$ 225,811	\$ 145,151	\$ 306,217	\$ 1,164,440
Repair & Replacement (Fund 800) Total - 90% to FY 22 Budget						\$ 28,240								
Capacity (Fund 900) Totals - 90% to FY 22 Budget						14,949								
						\$ 43,189								
Priority 1 Administrative				\$ 73,730	\$ 1,311	\$ 13,000	\$ 38,539	\$ 17,580	\$ 200	\$ -	\$ 3,100	\$ -	\$ -	\$ 72,419
Priority 1 Collection System				20,563	113	2,250	3,500	-	200	2,200	12,300	-	-	20,450
Priority 1 Transport				2,550	100	450	1,200	800	-	-	-	-	-	2,450
Priority 1 Treatment & Disposal				374,558	38,870	20,638	71,857	93,183	81,860	29,149	30,401	7,150	1,450	335,688
Total Priority 1				471,401	40,394	36,338	115,096	111,563	82,260	31,349	45,801	7,150	1,450	431,007
Priority 2 Administrative				7,230	180	950	-	500	-	300	1,350	2,900	1,050	7,050
Priority 2 Collection System				27,606	144	650	530	1,698	560	1,807	5,828	8,376	8,013	27,462
Priority 2 Transport				70,152	140	2,600	6,800	4,050	8,250	3,500	40,848	3,964	-	70,012
Priority 2 Treatment & Disposal				230,888	3,201	7,450	5,448	10,070	15,310	19,000	105,618	46,052	18,739	227,687
Total Priority 2				335,876	3,665	11,650	12,778	16,318	24,120	24,607	153,644	61,292	27,802	332,211
Priority 3 Administrative				2,600	-	-	-	300	-	-	1,200	900	200	2,600
Priority 3 Collection System				-	-	-	-	-	-	-	-	-	-	-
Priority 3 Transport				75,836	-	-	1,682	250	3,882	1,122	6,515	55,598	6,787	75,836
Priority 3 Treatment & Disposal				322,786	-	-	534	4,089	5,070	4,253	18,651	20,211	269,978	322,786
Total Priority 3				\$ 401,222	\$ -	\$ -	\$ 2,216	\$ 4,639	\$ 8,952	\$ 5,375	\$ 26,366	\$ 76,709	\$ 276,965	\$ 401,222

OTHER INFORMATION



New Wastewater Pump, Piping and Gate Valve at the Alvarado Pump Station

Annual Contract Purchases of Supplies, Services and Projects Renewal/Replacement Over \$100,000 for Fiscal Year 21/22	
	Estimated Expenditure
Supplies:	
Sodium Hypochlorite, 1-Year	\$ 720,000
Hydrogen Peroxide, 1-Year	597,000
Ferrous Chloride, 1-Year	547,000
Polymer, Emulsion, 2-Year Contract with 3 Optional 1-Year Renewals	503,500
LMK (Inversion Lining Kits)	125,000
Polymer, Mannich, 2-Year Contract with 3 Optional 1-Year Renewals	105,000
Total Supplies	\$ 2,597,500
Services:	
Series 2021A - Annual Debt Service on Bonds	\$ 7,512,026
CalPERS Retirement	6,913,738
Series 2020A - Annual Debt Service on Bonds	4,507,066
CalPERS Medical	3,919,896
115 Pension Trust Contribution	3,000,000
PG&E - Alvarado Site (\$1,800,000) and Newark P.S. (\$251,000)	2,051,000
EBDA	1,678,912
Biosolids Contract	1,496,000
OPEB Retiree Medical Trust Additional Funding	910,000
Insurance (Property & Contents, Fleet, General Liability, Bonding)	500,900
Gas Media, 2-Year Contract with 3 Optional 1-Year Renewals	171,252
DGS Natural Gas Service, PG&E Billed Through DGS	115,000
Total Services	\$ 32,775,790
Information Systems Projects:	
Non-Residential Billing (NRB) Replacement Phase 2	\$ 125,000
Permit Tracking System (PTS) Replacement	125,000
Total Information Systems Projects	\$ 250,000

UNION SANITARY DISTRICT

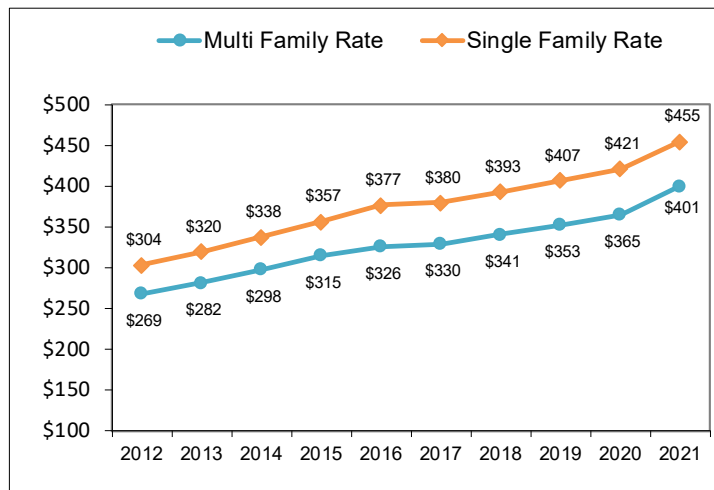
Current and Historical Fees

As of June 30, 2020

Last Ten Years

Sewer Service Charge Rates

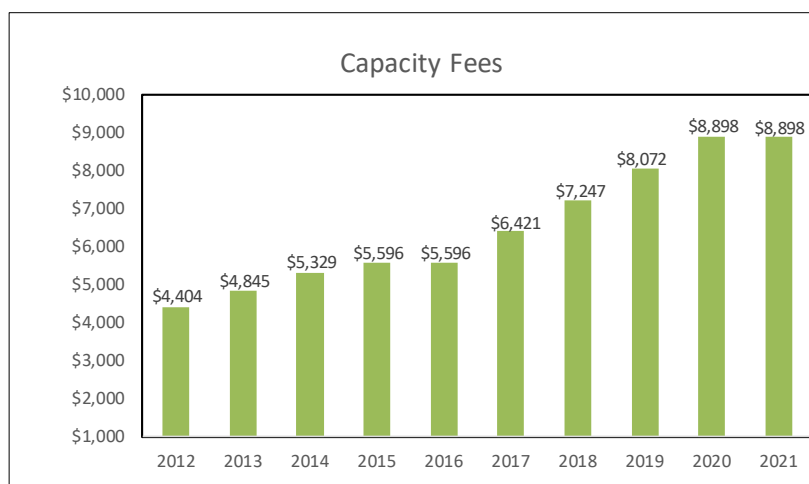
	Single Family Rate	Multi - Family Rate	Single Family Rate Percentage Change
2021	\$ 454.37	\$ 420.12	7.8%
2020	\$ 421.37	\$ 365.32	3.5%
2019	\$ 407.12	\$ 352.97	3.5%
2018	\$ 393.35	\$ 341.03	1.0%
2017	\$ 380.05	\$ 329.50	0.8%
2016	\$ 377.00	\$ 326.00	5.6%
2015	\$ 357.02	\$ 315.25	5.7%
2014	\$ 337.76	\$ 298.25	5.7%
2013	\$ 319.55	\$ 282.17	5.0%
2012	\$ 304.33	\$ 268.73	5.0%



The fees above are for residential units. A property with multiple housing units such as an apartment complex is charged \$365.32 for each dwelling unit on the property. Fees for commercial and industrial customers are based on the volume and strength of the wastewater being treated.

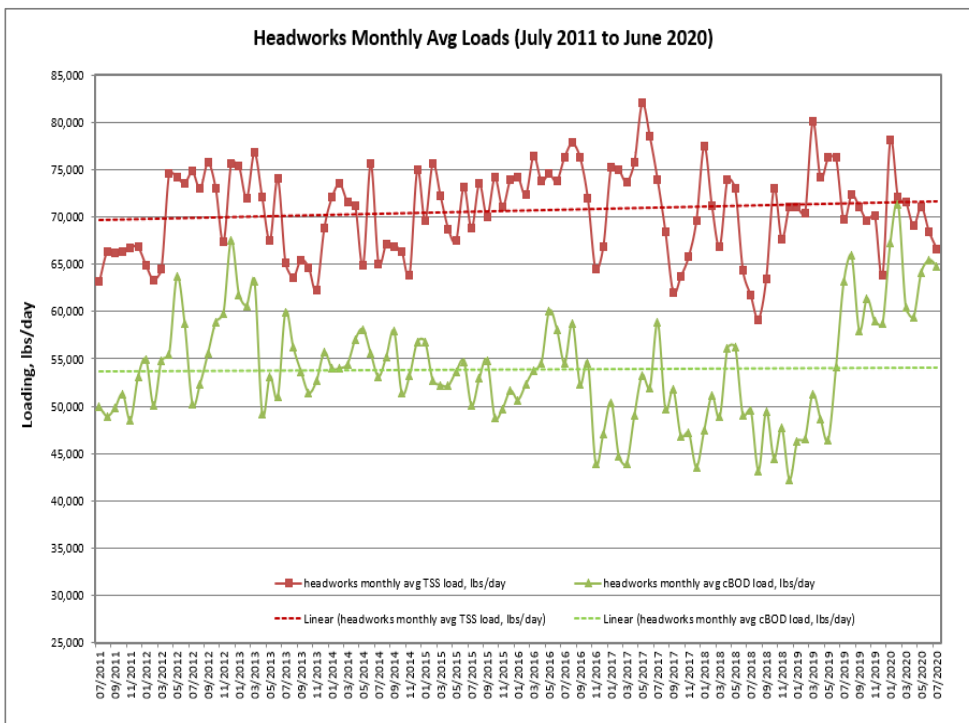
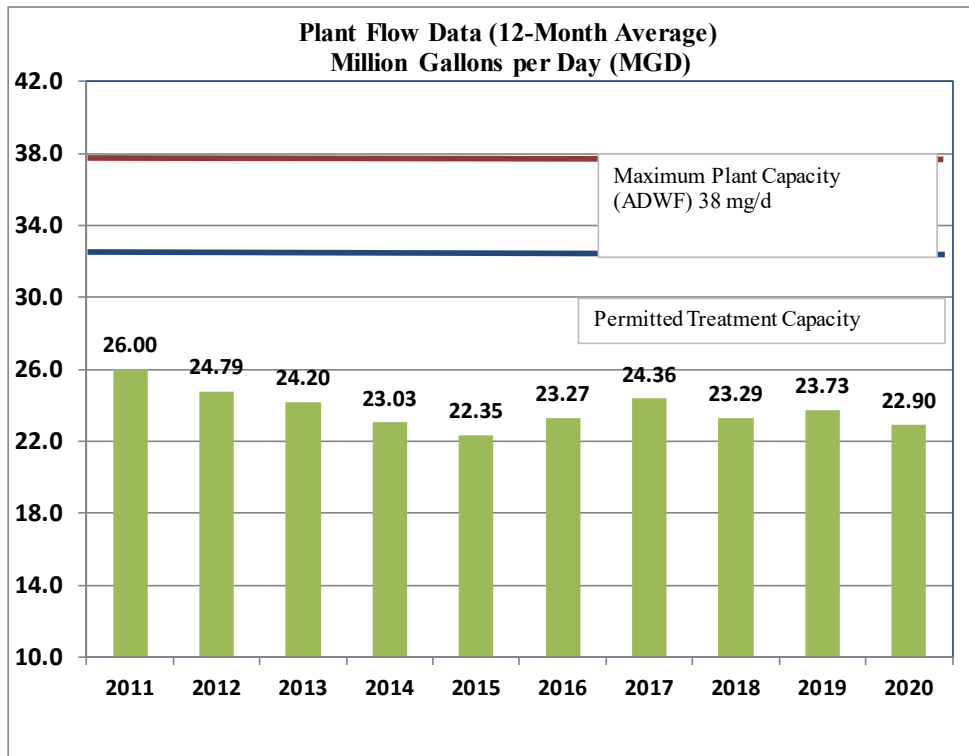
Capacity Fee Rates

		Percentage Change
2021	\$ 8,897.71	0.0%
2020	\$ 8,897.71	10.2%
2019	\$ 8,072.20	11.4%
2018	\$ 7,246.69	12.9%
2017	\$ 6,421.17	14.8%
2016	\$ 5,595.66	0.0%
2015	\$ 5,595.66	5.0%
2014	\$ 5,329.20	10.0%
2013	\$ 4,844.73	10.0%
2012	\$ 4,404.30	10.0%



The capacity fees shown are per dwelling unit. Other categories such as restaurants, warehouses, and mixed-use commercial facilities are based on square footage and other factors as per the Capacity Fee Ordinance.

UNION SANITARY DISTRICT
 Operating Indicators by Function/Program
 Average Daily Flow



Source: USD Treatment and Disposal Work Group

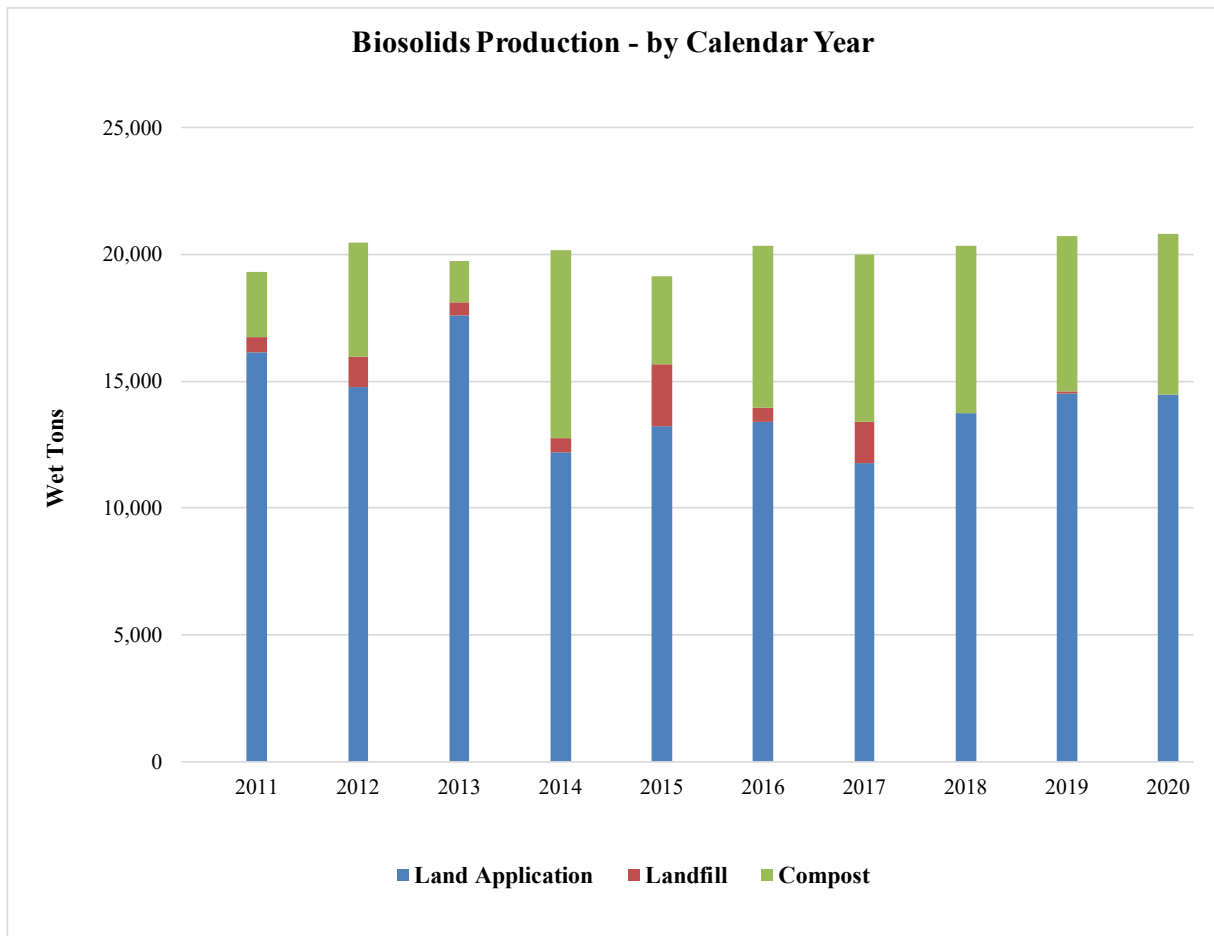
UNION SANITARY DISTRICT

Operating Indicators - Biosolids Last Ten Calendar Years

Function/Program

Biosolids

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Land Application	16,160	14,770	17,597	12,212	13,212	13,395	11,784	13,733	14,529	14,451
Landfill	571	1,187	501	545	2,450	563	1,624	0	72	0
Compost	2,585	4,501	1,642	7,414	3,470	6,399	6,584	6,615	6,103	6,342
Total (in Wet Tons)	19,315	20,458	19,741	20,171	19,132	20,357	19,992	20,347	20,704	20,793



UNION SANITARY DISTRICT

Full-time Equivalent District Employees by Function/Program Last 10 Fiscal Years

Function/Program	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
System Ops & Maint (CS Supt, FMC, TPO, RST, Warehouse)	55.00	53.45	54.45	55.45	52.45	53.45	53.45	50.45	51.45	13.45
Engineering and construction (CIP, ETSU)	11.00	11.00	9.00	8.00	9.00	10.00	8.00	8.00	7.00	8.00
Collections System Maintenance (CS)	25.50	26.00	25.00	25.00	25.00	25.00	23.00	23.00	24.00	22.00
Office of the General Manager (GM)	2.00	2.00	2.00	2.00	2.00	2.00	3.00	1.00	2.00	3.00
Finance (FIST)	5.00	5.00	6.00	5.00	3.00	5.00	5.00	5.00	5.00	5.00
Information systems (IT)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Admin (Adm Specialist, MMT, non-HR OST)	15.00	15.00	12.00	13.00	13.00	14.00	13.00	14.00	15.00	14.00
Customer and community services (Rest of TS)	20.00	20.00	21.00	21.00	20.00	20.00	18.00	19.00	19.00	19.00
Human resources (HR)	2.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00
Total # of Employees	140.50	139.45	136.45	136.45	131.45	136.45	131.45	128.45	131.45	92.45
Average years of service of employees as of June 30, 2020	10.63	10.20	10.20	10.41	10.60	10.54	11.25	11.97	11.70	17.28

CIP = Capital Improvements Projects Team
 ETSU = Enhanced Treatment & Site Upgrade
 FIST = Finance & Internal Support Team
 FMC = Fabrication, Maintenance and Construction
 MMT = Materials Management Team
 OST = Organizational Support Team
 RST = Research and Support Team
 TPO = Total Productive Operations Team
 TS = Technical Services Work Group

UNION SANITARY DISTRICT
Ten Principal Industrial Rate Payers by Levy
June 30, 2020

2019-20				2018-19			
Rate Payer	Total Annual Billing	Rank	% of Total Annual Billings	Rate Payer	Total Annual Billing	Rank	% of Total Annual Billings
Tesla	\$1,381,023	1	2.29%	Tesla	\$1,228,862	1	2.14%
Washington Hospital	314,394	2	0.52%	Washington Hospital	221,799	2	0.39%
U S Pipe	244,663	3	0.41%	U S Pipe	216,296	3	0.38%
Western Digital	187,814	4	0.31%	Western Digital	174,219	4	0.30%
Ranch 99/Warm Springs Shopping Center	161,740	5	0.27%	Ranch 99/Warm Springs Shopping Center	157,421	5	0.27%
Union Square Shopping Center/ Market Place	161,271	6	0.27%	Ranch 99/Newark	152,401	6	0.27%
Lam Research	160,087	7	0.27%	Marriott Hotel	141,572	7	0.25%
Ranch 99/Newark	148,835	8	0.25%	Union Square Shopping Center	138,482	8	0.24%
Marriott Hotel	133,716	9	0.22%	Lam Research	125,330	9	0.22%
Sterling Foods	127,508	10	0.21%	Gateway Plaza Shopping Center	125,202	10	0.22%
Total annual billing largest ten:	<u>\$3,021,050</u>		<u>5.02%</u>	Total annual billing largest ten:	<u>\$2,681,584</u>		<u>4.68%</u>
Total ALL annual billings	<u>\$60,216,149</u>			Total ALL annual billings	<u>\$57,330,651</u>		

2017-18				2016-17			
Rate Payer	Total Annual Billing	Rank	% of Total Annual Billings	Rate Payer	Total Annual Billing	Rank	% of Total Annual Billings
Tesla	\$817,848	1	1.51%	Tesla	\$1,141,868	1	2.18%
Western Digital	141,806	2	0.26%	Washington Hospital	206,132	2	0.39%
Solar City	172,276	3	0.32%	Western Digital	176,435	3	0.34%
U S Pipe	135,774	4	0.25%	Ranch 99/Warm Springs Shopping Center	161,772	4	0.31%
Seagate Magnetics	156,718	5	0.29%	Marriott Hotel	142,229	5	0.27%
Lam Research	122,934	6	0.23%	Ranch 99/Newark	133,807	6	0.26%
Washington Hospital	173,057	7	0.32%	U S Pipe	130,685	7	0.25%
Kaiser Hospital	106,337	8	0.20%	Kaiser Hospital	125,907	8	0.24%
Boehringer Ingeheim	87,678	9	0.16%	Gateway Plaza	124,269	9	0.24%
Seagate Technology #3	69,384	10	0.13%	Pacific Commons (Area 4-Asian Pearl, Kinders, etc.)	119,920	10	0.23%
Total annual billing largest ten:	<u>\$1,983,813</u>		<u>3.66%</u>	Total annual billing largest ten:	<u>\$2,463,022</u>		<u>4.70%</u>
Total ALL annual billings	<u>\$54,260,096</u>			Total ALL annual billings	<u>\$52,384,709</u>		

2015-16				2014-15			
Rate Payer	Total Annual Billing	Rank	% of Total Annual Billings	Rate Payer	Total Annual Billing	Rank	% of Total Annual Billings
Tesla	\$469,466	1	0.94%	Tesla	\$324,934	1	0.67%
Western Digital	218,616	2	0.44%	Western Digital	235,844	2	0.49%
Seagate Technology #3	152,100	3	0.30%	Washington Hospital	153,645	3	0.32%
Washington Hospital	147,910	4	0.30%	Seagate Technology	116,332	4	0.24%
U S Pipe	123,218	5	0.25%	Lido Faire Shopping Center	114,536	5	0.24%
Marriott Hotel	119,716	6	0.24%	Pacific Commons (Kohls/Old Navy Area)	113,472	6	0.23%
Kaiser Hospital	118,369	7	0.24%	Pacific Commons (Area 4-Asian Pearl, Kinders, etc.)	108,292	7	0.22%
Ranch 99/Warm Springs Shopping Center	115,458	8	0.23%	Ranch 99/Warm Springs Shopping Center	108,163	8	0.22%
Pacific Commons (Area 4-Asian Pearl, Kinders, etc)	112,498	9	0.22%	Full Bloom	105,805	9	0.22%
Pacific Commons (Kohls/Old Navy Area)	108,358	10	0.22%	Kaiser Hospital	102,771	10	0.21%
Total annual billing largest ten:	<u>\$1,685,708</u>		<u>3.36%</u>	Total annual billing largest ten:	<u>\$1,483,794</u>		<u>3.07%</u>
Total ALL annual billings	<u>\$50,112,564</u>			Total ALL annual billings	<u>\$48,379,254</u>		

UNION SANITARY DISTRICT

Miscellaneous Statistics
30-Jun-21

Governing Body:	Elected 5-Member Board of Directors Fremont - 3 Members Newark - 1 Member Union City - 1 Member
Governmental Structure:	Established in 1918 and reorganized in 1923 under the Sanitary District Act
Staff:	140.50 full-time equivalent employees
CEO:	General Manager
CFO:	Business Services Manager
Authority:	California Health and Safety Code Section 4700 et. Seq.
Services:	Wastewater collection, treatment and disposal
Service Area:	60.2 square miles (Annexed areas - Fremont, Newark and Union City)
Total Population Served:	356,823
Number of Parcels	101,056 (90,132 Residential; 3,117 Non-Residential; 7,807 Other (vacant land))
Operations:	Total miles of pipeline - 834, including the force main and all gravity sewers (including trunk mains) Number of pumping stations - 7 Larger: Irvington, Newark, Alvarado Smaller: Fremont, Boyce, Paseo Padre, Cherry Street
Permitted Plant Treatment Capacity (ADWF)	33 million gallons per day (mgd)
Type of Treatment:	Secondary
Sewer Service Charge:	\$454.37 annually per single family residential dwelling unit (beginning 07/01/21)

APPENDIX



Digester 7 Wall Construction

**Union Sanitary District 20-Year CIP
FY 2022 - FY2041
(All Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total	
ADMINISTRATIVE FACILITIES																											
800		3		Additional CS (Vehicle) Storage							250				250											250	
800		2		Cathodic Protection Improvements	550		500		300		300				1,950	350		350		400		400		450		3,900	
800		1	Prog/Des	ETSU - Campus Building	13,000	38,539	17,580								69,119											69,119	
800		1		Field Ops Bldg. Sesmic Upgrade and Leak Repairs				200		1,500	1,600				3,300											3,300	
800		3		FMC Storage			300								300											300	
800		3		Plant Paving							750		200		950	200		200		200		200				1,750	
800		2		Radio Repeater Antenna Replacement								150			150											150	
800	50	3		Solar Panels/Inverters Replacement at Alvarado											0			150								150	
900	50	3		Solar Panels/Inverters Replacement at Alvarado											0			150								150	
800	50	2	Des/Constr	Solar Panels/Inverters Replacement at Carport	50									300	350									100		450	
900	50	2	Des/Constr	Solar Panels/Inverters Replacement at Carport	50									300	350									100		450	
800	50	2	Des/Constr	Solar Panels/Inverters Replacement at Irvington	150										150	900										1,050	
900	50	2	Des/Constr	Solar Panels/Inverters Replacement at Irvington	150										150	900										1,050	
Total for ADMINISTRATIVE FACILITIES					13,950	38,539	18,380	200	300	1,500	2,650	400	500	600	77,019	2,350	0	850	0	600	0	600	0	450	200	82,069	
Total Priority 1 Administrative Facilities					13,000	38,539	17,580	200	0	1,500	1,600	0	0	0	72,419	0	0	0	0	0	0	0	0	0	0	0	72,419
Total Priority 2 Administrative Facilities					950	0	500	0	300	0	300	150	300	600	3,100	2,150	0	350	0	400	0	400	0	450	200	7,050	
Total Priority 3 Administrative Facilities					0	0	300	0	0	0	750	250	200	0	1,500	200	0	500	0	200	0	200	0	0	0	2,600	
Total Fund 800 - Administrative Facilities					13,750	38,539	18,380	200	300	1,500	2,650	400	500	300	76,519	1,450	0	700	0	600	0	600	0	450	100	80,419	
Total Fund 900 - Administrative Facilities					200	0	0	0	0	0	0	0	0	300	500	900	0	150	0	0	0	0	0	0	100	1,650	
Fund	%	Rank	Status	Project Name	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total	
COLLECTION SYSTEM																											
800		2	Design	Cast Iron/Pipe Lining		530		560		590		620		650	2,950		690		730		765		810		850	6,795	
800		1	Design	Central Avenue Sanitary Sewer Relocation	50	1,000									1,050											1,050	
800		2	Constr	Gravity Sewer Rehab/Replacement	650		1,698		1,807		1,922		2,046		8,123	2,176		2,316		2,464		2,622		2,966		20,667	
800		1		RCP Sewer Rehab (Alvarado Basin)				200	2,200	2,500					4,900											4,900	
800		1	Des/Constr	RCP Sewer Rehab (Irvington Basin)	2,200	2,500						200	2,200	2,500	9,600											9,600	
800		1		RCP Sewer Rehab (Newark Basin)						200	2,200	2,500			4,900											4,900	
Total for COLLECTION SYSTEM					2,900	4,030	1,698	760	4,007	3,290	4,122	3,320	4,246	3,150	31,523	2,176	690	2,316	730	2,464	765	2,622	810	2,966	850	47,912	
Total Priority 1 Collection System					2,250	3,500	0	200	2,200	2,700	2,200	2,700	2,200	2,500	20,450	0	0	0	0	0	0	0	0	0	0	0	20,450
Total Priority 2 Collection System					650	530	1,698	560	1,807	590	1,922	620	2,046	650	11,073	2,176	690	2,316	730	2,464	765	2,622	810	2,966	850	27,462	
Total Priority 3 Collection System					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Fund 800 - Collection System					2,900	4,030	1,698	760	4,007	3,290	4,122	3,320	4,246	3,150	31,523	2,176	690	2,316	730	2,464	765	2,622	810	2,966	850	47,912	
Total Fund 900 - Collection System					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fund	%	Rank	Status	Project Name	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total	
TRANSPORT SYSTEM																											
800	50	2		Alameda Creek Crossing Lift Station										2,974	3,324	1,982										5,306	
900	50	2		Alameda Creek Crossing Lift Station										2,974	3,324	1,982										5,306	
900		1	Des/Constr	Cherry St. PS	200	200									400											400	
900		2		Equalization Storage @ Irvington											0											0	
900		2		Equalization Storage @ Newark						2,200	6,700	15,500			24,400											24,400	
800		1	Des/Constr	Forcemain Corrosion Repairs - Phase 3	250	750									1,000											1,000	
800		1		Forcemain Corrosion Repairs - Phase 4		250	800								1,050											1,050	
800		3		Forcemain Rehabilitation										900	900	12,275	12,275	12,275	12,275							50,000	
800	50	2	Des/Constr	Irvington PS Pumps and VFDs	50		775	4,125	1,750						6,700											6,700	
900	50	2	Des/Constr	Irvington PS Pumps and VFDs	50		775	4,125	1,750						6,700											6,700	
800	45	2	Des/Constr	Newark and Irvington PS Chemical System Impro	1,125	2,340									3,465											3,465	
900	55	2	Des/Constr	Newark and Irvington PS Chemical System Impro	1,375	2,860									4,235											4,235	
800	50	2		Newark PS Pumps and VFDs						650	2,100	2,150			4,900											4,900	
900	50	2		Newark PS Pumps and VFDs						650	2,100	2,150			4,900											4,900	
800		3		Pump Station Asset Condition Assessment R&R		1,432		3,632	872	197			4,168		10,301			87	5,161		4,719			818		21,086	
900		2		Sanctuary West Pump Station		1,500	1,500								3,000											3,000	
800		3		Transport System Misc. Projects		250	250	250	250	250	250	250	250	250	2,250	250	250	250	250	250	250	250	250	250	250	4,750	
800		2		Wet Weather Flow Management		100	1,000								1,100											1,100	

**Union Sanitary District 20-Year CIP
FY 2022 - FY2041
(All Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total	
Total for TRANSPORT SYSTEM					3,050	9,682	5,100	12,132	4,622	3,947	11,150	20,750	4,418	7,098	81,949	16,489	12,525	12,612	17,686	250	4,969	250	250	1,068	250	148,298	
Total Priority 1 Transport System					450	1,200	800	0	0	0	0	0	0	0	2,450	0	0	0	0	0	0	0	0	0	0	2,450	
Total Priority 2 Transport System					2,600	6,800	4,050	8,250	3,500	3,500	10,900	20,500	0	5,948	66,048	3,964	0	0	0	0	0	0	0	0	0	70,012	
Total Priority 3 Transport System					0	1,682	250	3,882	1,122	447	250	250	4,418	1,150	13,451	12,525	12,525	12,612	17,686	250	4,969	250	250	1,068	250	75,836	
Total Fund 800 - Transport System					1,425	5,122	2,825	8,007	2,872	1,097	2,350	2,750	4,418	4,124	34,990	14,507	12,525	12,612	17,686	250	4,969	250	250	1,068	250	99,357	
Total Fund 900 - Transport System					1,625	4,560	2,275	4,125	1,750	2,850	8,800	18,000	0	2,974	46,959	1,982	0	0	0	0	0	0	0	0	0	0	48,941

Fund	%	Rank	Status	Project Name	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total
TREATMENT PLANT																										
900		2	Constr	Aeration Blower 11 and East Blower Bldg Improveme	1,400										1,400										1,400	
800	50	2	Constr	Alvarado Influent PS Improvements	2,500										2,500										2,500	
900	50	2	Constr	Alvarado Influent PS Improvements	2,500										2,500										2,500	
800		2		Alvarado Influent Valve Box Gate Valves 1-2			50	500							550										550	
800	50	2	Constr	Centrifuge Building Improvements	250										250										250	
900	50	2	Constr	Centrifuge Building Improvements	250										250										250	
800	50	2	Design	Centrifuge Replacement					550	1,250	4,900	2,450			9,150										9,150	
900	50	2	Design	Centrifuge Replacement					550	1,250	4,900	2,450			9,150										9,150	
800		2	Design	Centrifuge System Equipment Replacement					900	1,200	7,300	4,200			13,600										13,600	
800	50	1		Cogen Engine No. 1 60K Block Replacement				525							525		625								1,150	
900	50	1		Cogen Engine No. 1 60K Block Replacement				525							525		625								1,150	
800	50	1		Cogen Engine No. 2 60K Block Replacement		500							575		1,075							725			1,800	
900	50	1		Cogen Engine No. 2 60K Block Replacement		500							575		1,075							725			1,800	
800	50	2		Cogen Retrofit						100	950				1,050										1,050	
900	50	2		Cogen Retrofit						100	950				1,050										1,050	
800		2		Control Box No. 1 Improvements						615	4,300	1,800			6,715										6,715	
800		2		Degritter Building Roof (Seismic) Replacement									560	3,100	3,660	1,330									4,990	
800	50	2	Predesign	Degritting at Headworks and Improvements						905	5,150	2,200			8,255										8,255	
900	50	2	Predesign	Degritting at Headworks and Improvements						905	5,150	2,200			8,255										8,255	
800		3		Diffuser Replacement											0		900	700							1,600	
900		3		Digester Additional Capacity											0										0	
800		2		Digester No. 1 Insp & Rehab		200	1,400	2,800							4,400				600	5,700					10,700	
800		1		Digester No. 2 Insp & Rehab	150										150		600	5,300							6,050	
800		3		Digester No. 3 Insp & Rehab									413		413	3,822									4,235	
800		3		Digester No. 4 Insp & Rehab				420	3,900						4,320										4,320	
800		3		Digester No. 5 Insp & Rehab						440	4,040				4,480										4,480	
800		3		Digester No. 6 Insp & Rehab		200	1,000	4,650							5,850							1,000	7,900		14,750	
800		3		Digester No. 7 Insp & Rehab											0						500	4,600			5,100	
900		1	Constr	Digester No. 7	3,500										3,500										3,500	
800	50	1	Constr	Emergency Outfall Outlet Improvements	700										700										700	
900	50	1	Constr	Emergency Outfall Outlet Improvements	700										700										700	
800	60	1	Design	ETSU - Aeration Basin Modifications	2,138	10,320	5,640	6,300							24,398										24,398	
900	40	1	Design	ETSU - Aeration Basin Modifications	1,425	6,880	3,760	4,200							16,265										16,265	
800	40	1	Design	ETSU - Aeration Basin No. 8	1,600	3,000	1,480								6,080										6,080	
900	60	1	Design	ETSU - Aeration Basin No. 8	2,400	4,500	2,220								9,120										9,120	
800	60	1	Design	ETSU - Aeration Internal Lift Pumps	255	960	540	480							2,235										2,235	
900	40	1	Design	ETSU - Aeration Internal Lift Pumps	170	640	360	320							1,490										1,490	
800	60	1	Design	ETSU - Blower 7-10 Replacement	900	2,940	1,680	1,200							6,720										6,720	
900	40	1	Design	ETSU - Blower 7-10 Replacement	600	1,960	1,120	800							4,480										4,480	
800	60	1	Design	ETSU - Secondary Clarifiers	2,220	6,210	21,600	30,075	6,540						66,645										66,645	
900	40	1	Design	ETSU - Secondary Clarifiers	1,480	4,140	14,400	20,050	4,360						44,430										44,430	
800	60	1	Design	ETSU - Switchboard 4 Replacement			90	600	300						990										990	
900	40	1	Design	ETSU - Switchboard 4 Replacement			60	400	200						660										660	
800	60	1	Design	ETSU - Effluent Facilities	480	585	10,215	6,285	5,340						22,905										22,905	
900	40	1	Design	ETSU - Effluent Facilities	320	390	6,810	4,190	3,560						15,270										15,270	
800	25	1	Design	ETSU - Plant Equalization Storage			250	375	1,062	6,313					8,000										8,000	
900	75	1	Design	ETSU - Plant Equalization Storage			750	1,125	3,187	18,938					24,000										24,000	
800	50	3		ETSU - Nutrient Removal (Level 2 Year-round)											0				2,369		9,730	30,301	40,401	30,301	113,102	

**Union Sanitary District 20-Year CIP
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(All Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total
900	50	3		ETSU - Nutrient Removal (Level 2 Year-round)											0					2,369	9,730	30,301	40,401	30,301		113,102
800		2		Flares Replacement		670	5,500								6,170											6,170
800		2		Headworks Gates									500	3,500	4,000											4,000
800	60	1	Constr	Headworks Screens Replacement	60										60											60
900	40	1	Constr	Headworks Screens Replacement	40										40											40
800		2	Design	MCC Replacement	50	400					50	465			965											965
800		2	Des/Constr	Miscellaneous Improvements	250	1,250									1,500											1,500
800		2		Odor Scrubber System Improvements				610	1,242	5,430	4,603	1,408	347	2,730	16,370	1,187	6,541	4,055	6,899	3,364	3,203	715	5,631			47,965
800		2		Plant 1 and 2 Water System Improvements					100	1,020					1,120											1,120
800		2		Plant 5kV Switchgear			370	2,620	1,123						4,113											4,113
800		1		Plant 12kV Switchgear	500	3,500		1,000	5,100	4,000					14,100											14,100
800	50	3		Plant Additional Power Source											0						250	2,000	2,750			5,000
900	50	3		Plant Additional Power Source											0						250	2,000	2,750			5,000
800		2		Plant Asset Condition Assessment R&R		100	150	4,086	475		924	597	2,586	2,665	11,583	6,561	1,037	2,410	368	200		355		935	3,850	27,299
800	50	2		Plant Fiber Optic Network					55	113	454	227	300	300	1,449	300	300	400								2,449
900	50	2		Plant Fiber Optic Network					55	113	454	227	300	300	1,449	300	300	400								2,449
800		2		Plant Mechanical and Electrical Projects		500	500	500	500	500	500	500	500	500	4,500	500	500	500	500	500	500	500	500	500	500	9,500
800		2	Des/Constr	PLC Replacement		250		300				350			900		400				450			500		2,250
800		1		Primary Clarifier (1 - 4) Seismic Upgrade		682	3,758	1,610							6,050											6,050
800	75	2		Primary Clarifier Rehab (5-6)				1,084	7,260	7,260	1,328				16,932											16,932
900	25	2		Primary Clarifier Rehab (5-6)				361	2,420	2,420	442				5,643											5,643
800		3		Reclaimed Water											0											0
900		3		Reclaimed Water											0											0
800		3		Secondary Digester No. 1 Insp & Rehab		334	3,089								3,423			460	4,253							8,136
800		3		Secondary Digester No. 2 Insp & Rehab					353	3,258					3,611						485	4,485				8,581
800		2		Seismic Retrofit of Conc. Structures			300		300		300		300		1,200	300		300			300		300			2,700
800	50	2		Site Drainage Improvements			200	415	1,388	1,110					3,113											3,113
900	50	2		Site Drainage Improvements			200	415	1,388	1,110					3,113											3,113
800		2		Sodium Hypochlorite Loop Improvements	50	650	600								1,300											1,300
800		1	Des/Constr	Standby Power Generation System Upgrade	500	16,000	12,100	2,300							30,900											30,900
900		3		Standby Power Generator No. 4											0				2,057		13,028	6,514				21,599
800		2		Switchboard 3 Replacement	200	1,428	600								2,228											2,228
800		2		Thickeners 1 and 2 Rehabilitation			200	1,619	694						2,513											2,513
800		3		Thickeners 3 and 4 Rehabilitation											0		564	2,717								3,281
800		1	Design	WAS Thickeners	500	8,000	5,500								14,000											14,000
900		3		Waste Recycling and Alternative Energy									1,500	9,000	10,500											10,500
Total for TREATMENT PLANT					28,088	77,839	107,342	102,240	52,402	58,350	46,695	19,074	8,043	22,508	522,581	14,300	11,828	14,629	11,544	21,112	38,126	83,521	93,433	70,237	4,850	886,161
Total Priority 1 Treatment Plant					20,638	71,857	93,183	81,860	29,149	29,251	0	0	1,150	0	327,088	0	1,850	5,300	0	0	0	1,450	0	0	0	335,688
Total Priority 2 Treatment Plant					7,450	5,448	10,070	15,310	19,000	25,401	42,655	19,074	5,393	13,095	162,896	16,478	9,078	8,065	8,367	10,064	4,153	1,870	6,131	1,735	4,850	227,687
Total Priority 3 Treatment Plant					0	534	4,089	5,070	4,253	3,698	4,040	0	1,500	9,413	32,597	3,822	900	1,264	3,177	11,048	33,973	80,201	87,302	68,502	0	322,786
Total Fund 800 - Treatment Plant					13,303	58,769	77,322	70,054	36,882	33,514	34,799	14,197	5,668	13,208	357,716	14,000	10,903	14,229	11,544	16,686	15,118	43,981	50,282	39,936	4,850	579,245
Total Fund 900 - Treatment Plant					14,785	19,070	30,020	32,186	15,520	24,836	11,896	4,877	2,375	9,300	164,865	300	925	400	0	4,426	23,008	39,540	43,151	30,301	0	306,916

Project Type	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total
Administrative Facilities	13,950	38,539	18,380	200	300	1,500	2,650	400	500	600	77,019	2,350	0	850	0	600	0	600	0	450	200	82,069
Collection System	2,900	4,030	1,698	760	4,007	3,290	4,122	3,320	4,246	3,150	31,523	2,176	690	2,316	730	2,464	765	2,622	810	2,966	850	47,912
Transport System	3,050	9,682	5,100	12,132	4,622	3,947	11,150	20,750	4,418	7,098	81,949	16,489	12,525	12,612	17,686	250	4,969	250	250	1,068	250	148,298
Treatment Plant	28,088	77,839	107,342	102,240	52,402	58,350	46,695	19,074	8,043	22,508	522,581	14,300	11,828	14,629	11,544	21,112	38,126	83,521	93,433	70,237	4,850	886,161
GRAND TOTAL	47,988	130,090	132,520	115,332	61,331	67,087	64,617	43,544	17,207	33,356	713,072	35,315	25,043	30,407	29,960	24,426	43,860	86,993	94,493	74,721	6,150	1,164,440
R&R (Fund 800) Total	31,378	106,460	100,225	79,021	44,061	39,401	43,921	20,667	14,832	20,782	500,748	32,133	24,118	29,857	29,960	20,000	20,852	47,453	51,342	44,420	6,050	806,933
Capacity (Fund 900) Total	16,610	23,630	32,295	36,311	17,270	27,686	20,696	22,877	2,375	12,574	212,324	3,182	925	550	0	4,426	23,008	39,540	43,151	30,301	100	357,507
Priority 1																						
Administrative Facilities	13,000	38,539	17,580	200	0					0	72,419	0	0	0	0	0	0	0	0	0	0	72,419
Collection System	2,250	3,500	0	200	2,200	2,700	2,200	2,700	2,200	2,500	20,450	0	0	0	0	0	0	0	0	0	0	20,450
Transport System	450	1,200	800	0	0	0	0	0	0	0	2,450	0	0	0	0	0	0	0	0	0	0	2,450
Treatment Plant	20,638	71,857	93,183	81,860	29,149	29,251	0	0	1,150	0	327,088	0	1,850	5,300	0	0	0	1,450	0	0	0	335,688
Total Priority 1 Projects	36,338	115,096	111,563	82,260	31,349	33,451	3,800	2,700	3,350	2,500	422,407	0	1,850	5,300	0	0	0	1,450	0	0	0	431,007

Union Sanitary District 20-Year CIP
FY 2022 - FY2041
(All Figures x \$1,000)

Fund	%	Rank	Status	Project Name	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	10-Year Total	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40	FY 41	20-Year Total
Priority 2																										
				Administrative Facilities	950	0	500	0	300	0	300	150	300	600	3,100	2,150	0	350	0	400	0	400	0	450	200	7,050
				Collection System	650	530	1,698	560	1,807	590	1,922	620	2,046	650	11,073	2,176	690	2,316	730	2,464	765	2,622	810	2,966	850	27,462
				Transport System	2,600	6,800	4,050	8,250	3,500	3,500	10,900	20,500	0	5,948	66,048	3,964	0	0	0	0	0	0	0	0	0	70,012
				Treatment Plant	7,450	5,448	10,070	15,310	19,000	25,401	42,655	19,074	5,393	13,095	162,896	10,478	9,078	8,065	8,367	10,064	4,153	1,870	6,131	1,735	4,850	227,687
				Total Priority 2 Projects	11,650	12,778	16,318	24,120	24,607	29,491	55,777	40,344	7,739	20,293	243,117	18,768	9,768	10,731	9,097	12,928	4,918	4,892	6,941	5,151	5,900	332,211
Priority 3																										
				Administrative Facilities	0	0	300	0	0	0	750	250	200	0	1,500	200	0	500	0	200	0	200	0	0	0	2,600
				Collection System	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Transport System	0	1,682	250	3,882	1,122	447	250	250	4,418	1,150	13,451	12,525	12,525	12,612	17,686	250	4,969	250	250	1,068	250	75,836
				Treatment Plant	0	534	4,089	5,070	4,253	3,698	4,040	0	1,500	9,413	32,597	3,822	900	1,264	3,177	11,048	33,973	80,201	87,302	68,502	0	322,786
				Total Priority 3 Projects	0	2,216	4,639	8,952	5,375	4,145	5,040	500	6,118	10,563	47,548	16,547	13,425	14,376	20,863	11,498	38,942	80,651	87,552	69,570	250	401,222