



# Union Sanitary District Sewer Capacity Charge Update

April 2021



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS

2625 Alcatraz Ave, #602  
Berkeley, CA 94705  
Tel 510 653 3399  
www.bartlewells.com

April 16, 2021

Union Sanitary District  
5072 Benson Road  
Union City, CA 94587

Re: Wastewater Capacity Charge Update

Bartle Wells Associates is pleased to submit the attached *Wastewater Capacity Charge Update*. The study develops updated wastewater capacity charges designed to equitably recover the costs of wastewater system infrastructure and assets benefitting new development. The proposed capacity charges are designed to be adequate, fair, and comply with all legal requirements.

The proposed maximum wastewater capacity charge for a new single family home or equivalent dwelling unit (EDU) is calculated at \$11,063 (in current dollars), which results in Union Sanitary District's capacity charges remaining in the upper-middle range compared to other regional wastewater agencies. The updated charges reflect the cost of new development's share of capacity in both the District's existing wastewater facilities and expansion-related improvements identified in District's 20-Year Capital Improvement Plan.

To help minimize the annual impact of the fee increases, the District can phase in the updated capacity charges over five years. In addition, proposed charges over the next five years can also incorporate annual inflationary adjustments to account for construction cost inflation.

We enjoyed working with the District on this assignment and much appreciate the input and assistance received from District staff during development of the updated charges. Please contact us anytime if you have questions about the recommendations presented in the report or other related issues.

Sincerely,

BARTLE WELLS ASSOCIATES

Alex Handlers  
Principal/Vice-President

Erik Helgeson  
Senior Consultant



# Union Sanitary District Wastewater Capacity Charge Update

## Table of Contents

<b>ES. Executive Summary .....</b>	<b>ES-1</b>
Background & Objectives .....	ES-1
Capacity Charges & Revenues .....	ES-1
Updated Capacity Charges.....	ES-2
5-Year Phase-In of Updated Maximum Charges with Cost Inflation .....	ES-4
Future Fee Updates .....	ES-4
Capacity Charge Survey .....	ES-6
<b>1. Background, Objectives, &amp; Government Code .....</b>	<b>1</b>
Background.....	1
Objectives.....	1
Government Code .....	2
<b>2. Current &amp; Historical Capacity Charges .....</b>	<b>4</b>
Current Capacity Charges .....	4
Historical Charges.....	4
Historical Capacity Charge Revenues.....	7
<b>3. Capacity Charge Methodology.....</b>	<b>9</b>
Fee Methodology .....	9
Facility Valuation .....	10
<b>4. Updated Capacity Charge Calculation .....</b>	<b>12</b>
Recoverable Costs .....	12
Wastewater System Capacity .....	18
Cost Allocation.....	19
Unit Cost Calculations.....	21
<b>5. Wastewater Flows &amp; Loadings.....</b>	<b>23</b>
Residential Wastewater Flows & Loadings .....	23
Accessory Dwelling Units.....	24
Commercial Wastewater Flows & Loadings.....	26
<b>6. Proposed Capacity Charges.....</b>	<b>27</b>
Capacity Charge per Single Family Home or EDU .....	27
Industrial Capacity Charges .....	28
Updated Maximum Capacity Charges.....	28
Projected Capacity Charge Revenues .....	28
<b>7. Capacity Charge Application .....</b>	<b>31</b>
Capacity Charge Ordinance: Purpose of Charge .....	31
Capacity Charge Application to Projects with Unknown Uses .....	31
Capacity Charge Credits for Redevelopment .....	31
Future Fee Adjustments .....	32





## List of Tables & Appendices

---

### **TABLES**

Table ES-1 – Current & Proposed Maximum Base Year Capacity Charges

Table ES-2 – 5-Year Phase-In of Proposed Capacity Charges

Table 1 – Current Capacity Charges

Table 2 – Historical Capacity Charge per Single Family Home

Table 3 – Historical Capacity Charge Revenues

Table 4 – Summary of District Fixed Assets & Valuation

Table 5 – Pipeline Inventory & Replacement Cost per Linear Foot

Table 6 – Summary of EBDA Fixed Assets & Valuation

Table 7 – 20-Year Capital Improvement Plan Summary

Table 8 – Total Recoverable Costs

Table 9 – Wastewater System Capacity

Table 10 – Wastewater Treatment Plant Facility Cost Allocation

Table 11 – Wastewater System Cost Allocation

Table 12 – Wastewater Treatment Plant Facility Cost Allocation

Table 13 – Wastewater Flows per Residential Dwelling Unit

Table 14 – Wastewater Flow per Residential Dwelling Unit

Table 15 – Current Capacity Charges

Table 16 – Historical Capacity Charge per Single Family Home

Table 17 – Historical Capacity Charge Revenues

### **APPENDICES**

Appendix A – Capacity Charges with Low & High 20-Year CIP Cost Estimates

Appendix B – Union Sanitary District Fixed Asset List & Valuation

Appendix C – East Bay Dischargers Authority Fixed Asset List & Valuation

Appendix D – Residential Water Use & Wastewater Demand Data

Appendix E – 20-Year Capital Improvement Plan

Appendix F – Government Code Sections Pertaining to Capacity Charges

Appendix G – Capacity Charge Surveys



## ES. Executive Summary

---

### Background & Objectives

Union Sanitary District provides wastewater collection, treatment, and effluent disposal services to approximately 356,000 residents and businesses in the cities of Fremont, Newark, and Union City. The District levies capacity charges on new or expanded connections to the wastewater system. These charges are designed to recover the costs of capacity in existing and future infrastructure benefiting new development.

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 defensible 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.

### Capacity Charges & Revenues

Over the past 25 years, the District has gradually increased its capacity charges most years. The District's capacity fees were last updated in 2016 resulting in a gradual increase of charges over the past four years. The District's capacity charge for a new single family home is currently about \$8,898. Multi-family residential connections pay a lower charge per dwelling unit. Charges for commercial connections vary by type of business and reflect the estimated wastewater flows and strength concentrations for a range of commercial categories. Industrial connections pay separate capacity charge components based on actual flow and wastewater strength loadings; these charges are collected in four annual installments.

Capacity charge revenues can vary widely from year to year based on growth. Over the past decade revenues have ranged from roughly \$2.5 million during lower-growth years that followed the 2008 recession to over \$23 million in 2018. Capacity charge revenues have increased in recent years due to a resurgence of growth.

## Updated Capacity Charges

Updated capacity charges were calculated based on a Total Cost / Total Capacity methodology for five categories of District assets. Unit charges were developed separately for each of these asset types to more accurately reflect the cost per unit of capacity in each type of infrastructure.

Facility valuations are based on the acquisition cost of assets identified in the District's latest fixed asset schedule escalated into current dollars based on the change in the ENR Construction Cost Index (20-Cities Average). To both be conservative and exclude cost recovery for facilities that may not provide benefit to new wastewater connections, the updated fee calculation accounts for 90% cost recovery of the updated value of existing wastewater system infrastructure.

Table ES-1 on the following page shows current capacity charges and proposed new maximum base year charges. Under government code, the District can charge less, but cannot exceed the maximum charges calculated. The proposed maximum base year charge per new single family home is \$11,063, which is approximately 24.3% higher than the current single family charge. This increase reflects higher costs per unit of capacity based on a) an increase in expansion-related improvements identified in the District's capital improvement plan, particularly for the wastewater treatment plant, b) the addition of new facilities constructed over the past roughly five years, and c) construction cost inflation since the prior fee update. However, these cost increases are partially offset by a decrease in the estimated volume of wastewater flow generated by new residential dwelling units. The proposed maximum charges reflect updates to underlying unit cost calculations for both wastewater flow and strength, as well as updates to estimated wastewater discharge flows and/or loadings for new residential connections and some commercial categories. As such, the impacts of the proposed charges vary by customer type.

**Table ES-1 – Current & Proposed Maximum Base Year Capacity Charges**

CONNECTION CATEGORY	CHARGE PER UNIT		UNIT DEFINITION	FLOW (gpd per Unit)	BOD (mg/l)	SS (mg/l)	EDUs if applicable
	Current	2020 Update <sup>1</sup>					
<b>RESIDENTIAL &amp; COMMERCIAL</b>							
Single Family Dwelling Unit <sup>2</sup>	\$8,897.71	\$11,063	per unit ( <i>new construction only; not additions or repairs</i> )	195	200	200	1.00
Multi-Family Dwelling Unit	\$7,626.61	\$9,644	per unit ( <i>new construction only; not additions or repairs</i> )	170	200	200	0.87
Accessory Dwelling Unit (ADU) <sup>3</sup> Applies to new or expanded structures <i>No charges apply to ADUs within the living area of an existing single family home</i>	Current fee based on ADU square footage ÷ 4,500 sq ft x the Single Family Fee	\$5.67	per square foot; <i>fees shall be applied based on the square footage of each ADU</i>	0.10	200	200	0.00
Commercial/Industrial/Office use (C/I/O) (Domestic Use Only) and Mixed Use Commercial Property with individual tenant units exceeding 10,000 square feet	\$4.02	\$5.36	per square foot of building floor area	0.10	140	115	
Mixed-use Commercial property with individual tenant units less than 10,000 square feet	\$10.49	\$14.31	per square foot of building floor area	0.22	440	320	
Boarding Establishments	\$5,391.81	\$6,808	per unit, or	120	200	200	0.62
Including Hotels and Motels	\$2,965.90	\$3,971	per capita design tenant	70	200	200	0.36
Schools and Day Care Centers (Boarding Facilities Excluded)	\$5.58	\$7.42	per square foot of building floor area	0.14	130	100	
Churches (School & Day Care facilities)	\$3.98	\$5.30	per square foot of building	0.10	130	100	
Public Assembly Facilities	\$211.85	\$283.66	per seat	5	200	200	
Health Clubs	\$16.73	\$22.27	per square foot of building	0.42	130	100	
Park or Recreation Site Restrooms	\$8,897.71	\$11,063	per water closet				1.00
Coin-operated Laundromats	\$6,445.38	\$8,596	per washing machine	160	150	110	
Restaurants - All	\$30.03	\$42.19	per square foot of building	0.50	1000	600	
Eating/Drinking facilities without cooking	\$10.59	\$14.18	per square foot of building	0.25	200	200	
Car Wash with water recycling	\$8,897.71	\$11,063	lump sum		20	150	1.00
Warehouses	\$1.69	\$2.27	per square foot of building floor area up to 50,000 square feet	0.04	200	200	
	\$0.42	\$0.57	per square foot of building floor area for that portion of each building above 50,000 square feet	0.01	200	200	
Private cafeterias	\$30.03	\$42.19	per square foot of floor area for food preparation, cooking, food storage, and food service areas (excluding seating areas)	0.50	1000	600	
Equipment Wash Pad with Interceptor	\$8,897.71	\$11,063	lump sum, plus				1.00
	\$29.66	\$39.71	per square foot for any additional pad area above 600 square feet	0.70	200	200	
Mobile Home/RV Holding Tank disposal station	\$17,795.42	\$22,126	lump sum				2.00
Non-Standard Connections <sup>4</sup>	Varies	Varies	to be determined by District				
<b>INDUSTRIAL</b>							
Volume Component	\$24.96	\$32.77	per 1,000 gallons of est. avg. annual discharge volume				
COD Component	\$561.73	\$803.35	per 1,000 lbs of est. avg. annual COD demand loading				
SS Component	\$1,239.89	\$1,618.33	per 1,000 lbs of est. avg. annual SS demand loading				
<i>Industrial charges listed must be paid 4 times: once prior to permit issuance and at end of each year for 3 additional years. If charges total less than \$500, all charges shall be paid in one installment prior to permit issuance.</i>							
<p>Note: The minimum charge per any initial connection shall equal the charge for a Multi-Family Residential Dwelling Unit.</p> <p>1 Maximum fees are calculated based on the updated unit costs for flow, BOD, and SS applied to the estimated wastewater flow and strength characteristics of each type of connection.</p> <p>2 Single Family Dwelling Unit fee applies to homes with up to 4,500 square feet of building area; additional capacity fees for area in excess of 4,500 square feet shall be calculated on a pro-rata basis based on the additional square footage divided by 4,500 square feet.</p> <p>3 Accessory Dwelling Units shall meet the criteria of California Government Code Section 65852.2, which includes a maximum allowable floorspace of 1,200 square feet; capacity fees for ADUs shall be calculated based on the square footage of each ADU.</p> <p>4 Capacity fees for other types of uses shall be determined by District staff based on estimated wastewater flow and strength.</p>							

## 5-Year Phase-In of Updated Maximum Charges with Cost Inflation

To mitigate the annual impact of the increase in capacity charges, the District can phase in the proposed increases over multiple years, similar to how the District has phased in prior fee increases over the past decade. In addition, charges in future years can also include annual inflationary adjustments to help keep the District's capacity charges aligned with construction cost inflation.

Table ES-2 on the following page shows a 5-year projection of capacity charges accounting for both a) a 5-year phase in of capacity charges from current levels to the updated base-year maximum charges and b) future annual adjustments to account for construction cost inflation based on the 10-year historical average annual increase in the Engineering News-Record Construction Cost Index (20-Cities Average) of 2.7% per year.

## Future Fee Updates

In general, BWA recommends that capacity charges be independently reviewed and/or updated roughly once every five years or when substantial revisions are made to the District's capital improvement programs or to future projections of wastewater demand.

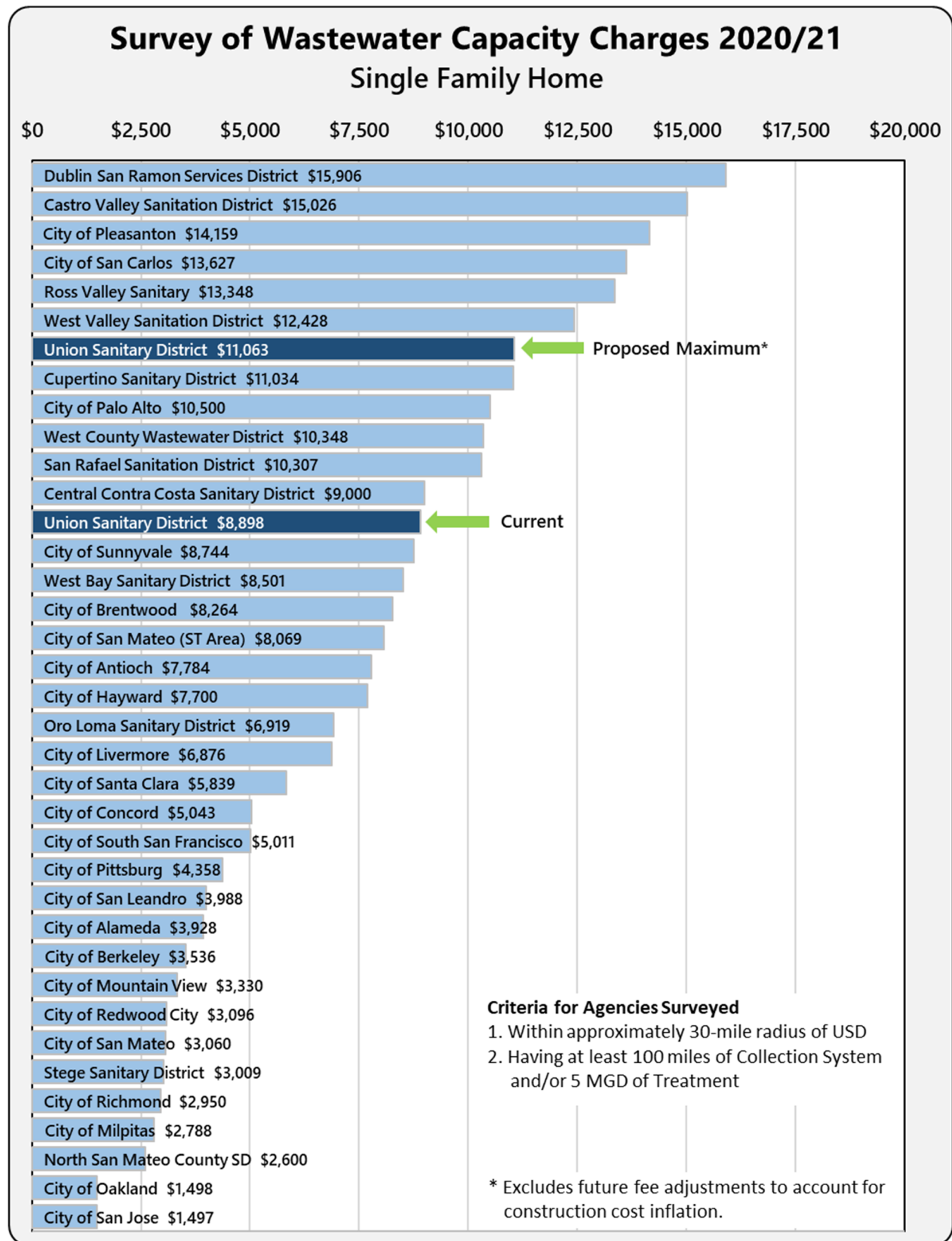


**Table ES-2 – 5-Year Phase-In of Proposed Capacity Charges**

CONNECTION CATEGORY	CAPACITY CHARGE PER UNIT						UNIT DEFINITION
	Current Charges	Proposed Charges with 5-Year Phase-In					
		Year 1	Year 2	Year 3	Year 4	Year 5	
Annual Adjustment % Escalation from Base Year		1.0000	2.7% 1.0270	2.7% 1.0547	2.7% 1.0832	2.7% 1.1125	
<b>RESIDENTIAL &amp; COMMERCIAL</b>							
Single Family Dwelling Unit <sup>1</sup>	\$8,897.71	\$9,331	\$10,027	\$10,755	\$11,514	\$12,307	per unit ( <i>new construction only; not additions or repairs</i> )
Multi-Family Dwelling Unit	\$7,626.61	\$8,030	\$8,661	\$9,321	\$10,009	\$10,728	per unit ( <i>new construction only; not additions or repairs</i> )
Accessory Dwelling Unit (ADU) <sup>2</sup> Applies to new or expanded structures <i>No charges apply to ADUs within the living area of an existing single family home</i>	Current fee based on ADU square footage ÷ 4,500 sq ft x the Single Family Fee	\$4.72	\$5.09	\$5.48	\$5.88	\$6.31	per square foot; <i>fees shall be applied based on the square footage of each ADU</i>
Commercial/Industrial/Office use (C/I/O) (Domestic Use Only) and Mixed Use Commercial Property with individual tenant units exceeding 10,000 square feet	\$4.02	\$4.29	\$4.68	\$5.09	\$5.52	\$5.96	per square foot of building floor area
Mixed-use Commercial property with individual tenant units less than 10,000 square feet	\$10.49	\$11.25	\$12.34	\$13.48	\$14.67	\$15.92	per square foot of building floor area
Boarding Establishments	\$5,391.81	\$5,675	\$6,119	\$6,583	\$7,068	\$7,574	per unit, or
Including Hotels and Motels	\$2,965.90	\$3,167	\$3,459	\$3,764	\$4,084	\$4,418	per capita design tenant
Schools and Day Care Centers (Boarding Facilities Excluded)	\$5.58	\$5.95	\$6.49	\$7.05	\$7.64	\$8.25	per square foot of building floor area
Churches (School & Day Care facilities)	\$3.98	\$4.24	\$4.63	\$5.03	\$5.46	\$5.90	per square foot of building
Public Assembly Facilities	\$211.85	\$226.21	\$247.07	\$268.89	\$291.71	\$315.56	per seat
Health Clubs	\$16.73	\$17.84	\$19.46	\$21.15	\$22.92	\$24.77	per square foot of building
Park or Recreation Site Restrooms	\$8,897.71	\$9,331	\$10,027	\$10,755	\$11,514	\$12,307	per water closet
Coin-operated Laundromats	\$6,445.38	\$6,876	\$7,503	\$8,159	\$8,845	\$9,563	per washing machine
Restaurants - All	\$30.03	\$32.46	\$35.84	\$39.37	\$43.07	\$46.93	per square foot of building
Eating/Drinking facilities without cooking	\$10.59	\$11.31	\$12.35	\$13.44	\$14.58	\$15.77	per square foot of building
<i>With temporary 50% fee reduction</i>	\$4.16	\$4.75	\$5.48	\$6.24	\$7.05	\$7.89	
Car Wash with water recycling	\$8,897.71	\$9,331	\$10,027	\$10,755	\$11,514	\$12,307	lump sum
Warehouses	\$1.69	\$1.81	\$1.97	\$2.15	\$2.33	\$2.53	per square foot of building floor area up to 50,000
	\$0.42	\$0.45	\$0.49	\$0.54	\$0.58	\$0.63	per square foot of building floor area for that portion of each building above 50,000 square feet
Private cafeterias	\$30.03	\$32.46	\$35.84	\$39.37	\$43.06	\$46.93	per square foot of floor area for food preparation, cooking, food storage, and food service areas (excluding seating areas)
Equipment Wash Pad with Interceptor	\$8,897.71	\$9,331	\$10,027	\$10,755	\$11,514	\$12,307	lump sum, plus
	\$29.66	\$31.67	\$34.59	\$37.64	\$40.84	\$44.18	per square foot for any additional pad area above 600 square feet
Mobile Home/RV Holding Tank disposal station	\$17,795.42	\$18,662	\$20,055	\$21,510	\$23,029	\$24,614	lump sum
Non-Standard Connections <sup>3</sup>	Varies	-	-	-	-	-	to be determined by District
<b>INDUSTRIAL</b>							
Volume Component	\$24.96	\$26.52	\$28.84	\$31.27	\$33.81	\$36.46	per 1,000 gallons
COD Component	\$561.73	\$610.05	\$676.15	\$745.38	\$817.85	\$893.69	per 1,000 lbs
SS Component	\$1,239.89	\$1,315.58	\$1,428.83	\$1,547.24	\$1,671.00	\$1,800.32	per 1,000 lbs
<i>Industrial charges listed must be paid 4 times: once prior to permit issuance and at end of each year for 3 additional years. If charges total less than \$500, all charges shall be paid in one installment prior to permit issuance.</i>							
<p>Note: The minimum charge per any initial connection shall equal the charge for a Multi-Family Residential Dwelling Unit.</p> <p>1 Single Family Dwelling Unit fee applies to homes with up to 4,500 square feet of building area; additional capacity fees for area in excess of 4,500 square feet shall be calculated on a pro-rata basis based on the additional square footage divided by 4,500 square feet.</p> <p>2 Accessory Dwelling Units shall meet the criteria of California Government Code Section 65852.2, which includes a maximum allowable floorspace of 1,200 square feet; capacity fees for ADUs shall be calculated based on the square footage of each ADU.</p> <p>3 Capacity fees for other types of uses shall be determined by District staff based on estimated wastewater flow and strength.</p>							

## Capacity Charge Survey

The following chart shows a survey of current wastewater capacity charges for a typical single family home. With full implementation of the proposed charges, the District's capacity charges will remain in the upper-middle range compared to other regional wastewater agencies



# 1. Background, Objectives, & Government Code

---

## Background

Union Sanitary District provides wastewater collection, treatment, and effluent disposal services to residents and businesses in the cities of Fremont, Newark, and Union City. The District is located in southern Alameda County, roughly halfway between Oakland and San Jose. The District serves a population of approximately 356,000 within a 60-square-mile service area. The District was founded in 1918 and is governed by a 5-member Board of Directors.

The District owns and operates a wastewater collection system and treatment plant. The collection system serves roughly 116,000 connections and includes approximately 835 miles of pipelines and 7 pump stations. The wastewater treatment plant is located in Union City and has a permitted capacity of 33 million gallons per day (mgd) of average dry weather flow (ADWF). Treated wastewater effluent is conveyed from the treatment plant through facilities operated by the East Bay Dischargers Authority (EBDA) and disposed into the San Francisco Bay.

## Objectives

Bartle Wells Associates (BWA) was retained to develop a comprehensive update to the District's wastewater capacity charges. Updated charges were calculated based on the same general methodology used by BWA in the 2010 Capacity Fee Study and 2016 Capacity Fee Update. Key objectives of the 2019 update include:

- Provide independent review of the District's current capacity charges;
- Incorporate updated information and data to ensure the District's capacity charges reflect the cost of providing capacity for serving new or expanded connections to the District's wastewater system;
- Evaluate regional water use data and update estimates of residential wastewater flow;
- Develop updated capacity fees that:
  - Comply with government code
  - Are based on industry-standard methodology
  - Recover the cost of infrastructure and assets benefiting new development
  - Are fair and equitable to existing and future customers.

BWA met with District staff on various occasions to gather information, discuss findings and alternatives, and receive input. Recommendations were developed with input from District staff and reflect the following updated information:

- The District's fixed asset schedule as of June 30, 2019;
- The District's 20-Year Capital Improvement Plan (CIP) under a range of projected costs including mid-point engineering cost estimates as well as low (-15%) and high (+25%) cost projections;
- The East Bay Dischargers Authority (EBDA) fixed asset schedule as of June 30, 2018;
- Updated cost estimates for District and EBDA facilities based on the Engineering News-Record (ENR) Construction Cost Index (20-Cities Average);
- Projected wastewater flow and strength data from the District's *Enhanced Treatment and Site Upgrade Program* dated August 2019 by Woodard & Curran;
- Updated wastewater strength information from District lab analysis of wastewater influent;
- Updated wastewater flow and/or strength concentrations for various residential and commercial customer categories.

## Government Code

Water and sewer capacity charges are governed by California Government Code Section 66013. This section of the Code is part of the Mitigation Fee Act which was primarily established by Assembly Bill 1600 (AB 1600) in 1987.

Section 66013 specifically governs water and wastewater capacity charges and defines a "capacity charge" to mean *"a charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the local agency involving capital expense related to its use of existing or new public facilities."*

Section 66013 distinguishes “capacity charges” from “connection fees” which are defined as fees for the physical facilities necessary to make a water or sewer connection, such as costs related to installation of meters and pipelines from a new building to a water or sewer main.

According to the Section 66013, a water or wastewater capacity charge “*shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed*” unless approved by a two-thirds vote. As such, the updated capacity charges calculated in this report represent the maximum charges that the District can levy. Section 66013 does not detail any specific methodology for calculating capacity charges.

Other sections of the Government Code that apply to water and wastewater capacity charges include Section 66016, 66022 and 66023. Section 66016 of the Code identifies the procedural requirements for adopting or increasing water and wastewater capacity charges. Section 66022 summarizes the general process by which the charges can be legally challenged. And Section 66023 provides individuals with a process for requesting an audit to determine if a fee or charge is reasonable. The full texts of Sections 66013, 66016 and 66022 are attached in Appendix F.

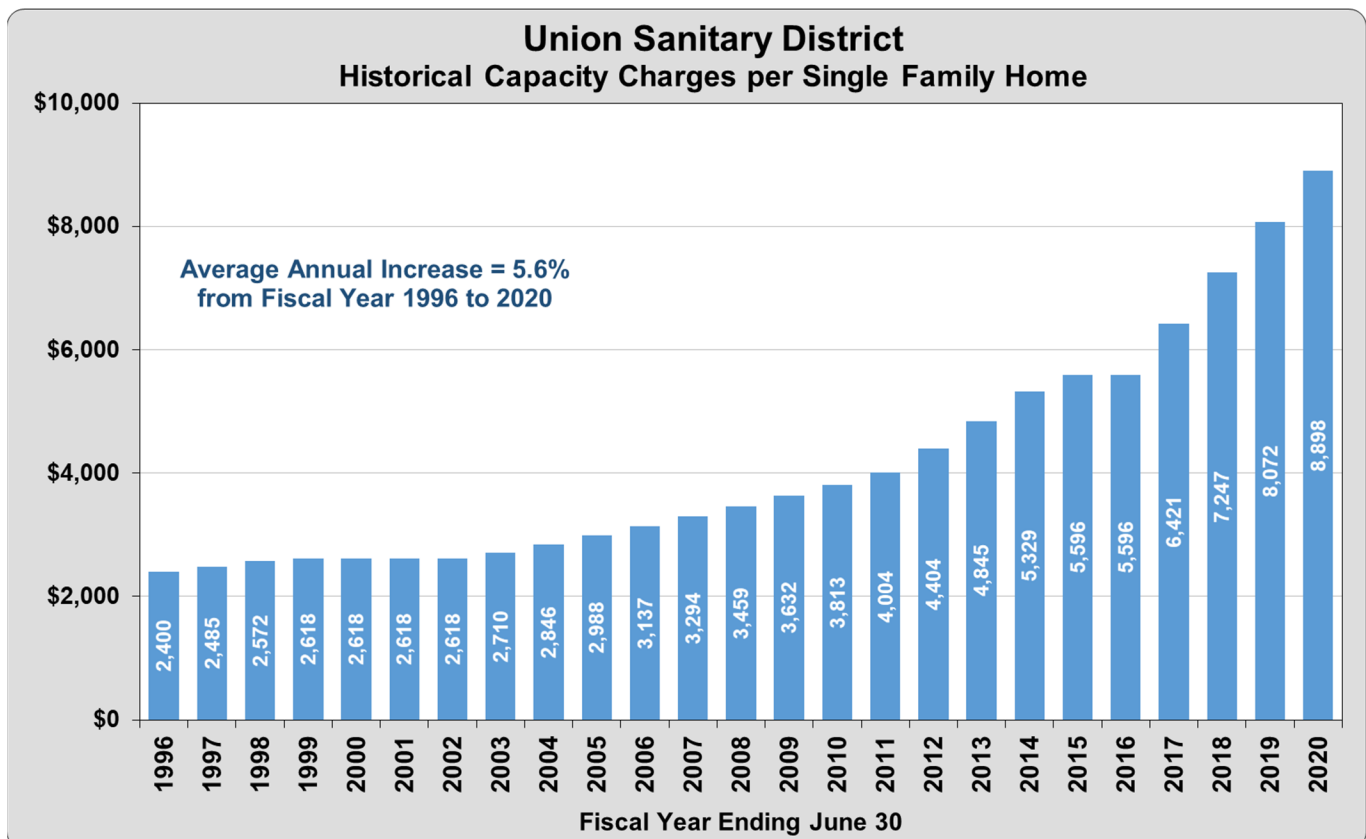
## 2. Current & Historical Capacity Charges

### Current Capacity Charges

Table 1 on the following page shows a schedule of the District's current capacity charges. The charge for a typical new single family home is currently about \$8,898. Multi-family residential connections pay a lower charge per dwelling unit. Charges for commercial connections vary by type of business and reflect the estimated wastewater flows and strength concentrations for a range of commercial categories. Industrial connections pay separate capacity charge components for flow and strength based on actual flow and wastewater loadings. Industrial capacity charges are typically paid in four annual installments and are ultimately adjusted to reflect the maximum level of wastewater discharged during the payment period to help ensure the charges reflect the discharge generated by each connection based on actual operations.

### Historical Charges

The following chart shows historical capacity charges per single family home. Over the past 25 years, the District's charges have increased by an average of 5.6% per year. Over the past four years, capacity charges were gradually phased in to the maximum levels calculated in the 2016 fee update in order to spread the increase over a number of years.



**Table 1 – Current Capacity Charges**

Connection Category	Charge Per Unit	Unit Definition
<b>RESIDENTIAL &amp; COMMERCIAL</b>		
Single Family Dwelling Unit	\$8,897.71	per unit ( <i>new construction only; not additions or repairs</i> )
Single Family Dwelling Unit (greater than 4,500 square feet)	\$8,897.71 + (see right)	Charge per unit plus proportionate charge above 4,500 sq. ft. (e.g. charge for 4,600 sq. ft. = 4,600/4,500 x charge per unit)
Multi-Family Dwelling Unit	\$7,626.61	per unit
Commercial/Industrial/Office use (C/I/O) (Domestic Use Only)	\$4.02	per square foot of building floor area
Mixed Use Commercial Property with Individual Tenant Units less than 10,000 sq. ft.	\$10.49	per square foot of building floor area
Boarding Establishments Including Hotels and Motels	\$5,391.81	per unit, or
	\$2,965.90	per capita design tenant
Schools and Day Care Centers (Boarding Facilities Excluded)	\$5.58	per square foot of building floor area
Churches (School and Day Care facilities excluded)	\$3.98	per square foot of building floor area
Public Assembly Facilities	\$211.85	per seat
Health Clubs	\$16.73	per square foot of building floor area
Park or Recreation Site restrooms	\$8,897.71	per water closet
Coin-operated Laundromats	\$6,445.38	per washing machine
Restaurants - All	\$30.03	per square foot of building floor area
Eating/Drinking facilities without cooking facilities	\$10.59	per square foot of building floor area
Car Wash with water recycling	\$8,897.71	lump sum
Warehouses	\$1.69	per square foot of building floor area up to 50,000 square feet
	\$0.42	per square foot of building floor area for that portion of each building above 50,000 square feet
Private Cafeterias	\$30.03	per square foot of floor area for food preparation, cooking, food storage, and food service areas (excluding seating areas)
Equipment Wash Pad in Interceptor	\$8,897.71	lump sum, plus
	\$29.66	per square foot for any additional pad area above 600 square feet
Mobile Home Holding Tank disposal station	\$17,795.42	lump sum
Non-Standard Connections	Capacity charges for uses not listed in the above table shall be determined by the District Engineer based upon the volume and pollutant loadings of the wastewater to be discharged.	
<b>INDUSTRIAL</b>		
Volume Component	\$24.96	per 1,000 gallons of est. avg. annual discharge volume
COD Component	\$561.73	per 1,000 lbs of est. avg. annual COD demand loading
SS Component	\$1,239.89	per 1,000 lbs of est. avg. annual SS demand loading
<p><i>Industrial charges listed must be paid 4 times: once prior to permit issuance and at end of each year for 3 additional years. If charges total less than \$500, all charges shall be paid in one installment prior to permit issuance.</i></p>		
<p>Note: The minimum charge per any initial connection shall equal the charge for a Single Family Dwelling Unit. Source: Ordinance No. 35.22 adopted April 25, 2016.</p>		

**Table 2 – Historical Capacity Charge per Single Family Home**

<b>Fiscal Year Ending June 30</b>	<b>Capacity Charge per Single Family Home</b>	<b>Annual % Change</b>
1996	\$2,400.00	-
1997	2,485.00	3.5%
1998	2,572.00	3.5%
1999	2,618.00	1.8%
2000	2,618.00	0.0%
2001	2,618.00	0.0%
2002	2,618.00	0.0%
2003	2,710.00	3.5%
2004	2,845.50	5.0%
2005	2,987.78	5.0%
2006	3,137.17	5.0%
2007	3,294.03	5.0%
2008	3,458.73	5.0%
2009	3,631.67	5.0%
2010	3,813.25	5.0%
2011	4,003.91	5.0%
2012	4,404.30	10.0%
2013	4,844.73	10.0%
2014	5,329.20	10.0%
2015	5,595.66	5.0%
2016	5,595.66	0.0%
2017	6,421.17	14.8%
2018	7,246.69	12.9%
2019	8,072.20	11.4%
2020	8,897.71	10.2%
Average Annual Increase Since 1996		5.6%



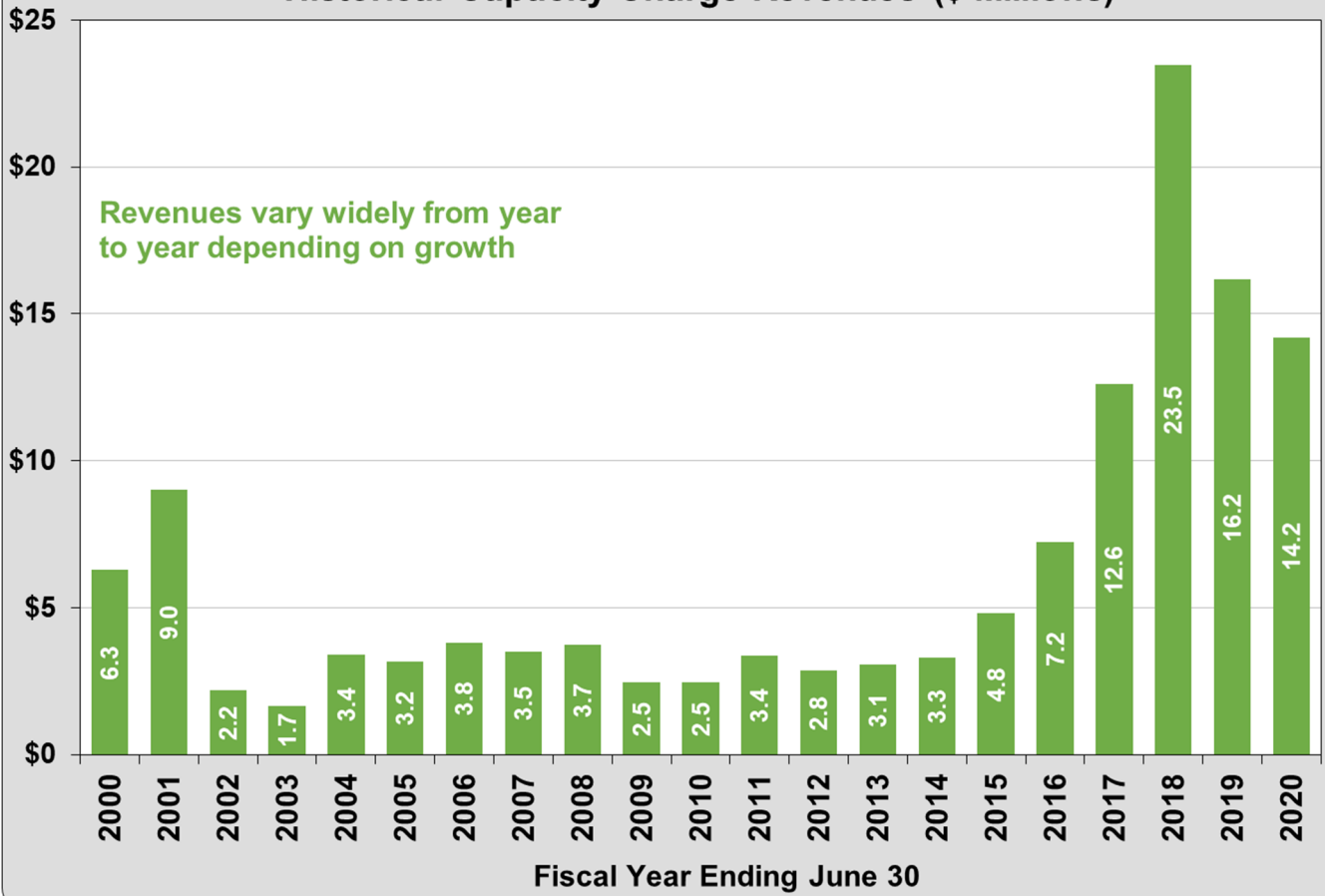
## Historical Capacity Charge Revenues

The following table shows capacity charge revenues by fiscal year since 2000 along with the estimated number of new single family residential equivalents connecting each year. The average number of new single family equivalents connecting over the period shown is a little over 1,300 per year. The District has experienced a higher-than-historical level of capacity charge revenues in recent years due to both a) higher than average levels of new development, and b) an increase in capacity charges in recent years.

**Table 3 – Historical Capacity Charge Revenues**

Fiscal Year Ending June 30	Capacity Fee Revenues	Capacity Fee Per EDU	Equivalent # of Paid EDUs
2000	\$6,285,294	\$2,618	2,401
2001	9,010,445	2,618	3,442
2002	2,188,019	2,618	836
2003	1,665,970	2,710	615
2004	3,411,559	2,846	1,199
2005	3,173,183	2,988	1,062
2006	3,819,854	3,137	1,218
2007	3,503,054	3,294	1,063
2008	3,746,046	3,459	1,083
2009	2,467,083	3,632	679
2010	2,467,083	3,813	647
2011	3,381,963	4,004	845
2012	2,848,488	4,404	647
2013	3,062,836	4,845	632
2014	3,315,007	5,329	622
2015	4,820,637	5,596	861
2016	7,233,337	5,596	1,293
2017	12,595,637	6,421	1,962
2018	23,473,238	7,247	3,239
2019	16,158,027	8,072	2,002
2020	14,179,465	8,898	1,594
2000-2020 Average			1,330
2000-2020 Median			1,063
10-Year Average			1,370
Annual Avg from Lowest 5-Year Continuous Period			679
Annual Avg from Highest 5-Year Continuous Period			2,018
EDUs = Equivalent Dwelling Units (Single Family Residential Equivalents)			

## Union Sanitary District Historical Capacity Charge Revenues (\$ Millions)



### 3. Capacity Charge Methodology

---

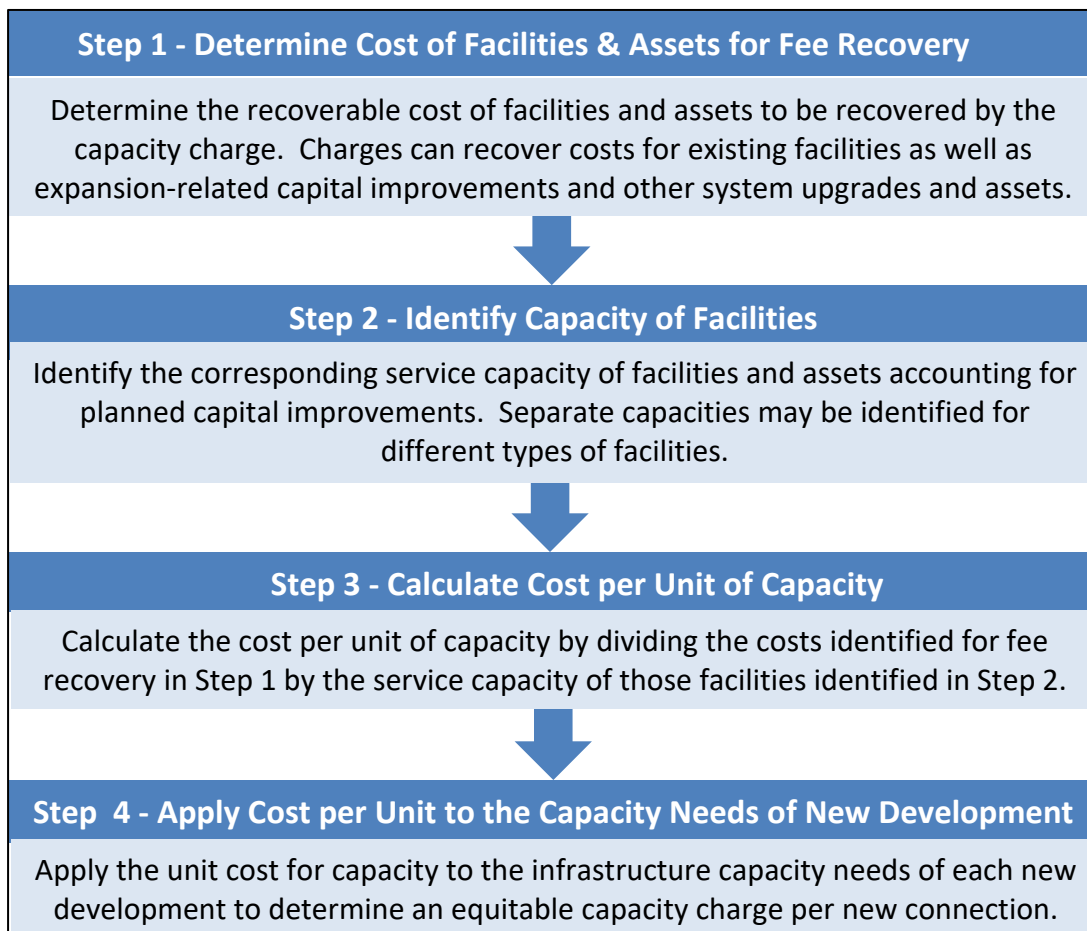
#### Fee Methodology

This report calculates updated capacity charges based on a Total Cost / Total Capacity methodology for 5 categories of District assets listed below. Unit charges were developed separately for each of these asset types to more accurately reflect the cost per unit of capacity in each type of infrastructure.

- Treatment Plant
- Collection System
- Pump Station & Conveyance
- General/Admin Facilities
- EBDA Effluent Disposal Facilities

The general approach for calculating updated fees for each asset class include:

#### Capacity Charge Methodology



## Facility Valuation

There are a range of reasonable approaches used for estimating facility costs for recovery via capacity charges. The updated capacity charges proposed in this report are based on the cost of facilities in current dollars. This is an industry standard approach that a) does not reduce asset value to account for depreciation, but also b) excludes costs incurred for maintaining expansion capacity in facilities designed to serve growth, and c) excludes interest on debt and/or implied interest on funds internally advanced to prepay for expansion capacity in infrastructure built to accommodate projected future demands. Depreciation is not factored in to the calculation to ensure that the fee reflects the full cost, and not a reduced portion of the cost, of facilities that were funded and built in advance to serve future development.

The valuation method used in the fee calculation reflects the principle that agencies and their customers benefit from economies of scale by building infrastructure sized to meet projected future demands, which results in a lower average cost per unit of capacity than if infrastructure was built on a piecemeal basis as growth occurs. The average cost per unit of capacity in a single larger pipeline, for example, is substantially lower than the cost of adding pipeline capacity on a unit by unit basis as growth occurs. If the recoverable costs of facilities are continually reduced to account for depreciation, then agencies would not be able to recover the proportionate share of costs of infrastructure built in advance to accommodate future growth since new connections would only have to pay a discounted cost for facilities constructed in advance to serve them. With depreciation, a new connection in 20 years, for example, would only have to pay for half of the cost of facility with a 40-year useful life resulting in financial subsidization of growth.

Facility valuations used to calculate updated capacity charges are based on the following:

- **District Wastewater Facilities:** The recoverable cost of the District's wastewater system infrastructure is based on the acquisition cost of assets identified in the District's latest fixed asset schedule as of June 30, 2019 escalated into current dollars based on the change in the ENR Construction Cost Index (20-Cities Average) from acquisition date to 2020 dollars. For

comparison, BWA also calculated costs of the District's conveyance system based on an updated inventory of pipelines and cost estimates per linear foot which resulted a similar valuation of the collection system.

- **EBDA Fixed Assets:** The recoverable cost for the District's share of EBDA facilities is based on the same, ENR-adjustment process described above to bring the original acquisition cost into current dollars accounting for construction cost inflation.
- **90% Cost Recovery Factor:** To both be conservative and exclude cost recovery for facilities that may not provide benefit to new wastewater connections, the updated fee calculation only includes 90% cost recovery for both the District's wastewater system infrastructure as well as the District's share of capacity in EBDA effluent disposal facilities.

## 4. Updated Capacity Charge Calculation

---

### Recoverable Costs

Tables 4 through 7 identify costs for facilities and assets to be recovered from the District's updated capacity charges.

#### **District Infrastructure & Assets**

Table 4 summarizes the original and inflation-adjusted cost of the District's infrastructure and assets. The recoverable cost of each type of asset is based on the purchase price of each asset adjusted into current dollars by the change in the Engineering News-Record (ENR) Construction Cost Index (20-Cities Average) from the acquisition year to June 2009. The table presents a summary of a line-by-line analysis of the District's fixed asset depreciation schedule as shown in Appendix B. To be conservative and exclude cost recovery for facilities that may not provide benefit to new wastewater connections, the updated charges account for 90% cost recovery for facilities and assets included in Table 4.

#### **Alternative Pipeline Cost Estimates**

To help verify the reasonableness of the cost estimates shown in Table 4, BWA also estimated collection system value based on an alternative approach accounting for the length and size of District pipelines and replacement costs per linear foot as shown on Table 5. Cost estimates per linear foot are based on a study conducted in 2008 by RMC Engineers with costs per linear foot adjusted into current costs based on the change in ENR Construction Cost Index. As shown at the bottom of Table 5, this alternative pipeline valuation approach results in a higher total cost than the collection system valuation used in the fee update, which is based on 90% of the inflation-adjusted cost of assets identified on Table 4. BWA proposes to use the lower-cost approach for collection system assets in the updated fee calculation.

**Table 4 – Summary of District Fixed Assets & Valuation**

<b>Asset Class &amp; Type</b>	<b>Acquisition Cost</b>	<b>ENR-Adjusted Cost</b>
<b><u>Treatment Plant Assets</u></b>		
trmtplant tmntplant	\$128,553,722	\$230,689,757
Other Treatment Plant Assets	<u>75,646,413</u>	<u>129,542,511</u>
SUBTOTAL	204,200,135	360,232,268
<b><u>Collection System Assets</u></b>		
collection collsys	167,515,188	356,368,326
collection contribcs	209,680,380	1,163,757,363
collection liftstat	7,060,153	8,051,125
Less Treatment Plant Assets	<u>(58,179)</u>	<u>(103,857)</u>
SUBTOTAL	384,197,543	1,528,072,958
<b><u>Pump Station &amp; Conveyance to Treatment Plant</u></b>		
collection pumpstat	35,743,640	54,729,400
collection twntforce	23,583,021	89,205,988
Less Treatment Plant Assets	<u>(207,733)</u>	<u>(295,510)</u>
SUBTOTAL	59,118,927	143,639,878
<b><u>General/Admin Assets</u></b>		
equipment	7,987,625	10,871,700
fleet	7,197,713	9,336,147
intangible	6,415,898	10,827,312
land	5,395,903	94,411,513
operations	78,877,183	137,969,393
Less Treatment Plant Assets	<u>(75,380,501)</u>	<u>(129,143,144)</u>
SUBTOTAL	30,493,821	134,272,921
<b>TOTAL</b>	<b>678,010,426</b>	<b>2,166,218,024</b>

Note: Some assets associated with treatment plant are included in other asset categories

**Table 5 – Pipeline Inventory & Replacement Cost per Linear Foot**

Pipeline Diameter	Length (feet) <sup>1</sup>	% of System	Replacement Cost		
			2008 \$/LF <sup>2</sup>	2019 \$/LF <sup>3</sup>	Total
5"	419	0.0%	\$225 <sup>4</sup>	\$311	\$130,309
6"	175,278	4.1%	225 <sup>5</sup>	311	54,511,458
8"	2,997,748	70.0%	225 <sup>5</sup>	311	932,299,628
10"	466,407	10.9%	230 <sup>6</sup>	318	148,317,426
12"	228,482	5.3%	235 <sup>6</sup>	325	74,256,650
14"	2,706	0.1%	310 <sup>4</sup>	429	1,160,874
15"	96,051	2.2%	310	429	41,205,879
16"	152	0.0%	310 <sup>4</sup>	429	65,208
18"	65,589	1.5%	335	463	30,367,707
20"	5,954	0.1%	360 <sup>4</sup>	498	2,965,092
21"	57,607	1.3%	360	498	28,688,286
24"	31,171	0.7%	385	533	16,614,143
27"	46,326	1.1%	410	567	26,266,842
30"	14,056	0.3%	450	623	8,756,888
33"	28,387	0.7%	500	692	19,643,804
36"	33,993	0.8%	550	761	25,868,673
39"	15,250	0.4%	575	795	12,123,750
42"	1,608	0.0%	600	830	1,334,640
48"	6,105	0.1%	700	968	5,909,640
60"	<u>6,283</u>	<u>0.1%</u>	800	1,107	<u>6,955,281</u>
<b>Total</b>	<b>4,279,572</b>	<b>100.0%</b>			<b>1,437,442,178</b>
<b>Comparison to Collection System Valuation from Table 4</b>					
Collection System Assets (Including Lift Stations)					1,528,072,958
Cost Adjustment Factor Used in Fee Calculation					<u>90%</u>
Cost Recovery Used in Fee Calculation					1,375,265,662

1 Source: RMC Engineers, *Long-Term Gravity Sewer Renewal/Replacement Projections* Dated September 5, 2008; Page 2, Table 1.

2 Source: Based on same document as above, Page 7, Table 5.

3 Adjusted by the change in the Engineering News-Record Construction Cost Index (20-Cities from the 2008 average index to the January 2020 index.

4 Estimated based on replacement cost of nearest size pipeline.

5 For 6" and 8" pipe, cost assumes 80% pipe bursting and 20% open-cut replacement.

6 For 10" and 12" pipe, cost assumes 70% pipe bursting and 30% open-cut replacement.



## EBDA Fixed Assets

Table 6 calculates the District’s share of costs for EBDA facilities based on the ENR-adjusted cost of each asset from the acquisition price into current dollars accounting for construction cost inflation. Detailed calculations for each asset are shown in Appendix C. The total ENR-adjusted cost of shared EBDA facilities is calculated at roughly \$146 million. The District is allocated 48.8% of EBDA facilities, equal to about \$71 million, based on the District’s capacity allocation under EBDA’s joint power agreement.

**Table 6 – Summary of EBDA Fixed Assets & Valuation**

<b>EBDA Asset Class</b>	<b>Acquisition Cost</b>	<b>ENR-Adjusted Cost</b>
Buildings & Structures Operations Ctr	\$529,917	\$1,579,593
Hayward Pump Station	1,600,599	3,004,333
San Leandro Pump Station	Excluded	
Marina Dechlor Facility	2,889,652	7,031,915
Oro Loma Pump Station	8,250,102	21,101,832
Alvarado Pump Station	Excluded	-
Data Acquisition System	510,856	1,017,053
Reclamation Facilities	747,707	1,897,100
Subsurface Lines	40,111,302	109,966,930
Office Furniture & Equipment	134,183	220,518
Field Equipment	71,053	171,443
Automotive Equipment	19,718	28,453
<b>Total</b>	<b>54,865,089</b>	<b>146,019,170</b>
<b>Union Sanitary District Share of EBDA Facilities</b>		
USD's Share of EBDA Facilities	48.8%	71,257,355

1 Source: EBDA Fixed Asset Depreciation Schedule 06/30/18

## 20-Year Capital Improvement Plan

Table 7 shows a summary of the District’s 20-Year CIP, which is attached in Appendix E. The table breaks out the share of CIP costs related to a) renewal and replacement of existing facilities and b) expansion and upgrade of capacity to serve new development. The updated fee calculations recover the capacity-related CIP costs but exclude the share of costs related to renewal and replacement to ensure no double-counting of existing assets and their replacements.

The table summarizes projected CIP costs under a range of cost estimates including a mid-point cost estimate as well as low (-15%) and high (+25%) cost estimates. The updated capacity charges calculated in this report are based on the mid-point cost estimate. Updated charges were also calculated under the low and high cost estimates and are included in Appendix A.

**Table 7 – 20-Year Capital Improvement Plan Summary**

<b>20-Year Cost Estimate</b>	<b>Mid-Point</b>	<b>Low -15%</b>	<b>High +25%</b>
<b>Administrative Facilities</b>			
Renewal & Replacement	\$79,900,000	\$67,915,000	\$99,875,000
Capacity	<u>1,550,000</u>	<u>1,317,500</u>	<u>1,937,500</u>
Subtotal	81,450,000	69,232,500	101,812,500
<b>Collection System</b>			
Renewal & Replacement	31,550,000	26,817,500	39,437,500
Capacity	<u>1,700,000</u>	<u>1,445,000</u>	<u>2,125,000</u>
Subtotal	33,250,000	28,262,500	41,562,500
<b>Transport System</b>			
Renewal & Replacement	105,925,000	90,036,250	132,406,250
Capacity	<u>36,050,000</u>	<u>30,642,500</u>	<u>45,062,500</u>
Subtotal	141,975,000	120,678,750	177,468,750
<b>Treatment</b>			
Renewal & Replacement	531,550,000	451,817,500	664,437,500
Capacity	<u>297,975,000</u>	<u>253,278,750</u>	<u>372,468,750</u>
Subtotal	829,525,000	705,096,250	1,036,906,250
<b>Total CIP</b>			
Renewal & Replacement	748,925,000	636,586,250	936,156,250
Capacity	<u>337,275,000</u>	<u>286,683,750</u>	<u>421,593,750</u>
Total	1,086,200,000	923,270,000	1,357,750,000

Source: Union Sanitary District

Note: Additional capital improvements would be needed to serve demand through projected buildout.

The updated charges exclude cost-recovery for some additional capital improvements that the District anticipates would likely be needed to serve customer demand through projected buildout but are not included in the current CIP. As such, the updated charges account for a conservative estimate of future capital improvement funding needs for growth.

## Total Recoverable Costs

Table 8 summarizes the total amount of costs to be recovered from the updated capacity charges. To be conservative and exclude cost recovery for facilities that may not provide benefit to new wastewater connections, the updated charges account for 90% cost recovery for facilities and assets included in the updated fee calculations.

**Table 8 – Total Recoverable Costs**

	<b>Total Recoverable Cost</b>	<b>Cost Adjustment Factor</b>	<b>Cost For Capacity Fee Recovery</b>
<b><u>Treatment Plant Assets</u></b>			
Cost of Existing Assets (Jan-2020 \$) <sup>1</sup>	\$360,232,268	90%	\$324,209,041
Expansion-Related CIP Projects <sup>2</sup>	<u>297,975,000</u>	90%	<u>268,177,500</u>
Subtotal	658,207,268		592,386,541
<b><u>Collection System Assets</u></b>			
Cost of Existing Assets (Jan-2020 \$) <sup>1</sup>	\$1,528,072,958	90%	\$1,375,265,662
Expansion-Related CIP Projects <sup>2</sup>	<u>1,700,000</u>	90%	<u>1,530,000</u>
Subtotal	1,529,772,958		1,376,795,662
<b><u>Pump Station &amp; Conveyance</u></b>			
Cost of Existing Assets (Jan-2020 \$) <sup>1</sup>	\$143,639,878	90%	\$129,275,890
Expansion-Related CIP Projects <sup>2</sup>	<u>36,050,000</u>	90%	<u>32,445,000</u>
Subtotal	179,689,878		161,720,890
<b><u>General/Administrative Facilities &amp; Assets</u></b>			
Cost of Existing Assets (Jan-2020 \$) <sup>1</sup>	\$134,272,921	90%	\$120,845,629
Expansion-Related CIP Projects <sup>2</sup>	<u>1,550,000</u>	90%	<u>1,395,000</u>
Subtotal	135,822,921		122,240,629
<b><u>EBDA Effluent Disposal Facilities</u></b>			
Cost of Existing Assets (Jan-2020 \$) <sup>3</sup>	\$71,257,355	90%	\$64,131,620
<b>TOTAL</b>	<b>\$2,574,750,380</b>		<b>\$2,317,275,342</b>

1 Based on ENR-adjusted purchase price shown on Table 4.

2 Based on mid-point construction cost estimate shown on Table 7.

3 Based on Union Sanitary District's share of EBDA facilities shown on Table 6.

Note: Excludes CIP costs for repairs & replacements to existing assets.

## Wastewater System Capacity

Table 9 lists the capacities of various types of District facilities used in the calculation of updated capacity charges.

**Table 9 – Wastewater System Capacity**

<b>Treatment Plant Permit Capacity</b>		
Flow (ADWF) <sup>1</sup>	33.0 mgd	NPDES Permit Capacity
<b>Treatment Plant Design Flows &amp; Loads at Buildout</b>		
Flow <sup>2</sup>	33.0 mgd	Average Annual Flow
TSS <sup>2</sup>	99,600 lbs/day	Average Annual Load
cBOD5 <sup>2</sup>	74,300 lbs/day	Average Annual Load
BOD <sup>3</sup>	81,730 lbs/day	Assumes BOD = cBOD5 x 1.10
<u>Estimated Concentrations at Buildout</u>		
TSS	362 mg/l	
cBOD5	270 mg/l	
BOD	297 mg/l	
<b>Collection System Capacity (ADWF)<sup>4</sup></b>		
Irvington Basin	17.0 mgd	
Newark Basin	10.8 mgd	
Alvarado Basin	<u>11.2</u> mgd	
Total Flow Capacity	39.0 mgd	Average Dry Weather Flow
<b>Pump Station &amp; Conveyance to Treatment Plant</b>		
Service Capacity Flow (ADWF) <sup>5</sup>	39.0 mgd	Average Dry Weather Flow
<b>EBDA Effluent Disposal Facilities</b>		
Flow Capacity (ADWF)	42.9 mgd	Average Dry Weather Flow

1 Source: NPDES Permit Capacity for Average Dry Weather Flow.

2 Source: *Enhanced Treatment and Site Upgrade Program, August 2019*; Woodard & Curran, Table 3.1: Design Flows and Loads.

3 Conversion factor based on Union Sanitary District lab analysis of wastewater influent.

4 Based on estimated buildout capacity from master plan updates for the District's 3 basins.

5 Assumes pump stations are adequate to handle buildout capacity of each basin.

**Treatment plant flow capacity** of 33 mgd is based on the plant's NPDES Permit capacity for Average Dry Weather Flow. Capacities for the wastewater strength measures of cBOD5 and TSS (or SS) are based on projections developed in the *Enhanced Treatment and Site Upgrade Program* dated August 2019, and assume the treatment plant operates at full flow capacity of 33 mgd. Capacity for BOD is based on an updated conversion factor based on the District's recent lab analysis.

**Collection system capacity** is estimated at 39 mgd based on the combined build-out design capacity (ADWF) for each of the District's 3 sub-basins. This capacity estimate is likely on the high side considering that pipeline upgrades/expansions would likely be needed to relieve bottlenecks in order to handle flows through buildout.

**Pump station and conveyance system capacity** is also estimated at 39 mgd based on total collection system capacity assuming these facilities are adequately sized to handle flows at buildout. This capacity estimate is also likely on the high side as the District would likely need to either expand existing pump stations and force mains, or construct other facilities – such as flow equalization basins – to mitigate the capacity shortfalls of existing pump stations and force mains to handle flows through buildout.

**The District's share of capacity of EBDA effluent disposal facilities** is based on the District's share of Average Dry Weather Flow capacity in EBDA infrastructure.

## Cost Allocation

Table 10 allocates the costs of the District's wastewater treatment for fee recovery based on wastewater flow and strength. The allocations are based on a) individual cost allocations for specific plant components when such information could be identified by District staff, and b) a general cost allocation of 1/3<sup>rd</sup> flow, 1/3<sup>rd</sup> BOD and 1/3<sup>rd</sup> SS for other facilities, which was determined to be a reasonable estimate based on input from District staff.

**Table 10 – Wastewater Treatment Plant Facility Cost Allocation**

Bldg No.	Description	Asset Value June 2019 <sup>1</sup>	General Allocation	Percentage Utilization <sup>2</sup>				Cost Allocation			
				TSS	BOD	Flow	Total	TSS	BOD	Flow	Total
00	Alvarado Trtmtnt Plant Assets	64,470,745	X	33.3%	33.3%	33.3%	100%	21,490,248	21,490,248	21,490,248	64,470,745
50	Alvarado Pump Station	582,215			100%	100%	100%	-	-	582,215	582,215
51	Primary Building 1 - 4	11,719,362		70%	10%	20%	100%	8,203,553	1,171,936	2,343,872	11,719,362
52	Primary Building 5 - 6	1,545,486		75%	15%	10%	100%	1,159,114	231,823	154,549	1,545,486
53	Aeration 5 - 7	4,835,476		10%	70%	20%	100%	483,548	3,384,833	967,095	4,835,476
54	Aeration 1 - 4	4,221,872		15%	75%	10%	100%	633,281	3,166,404	422,187	4,221,872
55	Pump Room 2	7,421,201		15%	75%	10%	100%	1,113,180	5,565,901	742,120	7,421,201
56	Pump Room 4	2,610,598		15%	75%	10%	100%	391,590	1,957,949	261,060	2,610,598
57	Reclaimed Wtr Pump Room	1,137,408		45%	45%	10%	100%	511,834	511,834	113,741	1,137,408
60	OCB	938,651	X	33.3%	33.3%	33.3%	100%	312,884	312,884	312,884	938,651
61	61-OCB-CHE	1,021,186	X	33.3%	33.3%	33.3%	100%	340,395	340,395	340,395	1,021,186
62	Yard Piping	5,240,814				100%	100%	-	-	5,240,814	5,240,814
63	Anaerobic Digestion	3,551,977		50%	50%		100%	1,775,988	1,775,988	-	3,551,977
64	Heat & Mix 3 Dig 4&5	4,011,445		50%	50%		100%	2,005,722	2,005,722	-	4,011,445
65	Secondary Dig 1&2	3,015,624		50%	50%		100%	1,507,812	1,507,812	-	3,015,624
66	Solids handling building	1,226,781		50%	50%		100%	613,391	613,391	-	1,226,781
68	Maintenance Shop	9,106,674	X	33.3%	33.3%	33.3%	100%	3,035,558	3,035,558	3,035,558	9,106,674
69	Engine Generator Rm No. 1	461,987	X	33.3%	33.3%	33.3%	100%	153,996	153,996	153,996	461,987
70	Control Building	4,312,981	X	33.3%	33.3%	33.3%	100%	1,437,660	1,437,660	1,437,660	4,312,981
71	Engine Generator rm No. 2	270,278	X	33.3%	33.3%	33.3%	100%	90,093	90,093	90,093	270,278
73	Heat & Mix 2 Dig 3	515,126		50%	50%		100%	257,563	257,563	-	515,126
74	Double Ended Substation	3,244,500	X	33.3%	33.3%	33.3%	100%	1,081,500	1,081,500	1,081,500	3,244,500
75	75-paint-s	187,703	X	33.3%	33.3%	33.3%	100%	62,568	62,568	62,568	187,703
76	Paint Shop	1,875,965	X	33.3%	33.3%	33.3%	100%	625,322	625,322	625,322	1,875,965
77	Was Thickener Building	1,005,611		20%	80%		100%	201,122	804,489	-	1,005,611
78	Engine Generator Rm 3	607,887	X	33.3%	33.3%	33.3%	100%	202,629	202,629	202,629	607,887
79	Headworks	4,807,909				100%	100%	-	-	4,807,909	4,807,909
80	Heat & Mix 4 Dig 6	1,074,251		50%	50%		100%	537,126	537,126	-	1,074,251
81	Centrifuge Building	27,346,161		50%	50%		100%	13,673,080	13,673,080	-	27,346,161
82	Admin Building	21,208,881	X	33.3%	33.3%	33.3%	100%	7,069,627	7,069,627	7,069,627	21,208,881
83	83-CS/AUTO	398,570	X	33.3%	33.3%	33.3%	100%	132,857	132,857	132,857	398,570
84	84-COVERED	12,299,603	X	33.3%	33.3%	33.3%	100%	4,099,868	4,099,868	4,099,868	12,299,603
86	86-solar	1,415,197	X	33.3%	33.3%	33.3%	100%	471,732	471,732	471,732	1,415,197
87	87-fmc mgm	106,175	X	33.3%	33.3%	33.3%	100%	35,392	35,392	35,392	106,175
88	88-trngctr	48,976	X	33.3%	33.3%	33.3%	100%	16,325	16,325	16,325	48,976
90	Cogeneration Facilities	2,670,363	X	33.3%	33.3%	33.3%	100%	890,121	890,121	890,121	2,670,363
99	Other Trtmtnt Plant Assets	149,716,628	X	33.3%	33.3%	33.3%	100%	49,905,543	49,905,543	49,905,543	149,716,628
<b>TOTAL</b>		<b>360,232,268</b>		<b>34.6%</b>	<b>35.7%</b>	<b>29.7%</b>	<b>100.0%</b>	<b>124,522,221</b>	<b>128,620,168</b>	<b>107,089,879</b>	<b>360,232,268</b>

1 Based on acquisition costs for each asset adjusted by the change in the ENR-CCI (20-Cities Avg) from acquisition date to June 2019.

2 Source: Allocations based on input from Union Sanitary District with General Allocation assets allocated 1/3 to TSS, 1/3 BOD, 1/3 Flow.

Table 11 shows overall wastewater system cost allocations to flow, BOD and SS for the 5 asset classes used for updated capacity charges. Treatment plant cost allocations are based on Table 10. Costs for the collection system, the District’s pump stations and force mains, and the EBDA effluent disposal infrastructure are all allocated 100% to flow. Costs for the District’s general and administrative facilities are allocated 50% to flow and 50% to strength split evenly between BOD and SS reflecting a balanced allocation for purposes of reasonably cost recovery. Overall, the updated capacity charges will be sized to recover approximately 79.4% from flow, 10.4% from BOD, and 10.2% from SS.

**Table 11 – Wastewater System Cost Allocation**

	Costs for Fee Recovery	Cost Allocation %			Cost Allocation \$		
		Flow	BOD	SS	Flow	BOD	SS
Treatment Plant	\$592,386,541	29.7%	35.7%	34.6%	\$176,104,720	\$211,510,359	\$204,771,462
Collection System	1,376,795,662	100.0%	0.0%	0.0%	1,376,795,662	0	0
Pump Station & Conveyance	161,720,890	100.0%	0.0%	0.0%	161,720,890	0	0
General/Admin Facilities & Asset	122,240,629	50.0%	25.0%	25.0%	61,120,314	30,560,157	30,560,157
EBDA Effluent Disposal Facilities	<u>64,131,620</u>	<u>100.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>64,131,620</u>	<u>0</u>	<u>0</u>
Total	2,317,275,342	79.4%	10.4%	10.2%	1,839,873,206	242,070,516	235,331,619

## Unit Cost Calculations

Capacity charge unit costs for wastewater flow, BOD, and SS are shown on Table 12. The District uses COD instead of BOD for levying capacity charges on industrial customers. The unit cost for COD is based on an updated conversion factor determined by the District’s lab.

**Table 12 – Wastewater Treatment Plant Facility Cost Allocation**

	<b>FLOW</b>	<b>BOD</b>	<b>SS</b>
<b>Treatment Plant</b>			
Cost Allocation	\$176,104,720	\$211,510,359	\$204,771,462
Capacity	33 mgd	81,730 lbs/day	99,600 lbs/day
Unit Cost	\$5,336,507 per mgd 5.337 per gpd \$14.62 per 1000 glns	\$2,587.92 per lb/day \$7,090.18 per 1000 lbs	\$2,055.94 per lb/day \$5,632.71 per 1000 lbs
<b>Collection System</b>			
Cost Allocation	\$1,376,795,662		
Capacity	39 mgd		
Unit Cost	\$35,302,453 per mgd 35.302 per gpd \$96.72 per 1000 glns		
<b>Pump Station &amp; WWTP Conveyance</b>			
Cost Allocation	\$161,720,890		
Capacity	39 mgd		
Unit Cost	\$4,146,689 per mgd 4.147 per gpd \$11.36 per 1000 glns		
<b>General/Admin Facilities &amp; Assets</b>			
Cost Allocation	\$61,120,314	\$30,560,157	\$30,560,157
Capacity	39 mgd	81,730 lbs/day	99,600 lbs/day
Unit Cost	\$1,567,188 per mgd 1.567 per gpd \$4.29 per 1000 glns	\$373.92 per lb/day \$1,024.43 per 1000 lbs	\$306.83 per lb/day \$840.63 per 1000 lbs
<b>EBDA Effluent Disposal Facilities</b>			
Cost Allocation	\$64,131,620		
Capacity	42.9 mgd		
Unit Cost	\$1,494,910 per mgd 1.495 per gpd \$4.10 per 1000 glns		
<b>Total Unit Costs</b>	<b>FLOW</b> \$47,847,746 per mgd \$47.85 per gpd \$131.09 per 1000 glns	<b>BOD</b> \$2,961.83 per lb/day \$8,114.61 per 1000 lbs	<b>SS</b> \$2,362.77 per lb/day \$6,473.33 per 1000 lbs
<b>COD Conversion</b>		<b>COD</b> \$1,172.89 per lb/day \$3,213.39 per 1000 lbs	
<i>Assumes BOD = COD x 0.396</i>			



## 5. Wastewater Flows & Loadings

---

### Residential Wastewater Flows & Loadings

The District's current fees are based on the assumption that a typical single family home discharges 210 gallons per day (gpd) of wastewater. BWA previously analyzed 4 years of water use data for single family and multi-family residential accounts provided by the Alameda County Water District (ACWD) from fiscal years 2005/06 through 2008/09. ACWD's service area mostly coincides with the District's service area. As part of the capacity charge update, BWA evaluated updated residential water use data from the past 2 fiscal years 2017/18 and 2018/19 to help determine if the current wastewater flow assumptions remain reasonable or should be revised.

The older data provides a reasonable estimate of residential water demand before California's recent drought, which was declared over in April 2017. The data from the past 2 fiscal years represents a period in which water demands have partially rebounded from levels experienced during the drought. Water demands from the past 2 years do not reflect the full level of demand anticipated from future residential connections as water use is expected to continue rebounding in future years.

Table 13 shows historical water use data for the 4 lowest contiguous months of water consumption. This data is based on wet-weather water use which reflects minimal outdoor irrigation and provides a reasonable estimate of indoor water use and wastewater discharge.

Based on both the historical and updated data, estimated wastewater flow per dwelling unit is proposed to be reduced for both single family and multi-family dwelling units as future wastewater discharge is anticipated to remain lower than historical norms. Single family residential flow is proposed to be reduced from 210 gpd to 195 gpd. Flow per multi-family dwelling unit is proposed to be reduced from 180 gpd to 170 gpd. Note that typical size of a new multi-family dwelling unit in the District's service area is estimated at roughly 1,800 square feet.

**Table 13 – Wastewater Flows per Residential Dwelling Unit**

	Single Family Dwelling Unit	Multi-Family Dwelling Unit
<b>Lowest 4-Month Contiguous Use per Fiscal Year (gpd)</b>		
<u>Historical Data from Prior Study</u>		
2005/06	214	180
2006/07	238	188
2007/08	236	190
2008/09	225	181
<u>Data from Past 2 Fiscal Years<sup>1</sup></u>		
2017/18	173	146
2018/19	169	142
<b>Wastewater Flow per Dwelling Unit (gpd)</b>		
Historical Estimates	210	180
Revised Estimates <sup>2</sup>	195	170

1 Water demand from the past two fiscal years represents a period in which water use was partially rebounding from reduced levels experienced during California's declared state of drought emergency from Jan-2014 through Apr-2017.

wastewater discharge will remain lower than historical norms in future years, even after water use fully rebounds from levels experienced during California's recent drought.

## Accessory Dwelling Units

Accessory Dwelling Units (ADUs) are generally defined as secondary residential dwelling units constructed on a residential property and may include a) second independent living units within or attached to the living area of an existing primary residence, and b) detached accessory dwelling units. ADUs are governed by California Government Code Section 65852.2.

The Code includes language governing water and sewer capacity charges for ADUs including:

- **ADUs within the living area of a primary residence** *“shall not be considered to be a new residential use for the purposes of calculating connection fees or capacity charges for utilities,*

*including water and sewer service.” Hence, the District may not levy capacity charges on ADUs that meet the requirements of the Code and are constructed within the living area of primary residence. To be considered within the living area of a primary residence, the Code permits “an expansion of not more than 150 square feet beyond the same physical dimensions as the existing accessory structure.”*

- **Detached ADUs, or ADUs that require expansion of a primary residence in excess of 150 square feet** *“may require a new or separate utility connection directly between the accessory dwelling unit and the utility. Consistent with Section 66013, the connection may be subject to a connection fee or capacity charge that shall be proportionate to the burden of the proposed accessory dwelling unit, based upon either its size or the number of its plumbing fixtures, upon the water or sewer system.”*

In compliance with the Code, the wastewater “burden” and capacity charges for ADUs eligible to pay such charges are proposed to be calculated in proportion to the square footage of each ADU. The wastewater flow per square foot for an ADU is conservatively calculated based on the estimated wastewater flow per square foot for a typical single family dwelling unit.

As shown on Table 13, the wastewater flow per single family dwelling unit is estimated at 195 gpd based on historical water use data from Alameda County Water District, whose service area largely coincides with Union Sanitary District. This level of wastewater flow is divided by a conservatively-high estimate of the size of a typical single family dwelling unit in the District’s service area at 1,950 square feet, resulting in a conservatively-low estimate of 10 gpd of wastewater flow per 100 square feet, or 0.1 gpd per square foot. This level of flow equates to 120 gpd for the maximum size 1,200 square foot ADU.

Wastewater capacity charges for new ADUs would be calculated based on the square footage of each unit multiplied by the capacity charge per square foot. ADUs are assumed to have the same wastewater strength as other types of residential dwelling units.

## Commercial Wastewater Flows & Loadings

BWA reviewed the wastewater flow and strength estimate for the various commercial fee categories. While no changes are recommended to most fee categories, the updated charges do account for a few modifications in wastewater strength estimates for non-residential connections to better align the charges with industry-standards and updated District estimates of typical flows and loadings from the various connection charge categories. The proposed capacity charges are based on assumptions that are consistent with industry standards and those used to develop and apply the District's wastewater service charges.

## 6. Proposed Capacity Charges

### Capacity Charge per Single Family Home or EDU

Table 14 calculates an updated capacity charge of \$11,063 per single family home or EDU based on the unit costs developed for flow, BOD, and SS, and the wastewater loadings of a typical single family home. The breakdown of the updated fee is shown as follows.

**Table 14 – Wastewater Flow per Residential Dwelling Unit**

	<b>FLOW</b>	<b>BOD</b>	<b>SS</b>	<b>TOTAL</b>
EDU Definition <sup>1</sup>	195 gpd	200 mg/l 0.119 1000 lbs	200 mg/l 0.119 1000 lbs	
Unit Costs <sup>2</sup>	\$47.85 per gpd	\$8,114.61 per 1000 lbs	\$6,473.33 per 1000 lbs	
Capacity Charge	\$9,331	\$963	\$769	<b>\$11,063</b>

1 An Equivalent Dwelling Unit (EDU) represents the wastewater discharge from a typical single family home.

2 From Table 12.

The updated charge of \$11,063 per single family home or EDU is approximately 24.3% higher than the District’s current fee of \$8,898 per EDU. This increase reflects a combination of factors including a) an increase in expansion-related improvements identified in the District’s capital improvement plan, particularly for the wastewater treatment plant, b) the addition of new facilities constructed over the past roughly five years, and c) construction cost inflation since the prior fee update. However, these cost increases are offset by a proposed decrease in the estimated volume of wastewater flow generated by a new single family home.

## Industrial Capacity Charges

Table 15 shows updated capacity charges for industrial customers. Since the District recovers industrial capacity fees in 4 installments, the unit costs developed for flow, COD, and SS are divided by 4 to show the annual fee.

**Table 15 – Proposed Industrial Capacity Charges**

	FLOW	COD	SS
<b>Proposed Industrial Fees</b>			
Unit Costs	\$131.09 per 1000 gallons	\$3,213.39 per 1000 lbs	\$6,473.33 per 1000 lbs
	47.85 per gpd	1,172.89 per lb/day	2,362.77 per lb/day
Divided by 4	32.77 per 1000 gallons	803.35 per 1000 lbs	1,618.33 per 1000 lbs
	11.96 per gpd	293.22 per lb/day	590.69 per lb/day

Note: Industrial fees are collected in 4 installments including an initial charge plus three additional charges for each subsequent year based on actual wastewater flow and strength from the prior annual period.

## Updated Maximum Capacity Charges

Table 16 shows a schedule of current and proposed maximum capacity charges, along with the percentage increase for each type of customer category. The table also shows the wastewater flow and strength assumptions used to calculate fees for each customer type. The proposed new maximum fees range from roughly 25% to 40% higher than current charges for most of the District’s connection categories.

## Projected Capacity Charge Revenues

Table 17 projects capacity charge revenues under Slow, Moderate, and Faster Growth scenarios for informational purposes. The table projects revenues under current capacity charges and the proposed maximum capacity charges, both assuming 2% annual fee escalation. Based on the assumptions, the updated maximum charges are projected to generate between roughly \$14 million and \$35 million of additional revenues over the next decade. Actual growth and capacity charge revenues may vary substantially from these projections.

**Table 16 – Schedule of Updated Maximum Capacity Charges**

CONNECTION CATEGORY	CHARGE PER UNIT			UNIT DEFINITION	FLOW (gpd per Unit)	BOD (mg/l)	SS (mg/l)	EDUs if applicable
	Current	2020 Update <sup>1</sup>	% Change					
<b>RESIDENTIAL &amp; COMMERCIAL</b>								
Single Family Dwelling Unit <sup>2</sup>	\$8,897.71	\$11,063	24%	per unit ( <i>new construction only; not additions or</i>	195	200	200	1.00
Multi-Family Dwelling Unit	\$7,626.61	\$9,644	26%	per unit ( <i>new construction only; not additions or</i>	170	200	200	0.87
Accessory Dwelling Unit (ADU) <sup>3</sup> Applies to new or expanded structures <i>No charges apply to ADUs within the living area of an existing single family home</i>	Current fee based on ADU square footage ÷ 4,500 sq ft x the Single Family Fee	\$5.67		per square foot; <i>fees shall be applied based on the square footage of each ADU</i>	0.10	200	200	0.00
Commercial/Industrial/Office use (C/I/O) (Domestic Use Only) and Mixed Use Commercial Property with individual tenant units exceeding 10,000 square	\$4.02	\$5.36	33%	per square foot of building floor area	0.10	140	115	
Mixed-use Commercial property with individual tenant units less than 10,000 square feet	\$10.49	\$14.31	36%	per square foot of building floor area	0.22	440	320	
Boarding Establishments	\$5,391.81	\$6,808	26%	per unit, or	120	200	200	0.62
Including Hotels and Motels	\$2,965.90	\$3,971	34%	per capita design tenant	70	200	200	0.36
Schools and Day Care Centers (Boarding Facilities Excluded)	\$5.58	\$7.42	33%	per square foot of building floor area	0.14	130	100	
Churches (School & Day Care facilities)	\$3.98	\$5.30	33%	per square foot of building	0.10	130	100	
Public Assembly Facilities	\$211.85	\$283.66	34%	per seat	5	200	200	
Health Clubs	\$16.73	\$22.27	33%	per square foot of building	0.42	130	100	
Park or Recreation Site Restrooms	\$8,897.71	\$11,063	24%	per water closet				1.00
Coin-operated Laundromats	\$6,445.38	\$8,596	33%	per washing machine	160	150	110	
Restaurants - All	\$30.03	\$42.19	40%	per square foot of building	0.50	1000	600	
Eating/Drinking facilities without cooking	\$10.59	\$14.18	34%	per square foot of building	0.25	200	200	
Car Wash with water recycling	\$8,897.71	\$11,063	24%	lump sum		20	150	1.00
Warehouses	\$1.69	\$2.27	34%	per square foot of building floor area up to 50,000	0.04	200	200	
	\$0.42	\$0.57	36%	per square foot of building floor area for that portion of each building above 50,000 square feet	0.01	200	200	
Private cafeterias	\$30.03	\$42.19	40%	per square foot of floor area for food preparation, cooking, food storage, and food service areas (excluding seating areas)	0.50	1000	600	
Equipment Wash Pad with Interceptor	\$8,897.71	\$11,063	24%	lump sum, plus				1.00
	\$29.66	\$39.71	34%	per square foot for any additional pad area above 600 square feet	0.70	200	200	
Mobile Home/RV Holding Tank disposal station	\$17,795.42	\$22,126	24%	lump sum				2.00
Non-Standard Connections <sup>4</sup>	Varies	Varies		to be determined by District				
<b>INDUSTRIAL</b>								
Volume Component	\$24.96	\$32.77	31%	per 1,000 gallons of est. avg. annual discharge volume				
COD Component	\$561.73	\$803.35	43%	per 1,000 lbs of est. avg. annual COD demand loading				
SS Component	\$1,239.89	\$1,618.33	31%	per 1,000 lbs of est. avg. annual SS demand loading				

*Industrial charges listed must be paid 4 times: once prior to permit issuance and at end of each year for 3 additional years.*

*If charges total less than \$500, all charges shall be paid in one installment prior to permit issuance.*

Note: The minimum charge per any initial connection shall equal the charge for a Multi-Family Residential Dwelling Unit.

1 Maximum fees are calculated based on the updated unit costs for flow, BOD, and SS applied to the estimated wastewater flow and strength characteristics of each type of connection.

2 Single Family Dwelling Unit fee applies to homes with up to 4,500 square feet of building area; additional capacity fees for area in excess of 4,500 square feet shall be calculated on a pro-rata basis based on the additional square footage divided by 4,500 square feet.

3 Accessory Dwelling Units shall meet the criteria of California Government Code Section 65852.2, which includes a maximum allowable floorspace of 1,200 square feet; capacity fees for ADUs shall be calculated based on the square footage of each ADU.

4 Capacity fees for other types of uses shall be determined by District staff based on estimated wastewater flow and strength.

**Table 17 – Projected Capacity Charge Revenues**

Year	1	2	3	4	5	6	7	8	9	10	Total	
<b>Growth Projections (Equivalent Dwelling Units per Year)<sup>1</sup></b>												
Slow Growth	600	600	600	600	600	600	600	600	600	600	600	6,000
Moderate Growth	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	10,000
Faster Growth	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	15,000
<b>Revenues Based on Current Capacity Fees with 2% Annual Escalation</b>												
Single Family Fee (\$ per EDU)	\$8,898	\$9,076	\$9,258	\$9,443	\$9,632	\$9,825	\$10,022	\$10,222	\$10,426	\$10,635		
Slow Growth	\$5,338,626	\$5,445,600	\$5,554,800	\$5,665,800	\$5,779,200	\$5,895,000	\$6,013,200	\$6,133,200	\$6,255,600	\$6,381,000		\$58,462,026
Moderate Growth	8,897,710	9,076,000	9,258,000	9,443,000	9,632,000	9,825,000	10,022,000	10,222,000	10,426,000	10,635,000		97,436,710
Faster Growth	13,346,565	13,614,000	13,887,000	14,164,500	14,448,000	14,737,500	15,033,000	15,333,000	15,639,000	15,952,500		146,155,065
<b>Revenues Based on Projected Capacity Fees with 2% Annual Escalation</b>												
Single Family Fee (\$ per EDU)	\$11,063	\$11,284	\$11,510	\$11,740	\$11,975	\$12,215	\$12,459	\$12,708	\$12,962	\$13,221		
Slow Growth	\$6,637,800	\$6,770,400	\$6,906,000	\$7,044,000	\$7,185,000	\$7,329,000	\$7,475,400	\$7,624,800	\$7,777,200	\$7,932,600		\$72,682,200
Moderate Growth	11,063,000	11,284,000	11,510,000	11,740,000	11,975,000	12,215,000	12,459,000	12,708,000	12,962,000	13,221,000		121,137,000
Faster Growth	16,594,500	16,926,000	17,265,000	17,610,000	17,962,500	18,322,500	18,688,500	19,062,000	19,443,000	19,831,500		181,705,500

<sup>1</sup> Conservatively estimated based on review of historical connections over past 20 years.



## 7. Capacity Charge Application

---

This section highlights some key issues regarding the application and implementation of the updated capacity charges.

### Capacity Charge Ordinance: Purpose of Charge

Pursuant to Government Code, revenues derived by capacity charges can only be used for the purpose for which the charges are collected. In order to maximize the District's flexibility for use of capacity charge revenues, BWA generally recommends that the resolution or ordinance adopting new charges broadly define the purpose of the charge, such as to recover costs for wastewater system infrastructure, wastewater treatment plant capacity, and any other wastewater utility assets benefitting new or expanded connections to the wastewater system.

### Capacity Charge Application to Projects with Unknown Uses

Developers occasionally seek permits for development projects whose ultimate uses are not known at the time the capacity charge is paid. In these cases, BWA recommends the District levy the capacity charge for the general Commercial/Industrial/Office (CIO) use as an initial payment that would be subject to adjustment after the development is occupied and its uses are known. The future adjustment may include the requirement to pay additional capacity charges or potentially receive a partial refund. In such cases, the District should require written acknowledgment from the property owner regarding the potential requirement for additional capacity charges to be paid based on the future use of the property.

### Capacity Charge Credits for Redevelopment

Capacity charges for redevelopment projects and/or expansions should be based on the incremental increase in wastewater demand generated from each project. Under this approach, the fees for future redevelopment projects would be based on the incremental difference between the capacity charges that would apply to the current connection and the capacity charges applicable to the expanded connection.

## Future Fee Adjustments

In future years, BWA recommends that the District review and consider updating its capacity charges when substantial revisions are made to anticipated wastewater system capital improvement costs or funding, or to substantial changes in projected demand. In general, BWA recommends that capacity charges be independently reviewed and/or updated at least once every five years.

# APPENDIX A

## Capacity Charges With Low & High CIP Cost Estimates (-15% & +25%)

*The District's 20-Year CIP includes a range of cost estimates for future capital improvements including a mid-point cost estimate as well as low (-15%) and high (+25%) cost estimates. The updated capacity charges calculated in this report are based on the mid-point cost estimate. Updated charges were also calculated under the low and high capital cost estimates as shown on the following tables in this appendix. Compared to the mid-point cost estimate, the low cost estimate resulted in roughly a \$200 decrease, and high cost estimate resulted in a roughly \$330 increase, to the capacity charges for a single family home. This appendix also includes tables projecting capacity charge revenues with the low and high fee estimates.*

# **Capacity Charges**

Low CIP Engineering Cost Estimate (-15%)

Table B-1  
 Union Sanitary District  
 Proposed Maximum Capacity Fees

Low CIP Cost Estimate (-15%)

CONNECTION CATEGORY	CHARGE PER UNIT		UNIT DEFINITION	FLOW (gpd per Unit)	BOD (mg/l)	SS (mg/l)	EDUs if applicable
	Current	2020 Update <sup>1</sup>					
<b>RESIDENTIAL &amp; COMMERCIAL</b>							
Single Family Dwelling Unit <sup>2</sup>	\$8,897.71	\$10,862	per unit ( <i>new construction only; not additions or repairs</i> )	195	200	200	1.00
Multi-Family Dwelling Unit	\$7,626.61	\$9,470	per unit ( <i>new construction only; not additions or repairs</i> )	170	200	200	0.87
Accessory Dwelling Unit (ADU) <sup>3</sup> Applies to new or expanded structures <i>No charges apply to ADUs within the living area of an existing single family home</i>	Based on ADU square footage / 4,500 sf x Single Family Fee	\$5.57	per square foot; <i>fees shall be applied based on the square footage of each Accessory Dwelling Unit</i>	0.10	200	200	0.00
Commercial/Industrial/Office use (C/I/O) (Domestic Use Only) and Mixed Use Commercial Property with individual tenant units exceeding 10,000 square feet	\$4.02	\$5.27	per square foot of building floor area	0.10	140	115	
Mixed-use Commercial property with individual tenant units less than 10,000 square feet	\$10.49	\$13.97	per square foot of building floor area	0.22	440	320	
Boarding Establishments	\$5,391.81	\$6,684	per unit, or	120	200	200	0.62
Including Hotels and Motels	\$2,965.90	\$3,899	per capita design tenant	70	200	200	0.36
Schools and Day Care Centers (Boarding Facilities Excluded)	\$5.58	\$7.31	per square foot of building floor area	0.14	130	100	
Churches (School & Day Care facilities)	\$3.98	\$5.22	per square foot of building	0.10	130	100	
Public Assembly Facilities	\$211.85	\$278.52	per seat	5	200	200	
Health Clubs	\$16.73	\$21.93	per square foot of building	0.42	130	100	
Park or Recreation Site Restrooms	\$8,897.71	\$10,862	per water closet				1.00
Coin-operated Laundromats	\$6,445.38	\$8,460	per washing machine	160	150	110	
Restaurants - All	\$30.03	\$40.85	per square foot of building	0.50	1000	600	
Eating/Drinking facilities without cooking	\$10.59	\$13.93	per square foot of building	0.25	200	200	
Car Wash with water recycling	\$8,897.71	\$10,862	lump sum		20	150	1.00

Table B-1  
 Union Sanitary District  
 Proposed Maximum Capacity Fees

Low CIP Cost Estimate (-15%)

CONNECTION CATEGORY	CHARGE PER UNIT		UNIT DEFINITION	FLOW (gpd per Unit)	BOD (mg/l)	SS (mg/l)	EDUs if applicable
	Current	2020 Update <sup>1</sup>					
Warehouses	\$1.69	\$2.23	per square foot of building floor area up to 50,000 square	0.04	200	200	
	\$0.42	\$0.56	per square foot of building floor area for that portion of each building above 50,000 square feet	0.01	200	200	
Private cafeterias	\$30.03	\$40.85	per square foot of floor area for food preparation, cooking, food storage, and food service areas (excluding seating areas)	0.50	1000	600	
Equipment Wash Pad with Interceptor	\$8,897.71	\$10,862	lump sum, plus				1.00
	\$29.66	\$38.99	per square foot for any additional pad area above 600 square feet	0.70	200	200	
Mobile Home/RV Holding Tank disposal station	\$17,795.42	\$21,724	lump sum				2.00
Non-Standard Connections <sup>4</sup>	Varies	Varies	to be determined by District				
<b>INDUSTRIAL</b>							
Volume Component	\$24.96	\$32.43	per 1,000 gallons of est. avg. annual discharge volume				
COD Component	\$561.73	\$755.51	per 1,000 lbs of est. avg. annual COD demand loading				
SS Component	\$1,239.89	\$1,522.35	per 1,000 lbs of est. avg. annual SS demand loading				
<p><i>Industrial charges listed must be paid 4 times: once prior to permit issuance and at end of each year for 3 additional years.                      If charges total less than \$500, all charges shall be paid in one installment prior to permit issuance.</i></p>							
<p>Note: The minimum charge per any initial connection shall equal the charge for a Multi-Family Residential Dwelling Unit.                      1 Maximum fees are calculated based on the updated unit costs for flow, BOD, and SS applied to the estimated wastewater flow and strength characteristics of each                      2 Single Family Dwelling Unit fee applies to homes with up to 4,500 square feet of building area; additional capacity fees for area in excess of 4,500 square feet shall be calculated on a pro-rata basis based on the additional square footage divided by 4,500 square feet.                      3 Accessory Dwelling Units shall meet the criteria of California Government Code Section 65852.2, which includes a maximum allowable floorspace of 1,200 square feet; capacity fees for ADUs shall be calculated based on the square footage of each ADU.                      4 Capacity fees for other types of uses shall be determined by District staff based on estimated wastewater flow and strength.</p>							

Table B-2  
 Union Sanitary District  
 Projected Capacity Fee Revenues

Low CIP Cost Estimate (-15%)

Annual Fee Escalation	2.0%
-----------------------	------

Year	1	2	3	4	5	6	7	8	9	10	Total
<b>Growth Projections (Equivalent Dwelling Units per Year)<sup>1</sup></b>											
Slow Growth	600	600	600	600	600	600	600	600	600	600	6,000
Moderate Growth	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	10,000
Faster Growth	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	15,000
<b>Revenues Based on <u>Current</u> Capacity Fees with 2% Annual Escalation</b>											
Single Family Fee (\$ per EDU)	\$8,898	\$9,076	\$9,258	\$9,443	\$9,632	\$9,825	\$10,022	\$10,222	\$10,426	\$10,635	
Slow Growth	\$5,338,626	\$5,445,600	\$5,554,800	\$5,665,800	\$5,779,200	\$5,895,000	\$6,013,200	\$6,133,200	\$6,255,600	\$6,381,000	\$58,462,026
Moderate Growth	8,897,710	9,076,000	9,258,000	9,443,000	9,632,000	9,825,000	10,022,000	10,222,000	10,426,000	10,635,000	97,436,710
Faster Growth	13,346,565	13,614,000	13,887,000	14,164,500	14,448,000	14,737,500	15,033,000	15,333,000	15,639,000	15,952,500	146,155,065
<b>Revenues Based on <u>Projected</u> Capacity Fees with 2% Annual Escalation</b>											
Single Family Fee (\$ per EDU)	\$10,862	\$11,079	\$11,301	\$11,527	\$11,758	\$11,993	\$12,233	\$12,478	\$12,728	\$12,983	
Slow Growth	\$6,517,308	\$6,647,400	\$6,780,600	\$6,916,200	\$7,054,800	\$7,195,800	\$7,339,800	\$7,486,800	\$7,636,800	\$7,789,800	\$71,365,308
Moderate Growth	10,862,180	11,079,000	11,301,000	11,527,000	11,758,000	11,993,000	12,233,000	12,478,000	12,728,000	12,983,000	118,942,180
Faster Growth	16,293,270	16,618,500	16,951,500	17,290,500	17,637,000	17,989,500	18,349,500	18,717,000	19,092,000	19,474,500	178,413,270

1 Conservatively estimated based on review of historical connections over past 20 years.

## **Capacity Charges**

High CIP Engineering Cost Estimate (+25%)



Table C-1  
 Union Sanitary District  
 Proposed Maximum Capacity Fees

High CIP Cost Estimate (+25%)

CONNECTION CATEGORY	CHARGE PER UNIT		UNIT DEFINITION	FLOW (gpd per Unit)	BOD (mg/l)	SS (mg/l)	EDUs if applicable
	Current	2020 Update <sup>1</sup>					
<b>RESIDENTIAL &amp; COMMERCIAL</b>							
Single Family Dwelling Unit <sup>2</sup>	\$8,897.71	\$11,394	per unit ( <i>new construction only; not additions or repairs</i> )	195	200	200	1.00
Multi-Family Dwelling Unit	\$7,626.61	\$9,933	per unit ( <i>new construction only; not additions or repairs</i> )	170	200	200	0.87
Accessory Dwelling Unit (ADU) <sup>3</sup> Applies to new or expanded structures <i>No charges apply to ADUs within the living area of an existing single family home</i>	Based on ADU square footage / 4,500 sf x Single Family Fee	\$5.84	per square foot; <i>fees shall be applied based on the square footage of each Accessory Dwelling Unit</i>	0.10	200	200	0.00
Commercial/Industrial/Office use (C/I/O) (Domestic Use Only) and Mixed Use Commercial Property with individual tenant units exceeding 10,000 square feet	\$4.02	\$5.50	per square foot of building floor area	0.10	140	115	
Mixed-use Commercial property with individual tenant units less than 10,000 square feet	\$10.49	\$14.86	per square foot of building floor area	0.22	440	320	
Boarding Establishments	\$5,391.81	\$7,012	per unit, or	120	200	200	0.62
Including Hotels and Motels	\$2,965.90	\$4,090	per capita design tenant	70	200	200	0.36
Schools and Day Care Centers (Boarding Facilities Excluded)	\$5.58	\$7.61	per square foot of building floor area	0.14	130	100	
Churches (School & Day Care facilities)	\$3.98	\$5.44	per square foot of building	0.10	130	100	
Public Assembly Facilities	\$211.85	\$292.16	per seat	5	200	200	
Health Clubs	\$16.73	\$22.83	per square foot of building	0.42	130	100	
Park or Recreation Site Restrooms	\$8,897.71	\$11,394	per water closet				1.00
Coin-operated Laundromats	\$6,445.38	\$8,820	per washing machine	160	150	110	
Restaurants - All	\$30.03	\$44.41	per square foot of building	0.50	1000	600	
Eating/Drinking facilities without cooking	\$10.59	\$14.61	per square foot of building	0.25	200	200	
Car Wash with water recycling	\$8,897.71	\$11,394	lump sum		20	150	1.00

Table C-1  
 Union Sanitary District  
 Proposed Maximum Capacity Fees

High CIP Cost Estimate (+25%)

CONNECTION CATEGORY	CHARGE PER UNIT		UNIT DEFINITION	FLOW (gpd per Unit)	BOD (mg/l)	SS (mg/l)	EDUs if applicable
	Current	2020 Update <sup>1</sup>					
Warehouses	\$1.69	\$2.34	per square foot of building floor area up to 50,000 square	0.04	200	200	
	\$0.42	\$0.58	per square foot of building floor area for that portion of each building above 50,000 square feet	0.01	200	200	
Private cafeterias	\$30.03	\$44.41	per square foot of floor area for food preparation, cooking, food storage, and food service areas (excluding seating areas)	0.50	1000	600	
Equipment Wash Pad with Interceptor	\$8,897.71	\$11,394	lump sum, plus				1.00
	\$29.66	\$40.90	per square foot for any additional pad area above 600 square feet	0.70	200	200	
Mobile Home/RV Holding Tank disposal station	\$17,795.42	\$22,788	lump sum				2.00
Non-Standard Connections <sup>4</sup>	Varies	Varies	to be determined by District				
<b>INDUSTRIAL</b>							
Volume Component	\$24.96	\$33.34	per 1,000 gallons of est. avg. annual discharge volume				
COD Component	\$561.73	\$883.08	per 1,000 lbs of est. avg. annual COD demand loading				
SS Component	\$1,239.89	\$1,778.31	per 1,000 lbs of est. avg. annual SS demand loading				
<p><i>Industrial charges listed must be paid 4 times: once prior to permit issuance and at end of each year for 3 additional years.                      If charges total less than \$500, all charges shall be paid in one installment prior to permit issuance.</i></p>							
<p>Note: The minimum charge per any initial connection shall equal the charge for a Multi-Family Residential Dwelling Unit.                      1 Maximum fees are calculated based on the updated unit costs for flow, BOD, and SS applied to the estimated wastewater flow and strength characteristics of each                      2 Single Family Dwelling Unit fee applies to homes with up to 4,500 square feet of building area; additional capacity fees for area in excess of 4,500 square feet shall be calculated on a pro-rata basis based on the additional square footage divided by 4,500 square feet.                      3 Accessory Dwelling Units shall meet the criteria of California Government Code Section 65852.2, which includes a maximum allowable floorspace of 1,200 square feet; capacity fees for ADUs shall be calculated based on the square footage of each ADU.                      4 Capacity fees for other types of uses shall be determined by District staff based on estimated wastewater flow and strength.</p>							

Table C-2  
 Union Sanitary District  
 Projected Capacity Fee Revenues

High CIP Cost Estimate (+25%)

Annual Fee Escalation	2.0%
-----------------------	------

Year	1	2	3	4	5	6	7	8	9	10	Total
<b>Growth Projections (Equivalent Dwelling Units per Year)<sup>1</sup></b>											
Slow Growth	600	600	600	600	600	600	600	600	600	600	6,000
Moderate Growth	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	10,000
Faster Growth	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	15,000
<b>Revenues Based on <u>Current</u> Capacity Fees with 2% Annual Escalation</b>											
Single Family Fee (\$ per EDU)	\$8,898	\$9,076	\$9,258	\$9,443	\$9,632	\$9,825	\$10,022	\$10,222	\$10,426	\$10,635	
Slow Growth	\$5,338,626	\$5,445,600	\$5,554,800	\$5,665,800	\$5,779,200	\$5,895,000	\$6,013,200	\$6,133,200	\$6,255,600	\$6,381,000	\$58,462,026
Moderate Growth	8,897,710	9,076,000	9,258,000	9,443,000	9,632,000	9,825,000	10,022,000	10,222,000	10,426,000	10,635,000	97,436,710
Faster Growth	13,346,565	13,614,000	13,887,000	14,164,500	14,448,000	14,737,500	15,033,000	15,333,000	15,639,000	15,952,500	146,155,065
<b>Revenues Based on <u>Projected</u> Capacity Fees with 2% Annual Escalation</b>											
Single Family Fee (\$ per EDU)	\$11,394	\$11,622	\$11,854	\$12,091	\$12,333	\$12,580	\$12,832	\$13,089	\$13,351	\$13,618	
Slow Growth	\$6,836,466	\$6,973,200	\$7,112,400	\$7,254,600	\$7,399,800	\$7,548,000	\$7,699,200	\$7,853,400	\$8,010,600	\$8,170,800	\$74,858,466
Moderate Growth	11,394,110	11,622,000	11,854,000	12,091,000	12,333,000	12,580,000	12,832,000	13,089,000	13,351,000	13,618,000	124,764,110
Faster Growth	17,091,165	17,433,000	17,781,000	18,136,500	18,499,500	18,870,000	19,248,000	19,633,500	20,026,500	20,427,000	187,146,165

1 Conservatively estimated based on review of historical connections over past 20 years.

## **APPENDIX B**

### **Union Sanitary District Fixed Asset List & Valuation**

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00006	06/30/09	10"SDR35 PVC Pipe in Concr20ft	collection	collsys	\$10,000	2009	8570.08	\$13,414
00011	06/30/09	8" pipe 81 ft	collection	contribcs	19,902	2009	8570.08	26,697
00025	06/30/09	8" PVC Pipe 31ft	collection	collsys	41,141	2009	8570.08	55,188
00029	06/30/09	Manhole Dropped Qty2	collection	collsys	28,816	2009	8570.08	38,655
00061	06/30/08	Traffic Bollards	collection	pumpstat	11,286	2008	8309.92	15,614
00170	06/30/08	Risers	collection	contribcs	23,093	2008	8309.92	31,948
00193	06/30/08	Sump Pump	collection	pumpstat	13,085	2008	8309.92	18,102
00196	06/30/09	Rehab MN S14017	collection	collsys	16,101	2009	8570.08	21,599
00201	06/30/06	Standard Drop Manhole	collection	collsys	12,046	2006	7751.25	17,867
00205	06/30/06	Manholes	collection	contribcs	12,161	2006	7751.25	18,037
00244	06/30/09	Coupling Epoxy Coat Steel Enca	collection	collsys	94,213	2009	8570.08	126,382
00315	06/30/08	Gas Detector Alarm/Beacon	collection	pumpstat	16,322	2008	8309.92	22,580
00346	06/30/05	Pumps 5/6 Sictopm Pipe Platfor	collection	liftstat	15,377	2005	7446.08	23,741
00347	06/30/06	Manholes	collection	collsys	19,886	2006	7751.25	29,494
00351	06/30/05	Pumps 5/6 Dschg Pipe Platform	collection	liftstat	15,997	2005	7446.08	24,698
00355	06/30/09	Rehab MN S14014	collection	collsys	29,603	2009	8570.08	39,711
00356	06/30/09	Rehab MN S14020	collection	collsys	29,603	2009	8570.08	39,711
00357	06/30/09	Rehab MN S14021	collection	collsys	29,603	2009	8570.08	39,711
00358	06/30/09	Rehab MN S14026	collection	collsys	29,603	2009	8570.08	39,711
00359	06/30/09	Rehab MN S14029	collection	collsys	29,603	2009	8570.08	39,711
00364	06/30/09	Coupling, St Steel Encapsulati	collection	collsys	150,991	2009	8570.08	202,547
00365	06/30/09	Rehab MN S14019	collection	collsys	30,278	2009	8570.08	40,616
00366	06/30/08	Surge Tower Lights	collection	pumpstat	15,203	2008	8309.92	21,032
00374	06/30/05	Conveyor & Centrifuge Platform	collection	liftstat	17,908	2005	7446.08	27,649
00385	06/30/06	Trunk Drop Manholes	collection	collsys	24,093	2006	7751.25	35,733
00390	06/30/05	Grit Hopper Platform	collection	liftstat	19,089	2005	7446.08	29,472
00395	06/30/09	33" Sewer Line Rehab 745 Ft	collection	collsys	178,075	2009	8570.08	238,878
00414	12/31/02	Chadbourne Swr Repair 21Ft of	collection	collsys	11,394	2002	6538.00	20,035
00431	06/30/05	Actuator at Wet Well 1	collection	pumpstat	10,757	2005	7446.08	16,607
00432	06/30/05	Actuator at Wet Well 2	collection	pumpstat	10,757	2005	7446.08	16,607
00433	06/30/05	Slide Gate at Wet Well 1	collection	pumpstat	10,757	2005	7446.08	16,607
00434	06/30/05	Slide Gate at Wet Well 2	collection	pumpstat	10,757	2005	7446.08	16,607
00435	06/30/05	Generator Enclosure Platform	collection	liftstat	21,979	2005	7446.08	33,934
00450	06/30/05	Actuator, Sluice Gate	collection	pumpstat	11,374	2005	7446.08	17,560
00481	06/30/07	Pipe Line 10in	collection	collsys	17,279	2007	7967.00	24,933
00486	06/30/05	Manholes	collection	collsys	19,292	2005	7446.08	29,786
00487	06/30/05	Actuator, Sluice Gate	collection	pumpstat	12,072	2005	7446.08	18,638

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00488	06/30/05	Sluice Gate	collection	pumpstat	12,072	2005	7446.08	18,638
00510	06/30/05	Actuator, Sluice Gate	collection	pumpstat	12,779	2005	7446.08	19,729
00511	06/30/05	Sluice Gate Bsn 2 to Ovfl	collection	pumpstat	12,779	2005	7446.08	19,729
00515	06/30/05	Non-Potable Water Pump 1	collection	pumpstat	13,021	2005	7446.08	20,103
00516	06/30/05	Non-Potable Water Pump 2	collection	pumpstat	13,021	2005	7446.08	20,103
00522	06/30/05	Actuator, Sluice Gate	collection	pumpstat	13,195	2005	7446.08	20,372
00533	06/30/05	Actuator at Wet Well 3	collection	pumpstat	13,433	2005	7446.08	20,739
00534	06/30/05	Actuator at Wet Well 3	collection	pumpstat	13,433	2005	7446.08	20,739
00535	06/30/05	Actuator at Wet Well 3	collection	pumpstat	13,433	2005	7446.08	20,739
00536	06/30/05	Slide Gate at Wet Well 2	collection	pumpstat	13,433	2005	7446.08	20,739
00537	06/30/05	Slide Gate at Wet Well 3	collection	pumpstat	13,433	2005	7446.08	20,739
00538	06/30/05	Slide Gate at Wet Well 3	collection	pumpstat	13,433	2005	7446.08	20,739
00551	06/30/08	Concrete Cap - Paseo Padre	collection	collsys	82,600	2008	8309.92	114,273
00557	06/30/05	Pump 1 Check Valve	collection	pumpstat	11,301	2005	7446.08	17,447
00558	06/30/05	Pump 2 Check Valve	collection	pumpstat	11,301	2005	7446.08	17,447
00559	06/30/05	Pump 3 Check Valve	collection	pumpstat	11,301	2005	7446.08	17,447
00560	06/30/05	Pump 4 Check Valve	collection	pumpstat	11,301	2005	7446.08	17,447
00565	06/30/05	Bucket 1 Basin Flush Tank	collection	pumpstat	17,063	2005	7446.08	26,344
00566	06/30/05	Bucket 2 Basin Flush Tank	collection	pumpstat	17,063	2005	7446.08	26,344
00567	06/30/05	Bucket 3 Basin Flush Tank	collection	pumpstat	17,063	2005	7446.08	26,344
00568	06/30/05	Bucket 4 Basin Flush Tank	collection	pumpstat	17,063	2005	7446.08	26,344
00569	06/30/05	Bucket 5 Basin Flush Tank	collection	pumpstat	17,063	2005	7446.08	26,344
00570	06/30/05	Bucket 6 Basin Flush Tank	collection	pumpstat	17,063	2005	7446.08	26,344
00571	06/30/05	6" Underground Lines	collection	contribcs	28,757	2005	7446.08	44,399
00581	06/30/05	Exhaust Fans Dry Well	collection	pumpstat	11,709	2005	7446.08	18,077
00582	06/30/05	Exhaust Fans PS	collection	pumpstat	11,709	2005	7446.08	18,077
00583	06/30/05	Wet Well Drainage Pump	collection	pumpstat	14,649	2005	7446.08	22,617
00598	06/30/05	Actuator, Plug Valve on Booste	collection	pumpstat	15,172	2005	7446.08	23,425
00599	06/30/05	Plug Valve on Booster Line	collection	pumpstat	15,172	2005	7446.08	23,425
00633	06/30/05	Static Loop Platform	collection	liftstat	31,479	2005	7446.08	48,602
00640	06/30/05	Check Valve, Bypass Vault N	collection	pumpstat	15,964	2005	7446.08	24,647
00641	06/30/05	Check Valve, South	collection	pumpstat	15,964	2005	7446.08	24,647
00642	06/30/05	Fill Plug Valve, North	collection	pumpstat	15,964	2005	7446.08	24,647
00643	06/30/05	Fill Plug Valve, South	collection	pumpstat	15,964	2005	7446.08	24,647
00644	06/30/05	Plug Valve, North	collection	pumpstat	15,964	2005	7446.08	24,647
00645	06/30/05	Plug Valve, South	collection	pumpstat	15,964	2005	7446.08	24,647
00664	06/30/05	Sluice Gate Btwn 1 & 2	collection	pumpstat	13,195	2005	7446.08	20,372

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00679	06/30/05	Gas Monitoring System	collection	pumpstat	13,602	2005	7446.08	21,001
00680	06/30/05	Gas Monitoring System	collection	pumpstat	13,602	2005	7446.08	21,001
00682	06/30/07	Pipe Line 8in	collection	collsys	24,525	2007	7967.00	35,389
00685	06/30/06	#1 NPS Booster Pump VFD	collection	pumpstat	13,167	2006	7751.25	19,529
00699	06/30/05	Carbon Filter Platform	collection	liftstat	35,328	2005	7446.08	54,544
00718	06/30/05	Actuator, Sluice Gate	collection	pumpstat	14,968	2005	7446.08	23,110
00719	06/30/05	Sluice Gate	collection	pumpstat	14,968	2005	7446.08	23,110
00725	12/31/99	48 Inch Underground Lines 32 F	collection	contribcs	17,890	1999	6059.50	33,942
00729	06/30/05	Washdown Pump 1	collection	pumpstat	19,253	2005	7446.08	29,725
00730	06/30/05	Washdown Pump 2	collection	pumpstat	19,253	2005	7446.08	29,725
00731	06/30/05	Washdown Pump 3	collection	pumpstat	19,253	2005	7446.08	29,725
00737	06/30/05	Actuator, Pump 1	collection	pumpstat	15,514	2005	7446.08	23,953
00738	06/30/05	Actuator, Pump 2	collection	pumpstat	15,514	2005	7446.08	23,953
00739	06/30/05	Actuator, Pump 3	collection	pumpstat	15,514	2005	7446.08	23,953
00740	06/30/05	Actuator, Pump 4	collection	pumpstat	15,514	2005	7446.08	23,953
00741	06/30/05	Pump 1 Dischg Gate Valve	collection	pumpstat	15,514	2005	7446.08	23,953
00742	06/30/05	Pump 2 Dischg Gate Valve	collection	pumpstat	15,514	2005	7446.08	23,953
00743	06/30/05	Pump 3 Dischg Gate Valve	collection	pumpstat	15,514	2005	7446.08	23,953
00744	06/30/05	Pump 4 Dischg Gate Valve	collection	pumpstat	15,514	2005	7446.08	23,953
00767	06/30/05	Actuator Gate Valve Lwr Dischg	collection	pumpstat	16,103	2005	7446.08	24,862
00788	06/30/05	Sluice Gate, Headgate 2	collection	pumpstat	17,353	2005	7446.08	26,793
00808	06/30/08	Manholes	collection	contribcs	135,522	2008	8309.92	187,487
00809	06/30/05	Actuator, Pump 1 Suction	collection	pumpstat	18,165	2005	7446.08	28,046
00810	06/30/05	Actuator, Pump 2 Suction	collection	pumpstat	18,165	2005	7446.08	28,046
00811	06/30/05	Actuator, Pump 3 Suction	collection	pumpstat	18,165	2005	7446.08	28,046
00812	06/30/05	Actuator, Pump 4 Suction	collection	pumpstat	18,165	2005	7446.08	28,046
00813	06/30/05	Pump 1 Suction Gate Valve	collection	pumpstat	18,165	2005	7446.08	28,046
00814	06/30/05	Pump 2 Suction Gate Valve	collection	pumpstat	18,165	2005	7446.08	28,046
00815	06/30/05	Pump 3 Suction Gate Valve	collection	pumpstat	18,165	2005	7446.08	28,046
00816	06/30/05	Pump 5 Suction Gate Valve	collection	pumpstat	18,165	2005	7446.08	28,046
00826	06/30/05	Proj187 Platform Install	collection	liftstat	46,662	2005	7446.08	72,044
00829	06/30/05	Pump 5 Check Valve	collection	pumpstat	18,861	2005	7446.08	29,120
00830	06/30/05	Pump 6 Check Valve	collection	pumpstat	18,861	2005	7446.08	29,120
00835	12/31/96	Risers 16 Qty	collection	contribcs	17,242	1996	5622.17	35,257
00860	12/31/98	6" Underground Lines 130 Ft	collection	contribcs	22,433	1998	5920.42	43,561
00863	06/30/05	Actuator, Pump 5 Suction	collection	pumpstat	21,177	2005	7446.08	32,696
00864	06/30/05	Actuator, Pump 6 Suction	collection	pumpstat	21,177	2005	7446.08	32,696

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00865	06/30/05	Pump 5 Suction Gate Valve	collection	pumpstat	21,177	2005	7446.08	32,696
00866	06/30/05	Pump 6 Suction Gate Valve	collection	pumpstat	21,177	2005	7446.08	32,696
00872	06/30/05	Actuator, Pump 5 Dischg	collection	pumpstat	21,381	2005	7446.08	33,010
00873	06/30/05	Actuator, Pump 6 Dischg	collection	pumpstat	21,381	2005	7446.08	33,010
00874	06/30/05	Pump 5 Dischg Gate Valve	collection	pumpstat	21,381	2005	7446.08	33,010
00875	06/30/05	Pump 6 Dischg Gate Valve	collection	pumpstat	21,381	2005	7446.08	33,010
00879	12/31/85	Piping	collection	pumpstat	10,395	1985	4195.00	28,487
00889	01/01/88	6 inch Underground Lines 88 F	collection	contribcs	11,802	1988	4519.00	30,024
00904	06/30/05	Actuator Hdr Gate Valve	collection	pumpstat	23,411	2005	7446.08	36,145
00905	06/30/05	Actuator Hdr Gate Valve	collection	pumpstat	23,411	2005	7446.08	36,145
00906	06/30/05	Lower Dischg Hdr E Gate Valve	collection	pumpstat	23,411	2005	7446.08	36,145
00907	06/30/05	Upper Dischg Hdr Gate Valve	collection	pumpstat	23,411	2005	7446.08	36,145
00910	06/30/05	36" Magnetic Flow Meter	collection	pumpstat	23,530	2005	7446.08	36,329
00911	12/31/98	Jarvis Avenue Sewer Replace PR	collection	collsys	15,135	1998	5920.42	29,389
00919	06/30/05	24" Gate Valve	collection	pumpstat	18,000	2005	7446.08	27,791
00927	06/30/09	36"Sewer Line Rehab 3474 Ft	collection	collsys	558,682	2009	8570.08	749,442
00940	01/01/87	Risers 19 Qty	collection	contribcs	12,837	1987	4406.00	33,495
00943	06/30/05	24" Pipe Liner	collection	pumpstat	64,822	2005	7446.08	100,081
00948	06/30/06	Manhole Concrete Pads	collection	collsys	84,324	2006	7751.25	125,066
00950	12/31/89	Risers 14 Qty	collection	contribcs	15,279	1989	4615.00	38,061
00954	12/31/88	Risers 14 Qty	collection	contribcs	14,601	1988	4519.00	37,145
00963	06/30/06	10"PVC Pipe	collection	collsys	87,078	2006	7751.25	129,150
00971	06/30/05	30" Steel Pipe & Fittings	collection	pumpstat	34,600	2005	7446.08	53,420
00977	12/31/95	Hetch Hetchy (Phase 2)	collection	collsys	14,051	1995	5471.17	29,525
00981	06/30/09	8" Pipe 1170 ft	collection	collsys	636,506	2009	8570.08	853,838
00991	06/30/07	Pipe, 8in,cured in plc 3858LF	collection	collsys	131,057	2007	7967.00	189,114
00992	06/30/06	Manholes	collection	contribcs	93,682	2006	7751.25	138,945
01001	06/30/04	10 In Underground Pipe	collection	contribcs	60,616	2004	7115.08	97,941
01004	06/30/06	Standard Manholes	collection	collsys	48,185	2006	7751.25	71,466
01010	12/31/95	Risers 21 Qty	collection	contribcs	25,316	1995	5471.17	53,195
01015	06/30/06	12" PVC Pipe Guide Boring	collection	collsys	97,966	2006	7751.25	145,299
01023	06/30/08	10" Underground Pipe 757 FT	collection	contribcs	186,804	2008	8309.92	258,433
01027	06/30/05	6"/8" Ductile Iron Pipe	collection	pumpstat	47,085	2005	7446.08	72,696
01031	06/30/06	21" Underground Pipe	collection	contribcs	101,680	2006	7751.25	150,807
01038	06/30/05	18" Pipe Casing	collection	collsys	64,960	2005	7446.08	100,294
01047	01/01/88	Risers 17 Qty	collection	contribcs	17,459	1988	4519.00	44,416
01065	06/30/05	Proj 163 Hywd Msh Outfall Modi	collection	pumpstat	44,159	2005	7446.08	68,179



**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01068	12/31/00	Hypo Tank 9000 gal	collection	pumpstat	18,796	2000	6221.17	34,734
01070	06/30/09	27" Sewer Line Rehab 2306Ft	collection	collsys	800,771	2009	8570.08	1,074,192
01086	12/31/99	21 Inch Underground Lines 187	collection	contribcs	44,568	1999	6059.50	84,556
01087	06/30/05	30" Pipe Casing	collection	collsys	75,500	2005	7446.08	116,568
01095	12/31/02	Hunter Easement Access Road Pr	collection	collsys	26,613	2002	6538.00	46,795
01097	12/31/02	Newark Subbasin Upper Relief P	collection	collsys	40,000	2002	6538.00	70,335
01098	12/31/02	Mission Crk Swr Relocation Pro	collection	collsys	53,351	2002	6538.00	93,812
01103	12/31/94	Fremont & Eggers Sewer Repair	collection	collsys	18,377	1994	5407.58	39,069
01142	06/30/05	Hydraulic Power Unit & Accumul	collection	pumpstat	41,465	2005	7446.08	64,020
01146	06/30/06	12" PVC Pipe	collection	collsys	134,825	2006	7751.25	199,966
01174	06/30/05	Proj 136 Newark PS Cpct Improv	collection	pumpstat	91,037	2005	7446.08	140,556
01177	06/30/05	Washdown PS Stucture	collection	pumpstat	114,207	2005	7446.08	176,329
01179	12/31/96	Dairy Ave Corridor Replacement	collection	collsys	25,110	1996	5622.17	51,345
01191	12/31/93	Alvarado P.S. Elec Valve OP	collection	collsys	21,182	1993	5210.42	46,736
01195	12/31/85	Influent Line	collection	pumpstat	23,927	1985	4195.00	65,571
01196	06/30/06	10" Underground Lines	collection	contribcs	161,554	2006	7751.25	239,610
01200	06/30/06	8" Underground Pipe	collection	contribcs	162,596	2006	7751.25	241,156
01217	12/31/99	Pine Street Sanitary Sewer Pro	collection	collsys	365,965	1999	6059.50	694,323
01219	06/30/05	Monorail Hoist Dry Well	collection	pumpstat	52,317	2005	7446.08	80,774
01221	06/30/06	Trunk Manholes	collection	collsys	168,648	2006	7751.25	250,132
01223	06/30/05	36" Welded Steel Pipe	collection	pumpstat	131,843	2005	7446.08	203,558
01225	06/30/05	Pump 1 VFD	collection	pumpstat	52,852	2005	7446.08	81,601
01226	06/30/05	Pump 2 VFD	collection	pumpstat	52,852	2005	7446.08	81,601
01227	06/30/05	Pump 3 VFD	collection	pumpstat	52,852	2005	7446.08	81,601
01228	06/30/05	Pump 4 VFD	collection	pumpstat	52,852	2005	7446.08	81,601
01231	06/30/09	33"Sewer Line Rehab 7494 Ft	collection	collsys	1,205,170	2009	8570.08	1,616,672
01235	06/30/05	Generator Switchboard	collection	pumpstat	54,734	2005	7446.08	84,507
01236	06/30/05	Main Switchboard	collection	pumpstat	54,734	2005	7446.08	84,507
01237	06/30/05	Motor Control Center	collection	pumpstat	54,734	2005	7446.08	84,507
01238	06/30/05	Motor Control Center	collection	pumpstat	54,734	2005	7446.08	84,507
01239	06/30/05	PGE Switchboard	collection	pumpstat	54,734	2005	7446.08	84,507
01244	06/30/09	30" Sewer Line Rehab 3235 Ft	collection	collsys	1,250,629	2009	8570.08	1,677,653
01247	12/31/94	Driscoll Blvd/P.Padre Rehab	collection	collsys	26,115	1994	5407.58	55,519
01255	06/30/05	Cath Protec TF Main Casing 02	collection	twforce	28,706	2005	7446.08	44,320
01256	06/30/05	Cath Protec TF Main Casing 05	collection	twforce	28,706	2005	7446.08	44,320
01259	06/30/05	12" PVC Storm Drain Pipe	collection	pumpstat	145,440	2005	7446.08	224,551
01261	06/30/05	Pump 4 Motor	collection	pumpstat	73,015	2005	7446.08	112,730

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01262	06/30/05	Pump 1	collection	pumpstat	73,015	2005	7446.08	112,730
01263	06/30/05	Pump 1 Motor	collection	pumpstat	73,015	2005	7446.08	112,730
01264	06/30/05	Pump 2	collection	pumpstat	73,015	2005	7446.08	112,730
01265	06/30/05	Pump 2 Motor	collection	pumpstat	73,015	2005	7446.08	112,730
01266	06/30/05	Pump 3	collection	pumpstat	73,015	2005	7446.08	112,730
01267	06/30/05	Pump 3 Motor	collection	pumpstat	73,015	2005	7446.08	112,730
01268	06/30/05	Pump 4	collection	pumpstat	73,015	2005	7446.08	112,730
01274	06/30/04	Manholes	collection	contribcs	121,204	2004	7115.08	195,837
01286	12/31/94	12 inch Underground Lines 271	collection	contribcs	48,682	1994	5407.58	103,496
01291	06/30/05	Pump 6 VFD	collection	pumpstat	64,036	2005	7446.08	98,867
01292	06/30/05	Pump 5 VFD	collection	pumpstat	64,037	2005	7446.08	98,869
01294	06/30/05	24" Weld Steel Bsn to Jct Strc	collection	pumpstat	96,263	2005	7446.08	148,624
01297	12/31/02	12 Inch Underground Lines 547	collection	contribcs	111,352	2002	6538.00	195,799
01304	12/31/00	12 Inch Underground Lines 440	collection	contribcs	87,721	2000	6221.17	162,103
01306	06/30/05	Man Holes, Trunk	collection	collsys	168,309	2005	7446.08	259,859
01310	06/30/05	Pump 5	collection	pumpstat	85,378	2005	7446.08	131,819
01311	06/30/05	Pump 5 Motor	collection	pumpstat	85,378	2005	7446.08	131,819
01312	06/30/05	Pump 6	collection	pumpstat	85,378	2005	7446.08	131,819
01313	06/30/05	Pump 6 Motor	collection	pumpstat	85,378	2005	7446.08	131,819
01316	12/31/94	Mission Blvd/I-680	collection	collsys	32,368	1994	5407.58	68,813
01321	12/31/97	24" Underground Lines 266 Ft	collection	contribcs	69,387	1997	5825.08	136,941
01323	12/31/02	Perrin Ave Access Proj 156	collection	collsys	49,146	2002	6538.00	86,418
01332	12/31/02	Manholes 46 Qty	collection	contribcs	125,124	2002	6538.00	220,016
01333	06/30/05	30" Weld Steel Pipe Twr to Bsn	collection	pumpstat	108,819	2005	7446.08	168,009
01355	06/30/04	12 In Underground Pipe	collection	contribcs	157,157	2004	7115.08	253,929
01359	06/30/05	24" Welded Steel Pipe	collection	pumpstat	195,729	2005	7446.08	302,194
01362	06/30/05	16" Weld Steel PS byps to Bsn	collection	pumpstat	118,236	2005	7446.08	182,549
01363	06/30/05	Bridge Crane	collection	pumpstat	78,860	2005	7446.08	121,755
01382	12/31/91	Fremont Blvd/Irvington	collection	collsys	33,140	1991	4835.08	78,797
01387	06/30/05	Odor Scrubber Contain Structur	collection	pumpstat	87,892	2005	7446.08	135,700
01398	12/31/98	Carmen Street Phase 2 PROJ 28-	collection	collsys	59,113	1998	5920.42	114,786
01414	12/31/02	Stevenson Blvd Imp Proj 127	collection	collsys	96,346	2002	6538.00	169,414
01415	06/30/04	Proj 182 Maiden Lane Swr	collection	collsys	189,909	2004	7115.08	306,849
01416	06/30/05	Manholes	collection	contribcs	233,266	2005	7446.08	360,149
01417	12/31/00	48 Inch Underground Lines 213	collection	contribcs	123,915	2000	6221.17	228,987
01433	06/30/06	24" Polycrrete Pipe Concret Cap	collection	collsys	320,291	2006	7751.25	475,041
01434	06/30/05	Pump Relocation	collection	pumpstat	49,847	2005	7446.08	76,961

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01435	06/30/05	Pump Relocation	collection	pumpstat	49,847	2005	7446.08	76,961
01437	12/31/93	Central Ave SS	collection	collsys	43,558	1993	5210.42	96,107
01438	12/31/92	Manholes 28 Qty	collection	contribcs	68,408	1992	4984.83	157,766
01442	12/31/92	Central Ave SS (Wrap up)	collection	collsys	41,485	1992	4984.83	95,675
01445	12/31/93	Manholes 30 Qty	collection	contribcs	74,437	1993	5210.42	164,238
01448	06/30/07	Diesel Tank, Above Ground	collection	pumpstat	187,304	2007	7967.00	270,278
01449	12/31/02	Hetch Hetchy Proj 31	collection	collsys	108,395	2002	6538.00	190,600
01450	12/31/92	Hickory Street Litigation	collection	collsys	42,913	1992	4984.83	98,968
01459	06/30/05	24" Welded Stell Pipe	collection	pumpstat	281,189	2005	7446.08	434,139
01461	06/30/05	Junction Structures	collection	collsys	282,533	2005	7446.08	436,215
01462	06/30/07	Diesel Tank, Above Ground	collection	pumpstat	205,664	2007	7967.00	296,771
01467	06/30/05	Foot Valve, East	collection	pumpstat	145,496	2005	7446.08	224,637
01470	06/30/07	Diesel Tank, Above Ground	collection	pumpstat	216,673	2007	7967.00	312,657
01475	06/30/05	Basin Odor Scrubber Fan & Duct	collection	pumpstat	153,602	2005	7446.08	237,152
01479	12/31/98	24" Underground Lines 509 Ft	collection	contribcs	135,367	1998	5920.42	262,857
01480	12/31/95	Kato Road Sewer	collection	collsys	63,438	1995	5471.17	133,299
01489	12/31/98	Collect. Sys. Grit Handling PR	collection	collsys	86,999	1998	5920.42	168,935
01498	06/30/06	12" PVC Pipe Steel Caseing	collection	collsys	451,033	2006	7751.25	668,951
01502	12/31/02	10 Inch Underground Lines 1276	collection	contribcs	253,017	2002	6538.00	444,901
01503	12/31/89	10 inch Underground Lines 533	collection	contribcs	84,385	1989	4615.00	210,209
01509	12/31/96	10 inch Underground Lines 3348	collection	contribcs	137,443	1996	5622.17	281,046
01512	12/31/98	Thornton/Peralta Corr Sewer Re	collection	collsys	100,366	1998	5920.42	194,891
01516	06/30/05	12" Underground Lines	collection	contribcs	401,087	2005	7446.08	619,254
01519	06/30/05	10" Underground Lines	collection	contribcs	407,060	2005	7446.08	628,476
01522	12/31/00	Pump Station Influent Channel	collection	liftstat	131,620	2000	6221.17	243,225
01523	12/31/00	Pump Station Influent Channel	collection	pumpstat	131,620	2000	6221.17	243,225
01524	06/30/06	24" Polycrrete Pipe	collection	collsys	542,866	2006	7751.25	805,155
01528	06/30/05	33" Welded Steel Pipe	collection	pumpstat	445,096	2005	7446.08	687,202
01529	12/31/94	Mission & Old Canyon	collection	collsys	84,222	1994	5407.58	179,053
01531	12/31/96	Olive Avenue Sewer Replacement	collection	collsys	98,578	1996	5622.17	201,574
01532	12/31/02	Frem/Peralta/Mattos Swr Liner	collection	collsys	189,651	2002	6538.00	333,479
01533	06/30/06	12" Underground Pipe	collection	contribcs	603,684	2006	7751.25	895,357
01534	06/30/06	18" Underground Pipe	collection	contribcs	620,719	2006	7751.25	920,623
01535	01/06/64	Risers 3051 Qty	collection	collsys	47,876	1964	936.00	588,026
01537	12/31/98	16" Underground Lines 1050 Ft	collection	contribcs	209,923	1998	5920.42	407,630
01546	06/30/05	48" Welded Stell Pipe	collection	pumpstat	503,690	2005	7446.08	777,667
01547	12/31/98	Peachtree Corridor Reach B PRO	collection	collsys	129,650	1998	5920.42	251,755

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01548	06/30/05	10" Pipe	collection	collsys	403,908	2005	7446.08	623,610
01562	12/31/97	18" Underground Lines 5387 Ft	collection	contribcs	224,297	1997	5825.08	442,670
01563	06/30/05	36" Welded Steel Pipe	collection	pumpstat	575,991	2005	7446.08	889,296
01564	12/31/90	Collection Improvements FYE 6/	collection	collsys	84,585	1990	4731.92	205,501
01565	12/31/00	Manholes 112 Qty	collection	contribcs	308,559	2000	6221.17	570,197
01567	06/30/05	30"/36" Weld Steel Bsn to Ovr	collection	pumpstat	357,846	2005	7446.08	552,493
01568	06/30/05	Proj 171 Access Rd Sentinel Pl	collection	collsys	241,689	2005	7446.08	373,154
01570	12/31/89	12 inch Underground Lines 864	collection	contribcs	140,608	1989	4615.00	350,265
01571	12/31/95	10 inch Underground Lines 1166	collection	contribcs	203,906	1995	5471.17	428,458
01572	12/31/01	Manholes 80 Qty	collection	contribcs	220,424	2001	6342.08	399,563
01573	12/31/91	Manholes 68 Qty	collection	contribcs	157,514	1991	4835.08	374,519
01576	06/30/05	24" Parshall Flume at Hywd Msh	collection	pumpstat	187,514	2005	7446.08	289,510
01581	06/30/05	Surge Tower Structure Improv	collection	pumpstat	657,391	2005	7446.08	1,014,972
01586	06/30/04	Valve, 60" Hay Marsh	collection	contribcs	78,427	2004	7115.08	126,720
01588	06/30/05	PROJ 162 PS Force Main Repair	collection	pumpstat	690,924	2005	7446.08	1,066,745
01589	12/31/00	Sabercat Easement Proj 28-103	collection	collsys	222,294	2000	6221.17	410,784
01591	12/31/93	Carmen Street San Sewer Replac	collection	collsys	123,238	1993	5210.42	271,913
01592	12/31/95	Manholes 101 Qty	collection	contribcs	237,650	1995	5471.17	499,363
01594	06/30/05	Site Work - Electrical	collection	pumpstat	289,279	2005	7446.08	446,630
01600	12/31/79	Irvington Surge Tower & Lining	collection	twforce	89,235	1979	3003.00	341,616
01601	06/30/06	8" Underground Lines	collection	contribcs	943,414	2006	7751.25	1,399,230
01602	12/31/92	Logan High School	collection	collsys	121,012	1992	4984.83	279,085
01605	06/30/05	Odor Scrubber Fan & Ducting	collection	pumpstat	296,621	2005	7446.08	457,965
01606	06/30/05	36" Weld Steel Pipe	collection	pumpstat	445,364	2005	7446.08	687,616
01607	06/30/05	36" Steel Pipe, Up/Lw Dschg Hd	collection	pumpstat	445,853	2005	7446.08	688,370
01608	12/31/98	12" Underground Lines 5280 Ft	collection	contribcs	323,982	1998	5920.42	629,111
01618	12/31/01	12 Inch Underground Lines 1515	collection	contribcs	302,074	2001	6342.08	547,570
01621	12/31/99	12 Inch Underground Lines 2045	collection	contribcs	400,785	1999	6059.50	760,384
01622	06/30/04	Proj 159 Canyon Hgts Swr Repla	collection	collsys	699,569	2004	7115.08	1,130,340
01623	12/31/91	Pump Station Improvement	collection	pumpstat	88,065	1991	4835.08	209,391
01625	06/30/05	Proj 158 Wshngtn/Osgood Reloca	collection	collsys	704,770	2005	7446.08	1,088,123
01627	06/30/08	8" Underground Pipe 9094 FT	collection	contribcs	2,140,236	2008	8309.92	2,960,898
01628	12/31/90	10 inch Underground Lines 1336	collection	contribcs	218,473	1990	4731.92	530,786
01629	01/01/87	12 inch Underground Lines 1221	collection	contribcs	179,792	1987	4406.00	469,120
01633	12/31/96	Smith & New Haven	collection	collsys	203,033	1996	5622.17	415,166
01636	01/06/63	30 Inch Underground Lines 1833	collection	collsys	93,499	1963	901.00	1,193,001
01637	12/31/01	Newark Old Town Street Improve	collection	collsys	348,429	2001	6342.08	631,598

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01640	12/31/90	Manholes 105 Qty	collection	contribcs	243,221	1990	4731.92	590,912
01642	06/30/05	Flap Gate 1	collection	pumpstat	505,652	2005	7446.08	780,696
01643	06/30/05	Flap Gate 2	collection	pumpstat	505,652	2005	7446.08	780,696
01644	06/30/05	Flap Gate 3	collection	pumpstat	505,652	2005	7446.08	780,696
01645	06/30/05	Flap Gate 4	collection	pumpstat	505,652	2005	7446.08	780,696
01646	06/30/05	Flap Gate 5	collection	pumpstat	505,652	2005	7446.08	780,696
01647	06/30/05	Flap Gate 6	collection	pumpstat	505,652	2005	7446.08	780,696
01651	12/31/99	42 Inch Underground Lines 1046	collection	contribcs	498,590	1999	6059.50	945,944
01652	06/30/05	Programmable Logic Controller	collection	pumpstat	424,325	2005	7446.08	655,132
01655	12/31/96	Manholes 242 Qty	collection	contribcs	359,620	1996	5622.17	735,357
01659	06/30/06	24" Polycrete Pipe Steel Case	collection	collsys	1,401,952	2006	7751.25	2,079,312
01660	01/01/88	18 inch Underground Lines 1295	collection	contribcs	228,350	1988	4519.00	580,921
01661	06/30/06	18" Polycrete Pipe Steel Case	collection	collsys	1,410,130	2006	7751.25	2,091,442
01667	01/01/88	15 inch Underground Lines 1474	collection	contribcs	241,058	1988	4519.00	613,250
01668	12/31/85	Mechanical Equip	collection	pumpstat	103,700	1985	4195.00	284,188
01670	12/31/94	10 inch Underground Lines 2071	collection	contribcs	361,924	1994	5407.58	769,436
01671	12/31/85	Mechanical/Electrical	collection	liftstat	105,000	1985	4195.00	287,750
01672	12/31/94	Manholes 149 Qty	collection	contribcs	368,845	1994	5407.58	784,150
01676	01/05/65	Other Underground Lines 3050 F	collection	collsys	123,210	1965	971.00	1,458,765
01677	06/30/05	1250 KW Eng Generator & Enclosu	collection	pumpstat	615,871	2005	7446.08	950,868
01681	12/31/98	Manholes 233 Qty	collection	contribcs	553,809	1998	5920.42	1,075,391
01683	12/31/99	Manholes 228 Qty	collection	contribcs	617,263	1999	6059.50	1,171,094
01686	12/31/98	10" Underground Lines 4988 Ft	collection	contribcs	578,608	1998	5920.42	1,123,545
01687	06/30/05	Basin Washdown System	collection	pumpstat	685,348	2005	7446.08	1,058,136
01689	06/30/04	8 In Underground Pipe	collection	contribcs	1,153,057	2004	7115.08	1,863,070
01690	12/31/91	Jarvis Ave Sewer	collection	collsys	221,609	1991	4835.08	526,917
01699	12/31/95	Peachtree Ave Corridor Sewer	collection	collsys	320,501	1995	5471.17	673,454
01700	12/31/99	10 Inch Underground Lines 3982	collection	contribcs	759,481	1999	6059.50	1,440,916
01701	12/31/92	8 inch Underground Lines 2695	collection	contribcs	315,775	1992	4984.83	728,258
01702	12/31/97	Manholes 341 Qty	collection	contribcs	633,775	1997	5825.08	1,250,810
01705	01/07/60	21 Inch Underground Lines 4761	collection	collsys	149,330	1960	824.00	2,083,424
01706	01/03/73	18 Inch Underground Lines 4032	collection	collsys	204,426	1973	1895.00	1,240,182
01709	12/31/93	El Camino/Santa Barbara	collection	collsys	294,600	1993	5210.42	650,008
01711	12/31/89	Manholes 175 Qty	collection	contribcs	392,458	1989	4615.00	977,642
01715	12/31/88	12 inch Underground Lines 2512	collection	contribcs	390,643	1988	4519.00	993,794
01716	12/31/97	12" Underground Lines 4510 Ft	collection	contribcs	699,154	1997	5825.08	1,379,841
01719	12/31/90	Transport System Master Plan F	collection	collsys	264,220	1990	4731.92	641,929

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01720	01/04/69	24 Inch Underground Lines 3224	collection	collsys	202,718	1969	1269.00	1,836,492
01721	12/31/01	10 Inch Underground Lines 3387	collection	contribcs	657,817	2001	6342.08	1,192,426
01723	12/31/88	Manholes 189 Qty	collection	contribcs	351,450	1988	4519.00	894,086
01724	12/31/02	8 Inch Underground Lines 6831	collection	contribcs	1,288,519	2002	6538.00	2,265,710
01726	12/31/89	D Street & Bodily Project TS-8	collection	collsys	262,339	1989	4615.00	653,506
01728	12/31/88	10 inch Underground Lines 2800	collection	contribcs	423,602	1988	4519.00	1,077,641
01733	01/07/60	36 Inch Underground Lines 3496	collection	collsys	186,704	1960	824.00	2,604,863
01738	12/31/95	Peachtree Ave. Corridor Study	collection	collsys	422,491	1995	5471.17	887,761
01741	12/31/79	Pipes Tanks & Components	collection	pumpstat	333,400	1979	3003.00	1,276,347
01742	12/31/79	Mechanical Equipment	collection	pumpstat	198,500	1979	3003.00	759,913
01745	01/01/88	33 Inch Underground Lines 90 F	collection	collsys	467,224	1988	4519.00	1,188,615
01748	01/01/87	Manholes 224 Qty	collection	contribcs	454,530	1987	4406.00	1,185,978
01750	01/01/87	Improvements	collection	collsys	205,651	1987	4406.00	536,593
01753	12/31/00	Perry Rd Corridor Sewer Proj 5	collection	collsys	753,507	2000	6221.17	1,392,431
01754	12/31/94	Parkson Aeration Panel Pilot	collection	collsys	443,652	1994	5407.58	943,187
01755	01/01/88	12 inch Underground Lines 3353	collection	contribcs	513,478	1988	4519.00	1,306,285
01757	06/30/05	8" Underground Lines	collection	contribcs	2,488,718	2005	7446.08	3,842,433
01758	12/31/96	Whipple Road	collection	collsys	550,000	1996	5622.17	1,124,650
01760	12/31/90	Fremont Blvd/Irv Dist Redevelo	collection	collsys	628,607	1990	4731.92	1,527,216
01761	01/05/66	33 Inch Underground Lines 4096	collection	collsys	269,900	1966	1019.00	3,044,999
01765	12/31/91	10 inch Underground Lines 4420	collection	contribcs	722,793	1991	4835.08	1,718,575
01768	01/06/63	27 Inch Underground Lines 6233	collection	collsys	280,811	1963	901.00	3,583,008
01769	12/31/91	Mowry Ave Project	collection	collsys	460,231	1991	4835.08	1,094,285
01770	01/06/64	Risers 18801 Qty	collection	contribcs	295,703	1964	936.00	3,631,937
01772	12/31/91	Mowry Ave Project	collection	collsys	469,238	1991	4835.08	1,115,701
01774	01/01/88	Manholes 313 Qty	collection	contribcs	660,529	1988	4519.00	1,680,382
01778	12/31/92	I-880 Sewer Replacement	collection	collsys	560,784	1992	4984.83	1,293,312
01780	12/31/90	I-880 Sewer Replacement	collection	collsys	851,864	1990	4731.92	2,069,625
01782	12/31/97	10" Underground Lines 8838 Ft	collection	contribcs	1,335,718	1997	5825.08	2,636,156
01785	01/08/56	6 Inch Underground Lines 28408	collection	collsys	278,022	1956	692.00	4,618,823
01787	01/05/66	15 Inch Underground Lines 1130	collection	collsys	408,978	1966	1019.00	4,614,071
01789	12/31/97	Alvarado Effluent P.S. Improve	collection	collsys	1,422,937	1997	5825.08	2,808,290
01792	12/31/79	Electrical Equipment	collection	pumpstat	535,900	1979	3003.00	2,051,573
01795	12/31/99	Thornton Ave - Fremont to I-88	collection	collsys	1,272,490	1999	6059.50	2,414,215
01798	01/01/88	Improvements	collection	collsys	418,432	1988	4519.00	1,064,489
01800	01/05/67	Manholes 1464 Qty	collection	collsys	505,824	1967	1074.00	5,414,444
01801	12/31/01	8 Inch Underground Lines 9464	collection	contribcs	1,748,526	2001	6342.08	3,169,557

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01802	12/31/00	8 Inch Underground Lines 13989	collection	contribcs	2,584,254	2000	6221.17	4,775,533
01803	06/30/05	Proj 117 Irv PS Improvements	collection	pumpstat	2,948,328	2005	7446.08	4,552,043
01804	12/31/91	Collection System Master Plan	collection	collsys	762,844	1991	4835.08	1,813,804
01807	12/31/96	Newark Subbasin (S&S)	collection	collsys	1,097,734	1996	5622.17	2,244,667
01808	12/31/96	Mission & Old Canyon	collection	collsys	1,119,637	1996	5622.17	2,289,454
01809	01/05/68	10 Inch Underground Lines 6379	collection	collsys	259,362	1968	1155.00	2,581,562
01810	06/30/06	24" Polycrete Pipe	collection	collsys	6,724,840	2006	7751.25	9,973,984
01812	12/31/91	Central Avenue C.M.	collection	collsys	815,198	1991	4835.08	1,938,285
01815	12/31/93	8 inch Underground Lines 9832	collection	contribcs	1,636,269	1993	5210.42	3,610,279
01816	12/31/94	N/I Pump Station Improvements	collection	collsys	526,695	1994	5407.58	1,119,733
01817	12/31/94	Osgood-Warm Springs Sewer	collection	collsys	1,071,041	1994	5407.58	2,276,991
01818	12/31/97	Jarvis Avenue Sewer Replacemen	collection	collsys	1,355,276	1997	5825.08	2,674,755
01820	12/31/95	Willow St. Corridor Sewer Reha	collection	collsys	1,172,149	1995	5471.17	2,462,983
01822	12/31/97	Central/Blacow Sewer Replaceme	collection	collsys	1,390,733	1997	5825.08	2,744,733
01823	01/06/63	30 inch Underground Lines 1129	collection	contribcs	576,264	1963	901.00	7,352,841
01824	12/31/79	Non Structural Construction -	collection	pumpstat	739,276	1979	3003.00	2,830,152
01826	12/31/92	Wells Avenue	collection	collsys	1,024,117	1992	4984.83	2,361,878
01827	12/31/89	Hickory Street Project	collection	collsys	901,646	1989	4615.00	2,246,068
01830	12/31/91	8 inch Underground Lines 11371	collection	contribcs	1,766,663	1991	4835.08	4,200,570
01831	01/05/67	12 Inch Underground Lines 2388	collection	collsys	563,567	1967	1074.00	6,032,533
01832	12/31/92	Thornton Avenue Sewer Replacem	collection	collsys	1,212,096	1992	4984.83	2,795,406
01833	01/05/65	Other Underground Lines 18797	collection	contribcs	759,385	1965	971.00	8,990,860
01834	12/31/92	Everglades Sewer	collection	collsys	1,232,388	1992	4984.83	2,842,204
01836	01/01/87	10 inch Underground Lines 1179	collection	contribcs	1,689,777	1987	4406.00	4,409,033
01837	12/31/98	I-Street Corridor Sewer Replac	collection	collsys	2,260,892	1998	5920.42	4,390,217
01839	12/31/95	8 inch Underground Lines 19042	collection	contribcs	3,005,796	1995	5471.17	6,315,940
01840	06/30/05	Pipe, Polycrete 1000MM	collection	collsys	9,272,774	2005	7446.08	14,316,612
01841	12/31/95	Dairy Ave Corridor Replacement	collection	collsys	1,859,510	1995	5471.17	3,907,303
01842	12/31/98	Newark Subbasin (inc Baine) PR	collection	collsys	2,442,141	1998	5920.42	4,742,168
01844	01/01/88	10 inch Underground Lines 1401	collection	contribcs	2,088,402	1988	4519.00	5,312,883
01845	12/31/97	Lower Warren Avenue Sewer Proj	collection	collsys	2,349,781	1997	5825.08	4,637,498
01846	01/07/60	21 inch Underground Lines 2934	collection	contribcs	928,362	1960	824.00	12,952,351
01848	12/31/91	Central Ave Design/CM	collection	collsys	1,647,703	1991	4835.08	3,917,720
01849	01/04/69	24 inch Underground Lines 1987	collection	contribcs	1,249,415	1969	1269.00	11,318,883
01852	12/31/02	Mowry Corridor Phase III Proj	collection	collsys	4,784,742	2002	6538.00	8,413,410
01853	12/31/92	Mowry Ave D&C	collection	collsys	1,933,948	1992	4984.83	4,460,182
01854	12/31/92	Mowry Ave. Design Phase 2	collection	collsys	1,933,948	1992	4984.83	4,460,182

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01855	12/31/95	Pump Station Ventilation Impro	collection	collsys	2,393,445	1995	5471.17	5,029,236
01856	01/07/60	36 inch Underground Lines 2154	collection	contribcs	1,150,715	1960	824.00	16,054,583
01857	12/31/95	Newark Subbasin	collection	collsys	2,541,937	1995	5471.17	5,341,255
01858	12/31/00	Upper Warren Ave Sewer Proj 28	collection	collsys	4,154,835	2000	6221.17	7,677,864
01859	12/31/01	Newark Subbasin Upper Relief P	collection	collsys	4,745,053	2001	6342.08	8,601,369
01860	01/03/73	18 inch Underground Lines 2208	collection	contribcs	1,718,863	1973	1895.00	10,427,748
01861	12/31/96	8 inch Underground Lines 36505	collection	contribcs	5,241,648	1996	5622.17	10,718,218
01862	12/31/99	8 Inch Underground Lines 38653	collection	contribcs	7,000,575	1999	6059.50	13,281,753
01866	01/05/66	33 inch Underground Lines 2515	collection	contribcs	1,657,490	1966	1019.00	18,699,724
01867	12/31/98	8" Underground Lines 42272 Ft	collection	contribcs	7,274,735	1998	5920.42	14,126,136
01870	12/31/90	8 inch Underground Lines 27550	collection	contribcs	4,280,324	1990	4731.92	10,399,154
01871	01/06/63	27 inch Underground Lines 3841	collection	contribcs	1,730,732	1963	901.00	22,083,276
01872	12/31/99	Upper Fremont Blvd Sewer Proj	collection	collsys	5,309,141	1999	6059.50	10,072,700
01874	12/31/94	8 inch Underground Lines 35591	collection	contribcs	5,909,371	1994	5407.58	12,563,091
01876	12/31/97	8" Underground Lines 52027 Ft	collection	contribcs	8,862,990	1997	5825.08	17,491,884
01880	01/08/56	6 inch Underground Lines 17508	collection	contribcs	2,157,203	1956	692.00	35,837,969
01881	01/05/66	15 inch Underground Lines 6967	collection	contribcs	2,520,665	1966	1019.00	28,438,024
01882	12/31/89	8 inch Underground Lines 39047	collection	contribcs	5,873,361	1989	4615.00	14,630,981
01883	12/31/00	Stevenson Blvd Sanitary Sewer	collection	collsys	8,541,517	2000	6221.17	15,784,165
01884	12/31/79	Non Structural Costs - Enginee	collection	twforce	3,282,841	1979	3003.00	12,567,618
01885	12/31/96	Peralta Corridor Sewer	collection	collsys	5,849,825	1996	5622.17	11,961,830
01887	12/31/88	8 inch Underground Lines 43237	collection	contribcs	7,311,379	1988	4519.00	18,600,106
01888	12/31/95	Newark Subbasin (S&S)	collection	collsys	7,121,272	1995	5471.17	14,963,600
01889	01/05/67	Manholes 9000 Qty	collection	contribcs	3,787,742	1967	1074.00	40,544,743
01892	01/01/87	8 inch Underground Lines 59301	collection	contribcs	7,955,045	1987	4406.00	20,756,619
01893	01/05/66	8 Inch Underground Lines 31585	collection	collsys	4,190,527	1966	1019.00	47,277,333
01894	01/05/67	12 inch Underground Lines 1471	collection	contribcs	3,757,100	1967	1074.00	40,216,742
01895	01/01/88	8 inch Underground Lines 74719	collection	contribcs	10,576,025	1988	4519.00	26,905,347
01897	12/31/79	39 Inch Force Mains 26171 Ft	collection	twforce	8,615,830	1979	3003.00	32,983,767
01898	01/05/68	10 inch Underground Lines 3931	collection	contribcs	6,607,196	1968	1155.00	65,764,827
01899	12/31/79	33 Inch Force Mains 40514 Ft	collection	twforce	11,177,274	1979	3003.00	42,789,679
01902	01/05/66	8 inch Underground Lines 19462	collection	contribcs	51,112,744	1966	1019.00	576,651,570
01944	01/01/10	DIESEL STORAGE TANK	collection	liftstat	59,225	2010	8798.92	77,381
01946	01/01/10	IPS OVERFLOW POND	collection	pumpstat	554,792	2010	8798.92	724,869
01947	01/01/10	MANHOLES	collection	collsys	224,172	2010	8798.92	292,894
01948	01/01/10	MANHOLES	collection	collsys	35,009	2010	8798.92	45,741
01949	01/01/10	MANHOLES	collection	collsys	207,593	2010	8798.92	271,233



**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01950	01/01/10	MANHOLES	collection	collsys	45,344	2010	8798.92	59,244
01951	01/01/10	MANHOLES	collection	collsys	51,915	2010	8798.92	67,830
01952	01/01/10	MANHOLES	collection	collsys	15,876	2010	8798.92	20,743
01953	01/01/10	MANHOLES	collection	collsys	20,143	2010	8798.92	26,319
01954	01/01/10	UPPER DSCHG HEADER FLOW METER	collection	pumpstat	45,084	2010	8798.92	58,905
01976	01/01/10	CIPP LINER 27 " 7000 LF	collection	collsys	1,776,542	2010	8798.92	2,321,158
01977	01/01/10	CIPP LINER 30" 1184 LF	collection	collsys	289,100	2010	8798.92	377,727
01990	01/01/10	8" PIPE 2179 FT	collection	contribcs	535,395	2010	8798.92	699,526
01991	01/01/10	15" PIPE 459 FT	collection	contribcs	129,981	2010	8798.92	169,828
01992	01/01/10	MANHOLES 18 QTY	collection	contribcs	63,888	2010	8798.92	83,473
02045	01/01/11	HEADGATE	collection	liftstat	16,298	2011	9069.83	20,658
02076	01/01/11	PIPE, 12" 16LF	collection	collsys	28,174	2011	9069.83	35,712
02077	01/01/11	PIPE, 8" 769 LF	collection	collsys	190,773	2011	9069.83	241,811
02078	01/01/11	LATERAL CONNECTION	collection	collsys	11,890	2011	9069.83	15,071
02079	01/01/11	PIPE, 10" 17 LF	collection	collsys	44,152	2011	9069.83	55,964
02080	01/01/11	MANHOLE	collection	collsys	11,890	2011	9069.83	15,071
02081	01/01/11	CIPP LINER 6" 33 LF	collection	collsys	17,650	2011	9069.83	22,371
02082	01/01/11	CIPP LINER 8" 784 LF	collection	collsys	142,414	2011	9069.83	180,515
02083	01/01/11	CIPP LINER 12" 341 LF	collection	collsys	36,516	2011	9069.83	46,286
02084	01/01/11	CIPP LINER 14" 885 LF	collection	collsys	38,951	2011	9069.83	49,372
02085	01/01/11	CIPP LINER 15" 216 LF	collection	collsys	18,258	2011	9069.83	23,143
02086	01/01/11	LATERAL SEALING SYSTEMS	collection	collsys	23,127	2011	9069.83	29,314
02090	01/01/11	PIPING/CONDUIT/PAD/FENCE/PAVING	collection	pumpstat	425,195	2011	9069.83	538,949
02092	01/01/11	PUMP STATION LIGHTS	collection	pumpstat	45,552	2011	9069.83	57,738
02093	01/01/11	PS VENTILATION DUCTWORK	collection	pumpstat	284,697	2011	9069.83	360,863
02094	01/01/11	TRAY/CONDUIT/WIRES	collection	pumpstat	833,451	2011	9069.83	1,056,427
02095	01/01/11	PAD/CONDUIT/WIRE/APPURTENANCES	collection	pumpstat	454,092	2011	9069.83	575,577
02096	01/01/11	GENERATOR	collection	pumpstat	768,559	2011	9069.83	974,173
02099	01/01/11	DRY WELL EXHAUST FAN	collection	pumpstat	62,278	2011	9069.83	78,939
02100	01/01/11	DRY WELL SUPPLY FAN	collection	pumpstat	62,278	2011	9069.83	78,939
02101	01/01/11	DRY WELL ROOF FAN #1`	collection	pumpstat	62,278	2011	9069.83	78,939
02102	01/01/11	DRY WELL ROOF FAN #2	collection	pumpstat	62,278	2011	9069.83	78,939
02103	01/01/11	MAIN SWITCFHBOARD	collection	pumpstat	1,015,621	2011	9069.83	1,287,332
02104	01/01/11	MOTOR CONTROL CENTER	collection	pumpstat	589,323	2011	9069.83	746,987
02105	01/01/11	RAW SEWAGE PUMP #1 VFD	collection	pumpstat	91,499	2011	9069.83	115,978
02106	01/01/11	RAW SEWAGE PUMP #2 VFD	collection	pumpstat	91,499	2011	9069.83	115,978
02107	01/01/11	RAW SEWAGE PUMP #3 VFD	collection	pumpstat	91,499	2011	9069.83	115,978

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02108	01/01/11	RAW SEWAGE PUMP #4 VFD	collection	pumpstat	91,499	2011	9069.83	115,978
02109	01/01/11	RAW SEWAGE PUMP #5 VFD	collection	pumpstat	91,499	2011	9069.83	115,978
02110	01/01/11	RAW SEWAGE PUMP #6 VFD	collection	pumpstat	91,499	2011	9069.83	115,978
02111	01/01/11	PLC PANEL	collection	pumpstat	49,571	2011	9069.83	62,833
02114	01/01/11	NEWARK EFFLUENT VALVE BOX 480V	collection	pumpstat	122,135	2011	9069.83	154,810
02115	01/01/11	NEWARK EFFLUENT VALVE BOX LIGHTING	collection	pumpstat	61,068	2011	9069.83	77,405
02116	01/01/11	NEWAR INFLUENT VALVE BOX 480V	collection	pumpstat	122,135	2011	9069.83	154,810
02117	01/01/11	LIGHTNING	collection	pumpstat	61,068	2011	9069.83	77,405
02118	01/01/11	WET WELL 1/2 GATE ACTUATOR	collection	pumpstat	18,505	2011	9069.83	23,456
02119	01/01/11	WET WELL 2/3 GATAE ACTUATOR	collection	pumpstat	18,505	2011	9069.83	23,456
02120	01/01/11	HEAD GATE	collection	pumpstat	202,847	2011	9069.83	257,115
02121	01/01/11	WET WELL #1 LEVEL INDICATOR	collection	pumpstat	14,235	2011	9069.83	18,043
02122	01/01/11	WET WELL #2 LEVEL INDICATOR	collection	pumpstat	14,235	2011	9069.83	18,043
02123	01/01/11	WET WELL #3 LEVEL INDICATOR	collection	pumpstat	14,235	2011	9069.83	18,043
02124	01/01/11	FLOW METER #	collection	pumpstat	56,939	2011	9069.83	72,173
02125	01/01/11	FLOW METER #2	collection	pumpstat	56,939	2011	9069.83	72,173
02126	01/01/11	INFLUENT BOX LEVEL INDICATOR	collection	pumpstat	14,235	2011	9069.83	18,043
02127	01/01/11	SURGE TOWER LEVEL INDICATOR	collection	pumpstat	14,235	2011	9069.83	18,043
02128	01/01/11	GROUND LEVEL DRY WELL HOIST	collection	pumpstat	113,879	2011	9069.83	144,345
02129	01/01/11	GROUND LEVEL WET WELL HOIST	collection	pumpstat	85,409	2011	9069.83	108,259
02130	01/01/11	BOTTOM LEVEL DRY WELL BRIDGECRANE	collection	pumpstat	85,409	2011	9069.83	108,259
02131	01/01/11	HEAD GATE HYDRAULIC POWER SUPPLY	collection	pumpstat	202,847	2011	9069.83	257,115
02132	01/01/11	DRY WELL SUMP PUMP #1	collection	pumpstat	21,352	2011	9069.83	27,065
02133	01/01/11	DRY WELL SUMP PUMP #2	collection	pumpstat	21,352	2011	9069.83	27,065
02134	01/01/11	RAW SEWAGE PUMP #1	collection	pumpstat	197,613	2011	9069.83	250,481
02135	01/01/11	RAW SEWAGE PUMP #	collection	pumpstat	197,613	2011	9069.83	250,481
02136	01/01/11	RAW SEWAGE PUMP #3	collection	pumpstat	197,613	2011	9069.83	250,481
02137	01/01/11	RAW SEWAGE PUMP #4	collection	pumpstat	197,613	2011	9069.83	250,481
02138	01/01/11	RAW SEWAGE PUMP #5	collection	pumpstat	197,613	2011	9069.83	250,481
02139	01/01/11	RAW SEWAGE PUMP #6	collection	pumpstat	197,613	2011	9069.83	250,481
02140	01/01/11	DEWATERING PUMP	collection	pumpstat	92,527	2011	9069.83	117,281
02141	01/01/11	PUMP #1 CHECK VALVE	collection	pumpstat	56,939	2011	9069.83	72,173
02142	01/01/11	PUMP #2 CHECK VALVE	collection	pumpstat	56,939	2011	9069.83	72,173
02143	01/01/11	PUMP #3 CHECK VALVE	collection	pumpstat	56,939	2011	9069.83	72,173
02144	01/01/11	PUMP #4 CHECK VALVE	collection	pumpstat	56,939	2011	9069.83	72,173
02145	01/01/11	PUMP #5 CHECK VALVE	collection	pumpstat	56,939	2011	9069.83	72,173
02146	01/01/11	PUMP #6 CHECK VALVE	collection	pumpstat	56,939	2011	9069.83	72,173

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02147	01/01/11	PUMP #1 DISCHARGE GATE VALVE	collection	pumpstat	26,097	2011	9069.83	33,079
02149	01/01/11	PUMP #2 DISCHARGE GATE VALVE	collection	pumpstat	26,097	2011	9069.83	33,079
02151	01/01/11	PUMP #3 DISCHARGE GATE VALVE	collection	pumpstat	26,097	2011	9069.83	33,079
02153	01/01/11	PUMP #4 DISCHARGE GATE VALVE	collection	pumpstat	26,097	2011	9069.83	33,079
02155	01/01/11	PUMP #5 DISCHARGE GATE VALVE	collection	pumpstat	26,097	2011	9069.83	33,079
02157	01/01/11	PUMP #6 DISCHARGE GATE VALVE	collection	pumpstat	26,097	2011	9069.83	33,079
02159	01/01/11	DISCHARGE HEADER GATE VALVE #1	collection	pumpstat	42,705	2011	9069.83	54,129
02161	01/01/11	DISCHARGE HEADER GATE VALVE #2	collection	pumpstat	42,705	2011	9069.83	54,129
02163	01/01/11	DISCHARGE HEADER GATE VALVE #3	collection	pumpstat	42,705	2011	9069.83	54,129
02165	01/01/11	DISCHARGE HEADER GATE VALVE #4	collection	pumpstat	42,705	2011	9069.83	54,129
02167	01/01/11	DISCHARGE HEADER PIPING	collection	pumpstat	288,256	2011	9069.83	365,374
02168	01/01/11	PUMP #1 SUCTION GATE VALVE	collection	pumpstat	35,587	2011	9069.83	45,108
02169	01/01/11	PUMP #2 SUCTION GATE VALVE	collection	pumpstat	35,587	2011	9069.83	45,108
02170	01/01/11	PUMP #3 SUCTION GATE VALVE	collection	pumpstat	35,587	2011	9069.83	45,108
02171	01/01/11	PUMP #4 SUCTION GATE VALVE	collection	pumpstat	35,587	2011	9069.83	45,108
02172	01/01/11	PUMP #5 SUCTION GATE VALVE	collection	pumpstat	35,587	2011	9069.83	45,108
02173	01/01/11	PUMP #6 SUCTION GATE VALVE	collection	pumpstat	35,587	2011	9069.83	45,108
02174	01/01/11	PIPING	collection	pumpstat	37,544	2011	9069.83	47,589
02175	01/01/11	PIPING	collection	pumpstat	37,544	2011	9069.83	47,589
02176	01/01/11	PIPING	collection	pumpstat	37,544	2011	9069.83	47,589
02177	01/01/11	PIPING	collection	pumpstat	37,544	2011	9069.83	47,589
02178	01/01/11	PIPING	collection	pumpstat	37,544	2011	9069.83	47,589
02179	01/01/11	PIPING	collection	pumpstat	37,544	2011	9069.83	47,589
02188	01/01/11	NEWARK REVERSE PUMPING PLUG VALVE	collection	pumpstat	40,712	2011	9069.83	51,603
02189	01/01/11	BYPASS CONNECTION VALUT PLUG VALVE	collection	pumpstat	27,758	2011	9069.83	35,184
02190	01/01/11	BYPASS CONNECTION VALUT PLUG VALVE	collection	pumpstat	27,758	2011	9069.83	35,184
02191	01/01/11	BYPASS CONNECTION VAULT PLUG VALVE	collection	pumpstat	27,758	2011	9069.83	35,184
02192	01/01/11	VALVE	collection	pumpstat	27,758	2011	9069.83	35,184
02193	01/01/11	VALVE	collection	pumpstat	27,758	2011	9069.83	35,184
02194	01/01/11	INFLUENT BOX FOOT VALVE #1	collection	pumpstat	27,758	2011	9069.83	35,184
02195	01/01/11	INFLUENT BOX FOOT VALVE #2	collection	pumpstat	27,758	2011	9069.83	35,184
02196	01/01/11	BYPASS PIPING	collection	pumpstat	175,801	2011	9069.83	222,833
02197	01/01/11	KNIFE GATE VALVE V022007 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255
02198	01/01/11	KNIFE GATE VALVE V022008 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255
02199	01/01/11	KNIFE GATE VALVE V022009 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255
02200	01/01/11	KNIFE GATE VALVE V022010 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255
02201	01/01/11	KNIFE GATE VALVE V022011 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02202	01/01/11	KNIFE GATE VALVE V022012 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255
02203	01/01/11	KNIFE GATE VALVE V022013 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255
02204	01/01/11	KNIFE GATE VALVE V022014 ACTUATOR	collection	pumpstat	21,502	2011	9069.83	27,255
02205	01/01/11	KNIFE GATE VALVE V052005	collection	pumpstat	61,538	2011	9069.83	78,001
02206	01/01/11	KNIFE GATE VALVE V052006 ACTUATOR	collection	pumpstat	61,538	2011	9069.83	78,001
02207	01/01/11	KNIFE GATE VALVE V022015 ACTUATOR	collection	pumpstat	31,601	2011	9069.83	40,056
02208	01/01/11	KNIFE GATE VALVE V022016 ACTUATOR	collection	pumpstat	31,601	2011	9069.83	40,056
02209	01/01/11	KNIFE GATE VALVE V022017 ACTUATOR	collection	pumpstat	31,601	2011	9069.83	40,056
02210	01/01/11	KNIFE GATE VALVE V022018 ACTUATOR	collection	pumpstat	31,601	2011	9069.83	40,056
02211	01/01/11	KNIFE GATE VALVE V022019 ACTUATOR	collection	pumpstat	31,601	2011	9069.83	40,056
02212	01/01/11	KNIFE GATE VALVE V052001 ACTUATOR	collection	pumpstat	42,705	2011	9069.83	54,129
02213	01/01/11	KNIFE GATE VALVE V052002 ACTUATOR	collection	pumpstat	42,705	2011	9069.83	54,129
02214	01/01/11	PIPE 6" 36LF	collection	collsys	70,865	2011	9069.83	89,824
02215	01/01/11	PIPE 8" 50 LF	collection	collsys	106,582	2011	9069.83	135,096
02216	01/01/11	LATERAL, 1 QTY	collection	collsys	13,358	2011	9069.83	16,931
02217	01/01/11	PIPE 10" CIPP REHAB	collection	collsys	151,303	2011	9069.83	191,781
02218	01/01/11	PIPE 10" OPEN CUT	collection	collsys	394,675	2011	9069.83	500,263
02219	01/01/11	PIPE 8" OPEN CUT	collection	collsys	17,793	2011	9069.83	22,554
02220	01/01/11	PIPE 6" OPEN CUT	collection	collsys	14,633	2011	9069.83	18,547
02221	01/01/11	MANHOLE	collection	collsys	40,972	2011	9069.83	51,933
02222	01/01/11	MANHOLE, DROP	collection	collsys	33,168	2011	9069.83	42,041
02227	01/01/11	PIPE 6" UNDERGROUND 120 LF	collection	contribcs	30,876	2011	9069.83	39,136
02228	01/01/11	PIPE 8" UNDERGROUND 15341 LF	collection	contribcs	3,947,224	2011	9069.83	5,003,235
02229	01/01/11	PIPE 10" UNDERGROUND 197 LF	collection	contribcs	53,158	2011	9069.83	67,380
02230	01/01/11	MANHOLES 106 QTY	collection	contribcs	392,382	2011	9069.83	497,357
02231	01/01/11	RISERS 25 QTY	collection	contribcs	45,166	2011	9069.83	57,249
02241	06/30/12	VALVE ACTUATOR	collection	twforce	20,429	2012	9308.17	25,232
02253	06/30/12	8" PIPE 1035 LF	collection	collsys	92,376	2012	9308.17	114,091
02254	06/30/12	10"PIPE 81 LF	collection	collsys	41,056	2012	9308.17	50,707
02256	06/30/12	8" CIPP LINER 260 LF	collection	collsys	105,452	2012	9308.17	130,241
02257	06/30/12	10" CIPP LINER 119 LF	collection	collsys	46,818	2012	9308.17	57,824
02258	06/30/12	12" CIPP LINER 335 LF	collection	collsys	44,815	2012	9308.17	55,350
02259	06/30/12	15" CIPP LINER 127 LF	collection	collsys	32,024	2012	9308.17	39,552
02260	06/30/12	8" PVC PIPE 475 LF	collection	collsys	224,653	2012	9308.17	277,464
02261	06/30/12	12" PVC PIPE 68 LF	collection	collsys	44,372	2012	9308.17	54,803
02262	06/30/12	MANHOLE STANDARD 1 QTY	collection	collsys	18,031	2012	9308.17	22,269
02263	06/30/12	MANHOLE DROP 1 QTY	collection	collsys	26,866	2012	9308.17	33,182

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02264	06/30/12	LATERAL CONNECTIONS 2 QTY	collection	collsys	20,371	2012	9308.17	25,159
02302	06/30/12	18" PVC PIPE OPEN CUT	collection	collsys	259,232	2012	9308.17	320,172
02303	06/30/12	MANHOLE TRUNK OUTSIDE DROP	collection	collsys	14,847	2012	9308.17	18,337
02304	06/30/12	8" PIPE, 3404 FT	collection	contribcs	908,059	2012	9308.17	1,121,524
02305	06/30/12	10" PIPE, 929 FT	collection	contribcs	260,129	2012	9308.17	321,280
02306	06/30/12	12" PIPE, 701 FT	collection	contribcs	201,802	2012	9308.17	249,241
02307	06/30/12	14" PIPE, 85 FT	collection	contribcs	25,289	2012	9308.17	31,234
02308	06/30/12	15" PIPE, 65 FT	collection	contribcs	20,005	2012	9308.17	24,708
02309	06/30/12	MANHOLES, 32 QTY	collection	contribcs	123,000	2012	9308.17	151,915
02320	01/01/13	8" PVC PIPE, 19 FT	collection	collsys	20,156	2013	9546.67	24,273
02321	01/01/13	MANHOLES, 6 QTY	collection	collsys	254,634	2013	9546.67	306,635
02360	01/01/13	BOX	collection	twforce	20,000	2013	9546.67	24,084
02361	01/01/13	HEADER	collection	twforce	40,000	2013	9546.67	48,169
02362	01/01/13	FORCE MAIN VALVE V17	collection	twforce	40,000	2013	9546.67	48,169
02363	01/01/13	FORCE MAIN VALVE V15	collection	twforce	10,000	2013	9546.67	12,042
02364	01/01/13	FORCE MAIN VALVE V19	collection	twforce	10,000	2013	9546.67	12,042
02365	01/01/13	FORCE MAIN VALVE V7	collection	twforce	10,000	2013	9546.67	12,042
02366	01/01/13	FORCE MAIN VALVE V9	collection	twforce	15,000	2013	9546.67	18,063
02367	01/01/13	FORCE MAIN VALVE V11	collection	twforce	15,000	2013	9546.67	18,063
02368	01/01/13	FORCE MAIN VALVE V13	collection	twforce	10,000	2013	9546.67	12,042
02369	01/01/13	FORCE MAIN VALVE V18	collection	twforce	40,000	2013	9546.67	48,169
02370	01/01/13	FORCE MAIN VALVE V16	collection	twforce	10,000	2013	9546.67	12,042
02371	01/01/13	FORCE MAIN VALVE V8	collection	twforce	10,000	2013	9546.67	12,042
02372	01/01/13	FORCE MAIN VALVE V10	collection	twforce	15,000	2013	9546.67	18,063
02373	01/01/13	FORCE MAIN VALVE V12	collection	twforce	15,000	2013	9546.67	18,063
02374	01/01/13	FORCE MAIN VALVE V5	collection	twforce	40,000	2013	9546.67	48,169
02375	01/01/13	FORCE MAIN VALVE V6	collection	twforce	40,000	2013	9546.67	48,169
02378	01/01/13	8' PIPE VCP 7630 LF	collection	collsys	415,853	2013	9546.67	500,779
02379	01/01/13	10" PIPE VCP 41 LF	collection	collsys	33,045	2013	9546.67	39,794
02380	01/01/13	12' PIPE VCP 16 LF	collection	collsys	14,858	2013	9546.67	17,892
02381	01/01/13	21" PIPE VCP 40 LF	collection	collsys	63,917	2013	9546.67	76,970
02382	01/01/13	LATERAL CONNECTION 2 QTY	collection	collsys	23,020	2013	9546.67	27,721
02383	01/01/13	10" PIPE PVC 510 LF	collection	contribcs	392,368	2013	9546.67	472,498
02384	01/01/13	10" PIPE HDPE 546.46 LF	collection	contribcs	1,025,140	2013	9546.67	1,234,497
02386	01/01/13	8" PIPE, 4712 LF	collection	contribcs	1,257,654	2013	9546.67	1,514,495
02387	01/01/13	10" PIPE, 929 LF	collection	contribcs	260,268	2013	9546.67	313,421
02388	01/01/13	12" PIPE, 701 LF	collection	contribcs	201,802	2013	9546.67	243,014

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02389	01/01/13	MANHOLES, 52 QTY	collection	contribcs	199,960	2013	9546.67	240,796
02390	01/01/13	8" PIPE, 2216 LF	collection	contribcs	603,445	2013	9546.67	726,682
02391	01/01/13	MANHOLES, 18 QTY	collection	contribcs	69,348	2013	9546.67	83,510
02475	01/01/14	SUNTECH 275 PV MODULES	collection	pumpstat	1,602,935	2014	9806.00	1,879,241
02476	01/01/14	SUNSEEKER SINGLE AXIS TRACKER	collection	pumpstat	610,323	2014	9806.00	715,528
02477	01/01/14	SOLARON INVERTER	collection	pumpstat	325,569	2014	9806.00	381,689
02478	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02479	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02480	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02481	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02482	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02483	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02484	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02485	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02486	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02487	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02488	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02489	01/01/14	SOLAR BOS CONBINER BOXES	collection	pumpstat	47,586	2014	9806.00	55,789
02490	01/01/14	BENITEK BIPOLAR RECOMBINER	collection	pumpstat	18,854	2014	9806.00	22,104
02491	01/01/14	EATON 800A BREAKER	collection	pumpstat	15,848	2014	9806.00	18,580
02500	01/01/14	RECTIFIER AT IPS	collection	pumpstat	54,087	2014	9806.00	63,410
02501	01/01/14	CATHODIC PROTECTION	collection	pumpstat	35,510	2014	9806.00	41,632
02502	01/01/14	CATHODIC PROTECTION	collection	pumpstat	35,510	2014	9806.00	41,632
02503	01/01/14	CATHODIC PROTECTION	collection	pumpstat	11,896	2014	9806.00	13,947
02504	01/01/14	CATHODIC PROTECTION	collection	pumpstat	46,555	2014	9806.00	54,580
02528	01/01/14	6" PIPE LINING, 36 LF	collection	collsys	34,937	2014	9806.00	40,960
02529	01/01/14	8" PIPE LINING, 796 LF	collection	collsys	314,815	2014	9806.00	369,082
02530	01/01/14	10" PIPE LINING, 173 LF	collection	collsys	16,016	2014	9806.00	18,777
02531	01/01/14	12" PIPE LINING, 924 LF	collection	collsys	100,266	2014	9806.00	117,549
02535	01/01/14	RIO6T	collection	pumpstat	62,378	2014	9806.00	73,130
02550	01/01/14	8" PIPE, 654 LF	collection	collsys	148,623	2014	9806.00	174,241
02551	01/01/14	10" PIPE, 907 LF	collection	collsys	159,725	2014	9806.00	187,258
02552	01/01/14	12" PIPE, 907 LF	collection	collsys	114,405	2014	9806.00	134,126
02553	01/01/14	FORCE MAIN, 30" HAYWARD MARSH	collection	collsys	122,818	2014	9806.00	143,989
02554	01/01/14	JACKING 990 LF	collection	collsys	2,214,163	2014	9806.00	2,595,830
02555	01/01/14	MANHOLE, STANDARD, 1 QTY	collection	collsys	21,313	2014	9806.00	24,987
02556	01/01/14	MANHOLE, DROP, 1 QTY	collection	collsys	99,462	2014	9806.00	116,607

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02559	01/01/14	6" PIPE, PVC 2032 LF	collection	collsys	551,266	2014	9806.00	646,290
02560	01/01/14	MANHOLES, STANDARD, 7 QTY	collection	collsys	71,726	2014	9806.00	84,090
02562	01/01/14	24" PVC GRAVITY SEWER, 72 LF	collection	liftstat	200,440	2014	9806.00	234,991
02563	01/01/14	PROCESS PIPING AND FITTINGS	collection	liftstat	182,167	2014	9806.00	213,568
02564	01/01/14	GENERATOR, STANDBY	collection	liftstat	174,234	2014	9806.00	204,268
02565	01/01/14	BRIDGE CRANE	collection	liftstat	107,657	2014	9806.00	126,214
02566	01/01/14	SEWAGE PUMP 1	collection	liftstat	106,240	2014	9806.00	124,554
02567	01/01/14	SEWAGE PUMP 2	collection	liftstat	106,240	2014	9806.00	124,554
02568	01/01/14	SEWAGE PUMP 2	collection	liftstat	106,240	2014	9806.00	124,554
02569	01/01/14	LIFT STATION CONTROL PANEL	collection	liftstat	99,158	2014	9806.00	116,250
02570	01/01/14	HYDRAULIC POWER UNIT	collection	liftstat	99,158	2014	9806.00	116,250
02571	01/01/14	14" & 16" PVC/DI FORCE MAIN 150 LF	collection	liftstat	78,901	2014	9806.00	92,502
02572	01/01/14	30" CONCRETE SEWER W/CIP LINING 65 LF	collection	liftstat	67,994	2014	9806.00	79,714
02574	01/01/14	MANHOLE M17009	collection	liftstat	62,611	2014	9806.00	73,404
02575	01/01/14	MANHOLE M17010	collection	liftstat	62,611	2014	9806.00	73,404
02576	01/01/14	PUMP 1 - VARIABLE FREQ DRIVE	collection	liftstat	60,911	2014	9806.00	71,411
02577	01/01/14	PUMP 2 - VARIABLE FREQ DRIVE	collection	liftstat	60,911	2014	9806.00	71,411
02578	01/01/14	PUMP 2 - VARIABLE FREQ DRIVE	collection	liftstat	60,911	2014	9806.00	71,411
02579	01/01/14	TROLLEY	collection	liftstat	60,911	2014	9806.00	71,411
02580	01/01/14	SLUICE GATE 3	collection	liftstat	53,120	2014	9806.00	62,277
02581	01/01/14	LINING 30 LF	collection	liftstat	48,162	2014	9806.00	56,464
02582	01/01/14	MAIN SWITCHBOARD	collection	liftstat	30,456	2014	9806.00	35,705
02584	01/01/14	GAS DETECTION SYSTEM	collection	liftstat	30,314	2014	9806.00	35,539
02585	01/01/14	PRECAST VALVE VAULT STRUCTURE	collection	liftstat	26,489	2014	9806.00	31,055
02586	01/01/14	ACTUATOR - SLUICE GATE 1	collection	liftstat	22,806	2014	9806.00	26,737
02587	01/01/14	ACTUATOR - SLUICE GATE 2	collection	liftstat	22,806	2014	9806.00	26,737
02588	01/01/14	ACTUATOR - SLUICE GATE 3	collection	liftstat	22,806	2014	9806.00	26,737
02589	01/01/14	ACTUATOR - PUMP 1 SUCTION VALVE	collection	liftstat	22,806	2014	9806.00	26,737
02590	01/01/14	ACTUATOR - PUMP 1 DISCHARGE VALVE	collection	liftstat	22,806	2014	9806.00	26,737
02591	01/01/14	ACTUATOR - PUMP 2 SUCTION VALVE	collection	liftstat	22,806	2014	9806.00	26,737
02592	01/01/14	ACTUATOR - PUMP 2 DISCHARGE VALVE	collection	liftstat	22,806	2014	9806.00	26,737
02593	01/01/14	ACTUATOR - PUMP 3 SUCTION VALVE	collection	liftstat	22,806	2014	9806.00	26,737
02594	01/01/14	ACTUATOR - PUMP 2 DISCHARGE VALVE	collection	liftstat	22,806	2014	9806.00	26,737
02595	01/01/14	ELECTRICAL ROOM SUPPLY FAN	collection	liftstat	22,806	2014	9806.00	26,737
02596	01/01/14	ELECTRICAL ROOM EXHAUST FAN	collection	liftstat	22,806	2014	9806.00	26,737
02597	01/01/14	MOTOR CONTROL CENTER 1	collection	liftstat	30,078	2014	9806.00	35,263
02598	01/01/14	SLUICE GATE 2	collection	liftstat	21,248	2014	9806.00	24,911

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02599	01/01/14	HYDRAULIC ACTUATED SLUICE GATE 1	collection	liftstat	21,248	2014	9806.00	24,911
02600	01/01/14	ACCUMULATOR	collection	liftstat	18,273	2014	9806.00	21,423
02601	01/01/14	PUMP 1 SUCTION VALVE - 12" PLUG VALVE	collection	liftstat	18,273	2014	9806.00	21,423
02602	01/01/14	VALVE	collection	liftstat	18,273	2014	9806.00	21,423
02603	01/01/14	PUMP 2 SUCTION VALVE - 12" PLUG VALVE	collection	liftstat	18,273	2014	9806.00	21,423
02604	01/01/14	VALVE	collection	liftstat	18,273	2014	9806.00	21,423
02605	01/01/14	PUMP 3 SUCTION VALVE - 12" PLUG VALVE	collection	liftstat	18,273	2014	9806.00	21,423
02606	01/01/14	VALVE	collection	liftstat	18,273	2014	9806.00	21,423
02607	01/01/14	AUTOMATIC TRANSFER SWITCH	collection	liftstat	17,565	2014	9806.00	20,593
02608	01/01/14	SLIDE GATE 1	collection	liftstat	17,140	2014	9806.00	20,095
02609	01/01/14	WEIR GATE 1	collection	liftstat	17,140	2014	9806.00	20,095
02610	01/01/14	WEIR GATE 2	collection	liftstat	17,140	2014	9806.00	20,095
02611	01/01/14	WETWELL SUPPLY FAN	collection	liftstat	15,582	2014	9806.00	18,268
02612	01/01/14	WETWELL EXHAUST FAN	collection	liftstat	15,582	2014	9806.00	18,268
02613	01/01/14	DRYWELL SUPPLY FAN	collection	liftstat	15,582	2014	9806.00	18,268
02614	01/01/14	DRYWELL EXHAUST FAN	collection	liftstat	15,582	2014	9806.00	18,268
02615	01/01/14	MECHANICAL ROOM SUPPLY FAN	collection	liftstat	15,582	2014	9806.00	18,268
02616	01/01/14	MECHANICAL ROOM EXHAUST FAN	collection	liftstat	15,582	2014	9806.00	18,268
02617	01/01/14	TLS-350 LEAK DETECTION SYSTEM	collection	liftstat	15,299	2014	9806.00	17,936
02618	01/01/14	PUMP 1 DISCHARGE CK VALVE 12" SWING	collection	liftstat	15,299	2014	9806.00	17,936
02619	01/01/14	PUMP 2 DISCHARGE CK VALVE 12" SWING	collection	liftstat	15,299	2014	9806.00	17,936
02620	01/01/14	PUMP 3 DISCHARGE CK VALVE 12" SWING	collection	liftstat	15,299	2014	9806.00	17,936
02621	01/01/14	DRAINS	collection	liftstat	15,157	2014	9806.00	17,770
02622	01/01/14	CONTROL PANEL HYDRAULIC POWER UNIT	collection	liftstat	15,157	2014	9806.00	17,770
02636	01/01/14	6" PIPE, 61 LF	collection	contribcs	17,094	2014	9806.00	20,041
02637	01/01/14	8" PIPE, 985 LF	collection	contribcs	276,320	2014	9806.00	323,951
02638	01/01/14	10" PIPE, 640 LF	collection	contribcs	188,128	2014	9806.00	220,557
02639	01/01/14	12" PIPE, 579 LF	collection	contribcs	174,759	2014	9806.00	204,883
02640	01/01/14	MANHOLES, 14 QTY	collection	contribcs	56,382	2014	9806.00	66,101
02727	01/01/15	10 INCH PIPE SDR-26 PVC 2456 FEET	collection	collsys	1,368,792	2015	10335.00	1,522,598
02728	01/01/15	MANHOLES, STANDARD 7 QTY	collection	collsys	114,217	2015	10335.00	127,052
02736	01/01/15	24 INCH PIPE 4070 FEET	collection	collsys	1,398,976	2015	10335.00	1,556,174
02737	01/01/15	27 INCH PIPE 4382 FEET	collection	collsys	1,624,112	2015	10335.00	1,806,608
02738	01/01/15	30 INCH PIPE 194 FEET	collection	collsys	207,588	2015	10335.00	230,914
02739	01/01/15	48 INCH PIPE 253 FEET	collection	collsys	351,634	2015	10335.00	391,146
02744	01/01/15	8 INCH PIPE 13232 FEET	collection	contribcs	3,796,945	2015	10335.00	4,223,595
02745	01/01/15	10 INCH PIPE 126 FEET	collection	contribcs	37,862	2015	10335.00	42,116



**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02746	01/01/15	12 INCH PIPE 1638 FEET	collection	contribcs	506,340	2015	10335.00	563,236
02747	01/01/15	MANHOLES 105 QTY	collection	contribcs	433,435	2015	10335.00	482,139
02749	01/01/15	10 INCH PIPE W/STEEL CASING 634 LF	collection	collsys	138,490	2015	10335.00	154,052
02770	01/01/16	8 INCH PIPE, PVC SS MAIN, 3855 LF	collection	collsys	2,461,926	2016	10385.00	2,725,380
02771	01/01/16	MANHOLES, 12 QTY	collection	collsys	231,207	2016	10385.00	255,949
02772	01/01/16	ACTUATOR - WIER GATE #1	collection	liftstat	84,832	2016	10385.00	93,910
02773	01/01/16	ACTUATOR - WEIR GATE #2	collection	liftstat	84,832	2016	10385.00	93,910
02774	01/01/16	FORCEMAIN VALVE	collection	liftstat	33,509	2016	10385.00	37,094
02775	01/01/16	ACTUATOR PUMP STATION BYPASS VALVE	collection	liftstat	25,762	2016	10385.00	28,518
02776	01/01/16	LOAD BANK	collection	liftstat	67,865	2016	10385.00	75,128
02777	01/01/16	GAS DETECTION SYSTEM CONTROL PANEL	collection	liftstat	101,798	2016	10385.00	112,692
02778	01/01/16	SUMP PUMP CONTROL PANEL	collection	liftstat	23,753	2016	10385.00	26,295
02784	01/01/16	8 INCH PIPE, 348 LF	collection	collsys	103,176	2016	10385.00	114,217
02785	01/01/16	10 INCH PIPE, 2789 LF	collection	collsys	867,337	2016	10385.00	960,152
02786	01/01/16	12 INCH PIPE, 2484 LF	collection	collsys	794,555	2016	10385.00	879,581
02787	01/01/16	MANHOLES, 23 QTY	collection	collsys	97,967	2016	10385.00	108,451
02811	06/30/17	27" SEWER REHAB 8773 LF - PRJ 437	collection	collsys	3,412,275	2017	10737.00	3,653,587
02812	06/30/17	30" SEWER REHAB 420 LF - PRJ 437	collection	collsys	224,620	2017	10737.00	240,505
02813	06/30/17	8" SEWER REHAB 125 LF - PRJ 437	collection	collsys	104,531	2017	10737.00	111,923
02846	06/30/17	8" PIPE 250 LF - PRJ 451	collection	collsys	141,933	2017	10737.00	151,970
02847	06/30/17	8" PIPE 90 LF - PRJ 451	collection	collsys	85,411	2017	10737.00	91,451
02848	06/30/17	10" PIPE 36 LF - PRJ 451	collection	collsys	40,193	2017	10737.00	43,036
02849	06/30/17	8" PIPE 10 LF - PRJ 451	collection	collsys	74,106	2017	10737.00	79,347
02856	06/30/17	27" PVC PIPELINE 190 LF - PRJ 475	collection	collsys	403,540	2017	10737.00	432,078
02857	06/30/17	27" PVC SLIP 732 LF - PRJ 475	collection	collsys	1,756,128	2017	10737.00	1,880,320
02858	06/30/17	MANHOLE 1 QTY - PRJ 475	collection	collsys	49,212	2017	10737.00	52,692
02863	06/30/17	8" PIPE 11368 LF	collection	collsys	3,420,039	2017	10737.00	3,661,901
02864	06/30/17	24" PIPE 412 LF	collection	collsys	189,592	2017	10737.00	203,000
02865	06/30/17	MANHOLES, 82 QTY	collection	collsys	355,384	2017	10737.00	380,516
02878	01/01/18	SEWAGE PUMP CHOPPER	collection	pumpstat	53,426	2018	11062.00	55,523
02905	01/01/18	HEADWORKS ACCESS MANWAYS - PRJ 491	collection	collsys	112,077	2018	11062.00	116,478
02906	01/01/18	ART'S RANCH ARV MANHOLES - PRJ 491	collection	collsys	114,792	2018	11062.00	119,299
02907	01/01/18	491	collection	collsys	71,353	2018	11062.00	74,154
02908	01/01/18	TURK ISLAND ACCESS MANWAYS - PRJ 491	collection	collsys	98,502	2018	11062.00	102,369
02909	01/01/18	TURK ISLAND ARV MANHOLES - PRJ 491	collection	collsys	114,792	2018	11062.00	119,299
02910	01/01/18	491	collection	collsys	145,179	2018	11062.00	150,879
02911	01/01/18	491	collection	collsys	98,502	2018	11062.00	102,369

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02912	01/01/18	491	collection	collsys	125,653	2018	11062.00	130,586
02913	01/01/18	491	collection	collsys	71,353	2018	11062.00	74,154
02914	01/01/18	491	collection	collsys	98,502	2018	11062.00	102,369
02915	01/01/18	COYOTE HILLS ARV MANHOLES - PRJ 491	collection	collsys	133,597	2018	11062.00	138,842
02916	01/01/18	491	collection	collsys	143,114	2018	11062.00	148,732
02917	01/01/18	MANWAYS - PRJ 491	collection	collsys	98,502	2018	11062.00	102,369
02918	01/01/18	HIGHWAY 84 ARV MANHOLES - PRJ 491	collection	collsys	133,660	2018	11062.00	138,908
02919	01/01/18	MANWAYS - PRJ 491	collection	collsys	98,502	2018	11062.00	102,369
02920	01/01/18	PRJ 491	collection	collsys	71,353	2018	11062.00	74,154
02921	01/01/18	OLD JARVIS ARV MANHOLES - PRJ 491	collection	collsys	128,695	2018	11062.00	133,748
02922	01/01/18	PRJ 491	collection	collsys	71,353	2018	11062.00	74,154
02923	01/01/18	MANWAYS - PRJ 491	collection	collsys	98,502	2018	11062.00	102,369
02924	01/01/18	8" PIPE 22,279 LF	collection	collsys	6,887,571	2018	11062.00	7,157,987
02925	01/01/18	MANHOLES, 186 QTY	collection	collsys	826,780	2018	11062.00	859,241
02940	01/01/19	PUMP	collection	pumpstat	85,910	2019	11268.48	87,647
02941	01/01/19	GODWIN DPC300 PUMP FOR IPS	collection	pumpstat	133,397	2019	11268.48	136,094
02992	01/01/19	SEWAGE PUMP 1 FLS - PRJ 444	collection	liftstat	585,545	2019	11268.48	597,384
02993	01/01/19	SEWAGE PUMP 2 FLS - PRJ 444	collection	liftstat	585,545	2019	11268.48	597,384
02994	01/01/19	ENGINE-GENERATOR-FLS - PRJ 444	collection	liftstat	58,035	2019	11268.48	59,208
02995	01/01/19	MCC-FLS - PRJ 444	collection	liftstat	199,899	2019	11268.48	203,940
02996	01/01/19	PRJ 444	collection	liftstat	14,509	2019	11268.48	14,802
02997	01/01/19	PRJ 444	collection	liftstat	22,553	2019	11268.48	23,009
02998	01/01/19	SAFETY EYEWASH FLS - PRJ 444	collection	liftstat	12,897	2019	11268.48	13,157
02999	01/01/19	EFFLUENT VAVLE ACTUATOR FLS - PRJ 444	collection	liftstat	17,733	2019	11268.48	18,091
03000	01/01/19	SEWAGE PUMP 1 PPLS - PRJ 444	collection	liftstat	659,578	2019	11268.48	672,914
03001	01/01/19	SEWAGE PUMP 2 PPLS - PRJ 444	collection	liftstat	659,578	2019	11268.48	672,914
03002	01/01/19	ENGINE-GENERATOR-PPLS - PRJ 444	collection	liftstat	58,035	2019	11268.48	59,208
03003	01/01/19	444	collection	liftstat	335,314	2019	11268.48	342,093
03004	01/01/19	MCC-PPLS - PRJ 444	collection	liftstat	248,593	2019	11268.48	253,619
03005	01/01/19	PRJ 444	collection	liftstat	19,184	2019	11268.48	19,572
03006	01/01/19	PRJ 444	collection	liftstat	19,184	2019	11268.48	19,572
03007	01/01/19	PRJ 444	collection	liftstat	21,586	2019	11268.48	22,022
03008	01/01/19	SAFETY EYEWASH PPLS - PRJ 444	collection	liftstat	12,897	2019	11268.48	13,157
03009	01/01/19	459	collection	collsys	2,106,051	2019	11268.48	2,148,632
03010	01/01/19	8" PIPE, C-900 OPEN CUT, 100 LF - PRJ 459	collection	collsys	78,538	2019	11268.48	80,126
03011	01/01/19	MANHOLES, 9 QTY - PRJ 459	collection	collsys	315,908	2019	11268.48	322,295
03024	01/01/19	PRJ 492	collection	pumpstat	210,909	2019	11268.48	215,173

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

Based on Fixed Asset Schedule 06/30/19

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
03025	01/01/19	PANEL - PRJ 492	collection	pumpstat	31,983	2019	11268.48	32,630
03026	01/01/19	UPS - PRJ 492	collection	pumpstat	45,834	2019	11268.48	46,761
03027	01/01/19	EXHAUST FAN - PRJ 492	collection	pumpstat	323,880	2019	11268.48	330,429
03028	01/01/19	BOOST PIPE EXTENSION - PRJ 492	collection	pumpstat	211,590	2019	11268.48	215,868
03029	01/01/19	BOYCE LIFT STATION - PRJ 506	collection	collsys	36,413	2019	11268.48	37,149
03032	01/01/19	8" PIPE 4,781 LF	collection	collsys	1,519,144	2019	11268.48	1,549,859
03033	01/01/19	MANHOLES, 48 QTY	collection	collsys	219,244	2019	11268.48	223,677
<b>Collection Total</b>					<b>443,582,382</b>			<b>1,672,112,203</b>
00097	06/30/09	RST 1500 Mini-Camera	equipment	equip-cs	10,277	2009	8570.08	13,786
00296	06/30/09	Datalogger UPS	equipment	computer	15,717	2009	8570.08	21,083
00386	06/30/09	Vapor Recovery System	equipment	equipfmc	33,901	2009	8570.08	45,476
00394	06/30/08	Jerome H2S Meter	equipment	equipfmc	11,808	2008	8309.92	16,335
00631	02/01/07	Spare ARV's	equipment	equipfmc	16,888	2007	7967.00	24,369
00694	06/30/06	Olympus Microscope & Dig Camer	equipment	equiplab	13,414	2006	7751.25	19,895
00777	06/30/08	Repeater System	equipment	equipfmc	17,731	2008	8309.92	24,529
00841	06/30/09	Mr Manhole Casting Ringsaw	equipment	equip-cs	44,548	2009	8570.08	59,759
00856	06/30/08	Novastar Camera	equipment	equip-cs	15,497	2008	8309.92	21,439
00857	06/30/08	Novastar Camera	equipment	equip-cs	15,497	2008	8309.92	21,439
00869	10/12/04	6" Submersible Pump	equipment	equipfmc	10,637	2004	7115.08	17,187
00926	01/10/07	SPM Leonova Vibration Monitor	equipment	equipfmc	17,865	2007	7967.00	25,779
00958	06/30/08	Readkey Pro Security System	equipment	computer	33,382	2008	8309.92	46,182
00961	12/31/00	Hoist Monorail System Maint B	equipment	equipfmc	28,468	2000	6221.17	52,607
01078	12/31/02	Fume Hood Lab 1 Proj 124	equipment	equiplab	12,932	2002	6538.00	22,739
01079	12/31/02	Fume Hood Lab 2 Proj 124	equipment	equiplab	12,932	2002	6538.00	22,739
01080	12/31/02	Fume Hood Lab 3 Proj 124	equipment	equiplab	12,932	2002	6538.00	22,739
01081	12/31/02	Fume Hood Lab 4 Proj 124	equipment	equiplab	12,932	2002	6538.00	22,739
01082	12/31/02	Fume Hood Lab 5 Proj 124	equipment	equiplab	12,932	2002	6538.00	22,739
01108	12/31/00	Pump Submersible 6 in ITT FI	equipment	equipfmc	10,561	2000	6221.17	19,516
01139	09/15/03	Laser Alignment System	equipment	equipfmc	16,833	2003	6694.58	28,906
01159	06/30/09	12" HDPE By-Pass Piping	equipment	equip-cs	200,336	2009	8570.08	268,739
01218	12/31/01	Microform Scanner Minolta MS	equipment	officefurn	15,687	2001	6342.08	28,435
01358	12/31/95	OFFICE TRAILER - TRAINING CENTER	equipment	equipfmc	17,593	1995	5471.17	36,967
01364	12/31/99	Camera RST Omieye III	equipment	equip-cs	17,861	1999	6059.50	33,887
01373	06/30/09	SharePoint Software & Serv	equipment	computer	228,538	2009	8570.08	306,571
01374	12/31/00	60 000 Lb Vehicle Hoist Maint	equipment	equip-cs	55,306	2000	6221.17	102,202
01418	01/28/04	Microsoft SW Assurance Ser Lic	equipment	computer	21,264	2004	7115.08	34,357

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01439	12/31/02	Man Lift Genie S-40 40 Ft	equipment	equipfmc	52,120	2002	6538.00	91,647
01455	12/31/02	Crane Proj 124	equipment	equipfmc	56,829	2002	6538.00	99,926
01456	12/31/02	Crane Proj 124	equipment	equipfmc	56,829	2002	6538.00	99,926
01501	06/30/09	Plant GIS Database Schema&data	equipment	computer	601,573	2009	8570.08	806,979
01510	06/30/06	FLexidata Software System	equipment	computer	49,332	2006	7751.25	73,167
01511	06/30/06	SCADA-Hansen Interface	equipment	computer	35,000	2006	7751.25	51,910
01520	12/31/95	Camera Equipment	equipment	equip-cs	36,681	1995	5471.17	77,076
01611	12/31/96	Records Mgmt - NECB	equipment	computer	69,345	1996	5622.17	141,798
01616	12/31/99	Records Mgmt - NECB	equipment	computer	74,409	1999	6059.50	141,171
01662	12/31/97	Records Mgmt - NECB	equipment	computer	98,773	1997	5825.08	194,937
01673	12/31/98	Records Mgmt - NECB	equipment	computer	107,272	1998	5920.42	208,302
01752	12/31/02	Furniture Modular Proj 133	equipment	officefurn	654,454	2002	6538.00	1,150,780
01843	06/30/05	Proj 36 GIS	equipment	computer	1,191,387	2005	7446.08	1,839,430
01905	01/01/10	FURNITURE, MODULAR	equipment	officefurn	10,008	2010	8798.92	13,077
01906	01/01/10	DRILL PRESS 2, MAINT SHOP	equipment	equipfmc	13,516	2010	8798.92	17,660
01914	01/01/10	PUMP, 6" SUBMERSIBLE	equipment	equip-cs	15,150	2010	8798.92	19,795
01939	01/01/10	PERMIT TRACKING SYSTEM SOFTWARE	equipment	computer	153,932	2010	8798.92	201,121
01998	01/01/11	APC SYMMETRA PX SERVER ROOM UPS	equipment	computer	77,080	2011	9069.83	97,701
01999	01/01/11	CCTV SYSTEM	equipment	computer	69,600	2011	9069.83	88,220
02013	01/01/11	VERTICLE BAND SAW	equipment	equipfmc	11,645	2011	9069.83	14,760
02016	01/01/11	BRIDGE CRANE	equipment	equip-cs	43,365	2011	9069.83	54,967
02017	01/01/11	BAND SAW, HORIZONTAL	equipment	equipfmc	11,030	2011	9069.83	13,981
02020	01/01/11	USD-SQLE DELL SERVER	equipment	computer	13,581	2011	9069.83	17,214
02025	01/01/11	OPTIMUM HR SOFTWARE SYSTEM	equipment	computer	31,347	2011	9069.83	39,733
02026	01/01/11	USD-ESX4	equipment	computer	25,000	2011	9069.83	31,688
02027	01/01/11	EDEN FINANCIAL SOFTWARE SYSTEM	equipment	computer	405,253	2011	9069.83	513,671
02030	01/01/11	DELL DR SCADA SERVER	equipment	computer	24,624	2011	9069.83	31,211
02044	01/01/11	SCADA SYSTEM UPGRADE	equipment	computer	43,623	2011	9069.83	55,293
02235	06/30/12	HP DESIGN JET T2300 PLOTTER/SCANNER	equipment	computer	13,085	2012	9308.17	16,161
02239	06/30/12	RKI GAS DETECTORS	equipment	equipfmc	69,831	2012	9308.17	86,247
02251	06/30/12	NPS CONDUIT AND CABLE	equipment	computer	12,950	2012	9308.17	15,994
02252	06/30/12	NPS ALVARADO BACK UP COMM	equipment	computer	37,304	2012	9308.17	46,073
02311	01/01/13	VMWARE ESX 3	equipment	computer	13,536	2013	9546.67	16,300
02313	01/01/13	QUANTUM HD BACKUP TARGET	equipment	computer	37,639	2013	9546.67	45,326
02410	01/01/14	LUMBERJACK CUTTING TOOL	equipment	equip-cs	13,793	2014	9806.00	16,170
02412	01/01/14	EXHAUST GAS ANALYZER	equipment	equipfmc	16,283	2014	9806.00	19,090
02414	01/01/14	6" SUBMERSIBLE PUMP	equipment	equipfmc	16,748	2014	9806.00	19,635

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02557	01/01/14	MOTOROLA HANDHELD RADIOS	equipment	radio	77,509	2014	9806.00	90,870
02558	01/01/14	MOTOROLA RADIO SYSTEM	equipment	radio	13,054	2014	9806.00	15,305
02701	06/30/14	APPLE I PAD DR5HXOFRDJHF	equipment	computer	0	2014	9806.00	0
02702	06/30/14	APPLE I PAD DR5HT1QLDJHF	equipment	computer	0	2014	9806.00	0
02703	06/30/14	APPLE I PAD DR5J2ODRDJHF	equipment	computer	0	2014	9806.00	0
02704	06/30/14	APPLE I PAD DDRFHT26SDJHF	equipment	computer	0	2014	9806.00	0
02705	06/30/14	APPLE I PAD DMPJXRSTDFHW	equipment	computer	0	2014	9806.00	0
02706	06/30/14	APPLE I PAD DMPJXSHQDFHW	equipment	computer	0	2014	9806.00	0
02710	01/01/15	GAS ANALYZER GEMS DIGITAL	equipment	equipfmc	11,908	2015	10335.00	13,246
02720	01/01/15	PARTS WASHER	equipment	equipfmc	37,354	2015	10335.00	41,551
02722	01/01/15	WATER CHAMP MIXER	equipment	equipfmc	21,263	2015	10335.00	23,652
02724	01/01/15	USD-PDC SERVER	equipment	computer	11,824	2015	10335.00	13,153
02734	01/01/15	PLANT GIS	equipment	computer	65,620	2015	10335.00	72,994
02735	01/01/15	PROJECT MATES SOFTWARE	equipment	computer	139,125	2015	10335.00	154,758
02748	01/01/15	FUEL MANAGEMENT SYSTEM	equipment	computer	31,904	2015	10335.00	35,489
02752	01/01/16	ADMIN SERVER UPS BATTERIES	equipment	computer	24,768	2016	10385.00	27,418
02753	01/01/16	OZIII PAN & TILT CAMERA	equipment	equip-cs	24,527	2016	10385.00	27,152
02754	01/01/16	EMC SAN	equipment	computer	23,363	2016	10385.00	25,863
02761	01/01/16	SERVER	equipment	computer	12,504	2016	10385.00	13,842
02766	01/01/16	SITE WASTE PUMP #3	equipment	equipfmc	51,821	2016	10385.00	57,366
02767	01/01/16	ICP-OEM	equipment	equiplab	81,654	2016	10385.00	90,392
02779	01/01/16	DELL R720 SERVER	equipment	computer	66,008	2016	10385.00	73,071
02780	01/01/16	TABLET DEVICES W/ACCESSORIES, 34 QTY	equipment	computer	61,092	2016	10385.00	67,629
02781	01/01/16	SOFTWARE	equipment	computer	106,992	2016	10385.00	118,442
02782	01/01/16	SOFTWARE	equipment	computer	667,428	2016	10385.00	738,851
02791	06/30/17	CONTEX IQ 4490 SCANNER	equipment	computer	14,768	2017	10737.00	15,812
02792	06/30/17	TOYOTA PNEUMATIC FORKLIFT	equipment	equipfmc	31,346	2017	10737.00	33,562
02793	06/30/17	50 TON SCOTCHMEN IRONWORKER	equipment	equipfmc	13,053	2017	10737.00	13,976
02794	06/30/17	DETECTION KIT	equipment	equipfmc	14,335	2017	10737.00	15,349
02796	06/30/17	QUANTUM NAS	equipment	computer	31,127	2017	10737.00	33,329
02797	06/30/17	PLANT FIREWALL	equipment	computer	12,115	2017	10737.00	12,972
02798	06/30/17	EMC VNXE3200 SAN FOR SCADA	equipment	computer	26,463	2017	10737.00	28,334
02799	06/30/17	CAMERA OZIII. PAN & TILT OPTICAL ZOOM	equipment	equip-cs	24,517	2017	10737.00	26,251
02800	06/30/17	CAMERA OZIII. PAN & TILT OPTICAL ZOOM	equipment	equip-cs	24,517	2017	10737.00	26,251
02801	06/30/17	CAMERA	equipment	equip-cs	11,574	2017	10737.00	12,393
02802	06/30/17	CAMERA	equipment	equip-cs	11,574	2017	10737.00	12,393
02803	06/30/17	DELL POWER EDGE SERVER - R730	equipment	computer	14,442	2017	10737.00	15,463

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02804	06/30/17	DELL POWER EDGE SERVER - R730	equipment	computer	13,734	2017	10737.00	14,705
02805	06/30/17	DELL POWER EDGE SERVER - R730	equipment	computer	13,734	2017	10737.00	14,705
02855	06/30/17	CISCO BE 6000 PHONE SYSTEM - PRJ 471	equipment	telephone	268,703	2017	10737.00	287,706
02872	01/01/18	MGMT (SIEM)	equipment	computer	20,942	2018	11062.00	21,764
02874	01/01/18	AIR COMPRESSOR WHEELED CART	equipment	equip-cs	9,219	2018	11062.00	9,581
02875	01/01/18	AMBIENT CART	equipment	equip-cs	27,150	2018	11062.00	28,216
02876	01/01/18	T-LINER ROTATIONAL DEVICE	equipment	equip-cs	13,719	2018	11062.00	14,257
02879	01/01/18	BRIDGEPORT MILLING MACHINE	equipment	equipfmc	19,997	2018	11062.00	20,782
02881	01/01/18	COMMANDER IV UNIT	equipment	equip-cs	41,030	2018	11062.00	42,641
02883	01/01/18	IPACS - PRJ 396	equipment	computer	188,307	2018	11062.00	195,700
02900	01/01/18	PRJ 474	equipment	computer	39,178	2018	11062.00	40,716
02901	01/01/18	477	equipment	computer	40,824	2018	11062.00	42,427
02930	01/01/19	PRECISION LATHE	equipment	equipfmc	24,818	2019	11268.48	25,320
02934	01/01/19	WALK BEHIND CONCRETE SAW	equipment	equip-cs	39,902	2019	11268.48	40,709
02937	01/01/19	DELL POWEREDGE R740XD SERVER	equipment	computer	195,418	2019	11268.48	199,369
02938	01/01/19	EDGE FIREWALL	equipment	computer	31,972	2019	11268.48	32,618
02942	01/01/19	PORTABLE SCRUBBER FAN	equipment	equipfmc	14,683	2019	11268.48	14,980
03030	01/01/19	FENCING OLD NEWARK WTP SITE - PRJ 523	equipment	equipfmc	11,849	2019	11268.48	12,089
03031	01/01/19	READKEY PRO SECURITY SYSTEMS	equipment	computer	14,706	2019	11268.48	15,003
<b>Equipment Total</b>					<b>7,987,625</b>			<b>10,871,700</b>
00207	06/30/09	2009 Chevy Colorado	fleet	vehicle	17,602	2009	8570.08	23,612
00292	06/30/09	2009 Dodge Grand Caravan	fleet	vehicle	22,104	2009	8570.08	29,652
00298	06/30/09	2009 Dodge Dakota	fleet	vehicle	22,931	2009	8570.08	30,761
00312	06/30/09	2009 Chevy Colorado 4WD	fleet	vehicle	24,782	2009	8570.08	33,243
00330	06/30/09	2009 Chevy Colorado	fleet	vehicle	27,358	2009	8570.08	36,699
00462	06/30/08	Particulate Matter Filter#99	fleet	vehicle	15,149	2008	8309.92	20,958
00545	06/30/08	Scissor Lift	fleet	equipport	16,323	2008	8309.92	22,582
00724	06/30/08	1989 GMC Winch Truck	fleet	vehicle	27,188	2008	8309.92	37,612
00726	12/31/02	Welder Portable Miller	fleet	equipport	10,545	2002	6538.00	18,542
00852	06/30/09	2009 Sterling Dump Truck	fleet	vehicle	138,068	2009	8570.08	185,211
00868	06/30/06	Boackhoe Trailer	fleet	equipport	20,503	2006	7751.25	30,410
00884	06/30/06	Emergency Response Trailer	fleet	equipport	21,189	2006	7751.25	31,426
00896	06/30/08	2008 Chevy Silverado 3500	fleet	vehicle	34,884	2008	8309.92	48,260
00897	06/30/08	2008 Chevy Siverado 3500	fleet	vehicle	34,884	2008	8309.92	48,260
00898	06/30/08	2008 Chevy Siverado 3500	fleet	vehicle	34,884	2008	8309.92	48,260
00924	05/01/07	2007 Chevy Colorado #305	fleet	vehicle	17,637	2007	7967.00	25,450

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00936	05/01/07	2007 Chevy Colorado #303	fleet	vehicle	18,089	2007	7967.00	26,102
00952	05/01/07	2007 Chevy Colorado #306	fleet	vehicle	19,083	2007	7967.00	27,537
00959	05/01/07	2007 Chevy Colorado #309	fleet	vehicle	19,350	2007	7967.00	27,921
00968	05/01/07	2007 Chevy Colorado #304	fleet	vehicle	19,722	2007	7967.00	28,458
01039	12/31/00	Concrete Saw Trailer	fleet	equipport	12,927	2000	6221.17	23,889
01061	07/01/06	10" Gorman Rupp Pump	fleet	equipport	47,064	2006	7751.25	69,803
01100	06/30/08	Skid Steer Loader	fleet	equipport	73,566	2008	8309.92	101,774
01109	06/30/06	2006 Chev Colorado Pickup	fleet	vehicle	15,392	2006	7751.25	22,828
01147	05/13/04	2004 Dodge Dakota #256	fleet	vehicle	13,757	2004	7115.08	22,228
01175	05/18/05	2005 Dodge 3/4 Ton Quad	fleet	vehicle	22,836	2005	7446.08	35,258
01176	05/18/05	2005 Dodge 3/4 Ton Quad	fleet	vehicle	22,836	2005	7446.08	35,258
01183	12/31/99	Trailer Eager Beaver Model 20X	fleet	equipport	16,994	1999	6059.50	32,242
01192	06/30/06	Vac Press Tank Stainless Steel	fleet	equipport	47,244	2006	7751.25	70,070
01197	05/25/05	2005 Dodge 3/4 Ton Serv Body	fleet	vehicle	25,164	2005	7446.08	38,852
01201	03/11/05	Forklift, Komatsu	fleet	equipport	25,306	2005	7446.08	39,071
01271	06/01/05	2005 Honda Civic Hybrid	fleet	vehicle	23,564	2005	7446.08	36,382
01272	06/01/05	2005 Honda Civic Hybrid	fleet	vehicle	23,564	2005	7446.08	36,382
01273	06/01/05	2005 Honda Civic Hybrid	fleet	vehicle	23,564	2005	7446.08	36,382
01287	12/31/90	1990 GMC 3/4 Ton Chasis/Cab E2	fleet	vehicle	14,189	1990	4731.92	34,473
01303	05/13/04	2004 Toyota Prius #257	fleet	vehicle	21,575	2004	7115.08	34,860
01308	06/30/05	Trailer, By-Pass Hose	fleet	equipport	51,028	2005	7446.08	78,785
01348	05/12/05	2005 Chev 1 Ton w Serv/Crane	fleet	vehicle	36,992	2005	7446.08	57,113
01381	12/31/01	2002 Chevrolet Silverado C1500	fleet	vehicle	20,574	2001	6342.08	37,295
01395	12/31/98	1999 Chevy Astro Van E989528	fleet	vehicle	20,419	1998	5920.42	39,650
01419	12/31/79	Pump Diesel 10 Inch 1979 Gorma	fleet	equipport	0	1979	3003.00	0
01425	12/31/01	2002 Toyota Prius E1130279	fleet	vehicle	23,087	2001	6342.08	41,850
01427	12/31/01	2002 Toyota Prius E1130280	fleet	vehicle	23,087	2001	6342.08	41,850
01428	12/31/01	2002 Toyota Prius E1130281	fleet	vehicle	23,087	2001	6342.08	41,850
01430	06/07/05	2005 Sterling Tank Truck	fleet	vehicle	73,251	2005	7446.08	113,096
01536	12/31/00	Truck #22 Modifications	fleet	vehicle	43,902	2000	6221.17	81,128
01544	05/01/05	2005 Sterling National Crane	fleet	vehicle	149,427	2005	7446.08	230,707
01604	01/01/88	1986 GMC Winch Truck E492563	fleet	vehicle	66,710	1988	4519.00	169,710
01612	12/31/92	1993 Ford Knuckle Boom Truck E	fleet	vehicle	69,698	1992	4984.83	160,742
01656	12/31/96	1997 Ford CF7000 Truck E036770	fleet	vehicle	97,686	1996	5622.17	199,750
01685	12/31/00	2001 Ford TV Inspection Van E1	fleet	vehicle	142,215	2000	6221.17	262,804
01691	09/30/03	Sewer Cleaner Combo Hydraulic	fleet	equipport	282,065	2003	6694.58	484,377
01913	01/01/10	1986 GMC WINCH TRUCK - ADDITION	fleet	vehicle	32,330	2010	8798.92	42,241

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01915	01/01/10	INTERNATIONAL VACTOR RAMJET	fleet	vehicle	255,338	2010	8798.92	333,615
01916	01/01/10	VIBRATORY ROLLER	fleet	vehicle	38,320	2010	8798.92	50,067
01929	01/01/10	ATLAS TRAILER/AIR COMPRESSOR	fleet	equipport	13,165	2010	8798.92	17,200
01930	01/01/10	MULTIQUIP CONCRETE SAW	fleet	equipport	20,829	2010	8798.92	27,215
01937	01/01/10	PUMP, 4" GODWIN DRI-PRIME	fleet	equipport	43,747	2010	8798.92	57,159
01996	01/01/11	CAT BACKHOE	fleet	vehicle	100,568	2011	9069.83	127,473
01997	01/01/11	TV VAN	fleet	vehicle	251,626	2011	9069.83	318,944
02008	01/01/11	2011 FORD F-250	fleet	vehicle	44,389	2011	9069.83	56,264
02009	01/01/11	2011 FORD F-250	fleet	vehicle	31,637	2011	9069.83	40,101
02014	01/01/11	2011 FORD F-350	fleet	vehicle	43,228	2011	9069.83	54,793
02015	01/01/11	2011 FORD F350	fleet	vehicle	43,228	2011	9069.83	54,793
02234	06/30/12	2011 CAT 420E BACKHOE	fleet	vehicle	106,445	2012	9308.17	131,468
02236	06/30/12	2011 DODGE GRAND CARAVAN	fleet	vehicle	22,756	2012	9308.17	28,106
02237	06/30/12	2011 DODGE GRAND CARAVAN	fleet	vehicle	20,559	2012	9308.17	25,392
02242	06/30/12	2012 CHEVY COLORADO 4WD	fleet	vehicle	31,271	2012	9308.17	38,622
02247	06/30/12	480E BACKHOE	fleet	equipport	11,993	2012	9308.17	14,812
02314	11/01/12	2012 TV VAN FORD F550	fleet	vehicle	282,958	2012	9308.17	349,475
02315	11/01/12	2012 TV VAN FORD F550	fleet	vehicle	282,958	2012	9308.17	349,475
02402	01/01/14	2013 CHEVY SILVERADO 1T	fleet	vehicle	44,386	2014	9806.00	52,037
02403	01/01/14	2013 TOYOTA TACOMA	fleet	vehicle	27,705	2014	9806.00	32,480
02404	01/01/14	6" DRI-PRIME PUMP ON TRAILER	fleet	equipport	57,307	2014	9806.00	67,185
02405	01/01/14	2013 CHEVY SILVERADO 1T	fleet	vehicle	44,386	2014	9806.00	52,037
02406	01/01/14	2013 CHEVY SILVERADO 1T	fleet	vehicle	44,386	2014	9806.00	52,037
02407	01/01/14	2013 CHEVY SILVERADO 1T	fleet	vehicle	44,386	2014	9806.00	52,037
02408	01/01/14	2013 CHEVY SILVERADO 1T	fleet	vehicle	44,386	2014	9806.00	52,037
02409	01/01/14	2014 FREIGHTLINER VACTOR COMBO UNIT	fleet	vehicle	454,772	2014	9806.00	533,163
02411	01/01/14	2014 FORD TRANSIT CONNECT	fleet	vehicle	24,664	2014	9806.00	28,916
02413	01/01/14	TRAILER, TILT DECK	fleet	equipport	14,441	2014	9806.00	16,930
02708	01/01/15	2015 CHEVY SILVERADO 3500 VAN	fleet	vehicle	50,156	2015	10335.00	55,792
02709	01/01/15	2015 CHEVY SILVERADO 3500 VAN	fleet	vehicle	50,156	2015	10335.00	55,792
02711	01/01/15	COLUMBIA ELECTRIC CART	fleet	vehicle	14,698	2015	10335.00	16,350
02712	01/01/15	COLUMBIA ELECTRIC CART	fleet	vehicle	14,698	2015	10335.00	16,350
02713	01/01/15	COLUMBIA ELECTRIC CART	fleet	vehicle	14,698	2015	10335.00	16,350
02714	01/01/15	2015 CHEVY VOLT	fleet	vehicle	36,198	2015	10335.00	40,266
02715	01/01/15	2015 CHEVY VOLT	fleet	vehicle	36,198	2015	10335.00	40,266
02716	01/01/15	2015 CHEVY SILVERADO 3500 VAN	fleet	vehicle	50,156	2015	10335.00	55,792
02717	01/01/15	2013 FORD F650	fleet	vehicle	156,515	2015	10335.00	174,102



**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

Based on Fixed Asset Schedule 06/30/19

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02718	01/01/15	2013 FORD F650	fleet	vehicle	156,515	2015	10335.00	174,102
02719	01/01/15	6"GODWIN PUMP TRAILER MOUNT	fleet	equipport	61,897	2015	10335.00	68,852
02721	01/01/15	SUBMERSIBLE PUMP PORTABLE	fleet	equipport	16,820	2015	10335.00	18,710
02723	01/01/15	2015 INTERNATIONAL DUMP TRUCK	fleet	vehicle	197,801	2015	10335.00	220,027
02725	01/01/15	2015 CHEVY SILVERADO 3500 TRUCK	fleet	vehicle	44,705	2015	10335.00	49,728
02755	01/01/16	2015 FORD F250	fleet	vehicle	36,016	2016	10385.00	39,870
02756	01/01/16	2015 FORD F250	fleet	vehicle	36,016	2016	10385.00	39,870
02757	01/01/16	2015 FORD F150	fleet	vehicle	27,700	2016	10385.00	30,664
02758	01/01/16	COLUMBIA CAR, YELLOW	fleet	vehicle	17,421	2016	10385.00	19,285
02759	01/01/16	COLUMBIA CAR, WHITE	fleet	vehicle	17,421	2016	10385.00	19,285
02760	01/01/16	COLUMBIA CAR, WHITER	fleet	vehicle	17,421	2016	10385.00	19,285
02762	01/01/16	2016 CHEVY SILVERADO, V2 PUS/VAN 5-1T	fleet	vehicle	51,473	2016	10385.00	56,981
02763	01/01/16	2016 CHEVY SILVERADO	fleet	vehicle	53,878	2016	10385.00	59,644
02764	01/01/16	2016 FORD DUMP TRUCK F550	fleet	vehicle	65,599	2016	10385.00	72,619
02765	01/01/16	2016 FORD DUMP TRUCK F550	fleet	vehicle	65,599	2016	10385.00	72,619
02788	06/30/17	UTILITY CART - COLUMBIA PARCAR	fleet	vehicle	18,058	2017	10737.00	19,335
02789	06/30/17	UTILITY CART - COLUMBIA PARCAR	fleet	vehicle	18,058	2017	10737.00	19,335
02790	06/30/17	PAINTING TRAILER	fleet	equipport	14,945	2017	10737.00	16,001
02795	06/30/17	VAPOROOTER COMMANDER	fleet	vehicle	36,492	2017	10737.00	39,072
02869	01/01/18	GLS AUTOMATIC SAMPLERS	fleet	equipport	15,822	2018	11062.00	16,443
02873	01/01/18	SLIP LINE TRAILER (LMK)	fleet	vehicle	56,730	2018	11062.00	58,957
02880	01/01/18	VAC-CON JETTER	fleet	vehicle	277,502	2018	11062.00	288,397
02882	01/01/18	FORD F-550 MINI JET	fleet	vehicle	191,167	2018	11062.00	198,673
02931	01/01/19	VACTOR COMBO UNIT	fleet	vehicle	507,967	2019	11268.48	518,237
02932	01/01/19	GODWIN 4" SILENCED DRI-PRIME PUMP	fleet	equipport	68,478	2019	11268.48	69,863
02933	01/01/19	WAREHOUSE	fleet	equipport	33,953	2019	11268.48	34,639
02935	01/01/19	2019 CHEVROLET BOLT EV	fleet	vehicle	37,789	2019	11268.48	38,553
02936	01/01/19	2019 CHEVROLET BOLT EV	fleet	vehicle	37,789	2019	11268.48	38,553
<b>Fleet Total</b>					<b>7,197,713</b>			<b>9,336,147</b>
02232	07/01/03	UNION CITY PERMIT	intangible	intangible	6,043,632	2003	6694.58	10,378,460
02385	07/17/12	EASEMENT - DOCUMENT 21751137	intangible	easement	198,026	2012	9308.17	244,578
02641	01/01/14	EASEMENT - DOC #2014065720	intangible	easement	174,240	2014	9806.00	204,275
<b>Intangible Total</b>					<b>6,415,898</b>			<b>10,827,312</b>
00002	09/11/52	All Land	land	land	4,624,417	1952	569.00	93,433,630
02021	01/01/11	LAND - BOYCE ROAD, FREMONT	land	land	348,142	2011	9069.83	441,282

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02024	01/01/11	LAND - HICKORY STREET, NEWARK	land	land	423,343	2011	9069.83	536,601
<b>Land Total</b>					<b>5,395,903</b>			<b>94,411,513</b>
00099	06/30/09	Fire Panel	operations	bldg	15,733	2009	8570.08	21,105
00115	06/30/09	Electrical	operations	bldg	28,283	2009	8570.08	37,941
00214	06/30/09	Tractor Loader Training Area	operations	bldg	36,510	2009	8570.08	48,976
00275	06/30/07	Permanent Structure	operations	bldg	20,528	2007	7967.00	29,622
00281	06/30/07	Permanent Structure	operations	bldg	21,321	2007	7967.00	30,767
00310	06/30/06	20" Steel Pipe	operations	bldg	10,364	2006	7751.25	15,372
00367	06/30/07	Library Cabinets	operations	bldg	12,205	2007	7967.00	17,612
00373	06/30/06	Maint Shop Bldg Ext Paint	operations	bldg	13,811	2006	7751.25	20,484
00380	06/30/06	24" Steel Pipe	operations	bldg	14,133	2006	7751.25	20,962
00398	06/30/09	Foundation, building	operations	bldg	143,994	2009	8570.08	193,160
00475	12/31/02	Paving/Grading Mech Maint Bld	operations	bldg	13,219	2002	6538.00	23,244
00502	06/30/06	Comp Room HVAC Unit	operations	bldg	12,929	2006	7751.25	19,176
00578	06/30/06	Comp Room HVAC Unit	operations	bldg	15,000	2006	7751.25	22,247
00592	12/31/02	Flooring Mech Maint Bldg Proj	operations	bldg	16,623	2002	6538.00	29,230
00618	06/30/07	Fire Suppression System	operations	bldg	27,853	2007	7967.00	40,192
00659	06/30/07	Permenent Structure	operations	bldg	58,950	2007	7967.00	85,065
00665	12/31/00	Ceiling Panels Maint Bldg Pr	operations	bldg	13,986	2000	6221.17	25,845
00689	06/30/08	Control Bldg Stairs	operations	bldg	61,831	2008	8309.92	85,540
00704	06/30/06	Field Ops Membrain Roof	operations	bldg	23,016	2006	7751.25	34,136
00745	06/30/05	Fire Alarm Link Btwn Bldgs	operations	bldg	19,399	2005	7446.08	29,951
00766	12/31/02	Roof Mech Maint Bldg Proj 124	operations	bldg	13,869	2002	6538.00	24,386
00787	06/30/06	Silencote Roof - Generator Rm	operations	bldg	27,822	2006	7751.25	41,264
00798	06/30/07	Roof Rehab - Prom Clarify1-4	operations	bldg	39,659	2007	7967.00	57,227
00799	06/30/09	Painting/Coating	operations	bldg	196,573	2009	8570.08	263,692
00807	06/30/06	Ctrl Bldg Patio Roof	operations	bldg	29,017	2006	7751.25	43,037
00832	06/30/06	Fire System	operations	bldg	24,602	2006	7751.25	36,489
00834	12/31/02	Fire/Security System Mech Mai	operations	bldg	16,576	2002	6538.00	29,147
00877	12/31/00	Site Prep Admin Bldg Proj 28	operations	bldg	22,858	2000	6221.17	42,240
00891	06/30/07	Storm Drain	operations	bldg	81,876	2007	7967.00	118,146
00892	06/30/06	Sidewalk/Curb Common Area	operations	bldg	29,371	2006	7751.25	43,561
00913	12/31/00	Flooring Tile Admin Bldg Pr	operations	bldg	25,000	2000	6221.17	46,198
00914	12/31/00	Fencing Covered Storage Proj	operations	bldg	15,640	2000	6221.17	28,902
00941	06/30/05	Control Bldg Ext Paint	operations	bldg	38,725	2005	7446.08	59,789
00949	06/30/09	Permanent Structure	operations	bldg	367,273	2009	8570.08	492,677

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00962	12/31/02	Flooring Carpet Control Bldg	operations	bldg	14,008	2002	6538.00	24,631
00973	06/30/06	4" Chemical Line	operations	bldg	53,714	2006	7751.25	79,666
00974	06/30/06	6" Sludge Line	operations	bldg	53,714	2006	7751.25	79,666
00995	06/30/05	Fire Detection System	operations	bldg	36,653	2005	7446.08	56,590
01016	12/31/02	Plumbing Mech Maint Bldg Proj	operations	bldg	21,254	2002	6538.00	37,373
01025	06/30/06	Electrical - Bldg	operations	bldg	40,096	2006	7751.25	59,469
01028	12/31/00	Lockers Maint Bldg Proj 28-4	operations	bldg	25,000	2000	6221.17	46,198
01029	12/31/00	Cabinets/Casework Maint Bldg	operations	bldg	33,422	2000	6221.17	61,762
01034	06/30/06	Vent Degrittied Prim Sludge	operations	bldg	62,053	2006	7751.25	92,034
01056	06/30/06	16" Steel Pipe	operations	bldg	65,955	2006	7751.25	97,822
01063	06/30/07	HVAC Unit	operations	bldg	63,582	2007	7967.00	91,748
01072	06/30/07	Storm Drain	operations	bldg	130,012	2007	7967.00	187,607
01094	12/31/02	Flooring Control Bldg Proj 12	operations	bldg	66,492	2002	6538.00	116,918
01120	06/30/06	Plumbing	operations	bldg	104,320	2006	7751.25	154,722
01145	12/31/00	Flooring Tile Maint Bldg Pr	operations	bldg	44,260	2000	6221.17	81,790
01151	06/30/09	Painting/Coating, Building	operations	bldg	383,756	2009	8570.08	514,788
01155	06/30/06	9 Lab Sinks & 8 Eyewashes	operations	bldg	56,152	2006	7751.25	83,282
01157	12/31/02	WH Portable Office Proj 133	operations	bldg	30,452	2002	6538.00	53,546
01169	06/30/09	Electrical, building	operations	bldg	405,313	2009	8570.08	543,706
01171	06/30/06	HVAC	operations	bldg	58,139	2006	7751.25	86,230
01172	12/31/02	Electrical Mech Maint Bldg Pr	operations	bldg	31,325	2002	6538.00	55,082
01181	12/31/02	Flooring Tile Control Bldg P	operations	bldg	24,366	2002	6538.00	42,845
01182	12/31/00	Paving/Grading Maint Bldg Pr	operations	bldg	25,000	2000	6221.17	46,198
01185	06/30/06	8" Secondary Dig Interim Pipe	operations	bldg	51,822	2006	7751.25	76,860
01199	12/31/02	Construction Mgmt & Overhead	operations	bldg	69,940	2002	6538.00	122,981
01202	12/31/02	Paving/Grading Control Bldg P	operations	bldg	52,876	2002	6538.00	92,976
01213	12/31/00	Fire/Security System Cov Stor	operations	bldg	27,281	2000	6221.17	50,413
01224	06/30/07	Electrical	operations	bldg	94,976	2007	7967.00	137,049
01230	12/31/02	Paint/Wall Treatment Control	operations	bldg	27,737	2002	6538.00	48,772
01254	12/31/00	Electrical Cov Stor Proj 28-	operations	bldg	60,711	2000	6221.17	112,190
01270	12/31/00	Elevator Admin Bldg Proj 28-	operations	bldg	46,723	2000	6221.17	86,341
01280	12/31/94	Seismic Design - Primary Bldg	operations	bldg	13,986	1994	5407.58	29,734
01293	12/31/02	Roof Control Bldg Proj 124	operations	bldg	55,474	2002	6538.00	97,545
01298	12/31/02	Structure Mech Maint Bldg Pro	operations	bldg	89,134	2002	6538.00	156,732
01302	06/30/05	Landscaping	operations	bldg	31,226	2005	7446.08	48,211
01315	12/31/00	Paint/Wall Trmt Maint Bldg P	operations	bldg	27,473	2000	6221.17	50,768
01317	06/30/06	Interior Wall Treatments	operations	bldg	111,811	2006	7751.25	165,834

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01346	06/30/06	Storm Drain	operations	bldg	189,508	2006	7751.25	281,070
01347	06/30/07	Roof Rehab - Prom Clarify 5-6	operations	bldg	166,245	2007	7967.00	239,890
01350	12/31/02	Ceiling Panels Control Bldg P	operations	bldg	26,085	2002	6538.00	45,867
01354	12/31/02	Fire/Security System Control	operations	bldg	66,305	2002	6538.00	116,589
01370	12/31/00	CABINETS/CASEWORK ADMIN BLDG	operations	bldg	86,951	2000	6221.17	160,680
01378	06/30/06	Permanent Structure	operations	bldg	216,482	2006	7751.25	321,077
01380	12/31/01	Control Bldg Roof Replacement	operations	bldg	76,502	2001	6342.08	138,675
01391	06/30/06	Painting/Coating - Bldg	operations	bldg	144,053	2006	7751.25	213,653
01396	06/30/09	Permanent Structure, Building	operations	bldg	1,028,098	2009	8570.08	1,379,139
01431	12/31/60	Concrete Pump Station Structur	operations	bldg	21,985	1960	824.00	306,731
01440	06/30/05	Landscaping	operations	bldg	50,388	2005	7446.08	77,796
01447	12/31/00	Fencing	operations	bldg	68,555	2000	6221.17	126,685
01451	12/31/00	Construction Mgmt & Overhead	operations	bldg	113,573	2000	6221.17	209,875
01452	12/31/00	Fire/Security System Maint Bl	operations	bldg	57,540	2000	6221.17	106,330
01465	12/31/79	Painting	operations	bldg	26,000	1979	3003.00	99,535
01466	12/31/91	Primary Clarifier Roof	operations	bldg	26,062	1991	4835.08	61,967
01468	12/31/85	Control Building & Paving	operations	bldg	44,625	1985	4195.00	122,294
01469	12/31/79	Fencing	operations	bldg	27,000	1979	3003.00	103,363
01473	12/31/02	Cabinets/Casework Control Bld	operations	bldg	169,079	2002	6538.00	297,306
01474	12/31/02	Plumbing Control Bldg Proj 12	operations	bldg	85,018	2002	6538.00	149,494
01481	12/31/99	Newark PS Access Rd Improvment	operations	bldg	132,161	1999	6059.50	250,741
01483	12/31/00	Ceiling Panels Admin Bldg Pr	operations	bldg	68,098	2000	6221.17	125,841
01485	06/30/05	Electrical Repairs	operations	bldg	128,704	2005	7446.08	198,711
01486	06/30/04	Proj 152 Paint Booth	operations	bldg	106,266	2004	7115.08	171,701
01488	12/31/00	Flooring Carpet Maint Bldg	operations	bldg	35,378	2000	6221.17	65,376
01490	12/31/00	Doors/Windows Maint Bldg Pro	operations	bldg	143,933	2000	6221.17	265,979
01496	12/31/02	Construction Mgmt & Overhead	operations	bldg	192,329	2002	6538.00	338,188
01497	12/31/00	Design Cov Stor Proj 28-48	operations	bldg	147,946	2000	6221.17	273,395
01515	12/31/00	Roof Cov Stor Proj 28-48	operations	bldg	105,526	2000	6221.17	195,006
01518	06/30/06	6" Secondary Dig Interim Pipe	operations	bldg	51,822	2006	7751.25	76,860
01521	12/31/97	Alvarado Paving Repair	operations	bldg	48,280	1997	5825.08	95,285
01530	12/31/02	Electrical Control Bldg Proj	operations	bldg	125,302	2002	6538.00	220,328
01538	12/31/00	Plumbing Maint Bldg Proj 28-	operations	bldg	208,230	2000	6221.17	384,796
01539	12/31/79	Excavation/Backfill/Duct Encas	operations	bldg	60,000	1979	3003.00	229,697
01545	12/31/02	Construction Mgmt & Overhead	operations	bldg	277,895	2002	6538.00	488,646
01549	12/31/00	Flooring Carpet Admin Bldg	operations	bldg	53,485	2000	6221.17	98,837
01559	12/31/91	Plant Lighting Improvements	operations	bldg	51,091	1991	4835.08	121,478

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01560	12/31/00	Site Piping Admin Bldg Proj	operations	bldg	240,700	2000	6221.17	444,798
01561	12/31/00	Fire/Security System Admin Bld	operations	bldg	120,720	2000	6221.17	223,083
01580	12/31/02	Structure Control Bldg Proj 1	operations	bldg	356,538	2002	6538.00	626,930
01582	12/31/85	Major Structure & Ground Prep	operations	bldg	99,310	1985	4195.00	272,157
01585	12/31/00	Plumbing	operations	bldg	286,091	2000	6221.17	528,677
01590	12/31/00	Sidewalk/Curb Common Area Pr	operations	bldg	148,220	2000	6221.17	273,901
01593	12/31/00	Doors/Windows Admin Bldg Pro	operations	bldg	304,214	2000	6221.17	562,168
01595	12/31/94	Walkway Improvements	operations	bldg	67,500	1994	5407.58	143,502
01613	06/30/06	Roof	operations	bldg	621,104	2006	7751.25	921,193
01617	12/31/00	Construction Mgmt & Overhead	operations	bldg	352,075	2000	6221.17	650,612
01619	06/30/06	Excavation	operations	bldg	863,489	2006	7751.25	1,280,688
01624	06/30/07	Irvington PS Floor Replacement	operations	bldg	623,194	2007	7967.00	899,264
01626	06/30/06	HVAC	operations	bldg	458,585	2006	7751.25	680,153
01634	12/31/00	Roof Maint Bldg Proj 28-48	operations	bldg	250,283	2000	6221.17	462,507
01635	12/31/98	Alvarado Admin & Lab Facility	operations	bldg	122,491	1998	5920.42	237,854
01648	12/31/01	Roof Replacement Proj 129	operations	bldg	368,418	2001	6342.08	667,833
01653	12/31/00	Structure Cov Stor Proj 28-4	operations	bldg	454,617	2000	6221.17	840,103
01654	12/31/00	Design Maint Bldg Proj 28-48	operations	bldg	458,634	2000	6221.17	847,526
01657	06/30/06	Electrical - Bldg	operations	bldg	1,118,439	2006	7751.25	1,658,819
01658	12/31/00	Paint/Wall Trmt Admin Bldg P	operations	bldg	98,036	2000	6221.17	181,164
01665	06/30/07	Electrical 480 Cable Replace	operations	bldg	825,504	2007	7967.00	1,191,194
01666	12/31/00	Roof Admin Bldg Proj 28-48	operations	bldg	303,561	2000	6221.17	560,962
01669	06/30/07	Newark PS Floor Replacement	operations	bldg	833,804	2007	7967.00	1,203,171
01674	12/31/85	Structural Items	operations	bldg	183,784	1985	4195.00	503,656
01679	12/31/00	Landscape/Irrigation Common A	operations	bldg	198,700	2000	6221.17	367,185
01680	12/31/00	Fuel Island/Tanks Cov Stor P	operations	bldg	270,586	2000	6221.17	500,025
01692	12/31/00	Electrical Maint Bldg Proj 2	operations	bldg	626,953	2000	6221.17	1,158,567
01693	12/31/00	HVAC Admin Bldg Proj 28-48	operations	bldg	405,591	2000	6221.17	749,505
01696	06/30/05	Expansion of PS Bldg Structure	operations	bldg	1,557,214	2005	7446.08	2,404,246
01697	06/30/05	Bldg Improvements	operations	bldg	1,559,490	2005	7446.08	2,407,760
01698	12/31/00	Construction Mgmt and Overhead	operations	bldg	670,079	2000	6221.17	1,238,261
01703	06/30/06	Paving	operations	bldg	1,050,610	2006	7751.25	1,558,218
01704	06/30/05	Site Work - Paving, Etc.	operations	bldg	656,025	2005	7446.08	1,012,864
01707	12/31/93	Roof Replacement	operations	bldg	149,959	1993	5210.42	330,871
01713	12/31/02	HVAC Control Bldg Proj 124	operations	bldg	489,282	2002	6538.00	860,345
01727	12/31/00	HVAC Maint Bldg Proj 28-48	operations	bldg	173,190	2000	6221.17	320,045
01730	12/31/00	Electrical Admin Bldg Proj 2	operations	bldg	827,212	2000	6221.17	1,528,635

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01734	12/31/00	Design Admin Bldg proj 28-48	operations	bldg	872,884	2000	6221.17	1,613,033
01739	06/30/06	Foundation - Bldg	operations	bldg	2,179,057	2006	7751.25	3,231,881
01759	12/31/79	Structural Items	operations	bldg	314,216	1979	3003.00	1,202,905
01763	12/31/79	Trench Excavation & Backfill	operations	bldg	330,500	1979	3003.00	1,265,245
01773	12/31/00	Structure Maint Bldg Proj 28	operations	bldg	1,312,057	2000	6221.17	2,424,595
01775	12/31/95	Benson Road Improvements	operations	bldg	321,655	1995	5471.17	675,879
01776	12/31/00	Paving/Grading Admin Bldg Pr	operations	bldg	686,309	2000	6221.17	1,268,254
01790	12/31/79	Roofing	operations	bldg	385,000	1979	3003.00	1,473,886
01791	12/31/00	Structure Admin Bldg Proj 28	operations	bldg	4,006,440	2000	6221.17	7,403,640
01793	06/30/96	Capitalized Interest on Constr	operations	bldg	1,180,877	1996	5622.17	2,414,679
01794	12/31/79	Painting	operations	bldg	400,000	1979	3003.00	1,531,310
01797	12/31/79	Iron & Structural Steel - Misc	operations	bldg	550,000	1979	3003.00	2,105,551
01799	06/30/06	Permanent Structure	operations	bldg	4,952,740	2006	7751.25	7,345,685
01805	12/31/91	Plant Lighting Improvements	operations	bldg	453,120	1991	4835.08	1,077,377
01835	12/31/79	Major Structure & Ground Prepa	operations	bldg	999,805	1979	3003.00	3,827,529
01869	12/31/79	Earthwork and Excavation for 1	operations	bldg	2,101,100	1979	3003.00	8,043,589
01891	12/31/79	Non Structural Costs - Enginee	operations	bldg	4,462,744	1979	3003.00	17,084,612
01945	01/01/10	BOILER CAMUS CONTROL BLDG	operations	bldg	46,377	2010	8798.92	60,594
01955	01/01/10	CS REMOTE STAGING TRAILER @IPS	operations	bldg	173,603	2010	8798.92	226,823
01956	01/01/10	PERMANENT STRUCTURE	operations	bldg	126,071	2010	8798.92	164,720
01957	01/01/10	PERMANENT STRUCTURE	operations	bldg	17,038	2010	8798.92	22,261
01958	01/01/10	PERMANENT STRUCTUREQ	operations	bldg	27,236	2010	8798.92	35,586
01959	01/01/10	PERMANENT STRUCTURE	operations	bldg	17,038	2010	8798.92	22,261
01960	01/01/10	PERMANENT STRUCTURE	operations	bldg	63,796	2010	8798.92	83,353
01961	01/01/10	ELECTRICAL	operations	bldg	90,218	2010	8798.92	117,875
02046	01/01/11	SOLAR CARPORT	operations	bldg	320,843	2011	9069.83	406,679
02047	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	30,379	2011	9069.83	38,506
02048	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	30,379	2011	9069.83	38,506
02049	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	30,379	2011	9069.83	38,506
02050	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02051	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02052	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02053	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02054	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02055	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02056	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02057	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02058	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02059	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02060	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02061	01/01/11	ELECTRIAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02062	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02063	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02064	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02065	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02066	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02067	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	33,178	2011	9069.83	42,054
02068	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	17,785	2011	9069.83	22,543
02069	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	17,785	2011	9069.83	22,543
02070	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	17,785	2011	9069.83	22,543
02071	01/01/11	ELECTRICAL - SOLAR CARPORT	operations	bldg	17,785	2011	9069.83	22,543
02091	01/01/11	BUILDING	operations	bldg	3,402,410	2011	9069.83	4,312,666
02112	01/01/11	FIRE ALARM CONTROL PANEL	operations	bldg	76,157	2011	9069.83	96,531
02249	06/30/12	IRV PS CEMENT TREATED BASE	operations	bldg	335,516	2012	9308.17	414,389
02289	06/30/12	CONTROL BUILDING	operations	bldg	30,719	2012	9308.17	37,940
02316	01/01/13	PAINTING/COATING	operations	bldg	212,537	2013	9546.67	255,942
02317	01/01/13	PERMANENTE STRUCTURE	operations	bldg	560,397	2013	9546.67	674,843
02376	01/01/13	PROGRAM	operations	bldg	29,950	2013	9546.67	36,066
02561	01/01/14	BOYCE ROAD LIFT STATION STRUCTURE	operations	bldg	5,559,910	2014	9806.00	6,518,300
02573	01/01/14	SITE PAVEMENT	operations	bldg	63,744	2014	9806.00	74,732
02583	01/01/14	SECURITY FENCE AND GATES	operations	bldg	30,314	2014	9806.00	35,539
02631	01/01/14	ROOM 3	operations	bldg	147,981	2014	9806.00	173,489
02729	01/01/15	BIRD NETTING	operations	bldg	37,572	2015	10335.00	41,794
02730	01/01/15	LED LIGHTING -COV STORAGE	operations	bldg	20,115	2015	10335.00	22,375
02768	01/01/16	CONTAINMENT	operations	bldg	16,979	2016	10385.00	18,795
02769	01/01/16	AREA	operations	bldg	16,979	2016	10385.00	18,795
02861	06/30/17	490	operations	bldg	39,005	2017	10737.00	41,764
02862	06/30/17	PRJ 490	operations	bldg	36,711	2017	10737.00	39,307
02926	01/01/18	WALKWAY IMPROVEMENTS - PRJ 448	operations	bldg	75,763	2018	11062.00	78,738
02928	01/01/19	TRANSPORT	operations	equipport	20,855	2019	11268.48	21,277
02929	01/01/19	CCTV EQUIPMENT - TRAKSTAR II CAMERA	operations	equipport	18,383	2019	11268.48	18,755
02939	01/01/19	RECLAIM PUMP 5	operations	equipplnt	15,572	2019	11268.48	15,886
02943	01/01/19	394	operations	equipplnt	1,553,358	2019	11268.48	1,584,764
02944	01/01/19	UNDERGROUND DSN PIPING - PRJ 394	operations	equipplnt	123,810	2019	11268.48	126,314

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02952	01/01/19	THICKENER CONTROL BUILDING - PRJ 394	operations	bldg	5,256,176	2019	11268.48	5,362,447
02955	01/01/19	SLUDGE PUMP 4 - PRJ 394	operations	equipplnt	58,455	2019	11268.48	59,636
02956	01/01/19	SLUDGE PUMP 5 - PRJ 394	operations	equipplnt	58,455	2019	11268.48	59,636
02957	01/01/19	SLUDGE PUMP 6 - PRJ 394	operations	equipplnt	58,455	2019	11268.48	59,636
02958	01/01/19	THICKENER GRINDER 3 - PRJ 394	operations	equipplnt	39,582	2019	11268.48	40,382
02959	01/01/19	PLUG VALVE - PRJ 394	operations	equipplnt	22,746	2019	11268.48	23,206
02960	01/01/19	PRJ 394	operations	equipplnt	27,486	2019	11268.48	28,042
02961	01/01/19	PRJ 394	operations	equipplnt	27,486	2019	11268.48	28,042
02962	01/01/19	PRJ 394	operations	equipplnt	27,486	2019	11268.48	28,042
02963	01/01/19	PRJ 394	operations	equipplnt	27,486	2019	11268.48	28,042
02964	01/01/19	THICKENER HOIST - PRJ 394	operations	equipplnt	20,429	2019	11268.48	20,842
02965	01/01/19	394	operations	bldg	1,027,321	2019	11268.48	1,048,091
02966	01/01/19	MCC 31 - PRJ 394	operations	equipplnt	279,123	2019	11268.48	284,767
02967	01/01/19	PLC 44 - PRJ 394	operations	equipplnt	359,099	2019	11268.48	366,359
02968	01/01/19	HEAT TRACE SYSTEM LCP - PRJ 394	operations	equipplnt	32,067	2019	11268.48	32,715
02970	01/01/19	ROOFTOP PACKAGED - PRJ 394	operations	equipplnt	26,000	2019	11268.48	26,526
02971	01/01/19	394	operations	equipplnt	590,981	2019	11268.48	602,929
02972	01/01/19	DIGESTER 2 TPS FEED VALVE - PRJ 394	operations	equipplnt	20,861	2019	11268.48	21,283
02973	01/01/19	DIGESTER 1 TPS FEED VALVE - PRJ 394	operations	equipplnt	20,861	2019	11268.48	21,283
02974	01/01/19	MCC 32 - PRJ 394	operations	equipplnt	273,992	2019	11268.48	279,532
02975	01/01/19	PLC 44 - PRJ 394	operations	equipplnt	294,174	2019	11268.48	300,121
02976	01/01/19	394	operations	equipplnt	13,619	2019	11268.48	13,894
02977	01/01/19	394	operations	equipplnt	13,619	2019	11268.48	13,894
02978	01/01/19	394	operations	equipplnt	108,334	2019	11268.48	110,524
02979	01/01/19	394	operations	equipplnt	288,374	2019	11268.48	294,205
02980	01/01/19	DIGESTER 4 TPS FEED VALVE - PRJ 394	operations	equipplnt	23,647	2019	11268.48	24,125
02981	01/01/19	PLC 20 - PRJ 394	operations	equipplnt	194,167	2019	11268.48	198,093
02982	01/01/19	DIGESTER 5 TPS FEED VALVE - PRJ 493	operations	equipplnt	23,647	2019	11268.48	24,125
02983	01/01/19	SCUM PUMP 1 - PRJ 394	operations	equipplnt	109,456	2019	11268.48	111,669
02984	01/01/19	SCUM PUMP 2 - PRJ 394	operations	equipplnt	109,456	2019	11268.48	111,669
02985	01/01/19	SCUM LINE OUTLET VALVE - PRJ 394	operations	equipplnt	14,361	2019	11268.48	14,651
02986	01/01/19	CHECK VALVE - PRJ 394	operations	equipplnt	29,794	2019	11268.48	30,396
02987	01/01/19	SCUM PUMP 3 - PRJ 394	operations	equipplnt	118,864	2019	11268.48	121,267
02988	01/01/19	SCUM PUMP 4 - PRJ 394	operations	equipplnt	118,864	2019	11268.48	121,267
02989	01/01/19	SCUM LINE OUTLET VALVE - PRJ 394	operations	equipplnt	14,361	2019	11268.48	14,651
02990	01/01/19	PLUG VALVE - PRJ 394	operations	equipplnt	72,350	2019	11268.48	73,813
02991	01/01/19	THICKENER GRINDER 4 - PRJ 394	operations	equipplnt	39,582	2019	11268.48	40,382



**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

Based on Fixed Asset Schedule 06/30/19

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
03012	01/01/19	OCB HYPO TANK 1 - PRJ 463	operations	equipplnt	243,462	2019	11268.48	248,384
03013	01/01/19	OCB HYPO TANK 2 - PRJ 463	operations	equipplnt	243,462	2019	11268.48	248,384
03014	01/01/19	OCB HYPO TANK 3 - PRJ 463	operations	equipplnt	243,462	2019	11268.48	248,384
03015	01/01/19	OCB HYPO TANK 4 - PRJ 463	operations	equipplnt	243,462	2019	11268.48	248,384
03016	01/01/19	PUMP 1 - PRJ 463	operations	equipplnt	202,592	2019	11268.48	206,688
03017	01/01/19	PUMP 2 - PRJ 463	operations	equipplnt	202,592	2019	11268.48	206,688
03018	01/01/19	PUMP 3 - PRJ 463	operations	equipplnt	202,592	2019	11268.48	206,688
03019	01/01/19	PUMP 4 - PRJ 463	operations	equipplnt	202,592	2019	11268.48	206,688
03020	01/01/19	463	operations	equipplnt	23,421	2019	11268.48	23,895
03021	01/01/19	PUMP 1 - PRJ 463	operations	equipplnt	337,692	2019	11268.48	344,520
03022	01/01/19	PUMP 2 - PRJ 463	operations	equipplnt	337,692	2019	11268.48	344,520
03023	01/01/19	PLC-48 - PRJ 463	operations	equipplnt	58,552	2019	11268.48	59,736
<b>Operations Total</b>					<b>78,877,183</b>			<b>137,969,393</b>
00036	06/30/09	Supply Fan	trmtplant	tmntplant	18,524	2009	8570.08	24,850
00042	06/30/09	Blower 10 Blow Off Valve	trmtplant	tmntplant	20,301	2009	8570.08	27,233
00050	06/30/09	Aeration Basin 6 Zone2&3 Isola	trmtplant	tmntplant	22,077	2009	8570.08	29,615
00051	06/30/09	Aeration Basin6 Zone1 Isolatio	trmtplant	tmntplant	22,077	2009	8570.08	29,615
00052	06/30/09	Auto Strainer Outlet	trmtplant	tmntplant	11,458	2009	8570.08	15,370
00053	06/30/09	Auto Strainer Wash Water 2" Va	trmtplant	tmntplant	11,458	2009	8570.08	15,370
00054	06/30/09	Auto StrainerWashWater2"V Actu	trmtplant	tmntplant	11,458	2009	8570.08	15,370
00055	06/30/09	Manual Strainer	trmtplant	tmntplant	11,458	2009	8570.08	15,370
00064	06/30/09	Pressure Sensor & Transducer	trmtplant	tmntplant	13,195	2009	8570.08	17,700
00066	06/30/09	SD #1 PDS Isolation Valve	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00067	06/30/09	SD #1 Sludge Recirculation 2	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00068	06/30/09	SD #2 Gas Isolation 2	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00069	06/30/09	SD #2 Gas Isolation 3	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00070	06/30/09	SD #2 Multiport PRV Isolat Val	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00071	06/30/09	SD #2 PRV #1	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00072	06/30/09	SD #2 PRV #2	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00073	06/30/09	SD #2 Sludge Redirection 2	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00074	06/30/09	SD #2 Thermal Shutoff Valve	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00076	06/30/09	Secondary/Digester #2 Crossove	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00077	06/30/09	SecondaryDigest #2 Sludge Feed	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00078	06/30/09	SecondaryDigester #2 Recircula	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00079	06/30/09	SecondayDigester #2 Gas Isolat	trmtplant	tmntplant	13,492	2009	8570.08	18,099
00101	06/30/09	DO Probe Aeration Basin5 Zone1	trmtplant	tmntplant	15,987	2009	8570.08	21,446

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00102	06/30/09	DO Probe Aeration Basin6 Zone1	trmtplant	tmntplant	15,987	2009	8570.08	21,446
00103	06/30/09	DO Probe Aeration Basin7 Zone1	trmtplant	tmntplant	15,987	2009	8570.08	21,446
00105	06/30/09	Manual Strainer Outlet	trmtplant	tmntplant	16,228	2009	8570.08	21,769
00107	06/30/09	Aeration Basin5 Zone2 Control	trmtplant	tmntplant	33,496	2009	8570.08	44,933
00108	06/30/09	Aeration Basin5 Zone3 Control	trmtplant	tmntplant	33,496	2009	8570.08	44,933
00109	06/30/09	Aeration Basin6 Zone2 Control	trmtplant	tmntplant	33,496	2009	8570.08	44,933
00110	06/30/09	Aeration Basin6 Zone3 Control	trmtplant	tmntplant	33,496	2009	8570.08	44,933
00111	06/30/09	Aeration Basin7 Zone1 Control	trmtplant	tmntplant	33,496	2009	8570.08	44,933
00112	06/30/09	Aeration Basin7 Zone2 Control	trmtplant	tmntplant	33,496	2009	8570.08	44,933
00113	06/30/09	Aeration Basin7 Zone3 Control	trmtplant	tmntplant	33,496	2009	8570.08	44,933
00121	06/30/09	4" PDS Return Line Valve	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00122	06/30/09	6" SD By Pass Valve #1`	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00123	06/30/09	6" SD By Pass Valve #2	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00124	06/30/09	Gas Meter ByPass	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00125	06/30/09	Gas Meter Inlet	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00126	06/30/09	Gas Meter Outlet	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00128	06/30/09	SD #1 Crossover Valve	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00131	06/30/09	SD #1 Overflow Box	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00132	06/30/09	SD #1 Side Hatch Valve	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00135	06/30/09	SD #2 Overflow Valve	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00136	06/30/09	SD #2 Side hatch Valve	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00137	06/30/09	SD#1 Bottom Suction Isola Valv	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00138	06/30/09	SD#1 Side Suction Isola Valve	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00139	06/30/09	SD#2 BottomSuction Isolat Valv	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00140	06/30/09	SD#2 Side Suction Isola Valve	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00141	06/30/09	SDS Circulation Pump #1 Check	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00142	06/30/09	SDS Circulation Pump #1 Inlet	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00143	06/30/09	SDS Circulation Pump #1 Outlet	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00144	06/30/09	SDS Circulation Pump #2 Check	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00145	06/30/09	Sds Circulation Pump #2 Inlet	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00146	06/30/09	SDS Circulation Pump #2 Outlet	trmtplant	tmntplant	17,633	2009	8570.08	23,654
00163	06/30/09	Blower 10 LCP	trmtplant	tmntplant	39,840	2009	8570.08	53,443
00174	06/30/09	Process Piping	trmtplant	tmntplant	57,463	2009	8570.08	77,084
00176	06/30/09	Auto Strainer LCP	trmtplant	tmntplant	29,917	2009	8570.08	40,133
00179	06/30/09	Aeration Basin1 Control Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00180	06/30/09	Aeration Basin2 Control Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00181	06/30/09	Aeration Basin3 Control Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00182	06/30/09	Aeration Basin4 Control Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00183	06/30/09	Aeration Basin5 Zone1 Control	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00184	06/30/09	Aeration Basin6 Zone1 Control	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00185	06/30/09	Basin 1 Air Conrol Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00186	06/30/09	Basin 2 Air Conrol Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00187	06/30/09	Basin 3 Air Control Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00188	06/30/09	Basin 4 Air Control Valve	trmtplant	tmntplant	45,169	2009	8570.08	60,592
00216	06/30/09	Air Flow Meter Basin5 Zone2	trmtplant	tmntplant	27,660	2009	8570.08	37,105
00217	06/30/09	Air Flow Meter Basin6 Zone2	trmtplant	tmntplant	27,660	2009	8570.08	37,105
00218	06/30/09	Air Flow Meter Basin6 Zone2	trmtplant	tmntplant	27,660	2009	8570.08	37,105
00219	06/30/09	Air Flow Meter Basin6 Zone3	trmtplant	tmntplant	27,660	2009	8570.08	37,105
00220	06/30/09	Air Flow Meter Basin7 Zone2	trmtplant	tmntplant	27,660	2009	8570.08	37,105
00221	06/30/09	Air Flow Meter Basin7 Zone3	trmtplant	tmntplant	27,660	2009	8570.08	37,105
00223	06/30/09	Air Flow Meter Basin 2	trmtplant	tmntplant	27,914	2009	8570.08	37,445
00224	06/30/09	Air Flow Meter Basin 3	trmtplant	tmntplant	27,914	2009	8570.08	37,445
00225	06/30/09	Air Flow Meter Basin 4	trmtplant	tmntplant	27,914	2009	8570.08	37,445
00226	06/30/09	Air Flow Meter Basin1	trmtplant	tmntplant	27,914	2009	8570.08	37,445
00227	06/30/09	Air Flow Meter Basin5 Zone1	trmtplant	tmntplant	27,914	2009	8570.08	37,445
00228	06/30/09	Air Flow Meter Basin6 Zone1	trmtplant	tmntplant	27,914	2009	8570.08	37,445
00229	06/30/09	Air Flow Meter Basin7 Zone1	trmtplant	tmntplant	27,914	2009	8570.08	37,445
00231	06/30/09	SDS Circulation Pump #1	trmtplant	tmntplant	37,410	2009	8570.08	50,184
00232	06/30/09	SDS Circulation Pump #1 Motor	trmtplant	tmntplant	37,410	2009	8570.08	50,184
00233	06/30/09	SDS Circulation Pump #2	trmtplant	tmntplant	37,410	2009	8570.08	50,184
00234	06/30/09	SDS Circulation Pump #2 Motor	trmtplant	tmntplant	37,410	2009	8570.08	50,184
00235	06/30/09	Air Flow Meter Basin5 Chan Air	trmtplant	tmntplant	28,167	2009	8570.08	37,784
00236	06/30/09	Air Flow Meter Basin6 Chan Air	trmtplant	tmntplant	28,167	2009	8570.08	37,784
00237	06/30/09	Air Flow Meter Basin7 Chan Air	trmtplant	tmntplant	28,167	2009	8570.08	37,784
00260	06/30/09	RAS Valve Control Panel Clari4	trmtplant	tmntplant	17,084	2009	8570.08	22,917
00270	06/30/09	Scrubber 6 Gas Flow Meter	trmtplant	tmntplant	30,462	2009	8570.08	40,864
00271	06/30/09	SD #1 Level Meter	trmtplant	tmntplant	30,462	2009	8570.08	40,864
00272	06/30/09	SD #2 Level Meter	trmtplant	tmntplant	30,462	2009	8570.08	40,864
00273	06/30/09	SDS Circulation Flow Meter	trmtplant	tmntplant	30,462	2009	8570.08	40,864
00277	06/30/08	West Mixing Sludge Fee Actuato	trmtplant	tmntplant	10,396	2008	8309.92	14,382
00278	06/30/08	West Mixing Sludge Feed Actuat	trmtplant	tmntplant	10,396	2008	8309.92	14,382
00293	06/30/09	Existing 480 VAC	trmtplant	tmntplant	66,485	2009	8570.08	89,186
00371	06/30/09	4160VAC Blower Starter Sec6	trmtplant	tmntplant	95,668	2009	8570.08	128,333
00404	06/30/09	Polymer Mixer 1	trmtplant	tmntplant	61,916	2009	8570.08	83,058

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00405	06/30/09	Polymer Mixer 2	trmtplant	tmntplant	61,916	2009	8570.08	83,058
00406	06/30/09	Polymer Mixer 3	trmtplant	tmntplant	61,916	2009	8570.08	83,058
00425	06/30/07	Cogen 1 Temp Ctrl Valve	trmtplant	tmntplant	11,321	2007	7967.00	16,337
00426	06/30/07	Cogen 4 Temp Ctrl Valve	trmtplant	tmntplant	11,321	2007	7967.00	16,337
00427	06/30/07	Cogen 4 Water ByPass Cont Valv	trmtplant	tmntplant	11,321	2007	7967.00	16,337
00451	06/30/06	Plumbing	trmtplant	tmntplant	23,802	2006	7751.25	35,303
00454	06/30/07	Hot Water Circ Pump 6	trmtplant	tmntplant	12,523	2007	7967.00	18,071
00455	06/30/07	Hot Water Circ Pump 7	trmtplant	tmntplant	12,523	2007	7967.00	18,071
00463	06/30/09	Polymer Tank 1	trmtplant	tmntplant	97,484	2009	8570.08	130,770
00464	06/30/09	Polymer Tank 2	trmtplant	tmntplant	97,484	2009	8570.08	130,770
00465	06/30/06	Milliken Bottom Inlet Valves	trmtplant	tmntplant	15,326	2006	7751.25	22,731
00466	06/30/06	Milliken Tip Inlet Valves	trmtplant	tmntplant	15,326	2006	7751.25	22,731
00477	06/30/07	Digester 6A Mix Pump Valve	trmtplant	tmntplant	12,955	2007	7967.00	18,694
00478	06/30/07	Digester 6A Mix Pump Valve	trmtplant	tmntplant	12,955	2007	7967.00	18,694
00479	06/30/07	Digester 6B Mix Pump Valve	trmtplant	tmntplant	12,955	2007	7967.00	18,694
00480	06/30/07	Digester 6B Mix Pump Valve	trmtplant	tmntplant	12,955	2007	7967.00	18,694
00483	06/30/09	Auto Strainer	trmtplant	tmntplant	64,926	2009	8570.08	87,095
00484	06/30/09	Auto Strainer #1	trmtplant	tmntplant	64,926	2009	8570.08	87,095
00514	06/30/07	Thickener Tank 4 Hatches	trmtplant	tmntplant	12,137	2007	7967.00	17,513
00553	06/30/05	Site Waste PS Ret Knife Gate V	trmtplant	tmntplant	11,170	2005	7446.08	17,246
00554	06/30/06	Basin 5 Main Air West Actuator	trmtplant	tmntplant	10,798	2006	7751.25	16,015
00555	06/30/06	Basin 6 Main Air East Actuator	trmtplant	tmntplant	10,798	2006	7751.25	16,015
00573	06/30/07	Electrical	trmtplant	tmntplant	20,728	2007	7967.00	29,910
00576	06/30/07	Thickener Tank 3 Hatches	trmtplant	tmntplant	13,595	2007	7967.00	19,617
00585	06/30/07	Temp Ctrl Valve 1	trmtplant	tmntplant	15,890	2007	7967.00	22,930
00586	06/30/07	Temp Ctrl Valve 2	trmtplant	tmntplant	15,890	2007	7967.00	22,930
00588	06/30/09	DO Zone1 Control Panel	trmtplant	tmntplant	79,935	2009	8570.08	107,228
00600	06/30/06	RAS Pump 1	trmtplant	tmntplant	11,780	2006	7751.25	17,471
00601	06/30/06	RAS Pump 2	trmtplant	tmntplant	11,780	2006	7751.25	17,471
00602	06/30/06	RAS Pump 3	trmtplant	tmntplant	11,780	2006	7751.25	17,471
00603	06/30/06	RAS Pump 4	trmtplant	tmntplant	11,780	2006	7751.25	17,471
00604	06/30/06	RAS Pump 5	trmtplant	tmntplant	11,780	2006	7751.25	17,471
00634	06/30/06	Centrifuge 1 Polymer Feed Pump	trmtplant	tmntplant	16,395	2006	7751.25	24,317
00635	06/30/06	Centrifuge 2 Polymer Feed Pump	trmtplant	tmntplant	16,395	2006	7751.25	24,317
00636	06/30/06	Centrifuge 3 Polymer Feed Pump	trmtplant	tmntplant	16,395	2006	7751.25	24,317
00637	06/30/06	Centrifuge 4 Polymer Feed Pump	trmtplant	tmntplant	16,395	2006	7751.25	24,317
00638	06/30/06	Polymer Tank 1 Recirc Pump	trmtplant	tmntplant	16,395	2006	7751.25	24,317

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00639	06/30/06	Polymer Tank 2 Recirc Pump	trmtplant	tmntplant	16,395	2006	7751.25	24,317
00654	06/30/06	Centrifuge Bldg Compressor 1	trmtplant	tmntplant	16,647	2006	7751.25	24,690
00655	06/30/06	Centrifuge Bldg Compressor 2	trmtplant	tmntplant	16,647	2006	7751.25	24,690
00657	06/30/07	Temp Cntrl Valve 3	trmtplant	tmntplant	17,522	2007	7967.00	25,285
00686	06/30/07	Ext Ctrl Panel for Sludge Valv	trmtplant	tmntplant	12,309	2007	7967.00	17,762
00687	06/30/05	Sludge Transfer Pump 1	trmtplant	tmntplant	13,695	2005	7446.08	21,144
00688	06/30/05	Sludge Transfer Pump 2	trmtplant	tmntplant	13,695	2005	7446.08	21,144
00691	06/30/09	PLC/VFD/SCADA	trmtplant	tmntplant	124,261	2009	8570.08	166,689
00701	06/30/09	RIO 12	trmtplant	tmntplant	95,668	2009	8570.08	128,333
00707	06/30/07	Meter Vault 6" Plug Valve	trmtplant	tmntplant	19,650	2007	7967.00	28,355
00708	06/30/07	Meter Vault 6" Plug Valve	trmtplant	tmntplant	19,650	2007	7967.00	28,355
00709	06/30/07	Meter Vault 6" Plug Valve	trmtplant	tmntplant	19,650	2007	7967.00	28,355
00710	06/30/07	Supermatant Box 6" Plug Valve	trmtplant	tmntplant	19,650	2007	7967.00	28,355
00712	06/30/07	Actuator Grit Pit Weir Gate	trmtplant	tmntplant	13,190	2007	7967.00	19,033
00714	02/01/07	Internalift Pump 6 Gear Box	trmtplant	tmntplant	13,299	2007	7967.00	19,190
00715	02/01/07	Internalift Pump 7 Gear Box	trmtplant	tmntplant	13,299	2007	7967.00	19,190
00716	02/01/07	Internalift Pump 8 Gear Box	trmtplant	tmntplant	13,299	2007	7967.00	19,190
00728	06/30/07	Digester 6 Hot Water Ctrl Valv	trmtplant	tmntplant	20,728	2007	7967.00	29,910
00735	06/01/07	Reclaimed Pump 5	trmtplant	tmntplant	13,935	2007	7967.00	20,108
00750	06/30/07	Sec Clarifier 2 Flow Meter	trmtplant	tmntplant	14,067	2007	7967.00	20,299
00752	06/30/09	RAS Flowmeter Sec Clarif 4	trmtplant	tmntplant	63,774	2009	8570.08	85,549
00753	06/30/09	RAS Isolation Valve SecClarf 4	trmtplant	tmntplant	63,774	2009	8570.08	85,549
00768	06/30/06	Loading Control Panel	trmtplant	tmntplant	20,775	2006	7751.25	30,813
00782	12/31/02	Main Breaker Generator #4	trmtplant	tmntplant	11,801	2002	6538.00	20,751
00784	06/30/02	Cogen Dollinger Gas Particle F	trmtplant	tmntplant	10,260	2002	6538.00	18,041
00785	12/31/01	Cogen Dollinger Gas Particle F	trmtplant	tmntplant	10,260	2001	6342.08	18,598
00790	06/30/05	Alv Div Structure Sluice Gate	trmtplant	tmntplant	17,500	2005	7446.08	27,019
00791	06/30/06	Electrical Panel Explosion Pro	trmtplant	tmntplant	18,844	2006	7751.25	27,949
00796	06/30/07	Sec Clarifier 2 Ctrl Valve	trmtplant	tmntplant	15,826	2007	7967.00	22,836
00800	12/31/01	Generator #1 Breaker Panel Pro	trmtplant	tmntplant	10,609	2001	6342.08	19,231
00803	06/30/07	Digester 6 Hot Water Ctrl Valv	trmtplant	tmntplant	24,183	2007	7967.00	34,896
00804	06/30/05	Primary 5-6 Dewatering Pump	trmtplant	tmntplant	13,457	2005	7446.08	20,777
00818	06/30/06	Rotork Valve Operator	trmtplant	tmntplant	11,778	2006	7751.25	17,468
00819	06/30/06	Rotork Valve Operator	trmtplant	tmntplant	11,778	2006	7751.25	17,468
00820	06/30/06	Rotork Valve Operator	trmtplant	tmntplant	11,778	2006	7751.25	17,468
00821	06/30/06	Rotork Valve Operator	trmtplant	tmntplant	11,778	2006	7751.25	17,468
00824	06/30/07	Thickener Ctrl Bldg Hatches	trmtplant	tmntplant	21,596	2007	7967.00	31,163

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
00827	04/01/07	Effluent Screen Gear Box	trmtplant	tmntplant	16,866	2007	7967.00	24,338
00837	06/01/07	EBDA 60" Valve Actuator	trmtplant	tmntplant	17,514	2007	7967.00	25,272
00848	06/30/07	Hex 5 6" Dischg Plug Valve	trmtplant	tmntplant	27,565	2007	7967.00	39,776
00849	06/30/07	Hex 5 6" Suction Plug Valve	trmtplant	tmntplant	27,565	2007	7967.00	39,776
00850	06/30/07	Temp Control Valve 4	trmtplant	tmntplant	27,565	2007	7967.00	39,776
00851	06/30/07	Temp Control Valve 5	trmtplant	tmntplant	27,565	2007	7967.00	39,776
00854	06/30/07	Grit Pit Weir Gate	trmtplant	tmntplant	18,517	2007	7967.00	26,720
00855	06/30/06	#4 Internalift Pump	trmtplant	tmntplant	26,528	2006	7751.25	39,345
00858	06/30/06	#3 Reclaim Pump	trmtplant	tmntplant	13,309	2006	7751.25	19,739
00881	06/30/07	Hot Water Pump 4	trmtplant	tmntplant	29,475	2007	7967.00	42,532
00882	06/30/07	Hot Water Pump 5	trmtplant	tmntplant	29,475	2007	7967.00	42,532
00885	06/30/05	Headworks Gas LACP	trmtplant	tmntplant	11,000	2005	7446.08	16,983
00886	06/30/05	Thickener Cntl Bldg Gas LACP	trmtplant	tmntplant	11,000	2005	7446.08	16,983
00887	06/30/07	Air Comp Sludge Valve Act	trmtplant	tmntplant	19,995	2007	7967.00	28,853
00893	06/30/05	Effluent Makeup Pump 1	trmtplant	tmntplant	23,000	2005	7446.08	35,511
00894	06/30/05	Effluent Makeup Pump 2	trmtplant	tmntplant	23,000	2005	7446.08	35,511
00899	12/31/01	Breaker - #2 Generator	trmtplant	tmntplant	13,863	2001	6342.08	25,129
00900	12/31/01	Breaker - #3 Generator	trmtplant	tmntplant	13,863	2001	6342.08	25,129
00901	03/23/05	Reclaimed Pump 4	trmtplant	tmntplant	11,647	2005	7446.08	17,982
00903	06/30/07	Piping	trmtplant	tmntplant	42,054	2007	7967.00	60,683
00920	06/30/07	Piping	trmtplant	tmntplant	43,337	2007	7967.00	62,536
00923	12/31/01	Day Tank Generators 2 3	trmtplant	tmntplant	10,900	2001	6342.08	19,758
00929	12/31/01	Cogen Train Air Cooled Water C	trmtplant	tmntplant	15,012	2001	6342.08	27,212
00930	06/30/06	Blending Unit 1 Emulsion Polym	trmtplant	tmntplant	32,216	2006	7751.25	47,782
00931	06/30/06	Blending Unit 1 Manich Polymer	trmtplant	tmntplant	32,216	2006	7751.25	47,782
00932	06/30/06	Blending Unit 1 Water Booster	trmtplant	tmntplant	32,216	2006	7751.25	47,782
00933	06/30/06	Blending Unit 2 Emulsion Polym	trmtplant	tmntplant	32,216	2006	7751.25	47,782
00934	06/30/06	Blending Unit 2 Manich Polymer	trmtplant	tmntplant	32,216	2006	7751.25	47,782
00935	06/30/06	Blending Unit 2 Water Booster	trmtplant	tmntplant	32,216	2006	7751.25	47,782
00938	12/31/01	Cogen Heat Exchanger Proj 142	trmtplant	tmntplant	11,414	2001	6342.08	20,689
00945	06/30/06	Polymer Room Sump	trmtplant	tmntplant	33,608	2006	7751.25	49,846
00946	09/30/03	Grinder, 2 Channel Monster	trmtplant	tmntplant	16,083	2003	6694.58	27,618
00947	09/30/03	Grinder, 2 Channel Monster	trmtplant	tmntplant	16,083	2003	6694.58	27,618
00983	06/30/09	RAS Control Valve Sec Clarif 4	trmtplant	tmntplant	115,516	2009	8570.08	154,958
00985	06/30/07	Hot Water Pump 1	trmtplant	tmntplant	39,004	2007	7967.00	56,282
00986	06/30/07	Hot Water Pump 2	trmtplant	tmntplant	39,004	2007	7967.00	56,282
01002	06/30/06	Polymer Tank 1 Mixer	trmtplant	tmntplant	38,458	2006	7751.25	57,040

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01003	06/30/06	Polymer Tank 2 Mixer	trmtplant	tmntplant	38,458	2006	7751.25	57,040
01005	06/30/05	Dig 3 Mixing Pump	trmtplant	tmntplant	30,296	2005	7446.08	46,775
01011	06/30/07	Cogen 1 Hot Water Circ Pump	trmtplant	tmntplant	41,040	2007	7967.00	59,221
01012	06/30/07	Cogen 4 Hot Water Circ Pump	trmtplant	tmntplant	41,040	2007	7967.00	59,221
01022	06/30/07	Piping	trmtplant	tmntplant	112,083	2007	7967.00	161,734
01033	06/30/07	Hydraulic Pwr Unit for Headgat	trmtplant	tmntplant	57,145	2007	7967.00	82,460
01035	06/30/06	Fuel Air Ration Controller	trmtplant	tmntplant	20,812	2006	7751.25	30,868
01036	06/30/06	Fuel Air Ration Controller	trmtplant	tmntplant	20,812	2006	7751.25	30,868
01045	06/30/05	Sludge Pump Rm 1 Gas LACP	trmtplant	tmntplant	16,500	2005	7446.08	25,475
01046	06/30/05	Sludge PUmP Rm 3 Gas LACP	trmtplant	tmntplant	16,500	2005	7446.08	25,475
01049	12/31/01	Compressor and Tank Generator	trmtplant	tmntplant	15,114	2001	6342.08	27,398
01053	10/05/01	Breaker Main Tie	trmtplant	tmntplant	20,493	2001	6342.08	37,147
01054	12/31/01	Breaker A Buss Main	trmtplant	tmntplant	20,493	2001	6342.08	37,147
01055	12/31/01	Breaker B Buss Main	trmtplant	tmntplant	20,493	2001	6342.08	37,147
01077	06/30/09	Blower 10	trmtplant	tmntplant	547,866	2009	8570.08	734,933
01092	06/30/07	Digester Mix Pump 6A	trmtplant	tmntplant	51,820	2007	7967.00	74,776
01093	06/30/07	Digester Mix Pump 6b	trmtplant	tmntplant	51,820	2007	7967.00	74,776
01096	06/30/07	Trench B Undgnd Chem Pipe	trmtplant	tmntplant	173,138	2007	7967.00	249,836
01118	12/31/01	Cogen Gas Booster Blowers Proj	trmtplant	tmntplant	24,260	2001	6342.08	43,976
01119	12/31/01	Cogen Gas Booster Blowers Proj	trmtplant	tmntplant	24,260	2001	6342.08	43,976
01121	06/30/05	Odor Scrubber 18 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01122	06/30/05	Odor Scrubber 1 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01123	06/30/05	Odor Scrubber 10 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01124	06/30/05	Odor Scrubber 11 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01125	06/30/05	Odor Scrubber 12 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01126	06/30/05	Odor Scrubber 13 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01127	06/30/05	Odor Scrubber 14 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01128	06/30/05	Odor Scrubber 15 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01129	06/30/05	Odor Scrubber 16 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01130	06/30/05	Odor Scrubber 17 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01131	06/30/05	Odor Scrubber 2 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01132	06/30/05	Odor Scrubber 3 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01133	06/30/05	Odor Scrubber 4 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01134	06/30/05	Odor Scrubber 5 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01135	06/30/05	Odor Scrubber 6 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01136	06/30/05	Odor Scrubber 7 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01137	06/30/05	Odor Scrubber 8 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01138	06/30/05	Odor Scrubber 9 Upgrade	trmtplant	tmntplant	41,015	2005	7446.08	63,324
01143	06/30/07	Hot Water Pump 3	trmtplant	tmntplant	56,072	2007	7967.00	80,911
01154	06/30/07	Boiler Expansion Tank	trmtplant	tmntplant	58,730	2007	7967.00	84,746
01160	06/30/06	Centrifuge 1 Sludge Feed Pump	trmtplant	tmntplant	57,446	2006	7751.25	85,201
01161	06/30/06	Centrifuge 2 Sludge Feed Pump	trmtplant	tmntplant	57,446	2006	7751.25	85,201
01162	06/30/06	Centrifuge 3 Sludge Feed Pump	trmtplant	tmntplant	57,446	2006	7751.25	85,201
01163	06/30/06	Centrifuge 4 Sludge Feed Pump	trmtplant	tmntplant	57,446	2006	7751.25	85,201
01164	06/30/07	Cogen 1 Heat Exchanger	trmtplant	tmntplant	80,665	2007	7967.00	116,400
01165	06/30/07	Cogen 4 Heat Exchanger	trmtplant	tmntplant	80,665	2007	7967.00	116,400
01166	06/30/06	Process Piping	trmtplant	tmntplant	115,276	2006	7751.25	170,973
01188	06/30/06	Sludge Grinder 1	trmtplant	tmntplant	62,226	2006	7751.25	92,291
01189	06/30/06	Sludge Grinder 2	trmtplant	tmntplant	62,226	2006	7751.25	92,291
01203	06/30/07	Digester 4/5 20" Crsvr Valve	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01204	06/30/07	Digester 4/5 24" Crsovr Valve	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01205	06/30/07	Digester 5 20" Plug Valve Low	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01206	06/30/07	Digester 5 20" Plug Valve Upp	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01207	06/30/07	Digester 5 24" Plug Valve	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01208	06/30/07	Digester 5 24" Plug Valve	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01209	06/30/07	digester 5 Mix Pump	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01210	06/30/07	digester 5 Mix Pump	trmtplant	tmntplant	68,912	2007	7967.00	99,439
01212	06/30/07	Hot Water Boiler 6 Pump 2	trmtplant	tmntplant	69,526	2007	7967.00	100,325
01214	12/31/96	Hayward Marsh Improvements B-2	trmtplant	tmntplant	13,946	1996	5622.17	28,517
01241	12/31/01	Cogen Activated Carbon Tank Pr	trmtplant	tmntplant	33,040	2001	6342.08	59,892
01242	12/31/01	Cogen Activated Carbon Tank Pr	trmtplant	tmntplant	33,040	2001	6342.08	59,892
01246	06/30/07	Vactor Pit	trmtplant	tmntplant	100,723	2007	7967.00	145,342
01300	06/30/07	Main Hot Water Circ Pump 2	trmtplant	tmntplant	88,094	2007	7967.00	127,120
01305	08/31/03	Valves, ARV Isolation on Force	trmtplant	tmntplant	27,461	2003	6694.58	47,157
01314	06/30/06	Wemco Hydorstal Pump	trmtplant	tmntplant	111,173	2006	7751.25	164,886
01320	06/30/07	Hot Water Boiler 6 Pump 1	trmtplant	tmntplant	95,436	2007	7967.00	137,713
01325	10/14/03	Pump, Internalift #3	trmtplant	tmntplant	29,120	2003	6694.58	50,007
01326	10/14/03	Pumps, Internalift #1	trmtplant	tmntplant	29,120	2003	6694.58	50,007
01329	06/30/07	Main Hot Water Circ Pump 1	trmtplant	tmntplant	96,731	2007	7967.00	139,582
01338	06/30/04	Mixing Pump, Sludge	trmtplant	tmntplant	60,000	2004	7115.08	96,946
01352	06/30/06	#3 GBT	trmtplant	tmntplant	48,816	2006	7751.25	72,402
01353	06/30/07	Piping	trmtplant	tmntplant	274,647	2007	7967.00	396,314
01357	12/31/00	Soil Scrubber & W Reclamation	trmtplant	tmntplant	61,403	2000	6221.17	113,469
01361	09/30/03	#1 GBT Overhaul	trmtplant	tmntplant	32,223	2003	6694.58	55,335



**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01365	06/30/06	Blended Polymer Tank 1	trmtplant	tmntplant	102,647	2006	7751.25	152,242
01366	06/30/06	Blended Polymer Tank 2	trmtplant	tmntplant	102,647	2006	7751.25	152,242
01371	06/30/07	Digester 5 Mixing Pump	trmtplant	tmntplant	111,351	2007	7967.00	160,678
01375	12/31/92	Pump Div 85 (part of plant)	trmtplant	tmntplant	18,845	1992	4984.83	43,461
01394	12/31/97	Hayward Marsh Improvements B-1	trmtplant	tmntplant	26,603	1997	5825.08	52,503
01400	06/30/06	Centrifuge 1 Clsfy Conveyor	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01401	06/30/06	Centrifuge 2 Clsfy Conveyor	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01402	06/30/06	Centrifuge 3 Clsfy Conveyor	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01403	06/30/06	Centrifuge 4 Clsfy Conveyor	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01404	06/30/06	Hopper 1 Distrib Conveyor	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01405	06/30/06	Hopper 1 Loading Conveyor 1	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01406	06/30/06	Hopper 1 Loading Conveyor 2	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01407	06/30/06	Hopper 2 Distrib Conveyor	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01408	06/30/06	Hopper 2 Loading Conveyor 1	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01409	06/30/06	Hopper 2 Loading Conveyor 2	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01410	06/30/06	Horizontal Collec Conveyor 1	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01411	06/30/06	Horizontal Collec Conveyor 2	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01412	06/30/06	Inclined Collec Conveyor 1	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01413	06/30/06	Inclined Collec Conveyor 2	trmtplant	tmntplant	119,175	2006	7751.25	176,755
01424	12/31/84	Concrete/Rebar Excavation Prep	trmtplant	tmntplant	35,192	1984	4146.00	97,583
01436	06/30/05	MMC 5	trmtplant	tmntplant	125,000	2005	7446.08	192,993
01453	06/30/05	Effluent Screen Rehab	trmtplant	tmntplant	135,891	2005	7446.08	209,807
01454	06/30/05	Effluent Screen Rehab	trmtplant	tmntplant	135,891	2005	7446.08	209,807
01458	12/31/83	FECL Storage Tank Add 1983 Pro	trmtplant	tmntplant	25,000	1983	4066.00	70,686
01460	12/31/91	Gas Compressor Room Vent	trmtplant	tmntplant	25,503	1991	4835.08	60,638
01478	06/30/07	Piping	trmtplant	tmntplant	447,041	2007	7967.00	645,076
01494	12/31/89	Alvarado Plant Improvements FY	trmtplant	tmntplant	31,842	1989	4615.00	79,321
01513	06/30/06	Aeration Bsn 1 Diffusers	trmtplant	tmntplant	50,244	2006	7751.25	74,519
01525	06/30/07	Thickener Tank 1	trmtplant	tmntplant	304,489	2007	7967.00	439,375
01527	06/30/07	Thickener Tank 2	trmtplant	tmntplant	312,694	2007	7967.00	451,214
01541	06/30/05	Aeration Bsn Diffuser Tank 4	trmtplant	tmntplant	59,493	2005	7446.08	91,853
01550	12/31/01	Generator #4 Rebuilt Proj 142	trmtplant	tmntplant	61,221	2001	6342.08	110,975
01552	12/31/94	Hetch Hetchy (Phase 1)	trmtplant	tmntplant	48,643	1994	5407.58	103,413
01554	12/31/91	Hoist Installations	trmtplant	tmntplant	48,020	1991	4835.08	114,176
01556	12/31/00	Underground Diesel Tank Improv	trmtplant	tmntplant	173,950	2000	6221.17	321,448
01558	06/30/06	Odor Scrubber	trmtplant	tmntplant	364,224	2006	7751.25	540,201
01569	06/30/09	Drive & Mech Sec Clarif 4	trmtplant	tmntplant	985,640	2009	8570.08	1,322,184

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01575	12/31/89	Treatment Plant Improvements F	trmtplant	tmntplant	56,228	1989	4615.00	140,068
01584	12/31/79	PUMPS	trmtplant	tmntplant	60,000	1979	3003.00	229,697
01596	06/30/06	Centrifuge 1	trmtplant	tmntplant	374,017	2006	7751.25	554,726
01597	06/30/06	Centrifuge 2	trmtplant	tmntplant	374,017	2006	7751.25	554,726
01598	06/30/06	Centrifuge 3	trmtplant	tmntplant	374,017	2006	7751.25	554,726
01599	06/30/06	Centrifuge 4	trmtplant	tmntplant	374,017	2006	7751.25	554,726
01620	06/30/06	Process Piping	trmtplant	tmntplant	867,119	2006	7751.25	1,286,072
01632	12/31/95	Secondary Containment: S Hypo	trmtplant	tmntplant	91,800	1995	5471.17	192,895
01638	12/31/99	WW Equalization Storage Sewer	trmtplant	tmntplant	278,472	1999	6059.50	528,327
01641	06/30/06	Centrifuge PLC	trmtplant	tmntplant	515,102	2006	7751.25	763,977
01675	12/31/92	Cathodic Protection System	trmtplant	tmntplant	109,169	1992	4984.83	251,772
01688	12/31/02	Hot Water Piping for Plant Pro	trmtplant	tmntplant	764,823	2002	6538.00	1,344,852
01695	12/31/84	Electrical Eng Generator Proj	trmtplant	tmntplant	140,000	1984	4146.00	388,201
01708	06/30/07	sec Clarifier 2 Tank	trmtplant	tmntplant	1,210,783	2007	7967.00	1,747,149
01710	12/31/93	Inka Rehab C.M. & Cons.	trmtplant	tmntplant	152,215	1993	5210.42	335,849
01712	12/31/01	Generator #1 Proj 142	trmtplant	tmntplant	419,645	2001	6342.08	760,692
01718	12/31/84	Underground Piping Eng Generat	trmtplant	tmntplant	265,115	1984	4146.00	735,129
01736	06/30/05	Proj 169 Digester 1 & 3 Rehab	trmtplant	tmntplant	625,621	2005	7446.08	965,922
01743	12/31/89	Plant Improve FYE 063090 Cost	trmtplant	tmntplant	204,236	1989	4615.00	508,767
01744	12/31/84	Non Structural Costs Engr. E	trmtplant	tmntplant	199,542	1984	4146.00	553,304
01746	12/31/95	Reclaimed Water Pipeline	trmtplant	tmntplant	225,625	1995	5471.17	474,095
01749	06/30/04	Proj 164 Digester 2 Dome Repai	trmtplant	tmntplant	744,871	2004	7115.08	1,203,538
01756	12/31/79	Tanks - Digester Insulation Co	trmtplant	tmntplant	300,000	1979	3003.00	1,148,483
01764	12/31/90	Hoist Installations FYE 6/30/9	trmtplant	tmntplant	249,726	1990	4731.92	606,716
01766	12/31/90	Plant Improvments FYE 06/30/91	trmtplant	tmntplant	280,107	1990	4731.92	680,527
01771	12/31/01	Cogen Proj 142 Mgmt & Overhead	trmtplant	tmntplant	721,163	2001	6342.08	1,307,255
01779	12/31/98	Generator #4 PROJ 28-72	trmtplant	tmntplant	449,856	1998	5920.42	873,534
01781	12/31/95	Hayward Marsh Improvements B-2	trmtplant	tmntplant	361,837	1995	5471.17	760,311
01783	12/31/00	Alvarado WWTF Upgrade 28-053	trmtplant	tmntplant	1,411,093	2000	6221.17	2,607,607
01786	12/31/62	Plant 1962 Proj Chlorine Conta	trmtplant	tmntplant	355,000	1962	872.00	4,680,264
01811	12/31/90	Gravity Belt Thicken Joint Sea	trmtplant	tmntplant	764,209	1990	4731.92	1,856,665
01813	06/30/05	Proj 135 Plant Mech Inprovemen	trmtplant	tmntplant	2,136,284	2005	7446.08	3,298,296
01821	12/31/84	Cogeneration Equipment Eng Gen	trmtplant	tmntplant	530,000	1984	4146.00	1,469,620
01828	12/31/97	Reclaimed Water Demo	trmtplant	tmntplant	782,870	1997	5825.08	1,545,062
01829	06/30/05	Proj 135 Plant Mech Inprovemen	trmtplant	tmntplant	2,658,207	2005	7446.08	4,104,113
01847	12/31/96	Alvarado Wastewater Treatment	trmtplant	tmntplant	1,106,618	1996	5622.17	2,262,833
01850	12/31/90	Plant Capacity ImprovementsFYE	trmtplant	tmntplant	1,104,592	1990	4731.92	2,683,634

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
01851	12/31/79	Piping--All Types 50 Yr Life	trmtplant	tmntplant	1,401,850	1979	3003.00	5,366,667
01863	12/31/89	Engine Generator - Standby	trmtplant	tmntplant	1,410,757	1989	4615.00	3,514,301
01868	12/31/95	Hayward Marsh Improvements B-1	trmtplant	tmntplant	1,714,082	1995	5471.17	3,601,721
01875	12/31/01	Alvarado Pump Addition & Autom	trmtplant	tmntplant	4,611,139	2001	6342.08	8,358,624
01886	12/31/88	Treatment Plant Expansion FYE	trmtplant	tmntplant	4,778,806	1988	4519.00	12,157,255
01890	12/31/92	Improvements - Interim FY93	trmtplant	tmntplant	3,269,040	1992	4984.83	7,539,249
01900	12/31/95	Alvarado Wastewater Treatment	trmtplant	tmntplant	38,728,054	1995	5471.17	81,377,472
01909	01/01/10	POLYMER BLENDING UNIT 2	trmtplant	tmntplant	44,628	2010	8798.92	58,309
01910	01/01/10	ACTUATOR, E INLET SLIDE GATE	trmtplant	tmntplant	11,953	2010	8798.92	15,618
01919	01/01/10	SPARE BEARING ASSEMBLY	trmtplant	tmntplant	17,944	2010	8798.92	23,445
01941	01/01/10	PROTECTION	trmtplant	tmntplant	54,713	2010	8798.92	71,486
01942	01/01/10	PROTECTION	trmtplant	tmntplant	51,703	2010	8798.92	67,553
01943	01/01/10	DEGRITTER BUILDING	trmtplant	tmntplant	138,574	2010	8798.92	181,056
01963	01/01/10	MIX PUMP NO. 2	trmtplant	tmntplant	201,285	2010	8798.92	262,991
01964	01/01/10	MIX PUMP NO 2 MOTOR	trmtplant	tmntplant	78,772	2010	8798.92	102,920
01965	01/01/10	DIGESTER NO 2 RECIRCULATION PUMP	trmtplant	tmntplant	55,805	2010	8798.92	72,913
01966	01/01/10	MOTOR	trmtplant	tmntplant	30,631	2010	8798.92	40,021
01967	01/01/10	VALV	trmtplant	tmntplant	22,419	2010	8798.92	29,292
01968	01/01/10	VALV)	trmtplant	tmntplant	22,419	2010	8798.92	29,292
01969	01/01/10	INLET	trmtplant	tmntplant	22,419	2010	8798.92	29,292
01970	01/01/10	WEST VIEWPORT BUTTERFLY VALVE	trmtplant	tmntplant	15,531	2010	8798.92	20,293
01971	01/01/10	EAST VIEWPORT BUTTERFLY VALVE	trmtplant	tmntplant	15,531	2010	8798.92	20,293
01974	01/01/10	EXHAUST FAN	trmtplant	tmntplant	18,233	2010	8798.92	23,822
01975	01/01/10	EXHAUST FAN MOTOR	trmtplant	tmntplant	17,152	2010	8798.92	22,410
01978	01/01/10	RAS FLOWMETER SEC CLARIF3	trmtplant	tmntplant	63,774	2010	8798.92	83,324
01979	01/01/10	RAS CONTROLVALVE SEC CLARIF 3	trmtplant	tmntplant	115,516	2010	8798.92	150,928
01980	01/01/10	RAS ISOLATION VALVE SEC CLARIF 3	trmtplant	tmntplant	63,774	2010	8798.92	83,324
01981	01/01/10	RAS VALVE CONTROL PANEL SEC CLARIF 3	trmtplant	tmntplant	17,084	2010	8798.92	22,321
01982	01/01/10	DRIVE AND MECH SED CLARIF 3	trmtplant	tmntplant	985,640	2010	8798.92	1,287,797
01983	01/01/10	RAS FLOWMETER SEC CLARIF 1	trmtplant	tmntplant	63,774	2010	8798.92	83,324
01984	01/01/10	RAS CONTROL VALVE SEC CLARIF 1	trmtplant	tmntplant	114,995	2010	8798.92	150,247
01985	01/01/10	RAS ISOLATION VALVE SEC CLARIF 1	trmtplant	tmntplant	63,774	2010	8798.92	83,324
01986	01/01/10	RAS VALVE CONTROL PANEL SEC CLARIF 1	trmtplant	tmntplant	17,084	2010	8798.92	22,321
01987	01/01/10	DRIVE AN MECH SEC CLARIF 1	trmtplant	tmntplant	1,286,504	2010	8798.92	1,680,894
02010	01/01/11	GENERATOR 7 MAIN BREAKER	trmtplant	tmntplant	13,557	2011	9069.83	17,184
02011	01/01/11	GBT CAKE TOTAL SOLIDS METER	trmtplant	tmntplant	24,365	2011	9069.83	30,883
02022	01/01/11	WEST SUPPLY FAN	trmtplant	tmntplant	49,024	2011	9069.83	62,139

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02023	01/01/11	EAST SUPPLY FAN	trmtplant	tmntplant	49,024	2011	9069.83	62,139
02031	01/01/11	ODOR DISPERSION WALL	trmtplant	tmntplant	720,789	2011	9069.83	913,624
02038	01/01/11	STACK 14 MODIFICATION	trmtplant	tmntplant	20,012	2011	9069.83	25,366
02042	01/01/11	STACK 18 MODIFICATION	trmtplant	tmntplant	20,012	2011	9069.83	25,366
02088	01/01/11	CLARIFIER 5 COATING	trmtplant	tmntplant	22,232	2011	9069.83	28,179
02089	01/01/11	CLARIFIER 6 COATING	trmtplant	tmntplant	22,232	2011	9069.83	28,179
02223	01/01/11	LIFT PUMP 5	trmtplant	tmntplant	295,866	2011	9069.83	375,020
02224	01/01/11	LIFT PUMP 6	trmtplant	tmntplant	295,854	2011	9069.83	375,004
02225	01/01/11	LIFT PUMP 7	trmtplant	tmntplant	295,854	2011	9069.83	375,004
02226	01/01/11	LIFT PUMP 8	trmtplant	tmntplant	295,854	2011	9069.83	375,004
02250	06/30/12	PRIMARY DIGESTER #1 DOME COATING	trmtplant	tmntplant	124,021	2012	9308.17	153,176
02276	06/30/12	MCC-3 MAIN BREAKER	trmtplant	tmntplant	15,231	2012	9308.17	18,812
02287	06/30/12	DP-1 MAIN PANEL	trmtplant	tmntplant	84,741	2012	9308.17	104,662
02288	06/30/12	DP-1 PULL BOX	trmtplant	tmntplant	18,410	2012	9308.17	22,738
02319	01/01/13	GRIT HOPPER	trmtplant	tmntplant	122,547	2013	9546.67	147,574
02322	01/01/13	PRIMARY DIGESTER #4 DOME COATING	trmtplant	tmntplant	176,245	2013	9546.67	212,238
02323	01/01/13	SWGR-1 ENCLOSURE	trmtplant	tmntplant	602,939	2013	9546.67	726,073
02324	01/01/13	480V SWGR-1	trmtplant	tmntplant	544,637	2013	9546.67	655,864
02325	01/01/13	208/120V LIGHTING PANEL	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02326	01/01/13	"B" BUSS TVSS DISPLAY & UPS-SWGR-1	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02327	01/01/13	BUSS	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02328	01/01/13	AUXILIARY	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02329	01/01/13	TR-LP-1 FEEDER BREAKER	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02330	01/01/13	GENERATOR	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02331	01/01/13	AUXILIARY	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02332	01/01/13	FEEDER	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02333	01/01/13	SWB-5 FEEDER BREAKER - ALVARADO PS	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02334	01/01/13	GENERATOR	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02335	01/01/13	GENERATOR	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02336	01/01/13	4 FEEDER	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02337	01/01/13	ROOM 1	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02338	01/01/13	FEEDER	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02339	01/01/13	1&3	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02340	01/01/13	PLC-SWGR-1	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02341	01/01/13	TIE BREAKER	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02342	01/01/13	AUXILIARY	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02343	01/01/13	CONTROL	trmtplant	tmntplant	46,145	2013	9546.67	55,569

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02344	01/01/13	1-4 FEEDER	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02345	01/01/13	ROOM	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02346	01/01/13	WATER	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02347	01/01/13	5&6	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02348	01/01/13	ROOM	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02349	01/01/13	FEEDER	trmtplant	tmntplant	46,145	2013	9546.67	55,569
02350	01/01/13	SPARE	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02351	01/01/13	AUXILIARY	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02352	01/01/13	SPARE	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02353	01/01/13	SWBD-3 BACK-UP FEEDER	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02354	01/01/13	AUXILIARY	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02355	01/01/13	"A" BUSS TVSS DISPLAY & CISCO SWITCH	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02356	01/01/13	MAIN BREAKER - MAIN FEEDER TO BUSS	trmtplant	tmntplant	22,806	2013	9546.67	27,463
02357	01/01/13	12KVTO 480V TRANSFORMER (TR-1A)	trmtplant	tmntplant	162,531	2013	9546.67	195,723
02358	01/01/13	12KW TO 480V TRANSFORMER (TR-1B)	trmtplant	tmntplant	160,260	2013	9546.67	192,989
02359	01/01/13	SWGR-1 HVAC UNIT	trmtplant	tmntplant	44,503	2013	9546.67	53,591
02415	01/01/14	PRIMARY CLARIFIER TANK #1	trmtplant	tmntplant	1,931,480	2014	9806.00	2,264,419
02416	01/01/14	PRIMARY CLARIFIER #2	trmtplant	tmntplant	1,930,248	2014	9806.00	2,262,975
02417	01/01/14	PRIMARY CLARIFIER #3	trmtplant	tmntplant	1,930,248	2014	9806.00	2,262,975
02418	01/01/14	PRIMARY CLARIFIER #4	trmtplant	tmntplant	1,930,248	2014	9806.00	2,262,975
02419	01/01/14	MECHANISM	trmtplant	tmntplant	397,093	2014	9806.00	465,542
02420	01/01/14	MECHANISM	trmtplant	tmntplant	397,093	2014	9806.00	465,542
02421	01/01/14	MECHANISM	trmtplant	tmntplant	397,093	2014	9806.00	465,542
02422	01/01/14	MECHANISM	trmtplant	tmntplant	397,093	2014	9806.00	465,542
02423	01/01/14	SCUM MIXER PUMP	trmtplant	tmntplant	98,591	2014	9806.00	115,586
02424	01/01/14	REMOTE INPUT/OUTPUT #9	trmtplant	tmntplant	63,264	2014	9806.00	74,170
02425	01/01/14	PRIMARY CLARIFIERS #1-4 SUPPLY FAN #1	trmtplant	tmntplant	25,295	2014	9806.00	29,655
02426	01/01/14	PRIMARY CLARIFIERS #1-4 SUPPLY FAN #2	trmtplant	tmntplant	25,295	2014	9806.00	29,655
02427	01/01/14	MONITORING	trmtplant	tmntplant	21,088	2014	9806.00	24,723
02428	01/01/14	MINI POWER CENTER (MPC-1)	trmtplant	tmntplant	21,088	2014	9806.00	24,723
02429	01/01/14	SLUDGE PUMP ROOM #1 SUPPLY FAN	trmtplant	tmntplant	16,908	2014	9806.00	19,823
02430	01/01/14	SUMP PUMP	trmtplant	tmntplant	24,859	2014	9806.00	29,144
02431	01/01/14	SUMP PUMPS LCP	trmtplant	tmntplant	34,706	2014	9806.00	40,688
02432	01/01/14	PANEL	trmtplant	tmntplant	36,522	2014	9806.00	42,817
02433	01/01/14	SUMP PUMP	trmtplant	tmntplant	40,356	2014	9806.00	47,312
02434	01/01/14	COMPACTOR	trmtplant	tmntplant	47,713	2014	9806.00	55,937
02435	01/01/14	#1	trmtplant	tmntplant	48,576	2014	9806.00	56,949

**Union Sanitary District  
Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02436	01/01/14	#2	trmtplant	tmntplant	48,576	2014	9806.00	56,949
02437	01/01/14	MANUAL TROLLEY HOIST	trmtplant	tmntplant	50,041	2014	9806.00	58,667
02438	01/01/14	MANUAL HOIST #1	trmtplant	tmntplant	50,041	2014	9806.00	58,667
02439	01/01/14	MANUAL HOIST #2	trmtplant	tmntplant	50,041	2014	9806.00	58,667
02440	01/01/14	MANUAL HOIST #3	trmtplant	tmntplant	50,041	2014	9806.00	58,667
02441	01/01/14	MANUAL HOIST #4	trmtplant	tmntplant	50,041	2014	9806.00	58,667
02442	01/01/14	WASHER COMPACTOR #2 LCP-A	trmtplant	tmntplant	50,899	2014	9806.00	59,672
02443	01/01/14	WASHER COMPACTOR #1 LCP-A	trmtplant	tmntplant	50,899	2014	9806.00	59,672
02444	01/01/14	WASHER COMPACTOR #1 LCP-B	trmtplant	tmntplant	50,899	2014	9806.00	59,672
02445	01/01/14	WASHER COMPACTOR #2 LCP-B	trmtplant	tmntplant	50,899	2014	9806.00	59,672
02446	01/01/14	COMPACTORS	trmtplant	tmntplant	53,144	2014	9806.00	62,305
02447	01/01/14	PUMP LCP	trmtplant	tmntplant	53,269	2014	9806.00	62,452
02448	01/01/14	SUMP PUMP #2	trmtplant	tmntplant	53,875	2014	9806.00	63,161
02449	01/01/14	SUMP PUMP #1	trmtplant	tmntplant	53,875	2014	9806.00	63,161
02450	01/01/14	HYPO CONTAINMENT AREA SUMP PUMP	trmtplant	tmntplant	57,843	2014	9806.00	67,814
02451	01/01/14	LCP	trmtplant	tmntplant	57,843	2014	9806.00	67,814
02452	01/01/14	CONTAINMENT	trmtplant	tmntplant	57,843	2014	9806.00	67,814
02453	01/01/14	PUMP #1	trmtplant	tmntplant	77,160	2014	9806.00	90,460
02454	01/01/14	PUMP #2	trmtplant	tmntplant	77,160	2014	9806.00	90,460
02455	01/01/14	ROOM	trmtplant	tmntplant	97,632	2014	9806.00	114,462
02456	01/01/14	SLIDING DOOR BAR SCREEN ROOM	trmtplant	tmntplant	97,632	2014	9806.00	114,462
02457	01/01/14	BLOWER ROOM EXHAUSE FAN	trmtplant	tmntplant	107,750	2014	9806.00	126,323
02458	01/01/14	BLOWER ROOM SUPPLY FAN	trmtplant	tmntplant	107,750	2014	9806.00	126,323
02459	01/01/14	PANEL LCP	trmtplant	tmntplant	116,406	2014	9806.00	136,471
02460	01/01/14	SHAFTLESS SCREW CONVEYOR #2	trmtplant	tmntplant	333,953	2014	9806.00	391,518
02461	01/01/14	SHAFTLESS SCREW CONVEYOR #1	trmtplant	tmntplant	333,953	2014	9806.00	391,518
02462	01/01/14	WASHER COMPACTOR #1`	trmtplant	tmntplant	366,010	2014	9806.00	429,101
02463	01/01/14	WASHER COMPACTOR #2	trmtplant	tmntplant	366,010	2014	9806.00	429,101
02464	01/01/14	ROOM	trmtplant	tmntplant	97,632	2014	9806.00	114,462
02465	01/01/14	SLIDING DOOR BAR SCREEN ROOM	trmtplant	tmntplant	57,843	2014	9806.00	67,814
02466	01/01/14	HYPO CONTAINMENT AREA SUMP PUMP	trmtplant	tmntplant	57,843	2014	9806.00	67,814
02467	01/01/14	LCP	trmtplant	tmntplant	57,843	2014	9806.00	67,814
02468	01/01/14	SUMP PUMP	trmtplant	tmntplant	77,160	2014	9806.00	90,460
02469	01/01/14	PUMP #1	trmtplant	tmntplant	77,160	2014	9806.00	90,460
02470	01/01/14	PUMP #2	trmtplant	tmntplant	53,269	2014	9806.00	62,452
02471	01/01/14	PUMP LCP	trmtplant	tmntplant	53,144	2014	9806.00	62,305
02472	01/01/14	COMPACTORS	trmtplant	tmntplant	50,899	2014	9806.00	59,672

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02473	01/01/14	WASHER COMPACTOR #1 LCP-B	trmtplant	tmntplant	50,899	2014	9806.00	59,672
02474	01/01/14	WASHER COMPACTOR #2 LCP-B	trmtplant	tmntplant	50,041	2014	9806.00	58,667
02492	01/01/14	PLC10	trmtplant	tmntplant	113,327	2014	9806.00	132,861
02493	01/01/14	PLC13	trmtplant	tmntplant	145,999	2014	9806.00	171,166
02494	01/01/14	PLC16	trmtplant	tmntplant	75,065	2014	9806.00	88,005
02495	01/01/14	RIO5	trmtplant	tmntplant	123,775	2014	9806.00	145,111
02496	01/01/14	RIO11	trmtplant	tmntplant	137,667	2014	9806.00	161,397
02497	01/01/14	RIO15	trmtplant	tmntplant	69,512	2014	9806.00	81,494
02498	01/01/14	MCC 12	trmtplant	tmntplant	245,364	2014	9806.00	287,658
02499	01/01/14	R-7 RECTIFIER, HEAT MIX 2	trmtplant	tmntplant	58,521	2014	9806.00	68,608
02505	01/01/14	CATHODIC PROTECTION	trmtplant	tmntplant	43,764	2014	9806.00	51,308
02506	01/01/14	VALVE, 16" KNIFE GATE 1	trmtplant	tmntplant	25,198	2014	9806.00	29,542
02507	01/01/14	VALVE, 16" KNIFE GATE 2	trmtplant	tmntplant	25,198	2014	9806.00	29,542
02508	01/01/14	VALVE, 16" KNIFE GATE 3	trmtplant	tmntplant	25,198	2014	9806.00	29,542
02509	01/01/14	VALVE, 16" KNIFE GATE 4	trmtplant	tmntplant	25,198	2014	9806.00	29,542
02510	01/01/14	VALVE, 16" KNIFE GATE 5	trmtplant	tmntplant	25,198	2014	9806.00	29,542
02511	01/01/14	VALVE, 16" SWING CHECK 1	trmtplant	tmntplant	22,234	2014	9806.00	26,066
02512	01/01/14	VALVE, 16" SWING CHECK 2	trmtplant	tmntplant	22,234	2014	9806.00	26,066
02513	01/01/14	VALVE, 16" SWING CHECK 3	trmtplant	tmntplant	22,234	2014	9806.00	26,066
02514	01/01/14	VALVE, 16" SWING CHECK 4	trmtplant	tmntplant	22,234	2014	9806.00	26,066
02515	01/01/14	VALVE, 16" SWING CHECK 5	trmtplant	tmntplant	22,234	2014	9806.00	26,066
02516	01/01/14	PIPING, 16" RAS PUMP 1 DISCHARGE	trmtplant	tmntplant	74,113	2014	9806.00	86,888
02517	01/01/14	PIPING, 16" RAS PUMP 2 DISCHARGE	trmtplant	tmntplant	74,113	2014	9806.00	86,888
02518	01/01/14	PIPING, 16" RAS PUMP 3 DISCHARGE	trmtplant	tmntplant	74,113	2014	9806.00	86,888
02519	01/01/14	PIPING, 16" RAS PUMP 4 DISCHARGE	trmtplant	tmntplant	74,113	2014	9806.00	86,888
02520	01/01/14	PIPING, 16" RAS PUMP 5 DISCHARGE	trmtplant	tmntplant	74,113	2014	9806.00	86,888
02521	01/01/14	FORCE MAIN, 42" RAS, PS TO CB	trmtplant	tmntplant	41,503	2014	9806.00	48,657
02522	01/01/14	SODIUM HYPOCHLORITE SYSTEM RAS PS	trmtplant	tmntplant	11,117	2014	9806.00	13,033
02523	01/01/14	FLOW METER, RAS	trmtplant	tmntplant	14,823	2014	9806.00	17,378
02524	01/01/14	THICKENER #3 MECHANISM	trmtplant	tmntplant	472,834	2014	9806.00	554,339
02525	01/01/14	THICKENER #4 MECHANISM	trmtplant	tmntplant	472,834	2014	9806.00	554,339
02526	01/01/14	THICKENER #3 TANK	trmtplant	tmntplant	469,918	2014	9806.00	550,920
02527	01/01/14	THICKENER #4 TANK	trmtplant	tmntplant	469,918	2014	9806.00	550,920
02532	01/01/14	THICKENED PRIMARY SLUDGE PUMP #7	trmtplant	tmntplant	157,533	2014	9806.00	184,688
02533	01/01/14	THICKENED PRIMARY SLUDGE PUMP #6	trmtplant	tmntplant	157,533	2014	9806.00	184,688
02534	01/01/14	THICKENED PRIMARY SLUDGE PUMP #5	trmtplant	tmntplant	157,533	2014	9806.00	184,688
02538	01/01/14	VFD	trmtplant	tmntplant	28,273	2014	9806.00	33,147

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02539	01/01/14	VFD	trmtplant	tmntplant	28,273	2014	9806.00	33,147
02540	01/01/14	VFD	trmtplant	tmntplant	28,273	2014	9806.00	33,147
02541	01/01/14	PANEL 4	trmtplant	tmntplant	27,831	2014	9806.00	32,629
02542	01/01/14	PANEL 3	trmtplant	tmntplant	27,831	2014	9806.00	32,629
02543	01/01/14	RELOCATED GRINDER 4	trmtplant	tmntplant	22,088	2014	9806.00	25,896
02544	01/01/14	RELOCATED GRINDER 3	trmtplant	tmntplant	22,088	2014	9806.00	25,896
02545	01/01/14	FEEDER	trmtplant	tmntplant	14,843	2014	9806.00	17,402
02546	01/01/14	FEEDER	trmtplant	tmntplant	14,843	2014	9806.00	17,402
02547	01/01/14	FEEDER	trmtplant	tmntplant	14,843	2014	9806.00	17,402
02548	01/01/14	THICKENED SLDG GRINDER 4 BREAKER	trmtplant	tmntplant	14,843	2014	9806.00	17,402
02549	01/01/14	THICKENED SLDG GRINDER 3 BREAKER	trmtplant	tmntplant	14,843	2014	9806.00	17,402
02623	01/01/14	LIFT PUMP 1	trmtplant	tmntplant	95,673	2014	9806.00	112,165
02624	01/01/14	LIFT PUMP 2	trmtplant	tmntplant	95,673	2014	9806.00	112,165
02625	01/01/14	LIFT PUMP 3	trmtplant	tmntplant	95,673	2014	9806.00	112,165
02626	01/01/14	LIFT PUMP 4	trmtplant	tmntplant	102,884	2014	9806.00	120,618
02627	01/01/14	GEAR BOX 1	trmtplant	tmntplant	84,586	2014	9806.00	99,166
02628	01/01/14	GEAR BOX 2	trmtplant	tmntplant	84,586	2014	9806.00	99,166
02629	01/01/14	GEAR BOX 3	trmtplant	tmntplant	84,586	2014	9806.00	99,166
02630	01/01/14	GEAR BOX 4	trmtplant	tmntplant	84,586	2014	9806.00	99,166
02632	01/01/14	AERATION BASIN 1	trmtplant	tmntplant	112,829	2014	9806.00	132,278
02633	01/01/14	AERATION BASIN 2	trmtplant	tmntplant	112,829	2014	9806.00	132,278
02634	01/01/14	AERATION BASIN 3	trmtplant	tmntplant	112,829	2014	9806.00	132,278
02635	01/01/14	AERATION BASIN 4	trmtplant	tmntplant	112,829	2014	9806.00	132,278
02642	01/01/14	MCC 15 MAIN BREAKER	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02643	01/01/14	MCC15 PANEL BOARD B	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02644	01/01/14	MCC15 SUMP PUMPS	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02645	01/01/14	MCC15 PANEL BOARD C	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02646	01/01/14	MCC15 DRYWELL HOIST 2ND FLOOR	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02647	01/01/14	MCC15 WELDING RECEPTACLE	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02648	01/01/14	MCC15 PANEL BOARD S	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02649	01/01/14	MCC15 CHLORINE SAMPLE PUMP 6	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02650	01/01/14	MCC15 CHLORINE SAMPLE PUMP 7	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02651	01/01/14	MCC15 ALVARADO PS HEADGATE	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02652	01/01/14	MCC15 AIR COMPRESSOR 1	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02653	01/01/14	MCC15 AIR COMPRESSOR 2	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02654	01/01/14	MCC15 SUPPLY FAN 1	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02655	01/01/14	MCC15 EQUIPMENT ROOM HOIST	trmtplant	tmntplant	12,113	2014	9806.00	14,201



**Union Sanitary District  
Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02656	01/01/14	MCC15 ACCESSORY HOIST	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02657	01/01/14	UNIT	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02658	01/01/14	MCC15 SCRUBBER SUPPLY FAN	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02659	01/01/14	MCC15 SCRUBBER EXHAUSE FAN	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02660	01/01/14	MCC15 CHLORINE ANALYZER SHED	trmtplant	tmntplant	12,113	2014	9806.00	14,201
02661	01/01/14	MCC13 MAIN BREAKER	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02662	01/01/14	MCC13 WELDING RECEPTACLE	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02663	01/01/14	MCC13 CHANNEL MIXING BLOWER 1	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02664	01/01/14	MCC13 CHANNEL MIXING BLOWER 2	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02665	01/01/14	MCC13 CHANNEL MIXING BLOWER 3	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02666	01/01/14	MCC13 CHANNEL MIXING BLOWER 4	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02667	01/01/14	MCC13 PANEL Q	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02668	01/01/14	MCC13 ROLL UP DOOR	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02669	01/01/14	MCC13 SCRUBBER EXHAUST FAN	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02670	01/01/14	MCC13 AERATION TANK ACTUATOR 1	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02671	01/01/14	MCC13 AERATION TANK ACTUATOR 2	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02672	01/01/14	MCC13 AERATION TANK ACTUATOR 3	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02673	01/01/14	MCC13 AERATION TANK ACTUATOR 4	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02674	01/01/14	MCC13 VENTILATION FAN	trmtplant	tmntplant	14,878	2014	9806.00	17,442
02675	01/01/14	MCC14 MAIN BREAKER	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02676	01/01/14	MCC14 WELDING RECEPTACLE	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02677	01/01/14	MCC14 PANEL BOARD R	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02678	01/01/14	MCC14 LIFT PUMP 1	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02679	01/01/14	MCC14 LIFT PUMP 2	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02680	01/01/14	MCC14 LIFT PUMP 3	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02681	01/01/14	MCC14 LIFT PUMP 4	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02682	01/01/14	MCC14 SECONDARY CLARIFIER DRIVE 5	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02683	01/01/14	MCC14 SECONDARY CLARIFIER DRIVE 6	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02684	01/01/14	MCC14 SCUM PUMP 7	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02685	01/01/14	MCC14 SCUM PUMP 7	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02686	01/01/14	MCC14 DEWATERING PUMP	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02687	01/01/14	MCC14 EXHAUST FAN E-18	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02688	01/01/14	MCC14 VENT FAN EF-9	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02689	01/01/14	MCC14 PANEL AH	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02690	01/01/14	MCC14 RAS BOX GATE PANEL	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02691	01/01/14	MCC14 SCRUBBER EXHAUST FAN	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02692	01/01/14	MCC14 WAS PUMP 1	trmtplant	tmntplant	13,113	2014	9806.00	15,374

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02693	01/01/14	MCC14 WAS PUMP 2	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02694	01/01/14	MCC14 WAS PUMP 3	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02695	01/01/14	MCC14 RAS PUMP 5	trmtplant	tmntplant	13,113	2014	9806.00	15,374
02696	01/01/14	MCC27 MAIN BREAKER	trmtplant	tmntplant	53,558	2014	9806.00	62,790
02697	01/01/14	MCC27 RAS PUMP 1	trmtplant	tmntplant	47,400	2014	9806.00	55,570
02698	01/01/14	MCC27 RAS PUMP 2	trmtplant	tmntplant	47,400	2014	9806.00	55,570
02699	01/01/14	MCC27 RAS PUMP 3	trmtplant	tmntplant	47,400	2014	9806.00	55,570
02700	01/01/14	MCC27 RAS PUMP 4	trmtplant	tmntplant	47,400	2014	9806.00	55,570
02707	01/01/15	SUPER SHREDDER	trmtplant	tmntplant	24,802	2015	10335.00	27,589
02726	01/01/15	MOYNO PUMP	trmtplant	tmntplant	45,999	2015	10335.00	51,168
02731	01/01/15	HYPO TANK A	trmtplant	tmntplant	80,804	2015	10335.00	89,883
02732	01/01/15	HYPO TANK B	trmtplant	tmntplant	80,804	2015	10335.00	89,883
02733	01/01/15	FERROUS CHLORIDE TANK	trmtplant	tmntplant	83,701	2015	10335.00	93,107
02740	01/01/15	DIGESTER 5	trmtplant	tmntplant	919,829	2015	10335.00	1,023,187
02741	01/01/15	ISOLATION	trmtplant	tmntplant	11,594	2015	10335.00	12,897
02742	01/01/15	ISOLATION	trmtplant	tmntplant	11,594	2015	10335.00	12,897
02743	01/01/15	ISOLATION	trmtplant	tmntplant	11,594	2015	10335.00	12,897
02750	01/01/16	ACTUATOR	trmtplant	tmntplant	16,759	2016	10385.00	18,553
02751	01/01/16	ACTUATOR	trmtplant	tmntplant	16,759	2016	10385.00	18,553
02783	01/01/16	MAIN BREAKER POWER METER	trmtplant	tmntplant	17,770	2016	10385.00	19,671
02815	06/30/17	VFD: LIFT PUMP NO . 5 - PRJ 441	trmtplant	tmntplant	54,768	2017	10737.00	58,641
02816	06/30/17	VFD: LIFT PUMP NO . 6 - PRJ 441	trmtplant	tmntplant	54,768	2017	10737.00	58,641
02817	06/30/17	VFD: LIFT PUMP NO . 7 - PRJ 441	trmtplant	tmntplant	54,768	2017	10737.00	58,641
02818	06/30/17	VFD: LIFT PUMP NO . 8 - PRJ 441	trmtplant	tmntplant	54,768	2017	10737.00	58,641
02819	06/30/17	PLC 8 AERATION BASIN 5-7 PLC - PRJ 441	trmtplant	tmntplant	263,905	2017	10737.00	282,568
02820	06/30/17	VFD: SITE WASTE NO. 1 - PRJ 441	trmtplant	tmntplant	60,086	2017	10737.00	64,335
02821	06/30/17	VFD: SITE WASTE NO. 2 - PRJ 441	trmtplant	tmntplant	60,086	2017	10737.00	64,335
02822	06/30/17	VFD: SITE WASTE NO. 3 - PRJ 441	trmtplant	tmntplant	60,086	2017	10737.00	64,335
02823	06/30/17	VFD: SITE WASTE NO. 4 - PRJ 441	trmtplant	tmntplant	60,086	2017	10737.00	64,335
02824	06/30/17	PLC 46 - PRJ 441	trmtplant	tmntplant	63,444	2017	10737.00	67,931
02827	06/30/17	GROUND WATER PUMP NO. 1 - PRJ 448	trmtplant	tmntplant	8,455	2017	10737.00	9,053
02828	06/30/17	PANEL 448	trmtplant	tmntplant	46,548	2017	10737.00	49,840
02829	06/30/17	GROUND WATER PUMP NO. 2 - PRJ 448	trmtplant	tmntplant	8,455	2017	10737.00	9,053
02830	06/30/17	PANEL 448	trmtplant	tmntplant	46,548	2017	10737.00	49,840
02831	06/30/17	JIB CRANE NO. 1 - PRJ 448	trmtplant	tmntplant	44,382	2017	10737.00	47,520
02832	06/30/17	JIB CRANE NO. 2 - PRJ 448	trmtplant	tmntplant	44,382	2017	10737.00	47,520
02833	06/30/17	HEAT EXCHANGER NO. 3 - PRJ 448	trmtplant	tmntplant	74,428	2017	10737.00	79,691

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02834	06/30/17	HEAT EXCHANGER NO. 6 - PRJ 448	trmtplant	tmntplant	74,428	2017	10737.00	79,691
02835	06/30/17	BAR SCREEN #1 - PRJ 448	trmtplant	tmntplant	193,019	2017	10737.00	206,670
02845	06/30/17	448	trmtplant	tmntplant	74,514	2017	10737.00	79,783
02852	06/30/17	AB NO. 5 DIFFUSER MEMBRANES - PRJ 466	trmtplant	tmntplant	103,586	2017	10737.00	110,911
02853	06/30/17	AB NO. 6 DIFFUSER MEMBRANES - PRJ 466	trmtplant	tmntplant	103,586	2017	10737.00	110,911
02854	06/30/17	AB NO. 7 DIFFUSER MEMBRANES - PRJ 466	trmtplant	tmntplant	103,586	2017	10737.00	110,911
02860	06/30/17	490	trmtplant	tmntplant	39,005	2017	10737.00	41,764
02867	06/30/17	MCC 16 REPLACEMENT PART - PRJ 441	trmtplant	tmntplant	198,901	2017	10737.00	212,967
02870	01/01/18	SITE WASTE PUMPS 1 & 2	trmtplant	tmntplant	69,538	2018	11062.00	72,268
02871	01/01/18	SITE WASTE PUMP 4	trmtplant	tmntplant	55,440	2018	11062.00	57,617
02877	01/01/18	GBT POLY SKID	trmtplant	tmntplant	41,218	2018	11062.00	42,837
02885	01/01/18	APG-NEUROS TURBO BLOWER - PRJ 457	trmtplant	tmntplant	624,915	2018	11062.00	649,450
02886	01/01/18	TURBO BLOWER - CORE 1 - PRJ 457	trmtplant	tmntplant	199,086	2018	11062.00	206,902
02887	01/01/18	TURBO BLOWER - CORE 2 - PRJ 457	trmtplant	tmntplant	199,086	2018	11062.00	206,902
02888	01/01/18	TURBO BLOWER - VFD 1 - PRJ 457	trmtplant	tmntplant	55,333	2018	11062.00	57,505
02889	01/01/18	TURBO BLOWER - VFD 2 - PRJ 457	trmtplant	tmntplant	55,333	2018	11062.00	57,505
02890	01/01/18	457	trmtplant	tmntplant	4,436	2018	11062.00	4,610
02891	01/01/18	457	trmtplant	tmntplant	4,436	2018	11062.00	4,610
02892	01/01/18	PRJ 457	trmtplant	tmntplant	3,754	2018	11062.00	3,902
02893	01/01/18	PRJ 457	trmtplant	tmntplant	3,754	2018	11062.00	3,902
02894	01/01/18	457	trmtplant	tmntplant	6,654	2018	11062.00	6,915
02895	01/01/18	457	trmtplant	tmntplant	6,654	2018	11062.00	6,915
02896	01/01/18	457	trmtplant	tmntplant	10,071	2018	11062.00	10,467
02897	01/01/18	457	trmtplant	tmntplant	10,071	2018	11062.00	10,467
02898	01/01/18	PRJ 457	trmtplant	tmntplant	17,424	2018	11062.00	18,108
02899	01/01/18	457	trmtplant	tmntplant	26,556	2018	11062.00	27,599
02902	01/01/18	480	trmtplant	tmntplant	172,073	2018	11062.00	178,829
02903	01/01/18	PRJ 480	trmtplant	tmntplant	172,073	2018	11062.00	178,829
02904	01/01/18	PRJ 480	trmtplant	tmntplant	172,073	2018	11062.00	178,829
02945	01/01/19	IMPROVEMENTS - PRJ 394	trmtplant	tmntplant	37,143	2019	11268.48	37,894
02946	01/01/19	PRJ 394	trmtplant	tmntplant	148,362	2019	11268.48	151,362
02947	01/01/19	3 - PRJ 394	trmtplant	tmntplant	194,145	2019	11268.48	198,070
02948	01/01/19	394	trmtplant	tmntplant	179,233	2019	11268.48	182,857
02949	01/01/19	BURNER - PRJ 394	trmtplant	tmntplant	24,762	2019	11268.48	25,263
02950	01/01/19	DUCTBANK FROM TEB TO TCB - PRJ 394	trmtplant	tmntplant	85,643	2019	11268.48	87,375
02951	01/01/19	PAVING - PRJ 394	trmtplant	tmntplant	157,938	2019	11268.48	161,131
02953	01/01/19	EQUIPMENT - PRJ 394	trmtplant	tmntplant	691,241	2019	11268.48	705,217

**Union Sanitary District**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/19*

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
02954	01/01/19	WINDWALL - PRJ 394	trmtplant	tmntplant	43,334	2019	11268.48	44,210
02969	01/01/19	DEEP WELL ANODE - PRJ 394	trmtplant	tmntplant	115,178	2019	11268.48	117,507
<b>Treatment Plant Total</b>					<b>128,553,722</b>			<b>230,689,757</b>
<b>Total</b>					<b>678,010,426</b>			<b>2,166,218,024</b>

**Union Sanitary District  
Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

Based on Fixed Asset Schedule 06/30/19

Asset #	Acquisition Date	Asset Description	Asset Type	Asset Class	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
---------	------------------	-------------------	------------	-------------	------------------	------------------	------------------------	-------------------

**Summary of Assets by Type & Class**

**Treatment Plant Assets**

tmntplant	tmntplant	<u>128,553,722</u>	<u>230,689,757</u>
<b>SUBTOTAL</b>		<b>128,553,722</b>	<b>230,689,757</b>

**Collection System Assets**

collection	collsys	167,515,188	356,368,326
collection	contribcs	209,680,380	1,163,757,363
collection	liftstat	<u>7,060,153</u>	<u>8,051,125</u>
<b>SUBTOTAL</b>		<b>384,255,722</b>	<b>1,528,176,815</b>

**Pump Station & Conveyance to Treatment Plant**

collection	pumpstat	35,743,640	54,729,400
collection	twforce	<u>23,583,021</u>	<u>89,205,988</u>
<b>SUBTOTAL</b>		<b>59,326,660</b>	<b>143,935,388</b>

**General/Admin Assets**

equipment		7,987,625	10,871,700
fleet		7,197,713	9,336,147
intangible		6,415,898	10,827,312
land		5,395,903	94,411,513
operations		<u>78,877,183</u>	<u>137,969,393</u>
<b>SUBTOTAL</b>		<b>105,874,322</b>	<b>263,416,065</b>

<b>TOTAL</b>		<b>678,010,426</b>	<b>2,166,218,024</b>
--------------	--	--------------------	----------------------

# **APPENDIX C**

## **East Bay Dischargers Authority Fixed Asset List & Valuation**

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
<b>BUILDINGS &amp; STRUCTURES</b>					
<b>OPERATIONS CENTER</b>					
Earthwork	4/1/81	23,256	1981	3535.00	75,632
Structure & Misc.	4/1/81	332,155	1981	3535.00	1,080,214
Plumbing	4/1/81	30,361	1981	3535.00	98,738
HVAC	4/1/81	27,307	1981	3535.00	88,806
Electrical	4/1/81	41,462	1981	3535.00	134,840
Carpet for Admin Office (pad not replaced)	11/30/04	9,323	2004	7115.08	15,064
Paint Inside of Admin Office	12/07/04	1,850	2004	7115.08	2,989
Window Coverings Admin Bldg	03/07/05	1,841	2005	7446.08	2,842
Telephone Lines	6/16/95	619	1995	5471.17	1,301
York 3 Ton 95% Efficient Furnace & 3 Ton 13-Seer A/C	04/26/11	6,224	2011	9069.83	7,889
York 4 Ton 95% Efficient Furnace & 3 Ton 13-Seer A/C	04/26/11	6,224	2011	9069.83	7,889
Alarm System Panel - Admin Bldg	10/25/01	476	2001	6342.08	863
Electrical Design for Installation of Office Generator(Calcon)	01/31/11	4,800	2011	9069.83	6,084
Re-Roof Operations Center Roof	05/26/06	16,616	2006	7751.25	24,644
Paint Exterior of Admin Bldg	05/15/12	4,017	2012	9308.17	4,961
Carpet for Admin Office (pad not replaced)	06/04/13	6,641	2013	9546.67	7,997
Ceiling Tiles & HVAC Grills Painted for Admin Office	05/28/13	3,112	2013	9546.67	3,748
Conference Room/Kitchen Water damage repair/remodel	10/31/16	13,633	2016	10385.00	15,092
<b>Total - Buildings &amp; Structures Operations Center</b>		<b>529,917</b>			<b>1,579,593</b>
<b>SEWAGE DISPOSAL FACILITIES</b>					
<b>HAYWARD PUMP STATION</b>					
Earthwork	4/1/81	55,415	1981	3535.00	180,217
	4/1/81	723	1981	3535.00	2,351
Concrete, Paving, Misc.	4/1/81	93,667	1981	3535.00	304,618
Mech. & Pump Equip.	4/1/81	81,448	1981	3535.00	264,880
Piping-Underground	4/1/81	93,939	1981	3535.00	305,503
Piping-Above Ground	4/1/81	85,934	1981	3535.00	279,469
Electircal	4/1/81	30,280	1981	3535.00	98,475

**East Bay Dischargers Authority**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Motor Control Unit	4/1/81	32,479	1981	3535.00	105,626
Equipment & Furnishings	4/1/81	510	1981	3535.00	1,659
Elect-Programable controller	10/30/87	6,332	1987	4406.00	16,522
Sensor Mag Meter	6/06/90	4,366	1990	4731.92	10,607
Submersible Level Transducer	7/18/90	3,427	1990	4731.92	8,326
OM SA1 Alignment Sys (1/5cost)	9/17/90	715	1990	4731.92	1,737
Lockout Devices (1/4cost)	7/31/91	103	1991	4835.08	245
Auto MA Calibrator - Model #8060 (1/5cost)	5/06/92	149	1992	4984.83	344
Auto Volt Calibrator - Model #9060 (1/5cost)	5/06/92	150	1992	4984.83	346
Test Pump Calibrator & Gauge (1/5cost)	5/14/92	132	1992	4984.83	304
Eff Pump No.2 Valve Actuator	7/31/94	3,984	1994	5407.58	8,470
Eff Pump No.4 Valve Actuator	7/31/94	3,983	1994	5407.58	8,468
H.P.S. Control Upgrade Project	6/01/95	43,840	1995	5471.17	92,119
Seismic Design & Eng SBG (20%)	1/23/97	1,637	1997	5825.08	3,231
Seismic Design & Eng SBG/C&G (20%)	1/23/97	34,061	1997	5825.08	67,222
Seismic Design & Eng C&D (20%)	1/23/97	1,152	1997	5825.08	2,274
Seismic Upgrade (Encinger)	1/23/97	1,457	1997	5825.08	2,876
Seismic Upgrade (Encinger)	1/23/97	17,132	1997	5825.08	33,811
Manual Transfer Switch	01/01/96	3,970	1996	5622.17	8,118
EBDA SCADA Telemetry System (5%) 6/30/96	07/23/98	1,641	1998	5920.42	3,187
EBDA SCADA Telemetry System (5%) 6/30/97	07/23/98	787	1998	5920.42	1,528
EBDA SCADA Telemetry System (5%) 6/30/98	07/23/98	187	1998	5920.42	363
PG&E Rebate Program - Ef f Pump #2 Valve Actuator	11/26/96	(1,766)	1996	5622.17	(3,611)
PG&E Rebate Program - Ef f Pump #4 Valve Actuator	11/26/96	(1,766)	1996	5622.17	(3,611)
Flow Chart Recorder/Totalizer	03/20/97	1,974	1997	5825.08	3,896
Roof/Building Replacement	12/19/97	4,425	1997	5825.08	8,733
Marsh Flow Signal-Parts & Installation	04/20/98	3,990	1998	5920.42	7,748
Effluent Pump No. 1 (Rebuilt 99/00)	10/14/99	11,170	1999	6059.50	21,192
Wetwell Level Probe/Transducer	06/12/00	2,093	2000	6221.17	3,868



## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Wet Well Level Indicator Milltronics Probe	02/28/05	885	2005	7446.08	1,366
Emergency Generator - Caterpillar 3406	09/01/01	79,563	2001	6342.08	144,224
Limitorque Actuator with Adaptor for HVBM07 Valve #7	07/06/00	3,735	2000	6221.17	6,902
VFD No. 1 for HEPS - 75 hp ABB Drive	06/01/01	6,786	2001	6342.08	12,301
Installation of VFD No. 1 - 75 hp ABB Drive	11/30/01	3,500	2001	6342.08	6,344
Variable Frequency Drive No. 2 - 75 hp (Calcon)	08/01/14	5,697	2014	9806.00	6,679
Variable Frequency Drive No. 3 for HEPS - 75 hp ABB Drive	06/01/01	6,786	2001	6342.08	12,301
Installation of VFD No. 3 - 75 hp ABB Drive	11/30/01	3,500	2001	6342.08	6,344
Effluent Pump No. 3 (Rebuilt 01/02)	08/15/01	7,388	2001	6342.08	13,392
Effluent Pump No. 3 - Remove, Inspect, Repair & Install (Pump Repair S	10/23/14	18,172	2014	9806.00	21,304
Hayward Flow Meter - Aquaprobe Flow Meter	9/15/05	5,992	2005	7446.08	9,251
Effluent Pump Motor No. 2 - Emergency Repair	11/18/05	5,286	2005	7446.08	8,161
Effluent Pump Motor No. 3 - Refurbish (Vincent Electric Motor)	07/31/14	5,561	2014	9806.00	6,519
Effluent Pump Motor No. 4 - Trim & balance	12/27/05	500	2005	7446.08	772
VFD No. 2 - 75 HP VFD (Calcon)	05/31/07	5,195	2007	7967.00	7,496
VFD No. 2 - Panel, electrical hardware & labor (Calcon)	06/25/07	1,807	2007	7967.00	2,607
VFD No. 2 - Labor (Calcon)	07/31/07	1,301	2007	7967.00	1,877
VFD No. 2 - Labor (Calcon)	08/31/07	1,497	2007	7967.00	2,160
VFD No. 2 - Materials & Labor (Calcon)	02/28/17	8,073	2017	10737.00	8,644
VFD No. 4 - 75 HP VFD (Calcon)	05/31/07	5,195	2007	7967.00	7,496
VFD No. 4 - Panel, electrical hardware & labor (Calcon)	06/25/07	1,807	2007	7967.00	2,607
VFD No. 4 - Labor (Calcon)	07/31/07	1,301	2007	7967.00	1,877
VFD No. 4 - Labor (Calcon)	08/31/07	1,497	2007	7967.00	2,160
Alvarado North Flow Meter (Calcon)	02/07/08	8,430	2008	8309.92	11,662
Insertion Flow Meter Calcon)	07/20/09	5,951	2009	8570.08	7,983
HEPS Perimeter Fencing & Gates (Bailey Fence Co)	02/03/11	5,091	2011	9069.83	6,453
MCC Upgrade w/ 2 75 HP VFDs - Main Breaker	05/05/00	3,928	2000	6221.17	7,259
HEPS Electrical Assessment Phase 1, PP #1&2	06/30/13	5,115	2013	9546.67	6,160
HEPS Electrical Assessment Phase 1, PP #3	07/25/13	165	2013	9546.67	199
HEPS Design of Replacement Switch Gear Phase 2 PP #1-5 10/25/15-06	06/30/16	8,460	2016	10385.00	9,365
HEPS Design of Replacement Switch Gear Phase 2 PP #6-15 06/25/16-0	06/30/17	106,886	2017	10737.00	114,445

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
HEPS MCC Project	06/30/18	141,037	2018	11062.00	146,574
HEPS MCC Project	06/30/18	375,577	2018	11062.00	390,323
HEPS Pump #2 Motor Replacement	03/15/18	17,076	2018	11062.00	17,746
HEPS #1 Effluent 14MF Cascade Propeller Pump Repairs	10/15/13	34,123	2013	9546.67	41,092
HEPS #1 75HP Motor Repairs	10/15/13	3,248	2013	9546.67	3,911
HEPS #2 Effluent Cascade Model MF Propeller Pump Repair	06/30/13	33,699	2013	9546.67	40,581
HEPS #2 75HP Motor Repair	06/30/13	3,248	2013	9546.67	3,911
HEPS #4 Effluent Cascade Model MF Propeller Pump Repair	11/26/13	40,514	2013	9546.67	48,788
HEPS #4 75HP Motor Repair	11/26/13	3,307	2013	9546.67	3,982
Total - Hayward Pump Station		1,600,599			3,004,333
SAN LEANDRO PUMP STATION					
Concrete, Paving & Misc.	4/1/81	111,062	1981	3535.00	361,189
Mech. & Pump. Equip.	4/1/81	77,929	1981	3535.00	253,436
Piping & Valves-Above Ground	4/1/81	101,855	1981	3535.00	331,247
Electrical	4/1/81	22,925	1981	3535.00	74,555
Motor Control Unit	4/1/81	94,545	1981	3535.00	307,473
Motor Control Unit Modification	9/93	30,378	1993	5210.42	67,026
Replace Auto-Con Unit	7/31/88	15,204	1988	4519.00	38,679
Transformer	9/30/88	2,705	1988	4519.00	6,882
Drive Motor	11/15/88	8,629	1988	4519.00	21,952
Spacer Coupling/Iron Motor Std	2/16/89	2,574	1989	4615.00	6,412
Isolation Transformers & Weather Shield	7/31/90	2,247	1990	4731.92	5,459
OM SA1 Alignment Sys (1/5cost)	9/17/90	715	1990	4731.92	1,737
Lockout Devices (1/4cost)	7/31/91	103	1991	4835.08	245
Auto MA Calibrator - Model #8060 (1/5cost)	5/06/92	149	1992	4984.83	344
Auto Volt Calibrator - Model #9060 (1/5cost)	5/06/92	150	1992	4984.83	346
Test Pump Calibrator &					

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Gauge (1/5cost)	5/14/92	132	1992	4984.83	304
DAS Antenna - SCADA	8/27/93	162	1993	5210.42	357
Eff Pump No.4 Exercise Motor	8/15/94	364	1994	5407.58	774
Automatic Transfer Switch	10/24/95	3,974	1995	5471.17	8,350
Seismic Design & Eng SBG (20%)	01/23/97	1,637	1997	5825.08	3,231
Seismic Design & Eng SBG/C&G (5%)	01/23/97	8,515	1997	5825.08	16,805
Seismic Design & Eng C&D (5%)	01/23/97	288	1997	5825.08	568
Seismic Upgrade (Encinger)	01/23/97	292	1997	5825.08	576
Seismic Upgrade (Encinger)	01/23/97	3,426	1997	5825.08	6,762
EBDA SCADA Telemetry System (5%) 6/30/96	07/23/98	1,641	1998	5920.42	3,187
EBDA SCADA Telemetry System (5%) 6/30/97	07/23/98	786	1998	5920.42	1,526
EBDA SCADA Telemetry System (5%) 6/30/98	07/23/98	187	1998	5920.42	363
Cummins West Generator @SLPS	04/04/97	26,180	1997	5825.08	51,669
Variable Frequency Drive #1	03/31/03	3,440	2003		
Variable Frequency Drive No. 1 - 30VFD & installation	01/27/06	2,976	2006	7751.25	4,414
Variable Frequency Drive #1 - 250A Main Breaker Replacement	01/31/14	4,487	2014	9806.00	5,260
Variable Frequency Drive #1 - Replace Control Board & Diodes	02/28/14	2,480	2014	9806.00	2,907
Variable Frequency Drive #1 - 3 VFD Diodes	03/31/14	341	2014	9806.00	400
Variable Frequency Drive #1 - 150HP (Calcon)	08/31/14	8,891	2014	9806.00	10,423
Variable Frequency Drive #1 - Remove old VFD/Install new ABB VFD (C	09/30/14	734	2014	9806.00	860
Variable Frequency Drive #2	03/31/03	3,440	2003	6694.58	5,907
Variable Frequency Drive #2 - 30HP VFD & INSTALL	01/06/05	3,152	2005	7446.08	4,867
Variable Frequency Drive #3	10/30/95	11,883	1995	5471.17	24,969
Variable Frequency Drive #3	11/21/03	6,586	2003	6694.58	11,310
Variable Frequency Drive #4	04/06/99	34,899	1999	6059.50	66,212
Effluent Wet Well Control Upgrade	11/30/00	5,500	2000	6221.17	10,164
Effluent Pump No. 1 (Rebuild)	09/14/01	8,352	2001	6342.08	15,140
Effluent Pump No. 1 Motor	09/21/01	3,531	2001	6342.08	6,401
Effluent Pump No. 1 Motor (Rebuild)	06/07/04	2,439	2004	7115.08	3,941
Effluent Pump No. 1 Motor (Emergency Repairs)	01/11/05	4,585	2005	7446.08	7,079
Effluent Pump No. 2 Motor	09/21/01	3,531	2001	6342.08	6,401
Effluent Pump No. 2 (Rebuild)	11/16/01	14,314	2001	6342.08	25,947

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Effluent Pump No. 2 Parts (CSL)	05/31/16	440	2016	10385.00	487
Effluent Pump No. 2 Rebuild (Pump Repair Service)	07/22/16	23,498	2016	10385.00	26,012
Effluent Pump No. 2 Motor (Emergency Repairs)	01/11/05	4,585	2005	7446.08	7,079
Effluent Pump No. 3 Motor & Pump (Pump Repair Service & pr)	12/29/16	23,483	2016	10385.00	25,996
Milltronic Level Controller	11/30/01	1,718	2001	6342.08	3,114
SL Pump Station Upgrade	06/30/05	2,885	2005	7446.08	4,454
SL Pump Station Upgrade	06/30/06	25,422	2006	7751.25	37,705
SL Pump Station Upgrade	06/30/07	505,060	2007	7967.00	728,797
SL Pump Station Upgrade	06/30/08	935,024	2008	8309.92	1,293,554
San Leandro Flow Meter	9/15/05	5,816	2005	7446.08	8,980
Auto Transfer Switch - 600 Amp Breaker	01/31/06	5,997	2006	7751.25	8,894
San Leandro Flow Meter (Calcon)	02/07/08	8,430	2008	8309.92	11,662
Effluent Pump No. 1 Check Valve	07/13/07	3,081	2007	7967.00	4,446
Effluent Pump No. 2 Check Valve	07/13/07	3,081	2007	7967.00	4,446
Effluent Pump No. 3 Check Valve	07/13/07	3,081	2007	7967.00	4,446
Effluent Pump No. 4 Check Valve	07/13/07	3,081	2007	7967.00	4,446
Emergency Generator Kohler Model 500REOZVB (Collicutt)	11/08/07	121,458	2007	7967.00	175,263
Bisulfite Facility Pump 520DUN/R 220RPM	04/09/09	6,500	2009	8570.08	8,719
Electrical Layout-New Bypass Control Valve & Signal	03/13/09	552	2009	8570.08	740
SLEPS Containment & Dechlorination System Project	06/30/09	7,242	2009	8570.08	9,715
SLEPS Site Containment Gate - fabricated slide gate	07/09/09	10,542	2009	8570.08	14,142
SLEPS Bypass Valve & Chemical Feed Pump System	09/01/09	10,600	2009	8570.08	14,219
SLEPS Level Monitor	09/30/09	1,017	2009	8570.08	1,364
Total - San Leandro Pump Station		2,356,907			4,182,736
MARINA DECHLOR. FACILITY					
Excavation & Sitework	4/1/81	39,688	1981	3535.00	129,071
Structure & Misc.	4/1/81	378,844	1981	3535.00	1,232,053
Concrete & Paving	4/1/81	82,589	1981	3535.00	268,591
Landscaping	4/1/81	20,695	1981	3535.00	67,303
Mechanical Equipment	4/1/81	464,782	1981	3535.00	1,511,535

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Piping-Above Ground	4/1/81	146,224	1981	3535.00	475,541
Electrical	4/1/81	94,393	1981	3535.00	306,979
Control Unit	4/1/81	32,166	1981	3535.00	104,608
Lab & Office Furnishings	4/1/81	15,871	1981	3535.00	51,615
Lab & Office Furnishings	6/30/86	7,466	1986	4295.00	19,984
Cathodic Protection	3/21/85	49,203	1985	4195.00	134,840
Control Unit-Disol. Ox. Probe	4/19/88	1,893	1988	4519.00	4,816
Piping-SO2 Chem. valves	6/30/88	1,405	1988	4519.00	3,574
Valve	7/25/88	352	1988	4519.00	895
Apco Air Relief Valves (2)	2/28/89	2,226	1989	4615.00	5,545
Cathodic Protection System	8/31/89	2,776	1989	4615.00	6,915
Portable Torch - Aircro	9/11/89	293	1989	4615.00	730
Sampler & Equipment	12/8/89	3,080	1989	4615.00	7,673
OM SA1 Alignment Sys (1/5cost)	9/17/90	715	1990	4731.92	1,737
Platform for Access to Combination Air/Vacuum Valve	7/31/90	10,987	1990	4731.92	26,693
Blind Flanges	12/04/90	2,631	1990	4731.92	6,392
2 Kent Strip Chart Recorders	12/29/90	4,016	1990	4731.92	9,757
PH Meter Model 108 Portable	02/04/91	297	1991	4835.08	706
PH Meter Model M-107	03/20/91	296	1991	4835.08	704
Sampler 117 Vac Model 291OR	7/03/91	2,922	1991	4835.08	6,948
Lockout Devices (1/4cost)	7/31/91	103	1991	4835.08	245
Micro 2000 Analyzer	12/30/91	6,683	1991	4835.08	15,890
Duo Phone System-Radio Shack	5/05/92	573	1992	4984.83	1,321
Auto MA Calibrator - Model #8060 (1/5cost)	5/06/92	149	1992	4984.83	344
Auto Volt Calibrator - Model #9060 (1/5cost)	5/06/92	150	1992	4984.83	346
Test Pump Calibrator & Gauge (1/5cost)	5/14/92	132	1992	4984.83	304
45 Gal Storage Cabinet	6/25/92	664	1992	4984.83	1,531
Drill, B 1/2" Rev	6/26/92	187	1992	4984.83	431

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Micrometer Set	7/17/92	197	1992	4984.83	454
Sump Pump No.1	9/14/92	3,053	1992	4984.83	7,041
3/4 Ton Ratchet Hoist	9/16/92	267	1992	4984.83	616
Sump Pump No.2	9/25/92	4,517	1992	4984.83	10,417
Sink for Samplers-2'x2' acrylic split tank	11/12/92	758	1992	4984.83	1,748
Valves for Sulfur Dioxide Tank B	12/10/92	1,514	1992	4984.83	3,492
Bioassay Platform	12/31/92	8,815	1992	4984.83	20,330
Unit Heater No. 1	01/11/93	513	1993	5210.42	1,132
Circular Saw	01/20/93	176	1993	5210.42	388
Router	01/20/93	168	1993	5210.42	371
Unit Heater No. 2	01/27/93	501	1993	5210.42	1,105
Sump Pump No.2 Motor	01/29/93	287	1993	5210.42	633
ARC/TIG Welder	02/05/93	731	1993	5210.42	1,613
Bioassay Control Panel	02/09/93	1,537	1993	5210.42	3,391
Portable Sander/Grinder	04/27/93	157	1993	5210.42	346
Bioassay System	05/01/93	11,152	1993	5210.42	24,606
Chiller, Micro-Mini 1/3HP,Digital Thermometer & 2 Stainless Steel Filter Screens-Aquatic Eco	10/27/93	907	1993	5210.42	2,001
Bioassay Chiller	04/21/04	1,446	2004	7115.08	2,336
MDF Transformer, 440-208 to 110	05/27/93	1,384	1993	5210.42	3,054
MegohmmeterRouter	06/24/93	717	1993	5210.42	1,582
Portable Band Saw Kit - Grainger	07/12/93	289	1993	5210.42	638
Hand Tachometer - Grainger	08/19/93	229	1993	5210.42	505
Hammer Rotary 1-1/2 Eagle TSC -CA Service	10/08/93	529	1993	5210.42	1,167
Chain Hoist & Trolley, 1/2 Ton - Grainger	12/06/93	231	1993	5210.42	510
2HP Pool Motor - Grainger	01/04/94	212	1994	5407.58	451
28FT Extension Ladder - Home Depot	01/21/94	291	1994	5407.58	619
Pump #2 Repair - Alfred Conhagen Inc.	01/25/94	5,883	1994	5407.58	12,507
2Hp Auto Sewage Pump - Grainger	02/18/94	978	1994	5407.58	2,079
Pipe Vice Tristand - Grainger	03/04/94	351	1994	5407.58	746
Hand Threader - Grainger	03/04/94	482	1994	5407.58	1,025
C1 Residual Chlorine Analyzer	03/14/94	7,448	1994	5407.58	15,834

**East Bay Dischargers Authority**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
PH/Temp Meter Kit w/Printer	03/15/94	387	1994	5407.58	823
PH/Temp Meter Kit w/Printer	03/15/94	393	1994	5407.58	836
8" Tradesman Vise - Grainger	06/13/94	341	1994	5407.58	725
25Hp, 1800RPM, 3 Phase Electric Motor	09/29/94	2,144	1994	5407.58	4,558
25Hp, 1800RPM, 3 Phase Electric Motor	09/29/94	2,144	1994	5407.58	4,558
25Hp, 1800RPM, 3 Phase Electric Motor	09/29/94	2,144	1994	5407.58	4,558
Auto Phone Dialer for Alarms -Verbatim	08/16/94	3,031	1994	5407.58	6,444
Backflow Preventer(Inside)	09/15/94	231	1994	5407.58	491
Seismic Design & Eng Servives (20%)	01/23/97	1,637	1997	5825.08	3,231
Seismic Design & Eng SBG/C&G (10%)	01/23/97	17,031	1997	5825.08	33,612
Seismic Design & Eng C&D (10%)	01/23/97	576	1997	5825.08	1,137
SODIUM BISULFITE CONVERSION PROJECT \$725,819					
06/30/95 \$ 15,270	06/30/95	15,270	2005	7446.08	23,576
06/30/96 53,542	06/30/95	15,270	2005	7446.08	23,576
06/30/97 652,375	06/30/95	15,270	2005	7446.08	23,576
06/30/98 4,632	06/30/95	15,270	2005	7446.08	23,576
Sodium Bisulfite Building	05/15/97	497,269	1997	5825.08	981,404
Bisulfite Pump Control Panel - CP	05/15/97	5,000	1997	5825.08	9,868
Bisulfite System Control Panel - SCP	05/15/97	10,000	1997	5825.08	19,736
Bisulfite System Control Panel - HCP	05/15/97	10,000	1997	5825.08	19,736
Bisulfite Alarm Panel - Outside	05/15/97	2,000	1997	5825.08	3,947
Bisulfite Facility Transformer	05/15/97	6,000	1997	5825.08	11,842
CM Pump No. 1 SPD/STRK Controller	05/15/97	12,000	1997	5825.08	23,683
CM Pump No. 2 SPD/STRK Controller	05/15/97	12,000	1997	5825.08	23,683
CM Pump No. 3 SPD/STRK Controller	05/15/97	12,000	1997	5825.08	23,683
Bisulfite Vent Gas Scrubber	05/15/97	1,500	1997	5825.08	2,960
Bisulfite Facility Heater No. 1	05/15/97	1,200	1997	5825.08	2,368
Bisulfite Facility Heater No. 2	05/15/97	1,200	1997	5825.08	2,368
Bisulfite Facility Roof Fan	05/15/97	1,500	1997	5825.08	2,960
Bisulfite Facility Fire Alarm #2	05/15/97	1,200	1997	5825.08	2,368
Bisulfite Tank No. 1 Level Transmitter	05/15/97	2,500	1997	5825.08	4,934

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Bisulfite Tank No. 2 Level Transmitter	05/15/97	2,500	1997	5825.08	4,934
Water Champ Chemical Induction Unit	05/15/97	22,000	1997	5825.08	43,419
Bisulfite Tank No. 1 Site Glass	05/15/97	3,000	1997	5825.08	5,921
Bisulfite Tank No. 2 Site Glass	05/15/97	3,000	1997	5825.08	5,921
Hot Water Heater	05/15/97	700	1997	5825.08	1,382
Bisulfite System Strainers	05/15/97	1,200	1997	5825.08	2,368
Bisulfite Storage Tank No. 1	05/15/97	17,000	1997	5825.08	33,551
Bisulfite Storage Tank No. 2	05/15/97	17,000	1997	5825.08	33,551
Chemical Injection Pump - Remove & Install (Watson Marlow)	03/31/15	9,999	2015	10335.00	11,122
Chemical Injection Pump - Remove & Install Calcon	03/31/15	2,846	2015	10335.00	3,166
Chemical Injection Pump - Flow Meter Upgrade & Programming	03/31/15	2,947	2015	10335.00	3,278
Chemical Injection Pump - UPS	04/30/15	733	2015	10335.00	815
Chemical Injection Pump - Remove & Install (Watson Marlow)	03/31/15	9,999	2015	10335.00	11,122
Chemical Injection Pump - Remove & Install Calcon	03/31/15	2,846	2015	10335.00	3,166
Chemical Injection Pump - Flow Meter Upgrade & Programming	03/31/15	3,982	2015	10335.00	4,429
Chemical Injection Pump - UPS	04/30/15	733	2015	10335.00	815
Chemical Injection Pump - Remove & Install (Watson Marlow)	03/31/15	9,998	2015	10335.00	11,121
Chemical Injection Pump - Remove & Install Calcon	03/31/15	2,846	2015	10335.00	3,166
Chemical Injection Pump - Flow Meter Upgrade & Programming	03/31/15	3,982	2015	10335.00	4,429
Chemical Injection Pump - UPS	04/30/15	733	2015	10335.00	815
Chemical Metering Pump No. 1	05/15/97	8,000	1997	5825.08	15,789
Chemical Metering Pump No. 2	05/15/97	8,000	1997	5825.08	15,789
Chemical Metering Pump No. 3	05/15/97	8,000	1997	5825.08	15,789
Bisulfite Sump Pump No. 1	05/15/97	2,700	1997	5825.08	5,329
Bisulfite Sump Pump No. 2	05/15/97	2,700	1997	5825.08	5,329
Bisulfite Facility Emergency Lights	05/15/97	3,000	1997	5825.08	5,921
Bisulfite Emergency Shower No. 1	05/15/97	1,200	1997	5825.08	2,368
Bisulfite Emergency Shower No. 2	05/15/97	1,200	1997	5825.08	2,368
Bisulfite Fire Sprinkler System	05/15/97	7,500	1997	5825.08	14,802
Bisulfite Facility Roof	05/15/97	10,000	1997	5825.08	19,736
Bisulfite Facility Smoke Detectors	05/15/97	750	1997	5825.08	1,480



## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Bisulfite Backflow Prevention Valves	05/15/97	2,250	1997	5825.08	4,441
Bisulfite System Check Valves (3)	05/15/97	1,500	1997	5825.08	2,960
Bisulfite Diaphragm Valves (33)	05/15/97	15,000	1997	5825.08	29,604
Bisulfite Elec Diaphragm Valve No. 1	05/15/97	1,500	1997	5825.08	2,960
Bisulfite Elec Diaphragm Valve No. 2	05/15/97	1,500	1997	5825.08	2,960
Bisulfite Elec Diaphragm Valve No. 3	05/15/97	1,500	1997	5825.08	2,960
Bisulfite Elec Diaphragm Valve No. 4	05/15/97	1,500	1997	5825.08	2,960
Water Champ Knife Gate Valve	05/15/97	2,500	1997	5825.08	4,934
Bisulfite Pressure Relief Valves (3)	05/15/97	2,250	1997	5825.08	4,441
Bisulfite System Plug Valves (4)	05/15/97	1,500	1997	5825.08	2,960
Tank Thickness Gauge	07/20/94	2,639	1994	5407.58	5,610
Meter Vault Sump Pump #2	03/24/95	5,588	1995	5471.17	11,742
Chain Link Fence	09/14/94	6,098	1994	5407.58	12,964
Gate Automation System (Gate Operator)	08/08/95	6,533	1995	5471.17	13,727
Gate Automation System (Gate Operator)	07/24/15	3,945	2015	10335.00	4,388
Seismic Upgrade (Encinger)	01/23/97	291	1997	5825.08	574
Seismic Upgrade (Encinger)	01/23/97	3,426	1997	5825.08	6,762
EBDA SCADA Telemetry System (5%) 6/30/96	07/23/98	1,641	1998	5920.42	3,187
EBDA SCADA Telemetry System (5%) 6/30/97	07/23/98	786	1998	5920.42	1,526
EBDA SCADA Telemetry System (5%) 6/30/98	07/23/98	187	1998	5920.42	363
2HP Auto Sewage Pump Submersible	11/30/95	833	1995	5471.17	1,750
Sample Pump 2HP Cast Iron	03/22/96	441	1996	5622.17	902
Sample Pump 2HP Cast Iron	03/22/96	441	1996	5622.17	902
Sample Pump 2HP Cast Iron	03/22/96	441	1996	5622.17	902
Sample Pump 2HP Cast Iron	03/22/96	442	1996	5622.17	904
Amperometric Titrator SN BA54006	04/25/96	1,641	1996	5622.17	3,356
Dissolved Oxygen Meter & Probe VWR	05/13/96	1,693	1996	5622.17	3,462
Dell Pentium Computer System (originally SCADA)	08/06/96	3,407	1996	5622.17	6,967
77 pc Tap & Die Set	12/06/96	334	1996	5622.17	683
2 HP Auto Sewage Pump	08/19/97	831	1997	5825.08	1,640
3 Pen Chart Recorder	05/05/98	3,171	1998	5920.42	6,157
Aurora Injector Pump 2.5X3Y12	06/03/98	1,600	1998	5920.42	3,107

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
SN#79-004418-3 Inspection (not repaired, new pump to be purchased in 98/99)					
Injector Water Pump & Motor #1 Grundfos	06/30/99	11,029	1999	6059.50	20,925
Injector Water Pump & Motor #1 Grundfos	06/30/99	11,030	1999	6059.50	20,927
2 HP Sewage Pump	03/22/99	782	1999	6059.50	1,484
Vent-O-Mat 8" Air/Vac Release Valve Aquadyne	11/17/98	6,494	1998	5920.42	12,610
Vent-O-Mat 2" Air/Vac Release Valve Aquadyne	11/17/98	2,030	1998	5920.42	3,942
Vent-O-Mat 8" Air/Vac Release Valve Aquadyne	01/28/99	6,503	1999	6059.50	12,338
Marina Flow meter No. 1 - Seco ABB Aquaprobe Insertion Mag Meter	12/03/99	5,077	1999	6059.50	9,632
Marina Flow meter No. 1 - Remove old & Install new	10/30/08	892	2008	8309.92	1,234
Marina Flow meter No. 1 - Sitrans Fus 1010 IP65 NEMA 4X	10/30/08	8,061	2008	8309.92	11,152
Chemical Pump - Pulled Cable Calcon	01/31/15	536	2015	10335.00	596
Chemical Flowmeter x2 & Cable x2 Calcon	01/31/15	3,512	2015	10335.00	3,907
Chemical Pump - Pulled Cable Calcon	01/31/15	536	2015	10335.00	596
Chemical Flowmeter x2 & Cable x2 Calcon	01/31/15	3,512	2015	10335.00	3,907
Chemical Pump - Pulled Cable Calcon	01/31/15	536	2015	10335.00	596
Siemens Controlotron Flow Meter Replacement - remove old & install	03/31/14	7,658	2014	9806.00	8,978
Marina Flow Meter No. 2 - Aquaprobe Flow Meter & install	9/15/05	5,220	2005	7446.08	8,059
MDF No 2 Flow Meter Probe	02/28/17	452	2017	10737.00	484
MDF Aquaprobe Magnetic Flow Meter & Installation	04/28/17	13,137	2017	10737.00	14,066
System Wide Spare Flow Meter	09/18/09	5,979	2009	8570.08	8,021
SBS Pump Flow Meter #3 Installation - Calcon	02/28/13	13,582	2013	9546.67	16,356
Cathodic Protection System - Repair/Replacement Installation of the Z1 & Z2 Reference Electrodes	12/31/99	2,600	1999	6059.50	4,933
1 HP Effluent Pump	01/31/00	432	2000	6221.17	798
PH/MV/Temp Meter No. 1 - VWR Scientific	01/31/00	888	2000	6221.17	1,641
Chlorine Residual Analyzer No. 2	08/24/04	9,267	2004	7115.08	14,973
Chlorine Residual Analyzer No. 3	03/17/00	6,959	2000	6221.17	12,860
New Analyzer @ MDF Installed Electrical Wiring & Conduits & Labor	05/30/17	220	2017	10737.00	235
New Analyzer @ MDF Installed Electrical Wiring & Conduits & Labor	05/30/17	186	2017	10737.00	199

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
New Test Hypo Analyzer @ MDF Install (Calcon)	06/30/17	1,215	2017	10737.00	1,301
Work on New CL2 Analyzer @ MDF	10/17/17	616	2017	10737.00	660
Portable Sump Pump 5 HP Self-Priming	05/04/00	666	2000	6221.17	1,231
2 HP Cast Iron Pump	06/20/00	458	2000	6221.17	846
MDF Effluent Sample Manifold Parts	01/17/02	1,729	2002	6538.00	3,040
Sample Pump & Motor (Spare)	04/26/02	479	2002	6538.00	842
Sample Pump in Meter Vault-2HP Cast Iron Pump	03/25/02	479	2002	6538.00	842
Sample Pump No. 4 in Meter Vault - 2HP Centrifugal Pump	12/21/04	526	2004	7115.08	850
Sample Pump - 2 HP Cast Iron Pump	03/04/02	479	2002	6538.00	842
Stainless Steel Angle&Flat-to install sample pump	01/09/02	239	2002	6538.00	420
2 HP Sewage Pump	04/20/01	803	2001	6342.08	1,456
Sample Pump & Motor No. 2	11/06/01	468	2001	6342.08	848
Sample Pump & Motor No. 1	11/28/01	468	2001	6342.08	848
Sample Pump & Motor No. 2	07/02/02	478	2002	6538.00	841
Sample Pump No. 3 Motor	11/21/02	231	2002	6538.00	406
Sample Pump No. 4 Motor	11/21/02	231	2002	6538.00	406
Dechlor Station Roof - Certainteed Landmark 50	05/07/04	6,989	2004	7115.08	11,293
Chlorine Residual Analyzer No. 1	07/31/05	10,086	2005	7446.08	15,572
Automatic Sampler No. 1	02/17/06	3,724	2006	7751.25	5,523
Automatic Sampler No. 2	02/17/06	3,724	2006	7751.25	5,523
Auto Transfer Switch	06/30/06	7,746	2006	7751.25	11,489
Auto Transfer Switch	07/14/06	1,004	2006	7751.25	1,489
Auto Transfer Switch	08/22/06	3,705	2006	7751.25	5,495
Sewage Pump No. 1 - rebuild submersible pump	06/22/07	4,414	2007	7967.00	6,369
Motor Starter & Installation (Calcon)	04/28/17	1,530	2017	10737.00	1,638
Sewage Pump No. 2	01/12/07	103	2007	7967.00	149
Sewage Pump No. 2 - rebuild submersible pump	06/22/07	4,415	2007	7967.00	6,371
Sewage Pump No. 2 - rebuild submersible pump	07/03/07	287	2007	7967.00	414
Motor Starter & Installation (Calcon)	04/28/17	1,530	2017	10737.00	1,638
Bioassay System	02/13/07	43,655	2007	7967.00	62,994
Amperometric Titrator	07/05/07	2,852	2007	7967.00	4,115

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Chemical Metering Pump Motor No. 1 (ABP Engineering)	07/03/07	1,554	2007	7967.00	2,242
Chemical Metering Pump Motor No. 1 (Calcon)	01/31/08	942	2008	8309.92	1,303
Chemical Metering Pump No. 1 (ABP Engineering)	07/03/07	4,230	2007	7967.00	6,104
Chemical Metering Pump No. 1 (Calcon)	01/31/08	943	2008	8309.92	1,305
Chemical Metering Pump Motor No. 2 (ABP Engineering)	07/03/07	1,554	2007	7967.00	2,242
Chemical Metering Pump Motor No. 2	12/20/07	1,451	2007	7967.00	2,094
Chemical Metering Pump Motor No. 2 (Calcon)	01/31/08	942	2008	8309.92	1,303
Chemical Metering Pump No. 2 (ABP Engineering)	07/03/07	4,230	2007	7967.00	6,104
Chemical Metering Pump No. 2	12/20/07	1,451	2007	7967.00	2,094
Chemical Metering Pump No. 2 (Calcon)	01/31/08	943	2008	8309.92	1,305
Chemical Metering Pump No. 2 (Calcon)	06/30/08	411	2008	8309.92	569
Chemical Metering Pump Motor No. 3 (ABP Engineering)	07/03/07	1,554	2007	7967.00	2,242
Chemical Metering Pump Motor No. 3 (Calcon)	01/31/08	942	2008	8309.92	1,303
Chemical Metering Pump No. 3 (ABP Engineering)	07/03/07	4,230	2007	7967.00	6,104
Chemical Metering Pump No. 3 (Calcon)	01/31/08	943	2008	8309.92	1,305
Water Champ Parts @ MDF	03/05/18	4,640	2018	11062.00	4,822
Chem Pump Backflow Valves (3)	07/03/07	879	2007	7967.00	1,268
Chem Pump Pressure Release Valves (3)	07/03/07	879	2007	7967.00	1,268
Bisulfite Tank No 1&2 Level Controller	04/30/08	3,141	2008	8309.92	4,345
Full Retrofit of Motor Control Center (MCC) @MDF	09/30/08	11,640	2008	8309.92	16,103
Full Retrofit of Motor Control Center (MCC) @MDF	09/30/08	11,640	2008	8309.92	16,103
Full Retrofit of Motor Control Center (MCC) @MDF	09/30/08	11,640	2008	8309.92	16,103
Caterpillar 3208 Generator Refurbished	12/15/08	21,925	2008	8309.92	30,332
Caterpillar 3208 Generator Cylinder Heads Refurbished	12/18/08	7,289	2008	8309.92	10,084
Replace Rectifier @ MDF	02/19/10	5,191	2010	8798.92	6,782
Instrument Control Center	03/31/93	13,244	1993	5210.42	29,222
Station Control, Alarm, & SCADA System	10/07/03	27,226	2003	6694.58	46,754
Station Control, Alarm & Scada System @MDF	09/24/10	1,360	2010	8798.92	1,777
Install 24VDC Redundant Power Supply Control System @MDF (Calcon)	01/31/14	8,359	2014	9806.00	9,800
Automatic Compliance Valve @MDF - Material only (Calcon)	04/29/14	1,451	2014	9806.00	1,701
Automatic Compliance Valve @MDF - Labor only (Calcon)	05/30/14	1,692	2014	9806.00	1,984
Programmable Logic Controller Redundant Backup @MDF (Calcon) PP#	06/30/16	35,640	2016	10385.00	39,454

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Programmable Logic Controller Redundant Backup @MDF (Calcon) PP#	02/28/17	3,960	2017	10737.00	4,240
8" Touch Screen & Installation	04/28/17	2,472	2017	10737.00	2,647
Gas Monitoring System @MDF	01/31/12	4,203	2012	9308.17	5,191
MDF Interior Painting	01/10/08	6,410	2008	8309.92	8,868
MDF Exterior Building and Doors	01/15/15	6,450	2015	10335.00	7,175
MDF Lab Flooring	01/28/08	2,076	2008	8309.92	2,872
MDF Access Ladder & Cage Installation	02/11/09	4,324	2009	8570.08	5,800
Replace Under Drain/Sewage Piping - Pump/Vault Systems	03/31/12	17,419	2012	9308.17	21,514
Lighting Fixture Upgrade @MDF (Calcon)	03/30/14	5,441	2014	9806.00	6,379
Legacy Wiring Removal	04/30/15	4,683	2015	10335.00	5,210
Concrete Island & 2 Berms to protect for Sea Level Rise	07/08/15	7,336	2015	10335.00	8,160
Refurbish Gas Detection System for Meter Vault (Calcon)	01/31/16	436	2016	10385.00	483
Emergency Light & Outlets Upgrade (Calcon)	01/31/16	4,997	2016	10385.00	5,532
Back Up CL2 Analyzers (Calcon)	06/29/16	1,082	2016	10385.00	1,198
CL2 Analyzers (Calcon)	11/30/16	4,358	2016	10385.00	4,824
MDF Lighting Upgrade - Exterior & Vault Lighting	05/17/18	1,769	2018	11062.00	1,839
MDF Lighting Upgrade	05/01/18	3,166	2018	11062.00	3,291
MDF Lighting Upgrade - Emergency Lighting	05/17/18	353	2018	11062.00	366
Sewage Pumps & Piping Removal & Replacement	04/26/13	32,800	2013	9546.67	39,498
MDF Temp Generator	03/07/13	394	2013	9546.67	474
Manual Transfer Switch Relocation	08/30/13	3,747	2013	9546.67	4,512
Total - Marina Dechlor Facility		2,889,652			7,031,915
ORO LOMA PUMP STATION					
Earthwork	4/1/81	428,573	1981	3535.00	1,393,779
Concrete & Paving	4/1/81	12,089	1981	3535.00	39,315
Structure	4/1/81	1,683,078	1981	3535.00	5,473,603
Misc. Fees & Tests	4/1/81	8,000	1981	3535.00	26,017
Mechanical & Pump. Equip.	4/1/81	1,501,590	1981	3535.00	4,883,379
Electrical	4/1/81	414,543	1981	3535.00	1,348,151
HVAC	4/1/81	37,928	1981	3535.00	123,347

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Plumbing	4/1/81	5,500	1981	3535.00	17,887
Piping-Underground	4/1/81	670,003	1981	3535.00	2,178,943
Piping-Above Ground	4/1/81	209,015	1981	3535.00	679,746
Equipment & Furnishings	4/1/81	2,426	1981	3535.00	7,890
Piping-Monitoring Wells	12/31/87	3,650	1987	4406.00	9,524
Pre/Post Lube System	9/30/88	7,577	1988	4519.00	19,276
PLC Installation	10/31/88	11,982	1988	4519.00	30,482
Temperature Regulators	5/30/90	2,021	1990	4731.92	4,910
OM SA1 Alignment Sys (1/5cost)	9/17/90	715	1990	4731.92	1,737
Homelite Chain Saw	12/10/90	976	1990	4731.92	2,371
Vibration Monitor Meter	12/19/90	1,611	1990	4731.92	3,914
Limitorque for 42" Valve	06/28/91	2,978	1991	4835.08	7,081
Lockout Devices (1/4cost)	7/31/91	103	1991	4835.08	245
Auto MA Calibrator - Model #8060 (1/5cost)	5/06/92	149	1992	4984.83	344
Auto Volt Calibrator - Model #9060 (1/5cost)	5/06/92	150	1992	4984.83	346
Test Pump Calibrator & Gauge (1/5cost)	5/14/92	132	1992	4984.83	304
Sample Pump & Motor No.1	8/31/92	751	1992	4984.83	1,732
Sample Pump & Motor No.2	8/31/92	751	1992	4984.83	1,732
Fuel Tank Monitoring System	3/05/93	10,259	1993	5210.42	22,636
Diesel Tank Double Containment Sensor - Leak Detector	07/31/00	2,151	2000	6221.17	3,975
Sump Pump	01/27/15	5,950	2015	10335.00	6,619
Pump #1 Replacement - Layne & Bowler	5/31/93	472	1993	5210.42	1,041
Recl Water Pump No. 1 - rebuilt	7/01/93	5,408	1993	5210.42	11,932
Pump #2 Replacement - Layne & Bowler	12/31/02	9,008	2002	6538.00	15,840
Recl Water Pump No. 1 Motor	7/22/93	5,216	1993	5210.42	11,509
Recl Water Pump No. 2 Motor	05/31/05	1,801	2005	7446.08	2,781
Battery System for Emerg Diesel Engines	05/31/05	1,801	2005	7446.08	2,781
Motor Overhaul	7/01/93	7,339	1993	5210.42	16,193
	6/14/94	5,215	1994	5407.58	11,087

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Effluent Pump No. 1 Motor	11/19/98	16,000	1998	5920.42	31,069
Eff Pump No. 1 Motor - rebuilt	03/13/03	6,818	2003	6694.58	11,708
Overhaul 350 Horsepower Motor & Align Motor to Gearbox	05/12/11	5,442	2011	9069.83	6,898
Effluent Pump No. 1 Motor - Refurbish & Laser Align	08/13/14	6,564	2014	9806.00	7,695
Motor Overhaul	5/31/94	5,216	1994	5407.58	11,089
Effluent Pump No. 4 Motor	11/19/98	16,000	1998	5920.42	31,069
Pump Station Motor #4 - Refurbish @ OLEPS (Vincent Electric Motor)	12/31/13	3,047	2013	9546.67	3,669
Replace Bad Bearings in Pump Motor	10/30/15	6,563	2015	10335.00	7,300
Seismic Design & Eng SBG (20%)	1/23/97	1,637	1997	5825.08	3,231
Seismic Design & Eng SBG/C&G (30%)	1/23/97	51,092	1997	5825.08	100,835
Seismic Design & Eng C&D (30%)	1/23/97	1,728	1997	5825.08	3,410
Seismic Upgrade (Encinger & Kellco)	1/23/97	4,089	1997	5825.08	8,070
Seismic Upgrade (Encinger)	1/23/97	44,544	1997	5825.08	87,911
Flex Coupling/Drive Shaft Engine No. 1	10/19/98	25,000	1998	5920.42	48,545
Flex Coupling/Drive Shaft Engine No. 2	10/19/98	25,000	1998	5920.42	48,545
Engine No. 1 (Pump 2)	10/19/98	311,738	1998	5920.42	605,335
Engine No. 2 Retrofit @OLEPS (Calcon)	03/30/17	3,932	2017	10737.00	4,211
Diesel Engine Control & Plc/Scada Programming Project	12/28/17	2,269	2017	10737.00	2,430
Engine No. 2 (Pump 3)	10/19/98	311,738	1998	5920.42	605,335
HMI for Diesel Pump Control @OLEPS (Calcon)	03/31/14	5,801	2014	9806.00	6,801
Labor for 24 VDC Power Isolators for Diesel Pump Control @OLEPS (Ca	06/30/14	754	2014	9806.00	884
Install Battery Charging Unit, Control Batteries & Charger Diesel Engine	11/30/15	3,309	2015	10335.00	3,680
Diesel Pump No. 3 Overhaul	03/31/17	60,243	2017	10737.00	64,504
Diesel Engine Control & Plc/Scada Programming Project	12/28/17	2,269	2017	10737.00	2,430
PR Distr DE-PLC-SCADA	6/30/18	350	2018	11062.00	364
EBDA SCADA Telemetry System (5%) 6/30/96	7/23/98	1,641	1998	5920.42	3,187
EBDA SCADA Telemetry System (5%) 6/30/97	7/23/98	786	1998	5920.42	1,526
EBDA SCADA Telemetry System (5%) 6/30/98	7/23/98	187	1998	5920.42	363
Valve Box 1/2 HP Auto Sump Pump	5/20/96	173	1996	5622.17	354
Variable Speed Control Unit #1	11/19/98	50,000	1998	5920.42	97,090
Variable Speed Control Unit #1 - Color HMI replacement	03/31/05	4,625	2005	7446.08	7,141
Variable Speed Control Unit #4	11/19/98	50,000	1998	5920.42	97,090

**East Bay Dischargers Authority**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
VFD & Soft Start #1	09/30/09	56,916	2009	8570.08	76,350
VFD & Soft Start #1	09/30/09	56,916	2009	8570.08	76,350
Control System Upgrades @OLEPs	02/28/17	8,356	2017	10737.00	8,947
Programmable Logic Control No. 1	11/19/98	3,000	1998	5920.42	5,825
Programmable Logic Control No. 2	11/19/98	3,000	1998	5920.42	5,825
Programmable Logic Control No. 3	11/19/98	2,000	1998	5920.42	3,884
Fisher Porter Controll No. 1	11/19/98	11,000	1998	5920.42	21,360
Fisher Porter Controll No. 2	11/19/98	11,000	1998	5920.42	21,360
Flow Chart Recorder	11/19/98	4,458	1998	5920.42	8,657
Philadelphia #1 Gear Box	6/30/97	16,700	1997	5825.08	32,959
Bearing & Seal Replacements #1 Gearbox	06/30/12	26,004	2012	9308.17	32,117
OLEPS No. 1 Right Angle Drive Overhaul - Rebuild (Timken Gears & Serv	04/08/14	32,850	2014	9806.00	38,513
OLEPS No. 1 Right Angle Drive Overhaul - Norwalk mileage & motel (DA	07/08/14	884	2014	9806.00	1,036
OLEPS No. 1 Right Angle Drive Overhaul - Rebuild (Timken Gears & Serv	07/08/14	96,951	2014	9806.00	113,663
OLEPS No. 1 Right Angle Drive Overhaul - Sales Tax (Timken Gears & Se	07/08/14	11,634	2014	9806.00	13,640
OLEPS No. 1 Right Angle Drive Overhaul - Align Motor & Gear Drive (OL	08/31/14	2,580	2014	9806.00	3,025
Diesel Engine Right Angle Gear Drive #2 Rebuilt	10/03/97	26,531	1997	5825.08	52,361
Diesel Engine Right Angle Gear Drive #3 Rebuilt	12/29/97	24,442	1997	5825.08	48,238
Diesel Transfer Pump & Motor	03/20/97	845	1997	5825.08	1,668
Emergency Fleet Charger/Starter	03/20/97	325	1997	5825.08	641
LEROI DRESSER Series 200 Air Compressor	06/19/98	1,859	1998	5920.42	3,610
Two Pen Chart ABB Recorder	06/23/98	1,885	1998	5920.42	3,660
Pump #1 Worthington 42" MC1 SN#Z-0015771-1 - Major repairs	10/19/98	32,314	1998	5920.42	62,748
Pump #1 Wiring	6/30/18	788	2018	11062.00	819
Pump #2 Worthington 48" MMC SN#77-Z-001478 - Major repairs	03/18/98	65,029	1998	5920.42	126,274
Pump #2 At OLEPS Low Output	09/15/17	8,027	2017	10737.00	8,595
Pump #3 Worthington 48" MMC SN#77-2-001578-2 - Major repairs	07/29/98	45,688	1998	5920.42	88,717



## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Pump #3 Labor Allocation	06/30/17	9,542	2017	10737.00	10,217
Pump #3 Inspection At OLEPS Pump Repair Service	08/31/17	765	2017	10737.00	819
Pump #4 Worthington 42" MC1 SN#Z-0015771-2 - Major repairs	06/04/98	35,610	1998	5920.42	69,148
Pump #4 Wiring	6/30/18	788	2018	11062.00	819
Asco Transfer Switch Kit	06/30/05	4,889	2005	7446.08	7,548
Emergency Power Transfer Switch	12/31/98	5,143	1998	5920.42	9,987
Engine No. 1 Heat Exchange System	10/21/99	33,614	1999	6059.50	63,774
Engine No. 2 Heat Exchange System	10/21/99	33,614	1999	6059.50	63,774
Repair Retaining Wall over Tank No. 1 (Pearson Equipment & Maintena	01/27/15	796	2015	10335.00	886
Project Permit Fee Alameda County DEH	10/21/15	719	2015	10335.00	800
Diesel Fuel Day Tank - Tramount Diesel Fuel Tank, Freight & Calcon installation	01/11/00	4,716	2000	6221.17	8,715
Wet Well No. 1 Level Indicator - Milltronics Probe & Calcon Installation	02/02/00	2,410	2000	6221.17	4,454
Wet Well No. 2 Level Indicator - Milltronics Probe & Calcon Installation	02/02/00	2,411	2000	6221.17	4,455
2 VSM Pre-lube Oil Pumps	10/22/01	921	2001	6342.08	1,669
HVAC Renewal Project @OLPS					
Main Ventilation System	Not in service	14,810			
Ventilation System Motor & Fan		4,937			
Engine No. 1 Fan No. 1		988			
Engine No. 1 Fan No. 1 Motor		987			
Engine No. 1 Fan No. 2		987			
Engine No. 1 Fan No. 2 Motor		987			
Engine No. 2 Fan No. 1		987			
Engine No. 2 Fan No. 1 Motor		987			
Engine No. 2 Fan No. 2		987			
Engine No. 2 Fan No.2 Motor		987			
Eff Pump No. 1 Exhaust Fan		987			
Eff Pump No. 1 Exhaust Fan Motor		987			
Eff Pump No. 4 Exhaust Fan		987			

**East Bay Dischargers Authority**

**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Eff Pump No. 4 Exhaust Fan Motor		987			
Instrumentation Flow Meter	07/18/01	4,482	2001	6342.08	8,125
Install New Flow Meter in OLEPS Confined Space	01/31/11	1,784	2011	9069.83	2,261
Oro Loma Flow Meter - Labor	10/31/05	526	2005	7446.08	812
Flexim Flow Meter w/ Ultrasonic Flow Transducers	01/31/11	7,971	2011	9069.83	10,104
No. 4 Gear Box Temp Regulator	08/07/03	1,065	2003	6694.58	1,829
Eff Pump No. 1 Oil Lube System	03/19/04	424	2004	7115.08	685
Eff Pump No. 2 Oil Lube System	03/19/04	424	2004	7115.08	685
Eff Pump No. 3 Oil Lube System	03/19/04	425	2004	7115.08	687
Eff Pump No. 4 Oil Lube System	03/19/04	425	2004	7115.08	687
Station Control, Alarm & Scada System	04/21/04	26,422	2004	7115.08	42,692
OLPS Interior Painting	06/30/04	8,680	2004	7115.08	14,025
Eff Pump No. 1 Gear Box Bearing Replacement	06/30/04	4,177	2004	7115.08	6,749
Effluent Pump Station Control System Upgrades TJC & Associates PP#1	06/30/15	45,462	2015	10335.00	50,571
Effluent Pump Station Control System Upgrades TJC & Associates PP#9	06/30/16	57,482	2016	10385.00	63,633
Effluent Pump Station Control System Upgrades 1,000 Feet of Fiber Crc	02/27/15	2,000	2015	10335.00	2,225
Effluent Pump Station Control System Upgrades Deliver Damaged Door	06/30/15	1,403	2015	10335.00	1,560
Programmable Logic Controller Project PP #1-6	09/15/15	89,965	2015	10335.00	100,074
Programmable Logic Controller Project Upgrade	01/21/16	110,952	2016	10385.00	122,826
Repair Communication System Between West Switch Gear and EBDA B	08/31/15	2,370	2015	10335.00	2,637
Upgrade UPS & Cabinet Wiring in PLC Panel (Calcon)	01/30/16	541	2016	10385.00	599
OLEPS DE-PLC-SCADA	06/30/18	10,817	2018	11062.00	11,242
OLEPS Human Machine Interface - Citect	01/20/05	1,529	2005	7446.08	2,361
HMI 100 pt key \$969.00 & installation \$560.00					
Auto Transfer Switch - Parts & Labor	08/31/05	3,467	2005	7446.08	5,353
Recl Water Screen Hoist No. 1 - Elect repair	11/30/05	812	2005	7446.08	1,254
Recl Water Strainer - Elect repair	11/30/05	812	2005	7446.08	1,254
Recl Water Screen Hoist No. 2 - Elect repair	11/30/05	812	2005	7446.08	1,254
Oro Loma Bypass Butfly Valve 42" - installation	01/31/06	666	2006	7751.25	988
PR Distr OLEPS Valve Avtuator	08/31/17	310	2017	10737.00	332
Limatorque MXA-20 52RPM Electric Actuator for Pump No. 2	04/21/15	5,338	2015	10335.00	5,938
Installed I/I Current Isolator for Pump No. 2 Valve Actuator (Calcon)	06/30/15	1,352	2015	10335.00	1,504

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Pump No. 3 Actuator - Labor (Calcon)	04/22/15	1,035	2015	10335.00	1,151
Eimitorque MXA-20 52RPM Electric Actuator for Pump No. 3	04/21/15	5,338	2015	10335.00	5,938
Pump No. 3 Contact Switches - Material & Labor (Calcon)	04/28/15	321	2015	10335.00	357
Auto Valve Operator for OVBE05 - Valve & installation	01/31/06	5,614	2006	7751.25	8,326
Master Control System Emergency Gen Battery Charger	06/29/06	1,258	2006	7751.25	1,866
Fabricate New Portable Battery Cart with MCS Charger for Diesels	11/30/15	4,841	2015	10335.00	5,385
Master Control System Engine No. 1 Battery Charger	06/29/06	1,248	2006	7751.25	1,851
Master Control System Engine No. 2 Battery Charger	06/29/06	1,248	2006	7751.25	1,851
Motor Control Center No. 1 (Siemens Energy)	10/31/07	42,364	2007	7967.00	61,131
Motor Control Center No. 2 (Siemens Energy)	10/31/07	42,364	2007	7967.00	61,131
Building Lighting @OLEPS (Vaden Industries)	03/10/08	16,535	2008	8309.92	22,875
3 Ft Drain Header with 2 inch Branches from Pump Drains, 3 inch to Su	11/15/14	10,277	2014	9806.00	12,048
1 Inch Pipe Remove/Replace PP#1 (D.W. Nicholson)	06/30/15	4,800	2015	10335.00	5,339
Replacement of Utility Water Line System (D.W. Nicholson)	10/29/15	42,400	2015	10335.00	47,164
Outfall CI2 Diffuser	06/30/17	2,714	2017	10737.00	2,905
Exterior Painting & Mural @OLEPS	08/11/08	20,000	2008	8309.92	27,669
Pressure Transmitter & Installation	02/13/09	1,688	2009	8570.08	2,264
PVC Sump Pump Discharge Pipe - Demo/Install	11/15/14	9,900	2014	9806.00	11,607
Building Upgrades	06/30/17	57,728	2017	10737.00	61,811
Concrete Slab for Overflow Weir @OLEPS	09/17/09	14,934	2009	8570.08	20,033
1,000 Gal Polysafe Tank for Overflow Weir @OLEPS	09/30/09	16,765	2009	8570.08	22,489
Disinfection Control System & PLC Upgrade @OLEPS	12/31/09	44,000	2009	8570.08	59,024
Sluice Gate & Valve Inspections @OLEPS	11/15/11	900	2011	9069.83	1,141
Sluice Gate & Valve Inspections @OLEPS	11/15/11	900	2011	9069.83	1,141
Sluice Gate & Valve Inspections @OLEPS	11/15/11	900	2011	9069.83	1,141
Hydro Tank & High Pressure Pump System Upgrade	11/30/11	16,200	2011	9069.83	20,534
Replace Damaged Valve Stem	04/16/12	7,135	2012	9308.17	8,812
High Pressure Water Pump Replacement	06/30/12	1,931	2012	9308.17	2,385
High Pressure Water Pump Replacement	06/30/12	17,376	2012	9308.17	21,461
High Pressure Water Pump Replacement	06/30/12	1,931	2012	9308.17	2,385
High Pressure Water Pump Replacement	06/30/12	17,376	2012	9308.17	21,461
Philadelphia #4 Gear Box	4/18/97	18,310	1997	5825.08	36,136

**East Bay Dischargers Authority**

**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

*Based on Fixed Asset Schedule 06/30/18*

<b>Asset Description</b>	<b>Acquisition Date</b>	<b>Acquisition Cost</b>	<b>Acquisition Year</b>	<b>ENR CCI Acquisition Yr</b>	<b>ENR-Adjusted Cost</b>
Replace 4 Bearings, 2 Bevel Gears & 1 Pinion Shaft - Effluent Pump #4 Gear Box rebuild	10/21/04	26,812	2004	7115.08	43,322
Bearing & Seal Replacements #4 Gearbox Dahl-Beck	06/30/13	29,995	2013	9546.67	36,121
Effluent Pump #4 Gearbox - Timken Gears & Service 50% PP#1&2	06/30/13	63,604	2013	9546.67	76,593
Effluent Pump #4 Gearbox - Timken Gears & Service PP#3	08/16/13	70,523	2013	9546.67	84,925
Effluent Pump #4 Gearbox - Remove & Replace - DW Nicholson	08/31/13	7,495	2013	9546.67	9,026
Effluent Pump #4 Gearbox - #4 Right-Angle Drive - Travel Reimb DAS	08/31/13	2,485	2013	9546.67	2,992
Effluent Pump #4 Back Stop Clutch (OLSD)	04/30/16	11,341	2016	10385.00	12,554
Effluent Pump #4 Rebuild & Convert to Grease -filled Vertical (OLSD)	06/30/16	1,589	2016	10385.00	1,759
75KW Generator Overhaul	10/29/12	3,548	2012	9308.17	4,382
Standby Power At OLEPS	3/29/18	195	2018	11062.00	203
OLEPS 4" Hellan Strainer Replacement75KW Generator Overhaul (Misc	07/29/13	6,003	2013	9546.67	7,229
Fuel Storage System Tank Replacement Phase 1 (Trihydro Corp)	06/30/16	15,396	2016	10385.00	17,043
Fuel Storage System Tank Replacement Phase 1 (Trihydro Corp & labor	06/30/17	57,637	2017	10737.00	61,713
AST Above Ground Diesel Storage At OLEPS	06/30/18	194,223	2018	11062.00	201,849
UST Fuel Storage System Tank Replacement	06/30/18	52,874	2018	11062.00	54,950
UST Fuel Storage System Tank Replacement	06/30/18	52,874	2018	11062.00	54,950
Day Tank Upgrade @OLEPS (Calcon)	06/30/17	6,586	2017	10737.00	7,052
Day Tank Upgrade @OLEPS (Calcon)	06/30/18	14,716	2018	11062.00	15,294
<b>Total - Oro Loma Pump Station</b>		<b>8,250,102</b>			<b>21,101,832</b>
<b>ALVARADO PUMP STATION</b>					
Earthwork	2/25/82	110,181	1982	3825.00	331,157
Structure	2/25/82	280,628	1982	3825.00	843,447
Mechanical & Pump. Equip.	2/25/82	191,653	1982	3825.00	576,027
Electrical	2/25/82	243,567	1982	3825.00	732,058
HVAC	2/25/82	32,059	1982	3825.00	96,356
Piping-Underground	2/25/82	280,128	1982	3825.00	841,945
Piping-Above Ground	2/25/82	77,119	1982	3825.00	231,787
OM SA1 Alignment Sys (1/5cost)	2/25/82	715	1982	3825.00	2,149
Flo Magmeter Sensor &Indicator	9/17/90	4,571	1990	4731.92	11,105

**East Bay Dischargers Authority**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Building Repair-Earthquake damage	2/07/91	10,848	1991	4835.08	25,793
AEPS Interior Painting	09/24/10	10,360	2010	8798.92	13,536
AEPS Operation & Infrastructure Optimization Proj PP#1-3	06/30/12	24,996	2012	9308.17	30,872
AEPS Operation & Infrastructure Optimization Proj PP#4-8	12/31/12	27,692	2012	9308.17	34,202
Auto MA Calibrator - Model #8060 (1/5cost)	9/12/91	149	1991	4835.08	354
Auto Volt Calibrator - Model #9060 (1/5cost)	5/06/92	150	1992	4984.83	346
Test Pump Calibrator & Gauge (1/5cost)	5/06/92	132	1992	4984.83	304
MCC #4 Replacement Project 05/11	5/14/92	88,179	1992	4984.83	203,363
DAS Antenna - SCADA	5/31/11	161	2011	9069.83	204
Rebuild Pump #4	08/27/93	9,621	1993	5210.42	21,228
Seismic Design & Eng SBG (20%)	01/31/94	1,637	1994	5407.58	3,480
Seismic Design & Eng SBG/C&G (35%)	01/23/97	59,607	1997	5825.08	117,640
Seismic Design & Eng C&D (35%)	01/23/97	2,016	1997	5825.08	3,979
Seismic Upgrade (D.W. Nicholson)	01/23/97	85,536	1997	5825.08	168,813
Seismic Upgrade (D.W. Nicholson)	01/23/97	17,464	1997	5825.08	34,467
ALVARADO EFFLUENT PUMP STATION UPGRADE \$570,820					
06/30/95 \$ 329,511	1995	329,511	1995	5471.17	692,386
06/30/96 241,309	1996	241,309	1996	5622.17	0
UNALLOCATED	1996	18,820	1996	5622.17	38,483
Variable Frequency Drive & H.F. No. 1	01/27/97	33,000	1997	5825.08	65,128
Variable Frequency Drive & H.F. No. 2	01/27/97	33,000	1997	5825.08	65,128
Prof Electrical Engineering Services 12/25/13-03/24/14 PP#1-3 (Beeche	03/24/14	7,755	2014	9806.00	9,092
Prof Electrical Engineering Services 08/24/14-05/24/15 PP#4-9 (Beeche	06/30/15	3,218	2015	10335.00	3,579
Prof Electrical Engineering Services 06/25/15-06/30/16 PP#10-18 (Beec	06/30/16	6,105	2016	10385.00	6,758
Variable Frequency Drive No. 2 replacement 150 hp (Royal Wholesale E	12/21/15	24,880	2015	10335.00	27,676
Variable Frequency Drive No. 2 replacement 150 hp (DW Nicholson)	06/30/16	12,410	2016	10385.00	13,738
Design & Installation of VFD #2	12/24/16	19,199	2016	10385.00	21,254
Variable Frequency Drive & H.F. No. 3	01/27/97	33,000	1997	5825.08	65,128

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Variable Frequency Drive & H.F. No. 4	01/27/97	38,000	1997	5825.08	74,996
Variable Frequency Drive & H.F. No. 5	01/27/97	38,000	1997	5825.08	74,996
Variable Frequency Drive & H.F. No. 6	01/27/97	38,000	1997	5825.08	74,996
Prof Electrical Engineering Services 12/25/13-03/24/14 PP#1-3 (Beeche	03/24/14	7,755	2014	9806.00	9,092
Prof Electrical Engineering Services 08/24/14-05/24/15 PP#4-9 (Beeche	06/30/15	3,218	2015	10335.00	3,580
Prof Electrical Engineering Services 06/25/15-06/30/16 PP#10-18 (Beech	06/30/16	6,105	2016	10385.00	6,758
Variable Frequency Drive No. 6 replacement 250 hp (Royal Wholesale E	12/21/15	52,871	2015	10335.00	58,812
Variable Frequency Drive No. 6 replacement 250 hp (DW Nicholson)	06/30/16	12,410	2016	10385.00	13,738
Design & Installation of VFD #6	12/24/16	19,199	2016	10385.00	21,254
Roof Fan & Motor No. 1	01/27/97	1,280	1997	5825.08	2,526
Roof Fan & Motor No. 2	03/14/03	1,280	2003	6694.58	2,198
Roof Fan & Motor No. 3	03/14/03	1,280	2003	6694.58	2,198
Pump Room Vent Fan	03/14/03	3,000	2003	6694.58	5,152
<b>Alvarado Effluent Flow Meter</b>	01/27/97	<b>50,000</b>	1997	5825.08	98,679
PLC No. 1	01/27/97	13,000	1997	5825.08	25,657
PLC No. 1 - Programming & installation of new PLC	12/31/09	63,246	2009	8570.08	84,841
PL Controller 4 MB (purchased from USD)	10/31/13	7,073	2013	9546.67	8,517
PLC No. 2	01/27/97	13,000	1997	5825.08	25,657
Trolley & Hoist Motors	01/27/97	8,000	1997	5825.08	15,789
Effluent Pump Motor No. 1	01/27/97	25,000	1997	5825.08	49,340
125 HP Reliance Motor No. 1 - Inspect & Repair (Vincent Electric Motor	06/30/15	4,657	2015	10335.00	5,180
Effluent Pump Motor No. 2	01/27/97	25,000	1997	5825.08	49,340
Effluent Pump Motor No. 3	01/27/97	25,000	1997	5825.08	49,340
Effluent Pump Motor No. 4	01/27/97	30,000	1997	5825.08	59,208
Effluent Pump Motor No. 5	01/27/97	30,000	1997	5825.08	59,208
Effluent Pump Motor No. 6	01/27/97	30,000	1997	5825.08	59,208
Effluent Pump Motor No. 6 - Inspect & Repair	01/27/97	5,233	1997	5825.08	10,328
Effluent Pump Motor No. 6 - Rebuild	06/30/18	18,015	2018	11062.00	18,722
Effluent Pump Motor No. 6 - Testing	06/30/18	513	2018	11062.00	533
Effluent Pump No. 1 - Balance impellar, shaft & coupling	05/31/15	1,658	2015	10335.00	1,845
Effluent Pump No. 1 - Temporary Impeller Repairs	08/12/15	3,220	2015	10335.00	3,582
Effluent Pump No. 1 - Repair Cracked Impeller	10/12/15	9,426	2015	10335.00	10,485

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Hydraulic Profile Study @AEPS PP#1-4 (Carollo Engineers Inc)	05/31/16	16,840	2016	10385.00	18,642
Payroll DAS & HC - Pump #1	05/31/17	471	2017	10737.00	504
Payroll - Pump #1	05/31/17	698	2017	10737.00	747
Effluent Pump No. 1 - Rebuild	06/30/18	99,340	2018	11062.00	103,240
Effluent Pump No. 4 - rebuild	09/14/09	14,048	2009	8570.08	18,845
Effluent Pump No. 4 - rebuild	10/24/02	5,144	2002	6538.00	9,045
Effluent Pump No. 5 - rebuild	03/31/05	11,263	2005	7446.08	17,389
Effluent Pump No. 6	11/07/02	87,000	2002	6538.00	152,979
Effluent Pump No. 6 - Impeller repair	01/27/97	6,592	1997	5825.08	13,010
Effluent Pump Motor #6 - Rebuild Fairbanks Morse pumpInspect & Rep	05/25/05	22,325	2005	7446.08	34,468
Payroll - Pump #6	05/31/17	646	2017	10737.00	692
Effluent Pump No. 6 - Rebuild	06/30/18	44,562	2018	11062.00	46,312
EBDA SCADA Telemetry System (5%) 6/30/96	06/30/18	1,641	2018	11062.00	1,705
EBDA SCADA Telemetry System (5%) 6/30/97	07/23/98	786	1998	5920.42	1,526
EBDA SCADA Telemetry System (5%) 6/30/98	07/23/98	186	1998	5920.42	361
Rebuild Electric Motor	07/23/98	5,488	1998	5920.42	10,657
2 Milltronics Level Sensors & installation	07/31/95	5,632	1995	5471.17	11,834
USD Surge Tower Level Indicator	11/21/96	2,121	1996	5622.17	4,337
Level Transducer - Removed & Installed	02/20/97	1,611	1997	5825.08	3,179
#2 Pump Impellar Replacement	09/30/08	9,336	2008	8309.92	12,916
Surge Tower Level Transducer	03/06/97	1,184	1997	5825.08	2,337
Repair Surge Tower Steps-New Handrail	05/19/97	3,402	1997	5825.08	6,714
Pump Station Control Valve Operator	01/29/99	8,560	1999	6059.50	16,240
Pump Station Control System Modification	01/31/02	30,000	2002	6538.00	52,751
Pump Station Control System Modification	09/30/02	9,292	2002	6538.00	16,339
Level Control Transducer No. 1	09/30/02	839	2002	6538.00	1,475
Level Control Transducer No. 1	07/31/02	811	2002	6538.00	1,426
Level Control Transducer No. 2	02/19/04	839	2004	7115.08	1,356
Level Control Transducer No. 2	07/31/02	849	2002	6538.00	1,493
Level Control Transducer - Spare	05/20/04	559	2004	7115.08	903
Overhead Crane & Hoist - Pumps	05/20/04	5,693	2004	7115.08	9,199
Station HMI Control	01/16/04	1,575	2004	7115.08	2,545

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Exhaust Fan Replacement	06/30/04	2,330	2004	7115.08	3,765
Exhaust Fan Replacement	06/17/04	2,330	2004	7115.08	3,765
Exhaust Fan Replacement	06/17/04	2,330	2004	7115.08	3,765
Level Control Transducer No. 1	06/17/04	542	2004	7115.08	876
EBDA Scada/Telemetry System - PLC CPU repair	08/31/05	1,953	2005	7446.08	3,015
Level Control Transducer No. 1	01/31/06	1,458	2006	7751.25	2,162
Level Control Transducer No. 2	09/29/06	1,459	2006	7751.25	2,164
EBDA Scada/Telemetry System	09/29/06	636	2006	7751.25	943
EBDA Scada/Telemetry System	04/30/07	1,402	2007	7967.00	2,023
Emergency Outfall Valve - Valve Renewal	02/20/08	7,555	2008	8309.92	10,452
Bearing Replacement Effluent Pump No. 4	11/12/09	4,606	2009	8570.08	6,179
Check Valve Dampeners	03/20/97	9,010	1997	5825.08	17,782
Refurbish Pump No. 1 Check Valve	07/31/10	11,667	2010	8798.92	15,244
Refurbish Pump No. 2 Check Valve	10/31/10	11,667	2010	8798.92	15,244
Refurbish Pump No. 3 Check Valve	10/31/10	11,667	2010	8798.92	15,244
30" Check Valve #4 Repairs @AEPS	03/31/09	11,819	2009	8570.08	15,855
Refurbish Pump No. 4 Check Valve	10/31/10	11,667	2010	8798.92	15,244
Inspect damaged Pump No. 4 Check Valve	12/31/12	2,500	2012	9308.17	3,088
30" Apco Series 6000 Swing Check Valve #4 (Frank Olsen Co)	10/03/13	48,925	2013	9546.67	58,917
Remove & Install Check Valve #4 labor & materials (DW Nicholson)	11/30/13	15,830	2013	9546.67	19,063
Refurbish Pump No. 5 Check Valve	10/31/10	11,666	2010	8798.92	15,242
Refurbish Pump No. 6 Check Valve	10/31/10	11,666	2010	8798.92	15,242
AEPS VFD Assessment	02/28/13	360	2013	9546.67	434
Electrical Engineering Services Switchboard 4 Tech Memo (Beecher Eng	08/13/16	1,080	2016	10385.00	1,196
Total - Alvarado Pump Station		3,249,963			7,140,784
DATA ACQUISITION SYSTEM					
Old System Disposed of					
Software, Testing, Training	6/3/82	43,881	1982	3825.00	131,887
Electrical & Hardware	6/3/82	93,212	1982	3825.00	280,155
New system					



## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
IBM - AT	6/3/82	5,317	1982	3825.00	15,981
Electrical & Harware	3/1/87	41,656	1987	4406.00	108,690
Electrical & Harware-Radios	6/30/87	2,264	1987	4406.00	5,907
Epson Printer FX286E	10/31/87	593	1987	4406.00	1,547
Remote 515 Board	8/2/88	1,472	1988	4519.00	3,745
USA Telecommunications Systems	8/11/88	513	1988	4519.00	1,305
Install of Printer Line	2/22/89	59	1989	4615.00	147
Epson FX-28 Printer	3/8/89	385	1989	4615.00	959
Compaq-Plus Computer	7/10/89	1,517	1989	4615.00	3,779
Practical Pereipherals 2400 Baud	8/31/89	246	1989	4615.00	613
MNP5 External Modem					
Equinet Version 4.0 - Calc Package and Manual	11/02/90	1,609	1990	4731.92	3,909
Printer, Epson Model FX-10	11/07/90	405	1990	4731.92	984
Printer, Epson Model FX-10	8/06/91	405	1991	4835.08	963
386 Computer with Upgrade for Telemetry System	8/06/91	4,049	1991	4835.08	9,627
DAS Antenna - SCADA	1/30/92	348	1992	4984.83	803
4 Communications Antennas	8/27/93	646	1993	5210.42	1,425
EBDA SCADA Telemetry System (75%) 6/30/96	9/16/93	24,609	1993	5210.42	54,298
EBDA SCADA Telemetry System (75%) 6/30/97	07/23/98	11,795	1998	5920.42	22,904
EBDA SCADA Telemetry System (75%) 6/30/98	07/23/98	2,808	1998	5920.42	5,453
EBDA/LAVWMA SCADA System (Calcon Inv PP#1 03/31/08)	07/23/98	20,746	1998	5920.42	40,285
EBDA/LAVWMA SCADA System (Calcon Inv PP#2 05/30/08)	03/19/09	40,372	2009	8570.08	54,157
<b>EBDA/LAVWMA SCADA System (Calcon Inv PP#3 10/07/08)</b>	<b>03/19/09</b>	<b>13,667</b>	2009	8570.08	18,334
EBDA SCADA Polling PLC Upgrade @Admin Office	11/30/11	22,340	2011	9069.83	28,317
EBDA/LAVWMA SCADA System (Calcon Inv PP#4 03/25/09)	03/19/09	23,515	2009	8570.08	31,544
SCADA System Radios (5)	03/19/09	6,761	2009	8570.08	9,070
Antenna and Installation for SCADA	08/31/15	4,653	2015	10335.00	5,176
Upgrade Wireless Communications	10/30/15	6,281	2015	10335.00	6,987
Upgrades & Corrections to SCADA Radio - Refurbish Serial Wireless Comm	12/30/15	1,190	2015	10335.00	1,323
Upgrade SCADA Software to Win911	12/31/15	1,329	2015	10335.00	1,478

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Upgrade SCADA	06/30/17	5,583	2017	10737.00	5,978
EBDA Scada/Telemetry System - Radio (Calcon)	12/18/09	4,151	2009	8570.08	5,568
EBDA Scada/Telemetry System - Radio (Calcon)	09/08/10	722	2010	8798.92	943
SCADA System Communication Upgrade	06/30/18	11,115	2018	11062.00	11,551
PC for Scada (R-Computer) & Setup of PC & Citect (Calcon)	05/31/15	4,418	2015	10335.00	4,914
EBDA Scada Server Replacement (R-Computer)	08/27/13	3,474	2013	9546.67	4,183
EBDA Scada Server Software & Hardware Update	09/26/13	2,656	2013	9546.67	3,198
Citect SCADA Software	09/24/10	1,277	2010	8798.92	1,668
SCADA System Upgrade	06/30/18	45,002	2018	11062.00	46,769
SCADA System Upgrade	06/30/18	14,076	2018	11062.00	14,629
EBDA SCADA Alarm System	10/30/95	3,308	1995	5471.17	6,951
EBDA SCADA Alarm System	03/31/03	7,113	2003	6694.58	12,215
EBDA SCADA Alarm Software WIN-911 (Wonderware NorCal)	02/04/14	1,909	2014	9806.00	2,238
EBDA SCADA Alarm Software WIN-911 - Installation (Calcon)	02/28/14	2,261	2014	9806.00	2,651
EBDA SCADA Alarm Software WIN-911 - Labor - troubleshoot (Calcon)	06/30/14	1,147	2014	9806.00	1,345
SCADA Alarm Notification Software - TopView	05/17/18	3,819	2018	11062.00	3,969
LAVWMA SCADA Connection	03/31/03	6,983	2003	6694.58	11,992
LAVWMA SCADA Connection	07/23/98	324	1998	5920.42	629
Smart UPS 400 Power Backup - SCADA	07/23/98	327	1998	5920.42	635
Maintenance Monitoring Standard System Software	11/06/96	2,165	1996	5622.17	4,427
Report Printer for Citect SCADA System	02/20/97	262	1997	5825.08	517
CMMS Program Upgrade, Davison Software	10/28/99	1,082	1999	6059.50	2,053
DAS Dell Computer, Monitor & UPS (Scada)	08/31/00	4,271	2000	6221.17	7,893
EBDA Network Server	05/28/02	4,769	2002	6538.00	8,386
Total - Data Acquisition System		510,856			1,017,053
RECLAMATION FACILITIES					
SKYWEST GOLF COURSE IRRIGATION					
Earthwork	4/19/84	25,962	1984	4146.00	71,989
Structure	4/19/84	215,344	1984	4146.00	597,120
Mechanical & Pump. Equip.	4/19/84	55,005	1984	4146.00	152,522

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Electrical	4/19/84	54,958	1984	4146.00	152,391
Piping-Underground	4/19/84	241,921	1984	4146.00	670,815
Piping-Above Ground	4/19/84	23,802	1984	4146.00	66,000
Skywest Chlorine Analyzer	4/19/84	5,041	1984	4146.00	13,978
Rebuild Analyzer, Parts & Labor	7/21/92	1,900	1992	4984.83	4,382
Sky West Chlorine Analyzer	6/30/01	7,892	2001	6342.08	14,306
Skywest Motor Control Center Modification	9/30/04	2,860	2004	7115.08	4,621
Sky West Pump No. 1 Motor	10/28/93	3,095	1993	5210.42	6,829
Sky West Pump No. 1	4/30/02	4,378	2002	6538.00	7,698
Sky West Pump No. 1 (Calcon)	06/30/17	11,485	2017	10737.00	12,298
Sky West Pump No. 2 Motor	4/30/02	3,095	2002	6538.00	5,442
Sky West Pump No. 2	4/30/02	4,378	2002	6538.00	7,698
Sky West Pump No. 2 (Calcon)	06/30/17	11,485	2017	10737.00	12,298
Limitorque Valve Actuator	4/30/02	2,310	2002	6538.00	4,062
Sky West Instrument Control Center	10/02/02	5,205	2002	6538.00	9,152
Sky West Instrument Control Center	10/31/02	580	2002	6538.00	1,020
Sky West Instrument Control Center	01/31/03	1,467	2003	6694.58	2,519
Sky West Instrument Control Center	12/31/02	1,288	2002	6538.00	2,265
Sky West Mixer Motor (North) Baldor 5hp	12/31/02	806	2002	6538.00	1,417
Sky West Mixer Motor (South) Baldor 5hp	03/30/05	806	2005	7446.08	1,244
Sky West Mixer Gears (North)	03/30/05	1,594	2005	7446.08	2,461
Sky West Mixer Gears (North) - Bearing sets etc.	04/28/05	996	2005	7446.08	1,538
Sky West Mixer Gears (North) - Gear box & misc.	05/31/05	1,266	2005	7446.08	1,955
Sky West Mixer Gears (South)	06/30/05	1,594	2005	7446.08	2,461
Sky West Mixer Gears (South) - Bearing sets etc.	04/28/05	995	2005	7446.08	1,536
Sky West Mixer Gears (North) - Gear box & misc.	05/31/05	1,266	2005	7446.08	1,955
Sky West Hypo Control System Upgrade	05/31/13	20,995	2013	9546.67	25,283
Sky West Chemical Injection Pump - Relocation	03/31/15	7,535	2015	10335.00	8,381
Sky West Hypo CL2 Dosing Line	08/31/15	8,912	2015	10335.00	9,914
Gate Valve 8" at Recycle Line - Furnish & Install	06/24/16	3,773	2016	10385.00	4,176
Sky West Total Residual Analyzer	04/30/13	5,144	2013	9546.67	6,194
Ultrasonic Level Transmitter & installation (Calcon)	06/14/17	8,573	2017	10737.00	9,180

**East Bay Dischargers Authority**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Total - Reclamation Facilities		747,707			1,897,100
SUBSURFACE LINES					
BAY OUTFALL	1982	19,464,081	1982	3825.00	58,500,682
Valve for Marina Meter Box	4/1/81	1,880	1981	3535.00	6,114
LAVWMA Valve Vault	8/8/91	134,946	1991	4835.08	320,859
Air/Vac Valve Project	11/3/93	1,442	1993	5210.42	3,182
Air/Vac Valve Project	05/31/94	1,443	1994	5407.58	3,068
Air/Vac Valve Project	05/31/94	1,443	1994	5407.58	3,068
F.M. and Bay Outfall Inspection	05/31/94	25,446	1994	5407.58	54,097
Fuel (Gasoline) Transfer Pump	06/01/95	374	1995	5471.17	786
Raise Manholes H-O ARV Key B Sta 20+05	03/20/97	2,028	1997	5825.08	4,002
Custom Clamps (3) for Outfall Pipe (DW Nicholson)	06/30/16	27,768	2016	10385.00	30,739
Custom Clamps (3) for Outfall Pipe (DW Nicholson)	08/18/16	1,461	2016	10385.00	1,618
SAN LEANDRO TO MARINA FORCE MAIN	1982	3,699,150	1982	3825.00	11,118,059
Blow-Off Valves	4/1/81	2,527	1981	3535.00	8,218
Air/Vac Valves	1/8/91	6,314	1991	4835.08	15,013
MARINA TO ORO LOMA FORCE MAIN	4/8/91	5,410,434	1991	4835.08	12,864,313
Blow-Off Valves	4/1/81	2,526	1981	3535.00	8,215
Air/Vac Valves	1/8/91	6,314	1991	4835.08	15,013
Air/Vac Release Valve M-O A/V Valve Key	4/8/91	6,391	1991	4835.08	15,196
Sta 60+00	01/26/00		2000	6221.17	0
Vent-O-Mat 8" Air/Vacuum Release Valve	02/19/04	6,745	2004	7115.08	10,898
Sta 71+00					
ORO LOMA TO HAYWARD FORCE MAIN					
Piping-Underground	1982	2,734,664	1982	3825.00	8,219,227
Cathodic Protection	4/1/81	9,504	1981	3535.00	30,908
Air/Vac Valves	3/21/85	4,154	1985	4195.00	11,384
HAYWARD TO ALVARADO FORCE MAIN					
Piping-Underground	11/09/93	8,363,252	1993	5210.42	18,452,754
Cathodic Protection	04/01/81	9,504	1981	3535.00	30,908

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Aquadyne Vent-O-Mat 4" Air Release Valve H-A A/V Valve Key P Sta 249+19	03/21/85	2,331	1985	4195.00	6,388
<b>Aquadyne Vent-O-Mat 4" Air Release Valve</b> H-A A/V Valve Key S Sta 268+94	04/30/05	<b>2,331</b>	2005	7446.08	3,599
Aquadyne Vent-O-Mat 6" RGX Combination Air Valve	04/30/05	6,377	2005	7446.08	9,846
Aquadyne Vent-O-Mat 6" RGX Combination Air Valve	08/11/08	6,377	2008	8309.92	8,822
Aquadyne Vent-O-Mat 6" RGX Combination Air Valve	08/11/08	6,377	2008	8309.92	8,822
<b>New Galvanic Anodes &amp; Replace Flush Test Station w/ Post Mounted Test Station</b>	<b>08/11/08</b>	<b>5,000</b>	2008	8309.92	6,917
Force Main Air Valves 4" T&T Valve & Instrument	12/15/10	3,121	2010	8798.92	4,078
Force Main Air Valves 6" T&T Valve & Instrument	06/29/11	3,298	2011	9069.83	4,180
Force Main Air Valves 8" T&T Valve & Instrument	06/29/11	3,785	2011	9069.83	4,798
<b>Force Main Air Valves 6" T&amp;T Valve &amp; Instrument</b>	06/29/11	<b>3,349</b>	2011	9069.83	4,245
Force Main Air Valves 8" T&T Valve & Instrument	10/14/11	3,842	2011	9069.83	4,870
Force Main Air Valves 8" T&T Valve & Instrument	10/14/11	3,842	2011	9069.83	4,870
Force Main Air Valves 4" T&T Valve & Instrument	09/07/12	3,454	2012	9308.17	4,265
Force Main Air Valves 4" T&T Valve & Instrument	09/07/12	3,454	2012	9308.17	4,265
Force Main Air Valves 4" T&T Valve & Instrument	09/07/12	3,453	2012	9308.17	4,265
Force Main Air Valves 6" T&T Valve & Instrument	09/07/12	3,652	2012	9308.17	4,510
Force Main Air Valves 6" T&T Valve & Instrument	09/07/12	3,651	2012	9308.17	4,509
Manhole Improvements for Force Main Station 59+63	03/18/14	6,850	2014	9806.00	8,031
Manhole Improvements for Force Main Station 51+43 FM37 Hayward Marsh	10/01/14	8,400	2014	9806.00	9,848
Manhole Improvements for Force Main Station 70+85	11/17/14	4,711	2014	9806.00	5,523
Manhole Improvements for Force Main Station 21+58	11/17/14	4,712	2014	9806.00	5,524
Manhole Improvements for Force Main Station 70+48	11/17/14	4,711	2014	9806.00	5,523
Manhole Improvements for Force Main Station 13+56	11/17/14	4,711	2014	9806.00	5,523
Manhole Improvements - Epoxy Coat Manhole for Transport System Station	11/12/15	3,900	2015	10335.00	4,338
Manhole Improvements - Epoxy Coat Manhole for Transport System Station	11/12/15	3,900	2015	10335.00	4,338
Manhole Improvements - Epoxy Coat Manhole for Transport System Station	11/12/15	3,900	2015	10335.00	4,338
Manhole Improvements - Epoxy Coat Manhole for Transport System Station	11/12/15	3,900	2015	10335.00	4,338
Manhole Improvements - Epoxy Coat Manhole for Transport System Station	11/12/15	3,900	2015	10335.00	4,338
Vaults, Ebda & Lavwma - Epoxy Coat Vault for Transport System	11/12/15	54,576	2015	10335.00	60,709

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
COMPLETION CONTRACTS					
Piping-Underground	12/31/84	0	1984	4146.00	0
SEISMIC DESIGN SBG/C&D	01/23/97	11,647	1997	5825.08	22,986
Total - Subsurface Lines		40,111,302			109,966,930
OFFICE FURNITURE & EQUIPMENT					
Laser Access Switch		330			
Pacific Data 2 Meg HP Laser Jet II	4/10/90	321	1990	4731.92	780
Ram Cartridge					
Word Processing Typewriter, Smith Corona 640DLD	11/02/90	263	1990	4731.92	639
Chair, Hi-Back Executive	10/25/91	941	1991	4835.08	2,237
Chair, Guest	10/25/91	724	1991	4835.08	1,721
Credenza, Martin Furn Model C67-1	10/25/91	734	1991	4835.08	1,745
Bookcase, Orman Grubb Mod ORM C784	10/28/91	226	1991	4835.08	537
Chairs, Desk (5)	10/28/91	541	1991	4835.08	1,286
Chairs, Armed Swivel Tilt (2)	11/04/91	371	1991	4835.08	882
Chair, Armed Swivel Tilt (1)	11/01/91	181	1991	4835.08	430
Transcribing Machine	11/08/91	292	1991	4835.08	694
Archive Storage - Records Shelving	12/29/92	1,642	1992	4984.83	3,787
Archive Storage - Records Shelving	01/24/94	862	1994	5407.58	1,833
Archive Storage - Ladder	08/13/93	412	1993	5210.42	909
2 Disc Holders - Fireking	08/13/93	561	1993	5210.42	1,238
Software Upgrades	12/20/93	630	1993	5210.42	1,390
American Fundware Acctg Software Upgrades V7.20	07/14/94	2,232	1994	5407.58	4,745
Canon L777 Fax	05/31/03	3,042	2003	6694.58	5,224
Records Retention Software	08/26/94	6,490	1994	5407.58	13,797
Records Management Software (Versatile)	09/12/94	1,754	1994	5407.58	3,729
Active File Storage	11/15/02	1,442	2002	6538.00	2,536
Archive File Storage	10/14/94	990	1994	5407.58	2,105
Binding Machine - 1st Impressions	10/14/94	296	1994	5407.58	629

## East Bay Dischargers Authority

### Fixed Asset Valuation

ENR-Construction Cost Index (20-Cities Avg), January 2020:

11,496.31

Based on Fixed Asset Schedule 06/30/18

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Bookcase - Admin Asst's office	03/27/95	667	1995	5471.17	1,402
Conference Table	09/19/95	636	1995	5471.17	1,336
Sharp Wizard Scheduler/Calculator (replacement)	10/05/95	355	1995	5471.17	746
Computer Equipment CCRWRP for O&M Mgr	03/31/96	2,869	1996	5622.17	5,867
Dell ErgoBoard 108-Key Win 95/98 Keyboard F8E208	07/11/95	24	1995	5471.17	50
HP Laser Jet Printer 4V	04/11/01	2,045	2001	6342.08	3,707
AFW Extended Report Writer Software	11/22/95	320	1995	5471.17	672
HP 1600C Desk Jet Color Printer	10/03/96	1,407	1996	5622.17	2,877
External Modem MT1932ZDX for USA	02/05/97	222	1997	5825.08	438
Canon NP 6551 Copier	05/20/98	0	1998	5920.42	0
Sharp MX5111N Copier/Printer/Scanner	02/28/13	12,480	2013	9546.67	15,029
Konica Bizhub C558 Copier/Printer/Scanner	06/14/18	12,803	2018	11062.00	13,305
Dell XPS R450/Monitor/Tape/Software GM	12/21/07	3,001	2007	7967.00	4,330
Dell XPS R450/Monitor/Tape/Software Admin	01/15/99	2,372	1999	6059.50	4,500
Dell Inspiron 3500/Software/Acc Scada Laptop	01/15/99	2,916	1999	6059.50	5,532
Dell XPS R450/Monitor/Zip/Software Acctg	01/15/99	2,238	1999	6059.50	4,246
Dell Back-Ups 500VA Accs Acctg	01/15/99	127	1999	6059.50	241
Dell Precision 340, 2.3 GHz Acctg Computer & UPS (Converted to Server 01/15/09)	01/15/99	2,446	1999	6059.50	4,641
Dell XPS 420 , Q9400(2.66GHZ),DCT, 6MB (11/14/08)	12/01/02	1,778	2002	6538.00	3,126
Dell Back-Ups 500VA Accs GM	01/15/09	127	2009	8570.08	170
Dell Back-Ups 500VA Accs Admin	01/15/99	127	1999	6059.50	241
Dell Scada Laptop Accessories	01/15/99	86	1999	6059.50	163
Epson FX-2180 Dot Matrix Printer-Acctg	01/15/99	581	1999	6059.50	1,102
ATS Communications Telephone System	02/26/99	11,942	1999	6059.50	22,657
Deluxe ESI Telephone System @ Admin office	09/23/99	4,603	1999	6059.50	8,733
Multi Task Arm Chair	10/29/09	346	2009	8570.08	464
Network Equipment - Dell Office Connect 16 Port	09/25/00	529	2000	6221.17	978
10/100 Dual Speed Hub, 3 3Com Fast Etherlink	03/27/01		2001	6342.08	0
10/100 PCI NIC w/WOL & Cables					
Dell Jet Direct 300X Office Connect Ext, 10/100	04/04/01	265	2001	6342.08	480
Base-TX Single Port J4101B#ABA Switcher for printer					

**East Bay Dischargers Authority**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
Dell Back-UPS 500 BK500MC	04/04/01	164	2001	6342.08	297
Dell Dimension 4100 Series, Pentium III, 19" Monitor & Upgrades	04/11/01	2,649	2001	6342.08	4,802
Verizon Cellular Phone - General Manager	04/23/01	103	2001	6342.08	187
Verizon Cellular Phone - Operations Manager	06/14/02	103	2002	6538.00	181
Verizon Cellular Phone - Operations Manager	06/14/02	330	2002	6538.00	580
Label maker & adapter	02/19/04	219	2004	7115.08	354
Dell Dimension 8300 + UPS O&M Mgr	09/19/02	2,162	2002	6538.00	3,802
HPdx2400 PC Harddrive - O&M Mgr	04/07/04	567	2004	7115.08	916
Dell Dimension 8300 + UPS Admin Asst	06/22/09	2,162	2009	8570.08	2,900
Dell Latitude D630 Laptop & Accessories - CSL Operator	04/07/04	2,009	2004	7115.08	3,246
HP5500C Flatbed Scanner	11/17/08	335	2008	8309.92	463
HP4600dn Color Laser Printer	04/07/04	2,734	2004	7115.08	4,418
Brother Intellifax-4100 Laser	04/07/04	299	2004	7115.08	483
Dell XPS 400 Computer System - GM	08/31/05	2,860	2005	7446.08	4,416
Computer System - Create Build w/ Acer 24"LCD Monitor GM	12/07/05	1,595	2005	7446.08	2,463
Dell Lattitude, D620 Laptop & Accessories	05/12/11	0	2011	9069.83	0
HP 6735b Business Notebook - GM	8/07/06	964	2006	7751.25	1,430
Canon SD850 IS 8MB Digital Camera	05/30/09	304	2009	8570.08	408
BenQ MP512 Projector	12/06/07	549	2007	7967.00	792
Equipment to Upgrade Internet Services @ EBDA Opr & Admin Bldg	02/25/15	1,537	2015	10335.00	1,709
Backup Generator @ Admin Office	05/28/09	19,950	2009	8570.08	26,762
<b>Total - Office Furniture &amp; Equipment</b>		<b>134,183</b>			<b>220,518</b>
<b>FIELD EQUIPMENT</b>					
Survey Equipment	12/1/81	823	1981	3535.00	2,677
Portable Sump Pump	12/1/81	527	1981	3535.00	1,714
Pressure Recorders	8/16/83	2,131	1983	4066.00	6,025
Oxygen Alarm	5/1/87	1,514	1987	4406.00	3,950
Orion Oxygen Meter	9/7/88	980	1988	4519.00	2,493
2-Oki 900 Portable Cellular Phones	2/22/90	2,669	1990	4731.92	6,484



**East Bay Dischargers Authority**  
**Fixed Asset Valuation**

ENR-Construction Cost Index (20-Cities Avg), January 2020:	11,496.31
--	-----------

*Based on Fixed Asset Schedule 06/30/18*

Asset Description	Acquisition Date	Acquisition Cost	Acquisition Year	ENR CCI Acquisition Yr	ENR-Adjusted Cost
w/ accessories					
Electronic Metering Pump	4/23/91	955	1991	4835.08	2,271
Emergency Standby Generator-175KW Caterpillar Genset Model 3208	4/23/91	57,911	1991	4835.08	137,694
Temperature Sensor for Electrical Systems	6/11/91	693	1991	4835.08	1,648
Spray Painting Equipment	10/23/92	362	1992	4984.83	835
Fischer & Porter Programmer	11/09/92	1,624	1992	4984.83	3,745
Camera & Accessories - Yashica	5/31/93	206	1993	5210.42	455
Meter Calibrator Kit	12/03/93	658	1993	5210.42	1,452
 Total - Field Equipment		 71,053			 171,443
 AUTOMOTIVE EQUIPMENT					
Ford Ranger XL 4WD Truck 1999	06/17/99	0	1999	6059.50	0
Ford Ranger 4WD & Tool Box 2007	08/31/07	19,718	2007	7967.00	28,453
 Total - Automotive Equipment		 19,718			 28,453
 TOTALS		 60,471,959			 157,342,690

## **APPENDIX D**

### **Water Use & Estimated Wastewater Demand Per Single Family & Multi-Family Dwelling Unit**

Table D-1

Union Sanitary District  
ACWD Average Monthly Water Use  
*Single Family Residential*

2005/06 - 2008/09

	<b>Estimated Single Family Use (gpd)</b>	<b>Average Annual Accounts</b>	<b>Average Monthly Use (gpd)</b>		<b>Estimated Single Family Use (gpd)</b>	<b>Average Annual Accounts</b>	<b>Average Monthly Use (gpd)</b>
<b>2005/06</b>				<b>2006/07</b>			
Jul	31,917,962	69,636	458	Jul	32,032,430	70,091	457
Aug	28,981,378	69,636	416	Aug	31,714,390	70,091	452
Sep	26,440,793	69,636	380	Sep	26,363,887	70,091	376
Oct	24,453,641	69,636	351	Oct	21,644,122	70,091	309
Nov	18,684,974	69,636	268	Nov	17,560,983	70,091	251
Dec	15,917,410	69,636	229	Dec	16,768,230	70,091	239
Jan	16,549,794	69,636	238	Jan	16,739,586	70,091	239
Feb	13,353,399	69,636	192	Feb	15,768,051	70,091	225
Mar	13,690,339	69,636	197	Mar	18,586,703	70,091	265
Apr	18,306,106	69,636	263	Apr	20,133,252	70,091	287
May	24,499,917	69,636	352	May	26,058,618	70,091	372
Jun	<u>28,161,814</u>	<u>69,636</u>	<u>404</u>	Jun	<u>29,211,011</u>	<u>70,091</u>	<u>417</u>
Total	260,957,525	69,636	312	Total	272,581,263	70,091	324
Avg Use for Lowest 4 Months			214	Avg Use for Lowest 4 Months			238
<b>2007/08</b>				<b>2008/09</b>			
Jul	27,619,267	70,857	390	Jul	27,582,753	71,085	388
Aug	27,770,560	70,857	392	Aug	27,454,617	71,085	386
Sep	25,557,682	70,857	361	Sep	24,635,000	71,085	347
Oct	20,453,942	70,857	289	Oct	19,661,080	71,085	277
Nov	17,847,497	70,857	252	Nov	18,132,509	71,085	255
Dec	17,862,409	70,857	252	Dec	17,813,336	71,085	251
Jan	16,234,270	70,857	229	Jan	15,111,216	71,085	213
Feb	15,039,885	70,857	212	Feb	13,907,274	71,085	196
Mar	19,405,819	70,857	274	Mar	17,279,816	71,085	243
Apr	21,591,617	70,857	305	Apr	19,390,157	71,085	273
May	25,701,180	70,857	363	May	24,777,456	71,085	349
Jun	<u>28,635,732</u>	<u>70,857</u>	<u>404</u>	Jun	<u>25,970,982</u>	<u>71,085</u>	<u>365</u>
Total	263,719,860	70,857	310	Total	251,716,198	71,085	295
Avg Use for Lowest 4 Months			236	Avg Use for Lowest 4 Months			225
<b>4-Year Average Use for 4 Lowest Contiguous Months (gpd)</b>							<b>228</b>

Table D-2  
 Union Sanitary District  
 ACWD Average Monthly Water Use  
 Single Family Residential

2017/18 - 2018/19

	Single Family Residential Use (gpd)	Est Average Annual Accounts	Average Monthly Use (gpd)
<b>2017/18</b>			
Jul	18,853,129	73,231	257
Aug	19,630,068	73,231	268
Sep	17,922,698	73,231	245
Oct	16,329,720	73,231	223
Nov	13,867,265	73,231	189
Dec	13,017,312	73,231	178
Jan	13,690,092	73,231	187
Feb	11,686,185	73,231	160
Mar	12,399,927	73,231	169
Apr	13,366,887	73,231	183
May	16,463,492	73,231	225
Jun	<u>18,235,504</u>	<u>73,231</u>	<u>249</u>
Total	185,462,281	73,231	211
Avg Use for Lowest 4 Contiguous Months			173
<b>2018/19</b>			
Jul	19,128,308	73,530	260
Aug	19,674,781	73,530	268
Sep	17,394,444	73,530	237
Oct	16,552,168	73,530	225
Nov	14,839,729	73,530	202
Dec	12,666,909	73,530	172
Jan	12,548,351	73,530	171
Feb	11,062,141	73,530	150
Mar	11,946,304	73,530	162
Apr	12,830,435	73,530	174
May	10,746,755	73,530	146
Jun	n/a	73,530	n/a
Total	159,390,327	73,530	197
Avg Use for Lowest 4 Contiguous Months			164
<b>2-Year Average of 4 Lowest Contiguous Months (gpd)</b>			<b>169</b>

Note: Water demand from the past two fiscal years represents a period in which water use was partially rebounding from reduced levels experienced during California's declared state of drought emergency from Jan-2014 through Apr-2017.

Table 4  
 Union Sanitary District  
 ACWD Average Monthly Water Use  
 Multi-Family Residential

2005/06 - 2008/09

	Estimated Multi-Family Use (gpd)	Estimated Annual Accounts <sup>1</sup>	Average Monthly Use (gpd)		Estimated Multi-Family Use (gpd)	Estimated Annual Accounts <sup>1</sup>	Average Monthly Use (gpd)
<b>2005/06</b>				<b>2006/07</b>			
Jul	8,680,492	33,863	256	Jul	8,861,092	34,192	259
Aug	8,717,198	33,863	257	Aug	8,860,478	34,192	259
Sep	8,257,184	33,863	244	Sep	8,347,415	34,192	244
Oct	7,236,807	33,863	214	Oct	7,612,253	34,192	223
Nov	6,007,978	33,863	177	Nov	6,491,403	34,192	190
Dec	6,004,021	33,863	177	Dec	6,600,660	34,192	193
Jan	7,054,528	33,863	208	Jan	6,582,734	34,192	193
Feb	6,015,573	33,863	178	Feb	6,002,018	34,192	176
Mar	5,328,796	33,863	157	Mar	6,936,123	34,192	203
Apr	6,080,335	33,863	180	Apr	6,800,171	34,192	199
May	7,645,838	33,863	226	May	7,646,349	34,192	224
Jun	<u>8,182,595</u>	<u>33,863</u>	<u>242</u>	Jun	<u>8,180,212</u>	<u>34,192</u>	<u>239</u>
Total	85,211,345	33,863	210	Total	88,920,907	34,192	217
Avg Use for 4 Low Months			180	Avg Use for 4 Low Months			188
<b>2007/08</b>				<b>2008/09</b>			
Jul	8,314,997	34,350	242	Jul	8,138,530	34,551	236
Aug	8,586,722	34,350	250	Aug	7,965,072	34,551	231
Sep	7,212,264	34,350	210	Sep	7,785,697	34,551	225
Oct	6,327,881	34,350	184	Oct	6,433,373	34,551	186
Nov	6,371,319	34,350	185	Nov	6,074,098	34,551	176
Dec	6,622,925	34,350	193	Dec	6,721,275	34,551	195
Jan	6,763,158	34,350	197	Jan	6,481,160	34,551	188
Feb	6,316,691	34,350	184	Feb	5,782,613	34,551	167
Mar	6,778,513	34,350	197	Mar	6,470,568	34,551	187
Apr	6,637,245	34,350	193	Apr	6,788,251	34,551	196
May	7,842,157	34,350	228	May	7,472,109	34,551	216
Jun	<u>8,795,937</u>	<u>34,350</u>	<u>256</u>	Jun	<u>7,847,913</u>	<u>34,551</u>	<u>227</u>
Total	86,569,809	34,350	210	Total	83,960,657	34,551	203
Avg Use for 4 Low Months			190	Avg Use for 4 Low Months			181
<b>4-Year Average Use for 4 Lowest Contiguous Months (gpd)</b>							<b>185</b>

<sup>1</sup> Based on census data for total housing units less number of ACWD single family residences; assumes a 100% occupancy rate.

Table 5  
 Union Sanitary District  
 ACWD Average Monthly Water Use  
*Multi-Family Residential*

2017/18 - 2018/19

	Multi-Family Residential Use (gpd) <sup>1</sup>	Estimated Annual Accounts <sup>2</sup>	Average Monthly Use (gpd)
<b>2017/18</b>			
Jul	7,362,353	40,842	180
Aug	7,643,045	40,842	187
Sep	7,192,913	40,842	176
Oct	6,765,772	40,842	166
Nov	6,007,598	40,842	147
Dec	5,960,595	40,842	146
Jan	6,471,322	40,842	158
Feb	5,633,821	40,842	138
Mar	5,826,160	40,842	143
Apr	6,060,260	40,842	148
May	6,877,735	40,842	168
Jun	<u>7,044,598</u>	<u>40,842</u>	<u>172</u>
Total	78,846,172	40,842	161
Avg Use for Lowest 4 Contiguous Months			146
<b>2018/19</b>			
Jul	7,194,161	41,636	173
Aug	7,420,634	41,636	178
Sep	6,835,568	41,636	164
Oct	6,686,958	41,636	161
Nov	6,268,795	41,636	151
Dec	5,795,118	41,636	139
Jan	6,048,515	41,636	145
Feb	5,393,309	41,636	130
Mar	5,647,630	41,636	136
Apr	5,969,257	41,636	143
May	6,755,705	41,636	162
Jun	<u>n/a</u>	<u>41,636</u>	<u>n/a</u>
Total	70,015,650	41,636	153
Avg Use for Lowest 4 Contiguous Months			137
<b>2-Year Average of 4 Lowest Contiguous Months (gpd)</b>			<b>142</b>

1 Excludes water use from Multi-Family Irrigation meters.

2 Based on census data for total housing units less number of ACWD single family residences; assumes a 100% occupancy rate.

Note: Water demand from the past two fiscal years represents a period in which water use was partially rebounding from reduced levels experienced during California's declared state of drought emergency from Jan-2014 through Apr-2017.

# **APPENDIX E**

## **Union Sanitary District 20-Year Capital Improvement Program**

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	10-Year Total
<b>ADMINISTRATIVE FACILITIES</b>															
800		3		Additional CS (Vehicle) Storage										250	250
800		1	Prog/Des	Campus Buildings (Admin, FMC, Ops)	500	10,400	42,100	19,400							72,400
800		1		Field Ops Bldg. Sismic Upgrade and Leak Repairs						200		1,500	1,600		3,300
800		3		FMC Storage					300						300
800		3	Des/Constr	Plant Paving	200		250				300		200		950
800		2		Radio Repeater Antenna Replacement										150	150
800	50	3		Solar Panels/Inverters Replacement at Alvarado											0
900	50	3		Solar Panels/Inverters Replacement at Alvarado											0
800	50	2		Solar Panels/Inverters Replacement at Carport			50								50
900	50	2		Solar Panels/Inverters Replacement at Carport			50								50
800	50	2		Solar Panels/Inverters Replacement at Irvington			150								150
900	50	2		Solar Panels/Inverters Replacement at Irvington			150								150
<b>Total for ADMINISTRATIVE FACILITIES</b>					<b>700</b>	<b>10,500</b>	<b>42,650</b>	<b>19,400</b>	<b>300</b>	<b>200</b>	<b>300</b>	<b>1,500</b>	<b>1,800</b>	<b>400</b>	<b>77,750</b>
Total Priority 1 Administrative Facilities					500	10,400	42,100	19,400	0	200	0	1,500	1,600	0	75,700
Total Priority 2 Administrative Facilities					0	100	300	0	0	0	0	0	0	150	550
Total Priority 3 Administrative Facilities					200	0	250	0	300	0	300	0	200	250	1,500
Total Fund 800 - Administrative Facilities					700	10,450	42,500	19,400	300	200	300	1,500	1,800	400	77,550
Total Fund 900 - Administrative Facilities					0	50	150	0	0	0	0	0	0	0	200
<b>COLLECTION SYSTEM</b>															
800		2		Cast Iron/Pipe Lining		500		500		500		500		500	2,500
800		1	Design	Central Avenue Sanitary Sewer Relocation	50	1,000									1,050
800		2	Design	Gravity Sewer Rehab/Replacement	1,500		1,500		1,500		1,500		1,500		7,500
800		1		RCP Sewer Rehab (Alvarado Basin)						350	3,500				3,850
800		1		RCP Sewer Rehab (Irvington Basin)			300	3,000							3,300
800		1		RCP Sewer Rehab (Newark Basin)								350	3,500		3,850
900		3		Stevenson at Davis St.								200	1,500		1,700
<b>Total for COLLECTION SYSTEM</b>					<b>1,550</b>	<b>1,500</b>	<b>1,800</b>	<b>3,500</b>	<b>1,500</b>	<b>850</b>	<b>5,000</b>	<b>1,050</b>	<b>6,500</b>	<b>500</b>	<b>23,750</b>
Total Priority 1 Collection System					50	1,000	300	3,000	0	350	3,500	350	3,500	0	12,050
Total Priority 2 Collection System					1,500	500	1,500	500	1,500	500	1,500	500	1,500	500	10,000
Total Priority 3 Collection System					0	0	0	0	0	0	0	200	1,500	0	1,700
Total Fund 800 - Collection System					1,550	1,500	1,800	3,500	1,500	850	5,000	850	5,000	500	22,050
Total Fund 900 - Collection System					0	0	0	0	0	0	0	200	1,500	0	1,700



**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	10-Year Total
<b>TRANSPORT SYSTEM</b>															
800	50	2		Alameda Creek Crossing Lift Station										250	250
900	50	2		Alameda Creek Crossing Lift Station										250	250
800		2	Constr	Cathodic Protection Improvements - Transport	300		500			150			150		1,100
900		1	Design	Cherry St. PS	400	1,400	1,200								3,000
900		2		Equalization Storage @ Irvington								75	250	550	875
900		2		Equalization Storage @ Newark								1,500	4,600	10,800	16,900
800		1	Constr	Forcemain Corrosion Repairs - Phase 3	500	500									1,000
800		1		Forcemain Corrosion Repairs - Phase 4		550	500								1,050
800		3		Forcemain Rehabilitation											0
800		3		Hayward Marsh Decommissioning		100	1,000								1,100
800	50	2		Irvington PS Pumps and VFDs					425	2,050	900				3,375
900	50	2		Irvington PS Pumps and VFDs					425	2,050	900				3,375
800	50	2		Newark and Irvington PS Chemical System Impro	100	1,050	1,600								2,750
900	50	2		Newark and Irvington PS Chemical System Impro	100	1,050	1,600								2,750
800	50	2		Newark PS Pumps and VFDs								550	2,500	1,050	4,100
900	50	2		Newark PS Pumps and VFDs								550	2,500	1,050	4,100
800		3		Pump Station Asset Condition Assessment R&R				2,150		3,850	1,000	200			7,200
800		3		Transport System Misc. Projects		250	250	250	250	250	250	250	250	250	2,250
800	50	1	Planning	Wet Weather Flow Management	500	300									800
900	50	1	Planning	Wet Weather Flow Management	500	300									800
<b>Total for TRANSPORT SYSTEM</b>					<b>2,400</b>	<b>5,500</b>	<b>6,650</b>	<b>2,400</b>	<b>1,100</b>	<b>8,350</b>	<b>3,050</b>	<b>3,125</b>	<b>10,250</b>	<b>14,200</b>	<b>57,025</b>
<b>Total Priority 1 Transport System</b>					<b>1,900</b>	<b>3,050</b>	<b>1,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,650</b>
<b>Total Priority 2 Transport System</b>					<b>500</b>	<b>2,100</b>	<b>3,700</b>	<b>0</b>	<b>850</b>	<b>4,250</b>	<b>1,800</b>	<b>2,675</b>	<b>10,000</b>	<b>13,950</b>	<b>39,825</b>
<b>Total Priority 3 Transport System</b>					<b>0</b>	<b>350</b>	<b>1,250</b>	<b>2,400</b>	<b>250</b>	<b>4,100</b>	<b>1,250</b>	<b>450</b>	<b>250</b>	<b>250</b>	<b>10,550</b>
<b>Total Fund 800 - Transport System</b>					<b>1,400</b>	<b>2,750</b>	<b>3,850</b>	<b>2,400</b>	<b>675</b>	<b>6,300</b>	<b>2,150</b>	<b>1,000</b>	<b>2,900</b>	<b>1,550</b>	<b>24,975</b>
<b>Total Fund 900 - Transport System</b>					<b>1,000</b>	<b>2,750</b>	<b>2,800</b>	<b>0</b>	<b>425</b>	<b>2,050</b>	<b>900</b>	<b>2,125</b>	<b>7,350</b>	<b>12,650</b>	<b>32,050</b>

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	10-Year Total
<b>TREATMENT PLANT</b>															
900		2	Des/Costr	Aeration Blower 11 and East Blower Bldg Improvem	400	1,900	2,000								4,300
800	50	2		Aeration Internal Lift Pumps			250	1,250							1,500
900	50	2		Aeration Internal Lift Pumps			250	1,250							1,500
800	50	2	Constr	Alvarado Influent PS Improvements-Phase 1	2,100	2,100									4,200
900	50	2	Constr	Alvarado Influent PS Improvements-Phase 1	2,100	2,100									4,200
800		2		Alvarado Influent PS Improvements-Phase 2				500	3,400						3,900
800		2	Des/Costr	Alvarado Influent Valve Box Gate Valves 1-2	100	700									800
800		2	Des/Costr	Cathodic Protection Improvements - Plant	75	900			500		150		150		1,775
800	50	2	Design	Centrifuge Building Improvements	200	1,900	1,200								3,300
900	50	2	Design	Centrifuge Building Improvements	200	1,900	1,200								3,300
800	50	2		Centrifuge Replacement			350	500	3,700	3,700					8,250
900	50	2		Centrifuge Replacement			350	500	3,700	3,700					8,250
800		2		Centrifuge System Equipment Replacement				600	2,400	2,400					5,400
800	50	1		Cogen Engine No. 1 60K Block Replacement						550					550
900	50	1		Cogen Engine No. 1 60K Block Replacement						550					550
800	50	1		Cogen Engine No. 2 60K Block Replacement			500								500
900	50	1		Cogen Engine No. 2 60K Block Replacement			500								500
800	50	2		Cogen Retrofit								100	1,000		1,100
900	50	2		Cogen Retrofit								100	1,000		1,100
800		2		Contact Tank Improvements	250										250
800		2		Control Box No. 1 Improvements								650	4,400	1,950	7,000
800		2		Degritter Building Roof (Seismic) Replacement											0
800	50	2		Degritting at Headworks and Improvements								950	5,400	2,300	8,650
900	50	2		Degritting at Headworks and Improvements								950	5,400	2,300	8,650
900		3		Digester Additional Capacity											0
800		3		Digester No. 1 Insp & Rehab			400	3,600							4,000
800		1	Des/Costr	Digester No. 2 Insp & Rehab	1,500	1,000									2,500
800		3		Digester No. 3 Insp & Rehab											0
800		3		Digester No. 4 Insp & Rehab						450	4,100				4,550
800		3		Digester No. 5 Insp & Rehab								450	4,300		4,750
800		3		Digester No. 6 Insp & Rehab				400	3,300						3,700
800		3		Digester No. 7 Insp & Rehab											0

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	10-Year Total
900		1	Des/Constr	Digester No. 7	2,000	13,000	10,000								25,000
800		3		Diffuser Replacement											0
800	50	2	Des/Constr	Emergency Outfall Outlet Improvements	500	150									650
900	50	2	Des/Constr	Emergency Outfall Outlet Improvements	500	150									650
800		2		Flares Replacement			700	5,300							6,000
900		2		Flares Replacement											0
800		2		Headworks Gates											0
800	60	1	Constr	Headworks Screens Replacement	1,680	420									2,100
900	40	1	Constr	Headworks Screens Replacement	1,120	280									1,400
800		2		MCC Replacement			100	900				50	500		1,550
800	50	1	Design	MP - Aeration Basin Modifications	1,000	5,100	11,200	11,200	2,800						31,300
900	50	1	Design	MP - Aeration Basin Modifications	1,000	5,100	11,200	11,200	2,800						31,300
800	50	1		MP - Secondary Clarifiers		1,900	3,450		27,350	18,250					50,950
900	50	1		MP - Secondary Clarifiers		1,900	3,450		27,350	18,250					50,950
800		1		MP - Effluent Facilities		2,000	3,000		21,400	21,400					47,800
900		1		MP - Plant Equalization Storage					550	1,650	17,300				19,500
800	50	3		MP - Nutrient Removal (Level 2 Year-round)											0
900	50	3		MP - Nutrient Removal (Level 2 Year-round)											0
800		2		Odor Scrubber System Improvements						850	1,700	7,500	5,700	1,500	17,250
800		2		Plant 1 and 2 Water System Improvements			100	900							1,000
800		2		Plant 5kV Switchgear					700	2,800					3,500
900		2		Plant 5kV Switchgear											0
800		2		Plant 12kV Switchgear					700	3,500					4,200
900		2		Plant 12kV Switchgear											0
800	50	3		Plant Additional Power Source											0
900	50	3		Plant Additional Power Source											0
800		2		Plant Asset Condition Assessment R&R				100	150	2,000	500		1,000		3,750
800		2		Plant Asset Condition Assessment Projects			2,400			3,000				800	6,200
800	50	2		Plant Fiber Optic Network		50	150			75	500				775
900	50	2		Plant Fiber Optic Network		50	150			75	500				775
800		2	Des/Constr	Plant Grating Replacement	50										50
800		2		Plant Mechanical and Electrical Projects		500	500	500	500	500	500	500	500	500	4,500
800		2		PLC Replacement		250				300				350	900

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	10-Year Total
800		1		Primary Clarifier (1 - 4) Sismic Upgrade		400	2,900	1,300							4,600
900		1		Primary Clarifier (1 - 4) Sismic Upgrade											0
800	75	2	Des/Constr	Primary Clarifier Rehab (5-6)	375					750	4,125	4,125	750		10,125
900	25	2	Des/Constr	Primary Clarifier Rehab (5-6)	125					250	1,375	1,375	250		3,375
800		3		Reclaimed Water											0
900		3		Reclaimed Water											0
800		3		Secondary Digester No. 1 Insp & Rehab				350	3,200						3,550
800		3		Secondary Digester No. 2 Insp & Rehab						400	3,400				3,800
800		2		Seismic Retrofit of Conc. Structures			200		300		300		300		1,100
800	50	2		Site Drainage Improvements				200	400	1,400	1,150				3,150
900	50	2		Site Drainage Improvements				200	400	1,400	1,150				3,150
800	50	2		Sludge Recirculation Pump Replacement		100	75								175
900	50	2		Sludge Recirculation Pump Replacement		100	75								175
800		1	Des/Constr	Standby Power Generation System Upgrade	1,500	12,500	10,000	4,000							28,000
900		3		Standby Power Generator No. 3											0
800		2		Switchboard 3 Replacement			100	800	350						1,250
900		2		Switchboard 3 Replacement											0
800		2		Switchboard 4 Replacement			150	1,000	500						1,650
900		2		Switchboard 4 Replacement											0
800		2		Thickeners 1 and 2 Rehabilitation				200	1,700	750					2,650
800		3		Thickeners 3 and 4 Rehabilitation											0
800		1	Design	WAS Thickeners	500	3,000	4,000	500							8,000
900		3		Waste Recycling and Alternative Energy											0
<b>Total for TREATMENT PLANT</b>					<b>17,275</b>	<b>59,850</b>	<b>73,950</b>	<b>42,600</b>	<b>107,150</b>	<b>90,000</b>	<b>34,500</b>	<b>20,100</b>	<b>30,200</b>	<b>10,200</b>	<b>485,825</b>
<b>Total Priority 1 Treatment Plant</b>					<b>10,300</b>	<b>46,600</b>	<b>60,200</b>	<b>28,200</b>	<b>82,250</b>	<b>60,650</b>	<b>17,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>305,500</b>
<b>Total Priority 2 Treatment Plant</b>					<b>6,975</b>	<b>12,850</b>	<b>10,150</b>	<b>13,650</b>	<b>18,400</b>	<b>28,900</b>	<b>12,700</b>	<b>16,250</b>	<b>25,900</b>	<b>10,200</b>	<b>155,975</b>
<b>Total Priority 3 Treatment Plant</b>					<b>0</b>	<b>400</b>	<b>3,600</b>	<b>750</b>	<b>6,500</b>	<b>450</b>	<b>4,500</b>	<b>3,850</b>	<b>4,300</b>	<b>0</b>	<b>24,350</b>
<b>Total Fund 800 - Treatment Plant</b>					<b>9,830</b>	<b>33,370</b>	<b>44,775</b>	<b>29,450</b>	<b>72,350</b>	<b>64,125</b>	<b>14,175</b>	<b>17,675</b>	<b>23,550</b>	<b>7,900</b>	<b>317,200</b>
<b>Total Fund 900 - Treatment Plant</b>					<b>7,445</b>	<b>26,480</b>	<b>29,175</b>	<b>13,150</b>	<b>34,800</b>	<b>25,875</b>	<b>20,325</b>	<b>2,425</b>	<b>6,650</b>	<b>2,300</b>	<b>168,625</b>

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	10-Year Total
				<b>Administrative Facilities</b>	700	10,500	42,650	19,400	300	200	300	1,500	1,800	400	77,750
				<b>Collection System</b>	1,550	1,500	1,800	3,500	1,500	850	5,000	1,050	6,500	500	23,750
				<b>Transport System</b>	2,400	5,500	6,650	2,400	1,100	8,350	3,050	3,125	10,250	14,200	57,025
				<b>Treatment Plant</b>	17,275	59,850	73,950	42,600	107,150	90,000	34,500	20,100	30,200	10,200	485,825
				<b>GRAND TOTAL</b>	<b>21,925</b>	<b>77,350</b>	<b>125,050</b>	<b>67,900</b>	<b>110,050</b>	<b>99,400</b>	<b>42,850</b>	<b>25,775</b>	<b>48,750</b>	<b>25,300</b>	<b>644,350</b>
				<b>R&amp;R (Fund 800) Total</b>	13,480	48,070	92,925	54,750	74,825	71,475	21,625	21,025	33,250	10,350	441,775
				<b>Capacity (Fund 900) Total</b>	8,445	29,280	32,125	13,150	35,225	27,925	21,225	4,750	15,500	14,950	202,575
				+											
				<b>Priority 1</b>											
				<b>Administrative Facilities</b>	500	10,400	42,100	19,400	0	200	0	1,500	1,600	0	75,700
				<b>Collection System</b>	50	1,000	300	3,000	0	350	3,500	350	3,500	0	12,050
				<b>Transport System</b>	1,900	3,050	1,700	0	0	0	0	0	0	0	6,650
				<b>Treatment Plant</b>	10,300	46,600	60,200	28,200	82,250	60,650	17,300	0	0	0	305,500
				<b>Total Priority 1 Projects</b>	<b>12,750</b>	<b>61,050</b>	<b>104,300</b>	<b>50,600</b>	<b>82,250</b>	<b>61,200</b>	<b>20,800</b>	<b>1,850</b>	<b>5,100</b>	<b>0</b>	<b>399,900</b>
				<b>Priority 2</b>											
				<b>Administrative Facilities</b>	0	100	300	0	0	0	0	0	0	150	550
				<b>Collection System</b>	1,500	500	1,500	500	1,500	500	1,500	500	1,500	500	10,000
				<b>Transport System</b>	500	2,100	3,700	0	850	4,250	1,800	2,675	10,000	13,950	39,825
				<b>Treatment Plant</b>	6,975	12,850	10,150	13,650	18,400	28,900	12,700	16,250	25,900	10,200	155,975
				<b>Total Priority 2 Projects</b>	<b>8,975</b>	<b>15,550</b>	<b>15,650</b>	<b>14,150</b>	<b>20,750</b>	<b>33,650</b>	<b>16,000</b>	<b>19,425</b>	<b>37,400</b>	<b>24,800</b>	<b>206,350</b>
				<b>Priority 3</b>											
				<b>Administrative Facilities</b>	200	0	250	0	300	0	300	0	200	250	1,500
				<b>Collection System</b>	0	0	0	0	0	0	0	200	1,500	0	1,700
				<b>Transport System</b>	0	350	1,250	2,400	250	4,100	1,250	450	250	250	10,550
				<b>Treatment Plant</b>	0	400	3,600	750	6,500	450	4,500	3,850	4,300	0	24,350
				<b>Total Priority 3 Projects</b>	<b>200</b>	<b>750</b>	<b>5,100</b>	<b>3,150</b>	<b>7,050</b>	<b>4,550</b>	<b>6,050</b>	<b>4,500</b>	<b>6,250</b>	<b>500</b>	<b>38,100</b>

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	20-Year Total
<b>ADMINISTRATIVE FACILITIES</b>															
800		3		Additional CS (Vehicle) Storage											250
800		1	Prog/Des	Campus Buildings (Admin, FMC, Ops)											72,400
800		1		Field Ops Bldg. Sismic Upgrade and Leak Repair											3,300
800		3		FMC Storage											300
800		3	Des/Constr	Plant Paving	200		200		200		200		200		1,950
800		2		Radio Repeater Antenna Replacement											150
800	50	3		Solar Panels/Inverters Replacement at Alvarado					150						150
900	50	3		Solar Panels/Inverters Replacement at Alvarado					150						150
800	50	2		Solar Panels/Inverters Replacement at Carport				300							350
900	50	2		Solar Panels/Inverters Replacement at Carport				300							350
800	50	2		Solar Panels/Inverters Replacement at Irvington				900							1,050
900	50	2		Solar Panels/Inverters Replacement at Irvington				900							1,050
<b>Total for ADMINISTRATIVE FACILITIES</b>					<b>200</b>	<b>600</b>	<b>2,000</b>	<b>0</b>	<b>500</b>	<b>0</b>	<b>200</b>	<b>0</b>	<b>200</b>	<b>0</b>	<b>81,450</b>
Total Priority 1 Administrative Facilities					0	0	0	0	0	0	0	0	0	0	75,700
Total Priority 2 Administrative Facilities					0	600	1,800	0	0	0	0	0	0	0	2,950
Total Priority 3 Administrative Facilities					200	0	200	0	500	0	200	0	200	0	2,800
Total Fund 800 - Administrative Facilities					200	300	1,100	0	350	0	200	0	200	0	79,900
Total Fund 900 - Administrative Facilities					0	300	900	0	150	0	0	0	0	0	1,550
<b>COLLECTION SYSTEM</b>															
800		2		Cast Iron/Pipe Lining		500		500		500		500			4,500
800		1	Design	Central Avenue Sanitary Sewer Relocation											1,050
800		2	Design	Gravity Sewer Rehab/Replacement	1,500		1,500		1,500		1,500		1,500		15,000
800		1		RCP Sewer Rehab (Alvarado Basin)											3,850
800		1		RCP Sewer Rehab (Irvington Basin)											3,300
800		1		RCP Sewer Rehab (Newark Basin)											3,850
900		3		Stevenson at Davis St.											1,700
<b>Total for COLLECTION SYSTEM</b>					<b>1,500</b>	<b>500</b>	<b>1,500</b>	<b>500</b>	<b>1,500</b>	<b>500</b>	<b>1,500</b>	<b>500</b>	<b>1,500</b>	<b>0</b>	<b>33,250</b>
Total Priority 1 Collection System					0	0	0	0	0	0	0	0	0	0	12,050
Total Priority 2 Collection System					1,500	500	1,500	500	1,500	500	1,500	500	1,500	0	19,500
Total Priority 3 Collection System					0	0	0	0	0	0	0	0	0	0	1,700
Total Fund 800 - Collection System					1,500	500	1,500	500	1,500	500	1,500	500	1,500	0	31,550
Total Fund 900 - Collection System					0	0	0	0	0	0	0	0	0	0	1,700

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	20-Year Total
<b>TRANSPORT SYSTEM</b>															
800	50	2		Alameda Creek Crossing Lift Station		2,500	1,500								4,250
900	50	2		Alameda Creek Crossing Lift Station		2,500	1,500								4,250
800		2	Constr	Cathodic Protection Improvements - Transport		150			150			150			1,550
900		1	Design	Cherry St. PS											3,000
900		2		Equalization Storage @ Irvington											875
900		2		Equalization Storage @ Newark											16,900
800		1	Constr	Forcemain Corrosion Repairs - Phase 3											1,000
800		1		Forcemain Corrosion Repairs - Phase 4											1,050
800		3		Forcemain Rehabilitation		1,000	13,000	13,000	13,000	13,000					53,000
800		3		Hayward Marsh Decommissioning											1,100
800	50	2		Irvington PS Pumps and VFDs											3,375
900	50	2		Irvington PS Pumps and VFDs											3,375
800	50	2		Newark and Irvington PS Chemical System Impro											2,750
900	50	2		Newark and Irvington PS Chemical System Impro											2,750
800	50	2		Newark PS Pumps and VFDs											4,100
900	50	2		Newark PS Pumps and VFDs											4,100
800		3		Pump Station Asset Condition Assessment R&R	4,750				100	5,900		10,250			28,200
800		3		Transport System Misc. Projects	250	250	250	250	250	250	250	250	250	250	4,750
800	50	1	Planning	Wet Weather Flow Management											800
900	50	1	Planning	Wet Weather Flow Management											800
<b>Total for TRANSPORT SYSTEM</b>					<b>5,000</b>	<b>6,400</b>	<b>16,250</b>	<b>13,250</b>	<b>13,500</b>	<b>19,150</b>	<b>250</b>	<b>10,650</b>	<b>250</b>	<b>250</b>	<b>141,975</b>
<b>Total Priority 1 Transport System</b>					<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,650</b>
<b>Total Priority 2 Transport System</b>					<b>0</b>	<b>5,150</b>	<b>3,000</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>0</b>	<b>48,275</b>
<b>Total Priority 3 Transport System</b>					<b>5,000</b>	<b>1,250</b>	<b>13,250</b>	<b>13,250</b>	<b>13,350</b>	<b>19,150</b>	<b>250</b>	<b>10,500</b>	<b>250</b>	<b>250</b>	<b>87,050</b>
<b>Total Fund 800 - Transport System</b>					<b>5,000</b>	<b>3,900</b>	<b>14,750</b>	<b>13,250</b>	<b>13,500</b>	<b>19,150</b>	<b>250</b>	<b>10,650</b>	<b>250</b>	<b>250</b>	<b>105,925</b>
<b>Total Fund 900 - Transport System</b>					<b>0</b>	<b>2,500</b>	<b>1,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36,050</b>

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	20-Year Total
<b>TREATMENT PLANT</b>															
900		2	Des/Costr	Aeration Blower 11 and East Blower Bldg Improvemen											4,300
800	50	2		Aeration Internal Lift Pumps											1,500
900	50	2		Aeration Internal Lift Pumps											1,500
800	50	2	Constr	Alvarado Influent PS Improvements-Phase 1											4,200
900	50	2	Constr	Alvarado Influent PS Improvements-Phase 1											4,200
800		2		Alvarado Influent PS Improvements-Phase 2											3,900
800		2	Des/Constr	Alvarado Influent Valve Box Gate Valves 1-2											800
800		2	Des/Constr	Cathodic Protection Improvements - Plant	150		150		150		150		150		2,525
800	50	2	Design	Centrifuge Building Improvements											3,300
900	50	2	Design	Centrifuge Building Improvements											3,300
800	50	2		Centrifuge Replacement											8,250
900	50	2		Centrifuge Replacement											8,250
800		2		Centrifuge System Equipment Replacement											5,400
800	50	1		Cogen Engine No. 1 60K Block Replacement				650							1,200
900	50	1		Cogen Engine No. 1 60K Block Replacement				650							1,200
800	50	1		Cogen Engine No. 2 60K Block Replacement	600								750		1,850
900	50	1		Cogen Engine No. 2 60K Block Replacement	600								750		1,850
800	50	2		Cogen Retrofit											1,100
900	50	2		Cogen Retrofit											1,100
800		2		Contact Tank Improvements											250
800		2		Control Box No. 1 Improvements											7,000
800		2		Degritter Building Roof (Seismic) Replacement	600	3,400	1,400								5,400
800	50	2		Degritting at Headworks and Improvements											8,650
900	50	2		Degritting at Headworks and Improvements											8,650
900		3		Digester Additional Capacity											0
800		3		Digester No. 1 Insp & Rehab						600	5,700				10,300
800		1	Des/Constr	Digester No. 2 Insp & Rehab				600	5,300						8,400
800		3		Digester No. 3 Insp & Rehab		450	4,150								4,600
800		3		Digester No. 4 Insp & Rehab											4,550
800		3		Digester No. 5 Insp & Rehab											4,750
800		3		Digester No. 6 Insp & Rehab										600	4,300
800		3		Digester No. 7 Insp & Rehab							550	5,200			5,750



**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	20-Year Total
900		1	Des/Constr	Digester No. 7											25,000
800		3		Diffuser Replacement				950	750						1,700
800	50	2	Des/Constr	Emergency Outfall Outlet Improvements											650
900	50	2	Des/Constr	Emergency Outfall Outlet Improvements											650
800		2		Flares Replacement											6,000
900		2		Flares Replacement											0
800		2		Headworks Gates	500	3,500									4,000
800	60	1	Constr	Headworks Screens Replacement											2,100
900	40	1	Constr	Headworks Screens Replacement											1,400
800		2		MCC Replacement											1,550
800	50	1	Design	MP - Aeration Basin Modifications											31,300
900	50	1	Design	MP - Aeration Basin Modifications											31,300
800	50	1		MP - Secondary Clarifiers											50,950
900	50	1		MP - Secondary Clarifiers											50,950
800		1		MP - Effluent Facilities											47,800
900		1		MP - Plant Equalization Storage											19,500
800	50	3		MP - Nutrient Removal (Level 2 Year-round)							2,600	10,750	34,000	45,400	92,750
900	50	3		MP - Nutrient Removal (Level 2 Year-round)							2,600	10,750	34,000	45,400	92,750
800		2		Odor Scrubber System Improvements	400	3,000	1,300	7,000	4,400	7,500	3,700	3,500	800	6,300	55,150
800		2		Plant 1 and 2 Water System Improvements											1,000
800		2		Plant 5kV Switchgear											3,500
900		2		Plant 5kV Switchgear											0
800		2		Plant 12kV Switchgear											4,200
900		2		Plant 12kV Switchgear											0
800	50	3		Plant Additional Power Source								250	2,000	2,750	5,000
900	50	3		Plant Additional Power Source								250	2,000	2,750	5,000
800		2		Plant Asset Condition Assessment R&R	200	300	4,500	1,150	2,650	400	200	0	400	0	13,550
800		2		Plant Asset Condition Assessment Projects	3,350	3,350	3,350								16,250
800	50	2		Plant Fiber Optic Network											775
900	50	2		Plant Fiber Optic Network											775
800		2	Des/Constr	Plant Grating Replacement											50
800		2		Plant Mechanical and Electrical Projects	500	500	500	500	500	500	500	500	500	500	9,500
800		2		PLC Replacement				400				450			1,750

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	20-Year Total
800		1		Primary Clarifier (1 - 4) Sismic Upgrade											4,600
900		1		Primary Clarifier (1 - 4) Sismic Upgrade											0
800	75	2	Des/Constr	Primary Clarifier Rehab (5-6)											10,125
900	25	2	Des/Constr	Primary Clarifier Rehab (5-6)											3,375
800		3		Reclaimed Water											0
900		3		Reclaimed Water											0
800		3		Secondary Digester No. 1 Insp & Rehab						500	4,700				8,750
800		3		Secondary Digester No. 2 Insp & Rehab								550	5,000		9,350
800		2		Seismic Retrofit of Conc. Structures	300		300		300				300		2,600
800	50	2		Site Drainage Improvements											3,150
900	50	2		Site Drainage Improvements											3,150
800	50	2		Sludge Recirculation Pump Replacement				100							275
900	50	2		Sludge Recirculation Pump Replacement				100							275
800		1	Des/Constr	Standby Power Generation System Upgrade											28,000
900		3		Standby Power Generator No. 3							2,300	14,500	7,200		24,000
800		2		Switchboard 3 Replacement											1,250
900		2		Switchboard 3 Replacement											0
800		2		Switchboard 4 Replacement											1,650
900		2		Switchboard 4 Replacement											0
800		2		Thickeners 1 and 2 Rehabilitation											2,650
800		3		Thickeners 3 and 4 Rehabilitation					650	3,000					3,650
800		1	Design	WAS Thickeners											8,000
900		3		Waste Recycling and Alternative Energy	500	5,000									5,500
<b>Total for TREATMENT PLANT</b>					<b>7,700</b>	<b>19,500</b>	<b>15,850</b>	<b>11,900</b>	<b>14,700</b>	<b>12,500</b>	<b>22,750</b>	<b>42,050</b>	<b>93,050</b>	<b>103,700</b>	<b>829,525</b>
Total Priority 1 Treatment Plant					1,200	0	0	1,900	5,300	0	0	0	1,500	0	315,400
Total Priority 2 Treatment Plant					6,000	14,050	11,700	9,050	8,000	8,400	4,850	4,450	2,150	6,800	231,425
Total Priority 3 Treatment Plant					500	5,450	4,150	950	1,400	4,100	17,900	37,600	89,400	96,900	282,700
<b>Total Fund 800 - Treatment Plant</b>					<b>6,600</b>	<b>14,500</b>	<b>15,750</b>	<b>11,250</b>	<b>14,700</b>	<b>12,500</b>	<b>17,850</b>	<b>16,550</b>	<b>49,100</b>	<b>55,550</b>	<b>531,550</b>
<b>Total Fund 900 - Treatment Plant</b>					<b>1,100</b>	<b>5,000</b>	<b>100</b>	<b>650</b>	<b>0</b>	<b>0</b>	<b>4,900</b>	<b>25,500</b>	<b>43,950</b>	<b>48,150</b>	<b>297,975</b>

**UNION SANITARY DISTRICT 20-Year CIP  
FISCAL YEARS 2020-2039 (Figures x \$1,000)**

Fund	%	Rank	Status	Project Name	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	20-Year Total
				<b>Administrative Facilities</b>	200	600	2,000	0	500	0	200	0	200	0	81,450
				<b>Collection System</b>	1,500	500	1,500	500	1,500	500	1,500	500	1,500	0	33,250
				<b>Transport System</b>	5,000	6,400	16,250	13,250	13,500	19,150	250	10,650	250	250	141,975
				<b>Treatment Plant</b>	7,700	19,500	15,850	11,900	14,700	12,500	22,750	42,050	93,050	103,700	829,525
				<b>GRAND TOTAL</b>	<b>14,400</b>	<b>27,000</b>	<b>35,600</b>	<b>25,650</b>	<b>30,200</b>	<b>32,150</b>	<b>24,700</b>	<b>53,200</b>	<b>95,000</b>	<b>103,950</b>	<b>1,086,200</b>
				<b>R&amp;R (Fund 800) Total</b>	13,300	19,200	33,100	25,000	30,050	32,150	19,800	27,700	51,050	55,800	748,925
				<b>Capacity (Fund 900) Total</b>	1,100	7,800	2,500	650	150	0	4,900	25,500	43,950	48,150	337,275
				<b>Priority 1</b>											
				<b>Administrative Facilities</b>	0	0	0	0	0	0	0	0	0	0	75,700
				<b>Collection System</b>	0	0	0	0	0	0	0	0	0	0	12,050
				<b>Transport System</b>	0	0	0	0	0	0	0	0	0	0	6,650
				<b>Treatment Plant</b>	1,200	0	0	1,900	5,300	0	0	0	1,500	0	315,400
				<b>Total Priority 1 Projects</b>	<b>1,200</b>	<b>0</b>	<b>0</b>	<b>1,900</b>	<b>5,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,500</b>	<b>0</b>	<b>409,800</b>
				<b>Priority 2</b>											
				<b>Administrative Facilities</b>	0	600	1,800	0	0	0	0	0	0	0	2,950
				<b>Collection System</b>	1,500	500	1,500	500	1,500	500	1,500	500	1,500	0	19,500
				<b>Transport System</b>	0	5,150	3,000	0	150	0	0	150	0	0	48,275
				<b>Treatment Plant</b>	6,000	14,050	11,700	9,050	8,000	8,400	4,850	4,450	2,150	6,800	231,425
				<b>Total Priority 2 Projects</b>	<b>7,500</b>	<b>20,300</b>	<b>18,000</b>	<b>9,550</b>	<b>9,650</b>	<b>8,900</b>	<b>6,350</b>	<b>5,100</b>	<b>3,650</b>	<b>6,800</b>	<b>302,150</b>
				<b>Priority 3</b>											
				<b>Administrative Facilities</b>	200	0	200	0	500	0	200	0	200	0	2,800
				<b>Collection System</b>	0	0	0	0	0	0	0	0	0	0	1,700
				<b>Transport System</b>	5,000	1,250	13,250	13,250	13,350	19,150	250	10,500	250	250	87,050
				<b>Treatment Plant</b>	500	5,450	4,150	950	1,400	4,100	17,900	37,600	89,400	96,900	282,700
				<b>Total Priority 3 Projects</b>	<b>5,700</b>	<b>6,700</b>	<b>17,600</b>	<b>14,200</b>	<b>15,250</b>	<b>23,250</b>	<b>18,350</b>	<b>48,100</b>	<b>89,850</b>	<b>97,150</b>	<b>374,250</b>

# **APPENDIX F**

## **California Government Code Pertaining to Water & Wastewater Capacity Charges**

**California Government Code**  
**Key Sections Pertaining to Water & Wastewater Capacity Charges**  
**Sections 66013, 66016, 66022 & 66023**

**66013**

(a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.

(b) As used in this section:

(1) "Sewer connection" means the connection of a structure or project to a public sewer system.

(2) "Water connection" means the connection of a structure or project to a public water system, as defined in subdivision (f) of Section 116275 of the Health and Safety Code.

(3) "Capacity charge" means a charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities. A "capacity charge" does not include a commodity charge.

(4) "Local agency" means a local agency as defined in Section 66000.

(5) "Fee" means a fee for the physical facilities necessary to make a water connection or sewer connection, including, but not limited to, meters, meter boxes, and pipelines from the structure or project to a water distribution line or sewer main, and that does not exceed the estimated reasonable cost of labor and materials for installation of those facilities.

(6) "Public facilities" means public facilities as defined in Section 66000.

(c) A local agency receiving payment of a charge as specified in paragraph (3) of subdivision (b) shall deposit it in a separate capital facilities fund with other charges received, and account for the charges in a manner to avoid any commingling with other moneys of the local agency, except for investments, and shall expend those charges solely for the purposes for which the charges were collected. Any interest income earned from the investment of moneys in the capital facilities fund shall be deposited in that fund.

(d) For a fund established pursuant to subdivision (c), a local agency shall make available to the public, within 180 days after the last day of each fiscal year, the following information for that fiscal year:

(1) A description of the charges deposited in the fund.

(2) The beginning and ending balance of the fund and the interest earned from investment of moneys in the fund.

(3) The amount of charges collected in that fiscal year.

(4) An identification of all of the following:

(A) Each public improvement on which charges were expended and the amount of the expenditure for each improvement, including the percentage of the total cost of the public improvement that was funded with those charges if more than one source of funding was used.

(B) Each public improvement on which charges were expended that was completed during that fiscal year.

(C) Each public improvement that is anticipated to be undertaken in the following fiscal year.

(5) A description of each interfund transfer or loan made from the capital facilities fund. The information provided, in the case of an interfund transfer, shall identify the public improvements on which the transferred moneys are, or will be, expended. The information, in the case of an interfund loan, shall include the date on which the loan will be repaid, and the rate of interest that the fund will receive on the loan.

(e) The information required pursuant to subdivision (d) may be included in the local agency's annual financial report.

(f) The provisions of subdivisions (c) and (d) shall not apply to any of the following:

(1) Moneys received to construct public facilities pursuant to a contract between a local agency and a person or entity, including, but not limited to, a reimbursement agreement pursuant to Section 66003.

(2) Charges that are used to pay existing debt service or which are subject to a contract with a trustee for bondholders that requires a different accounting of the charges, or charges that are used to reimburse the local agency or to reimburse a person or entity who advanced funds under a reimbursement agreement or contract for facilities in existence at the time the charges are collected.

(3) Charges collected on or before December 31, 1998.

(g) Any judicial action or proceeding to attack, review, set aside, void, or annul the ordinance, resolution, or motion imposing a fee or capacity charge subject to this section shall be brought pursuant to Section 66022.

(h) Fees and charges subject to this section are not subject to the provisions of Chapter 5 (commencing with Section 66000), but are subject to the provisions of Sections 66016, 66022, and 66023.

(i) The provisions of subdivisions (c) and (d) shall only apply to capacity charges levied pursuant to this section.

*(Amended by Stats. 2007, Ch. 94, Sec. 1. Effective January 1, 2008.)*

---

## **66016**

(a) Prior to levying a new fee or service charge, or prior to approving an increase in an existing fee or service charge, a local agency shall hold at least one open and public meeting, at which oral or written presentations can be made, as part of a regularly scheduled meeting. Notice of the time and place of the meeting, including a general explanation of the matter to be considered, and a statement that the data required by this section is available, shall be mailed at least 14 days prior to the meeting to any interested party who files a written request with the local agency for mailed notice of the meeting on new or increased fees or service charges. Any written request for mailed notices shall be valid for one year from the date on which it is filed unless a renewal request is filed. Renewal requests for mailed notices shall be filed on or before April 1 of each year. The legislative body may establish a reasonable annual charge for sending notices based on the estimated cost of providing the service. At least 10 days prior to the meeting, the local agency shall make available to the public data indicating the amount of cost, or estimated cost, required to provide the service for which the fee or

service charge is levied and the revenue sources anticipated to provide the service, including General Fund revenues. Unless there has been voter approval, as prescribed by Section 66013 or 66014, no local agency shall levy a new fee or service charge or increase an existing fee or service charge to an amount which exceeds the estimated amount required to provide the service for which the fee or service charge is levied. If, however, the fees or service charges create revenues in excess of actual cost, those revenues shall be used to reduce the fee or service charge creating the excess.

(b) Any action by a local agency to levy a new fee or service charge or to approve an increase in an existing fee or service charge shall be taken only by ordinance or resolution. The legislative body of a local agency shall not delegate the authority to adopt a new fee or service charge, or to increase a fee or service charge.

(c) Any costs incurred by a local agency in conducting the meeting or meetings required pursuant to subdivision (a) may be recovered from fees charged for the services which were the subject of the meeting.

(d) This section shall apply only to fees and charges as described in Sections 51287, 56383, 65104, 65456, 65584.1, 65863.7, 65909.5, 66013, 66014, and 66451.2 of this code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code.

(e) Any judicial action or proceeding to attack, review, set aside, void, or annul the ordinance, resolution, or motion levying a fee or service charge subject to this section shall be brought pursuant to Section 66022.

*(Amended by Stats. 2006, Ch. 643, Sec. 19. Effective January 1, 2007.)*

---

## **66022**

(a) Any judicial action or proceeding to attack, review, set aside, void, or annul an ordinance, resolution, or motion adopting a new fee or service charge, or modifying or amending an existing fee or service charge, adopted by a local agency, as defined in Section 66000, shall be commenced within 120 days of the effective date of the ordinance, resolution, or motion.

If an ordinance, resolution, or motion provides for an automatic adjustment in a fee or service charge, and the automatic adjustment results in an increase in the amount of a fee or service charge, any action or proceeding to attack, review, set aside, void, or annul the increase shall be commenced within 120 days of the effective date of the increase.



(b) Any action by a local agency or interested person under this section shall be brought pursuant to Chapter 9 (commencing with Section 860) of Title 10 of Part 2 of the Code of Civil Procedure.

(c) This section shall apply only to fees, capacity charges, and service charges described in and subject to Sections 66013, 66014, and 66016.

*(Amended by Stats. 2006, Ch. 643, Sec. 20. Effective January 1, 2007.)*

---

## **66023**

(a) Any person may request an audit in order to determine whether any fee or charge levied by a local agency exceeds the amount reasonably necessary to cover the cost of any product, public facility, as defined in Section 66000, or service provided by the local agency. If a person makes that request, the legislative body of the local agency may retain an independent auditor to conduct an audit to determine whether the fee or charge is reasonable, but is not required to conduct the audit if an audit has been performed for the same fee within the previous 12 months.

(b) To the extent that the audit determines that the amount of any fee or charge does not meet the requirements of this section, the local agency shall adjust the fee accordingly. This subdivision does not apply to a fee authorized pursuant to Section 17620 of the Education Code, or Sections 65995.5 and 65995.7.

(c) The local agency shall retain an independent auditor to conduct an audit only if the person who requests the audit deposits with the local agency the amount of the local agency's reasonable estimate of the cost of the independent audit. At the conclusion of the audit, the local agency shall reimburse unused sums, if any, or the requesting person shall pay the local agency the excess of the actual cost of the audit over the sum which was deposited.

(d) Any audit conducted by an independent auditor to determine whether a fee or charge levied by a local agency exceeds the amount reasonably necessary to cover the cost of providing the product or service shall conform to generally accepted auditing standards.

(e) The procedures specified in this section shall be alternative and in addition to those specified in Section 54985.

(f) The Legislature finds and declares that oversight of local agency fees is a matter of statewide interest and concern. It is, therefore, the intent of the Legislature that this chapter shall supersede all conflicting local laws and shall apply in charter cities.

(g) This section shall not be construed as granting any additional authority to any local agency to levy any fee or charge which is not otherwise authorized by another provision of law, nor shall its provisions be construed as granting authority to any local agency to levy a new fee or charge when other provisions of law specifically prohibit the levy of a fee or charge.

*(Amended by Stats. 2009, Ch. 507, Sec. 3. (AB 1084) Effective January 1, 2010.)*

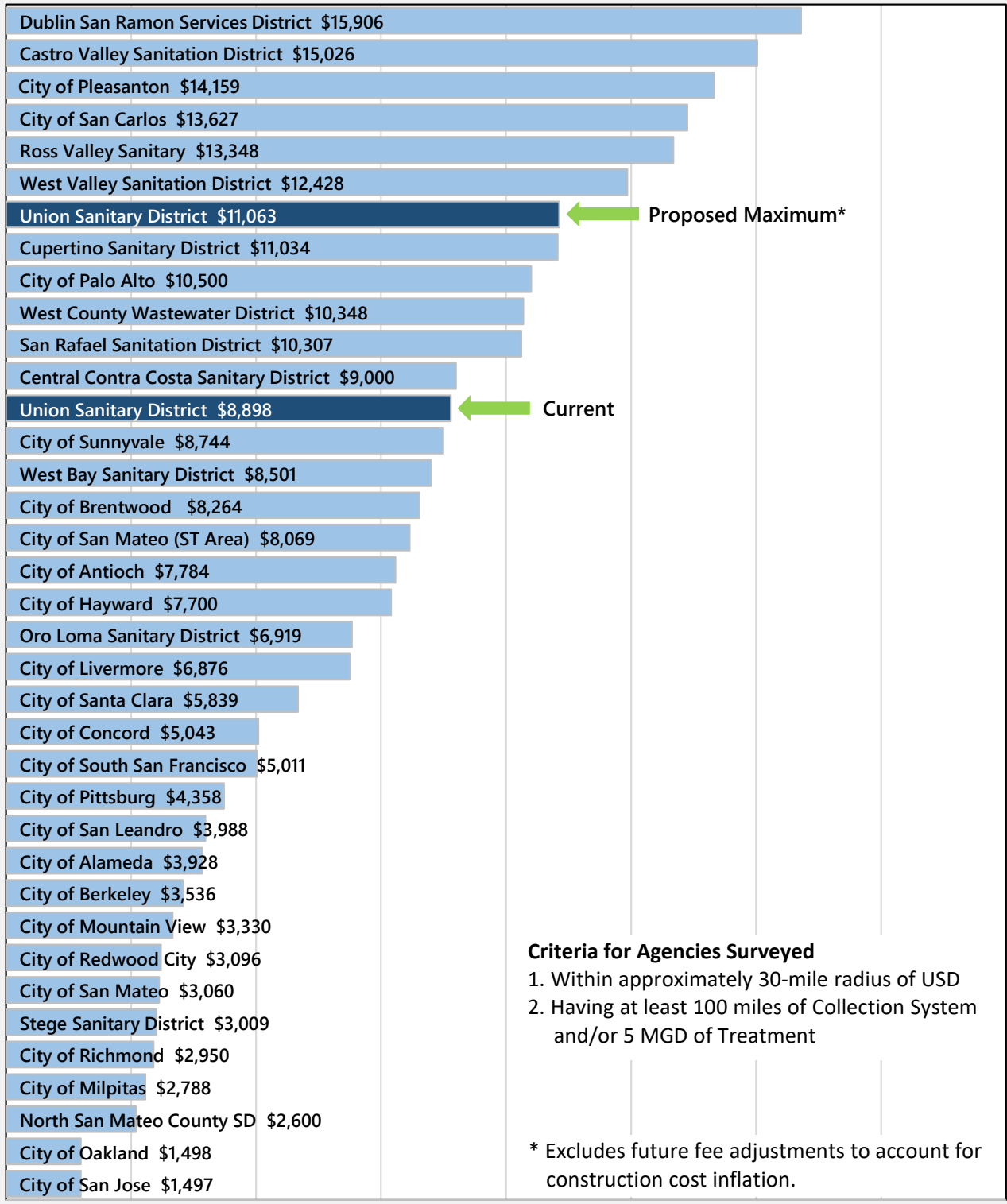
# **APPENDIX G**

## **Sewer Capacity Charge Surveys**

# Survey of Wastewater Capacity Charges 2020/21

## Single Family Home

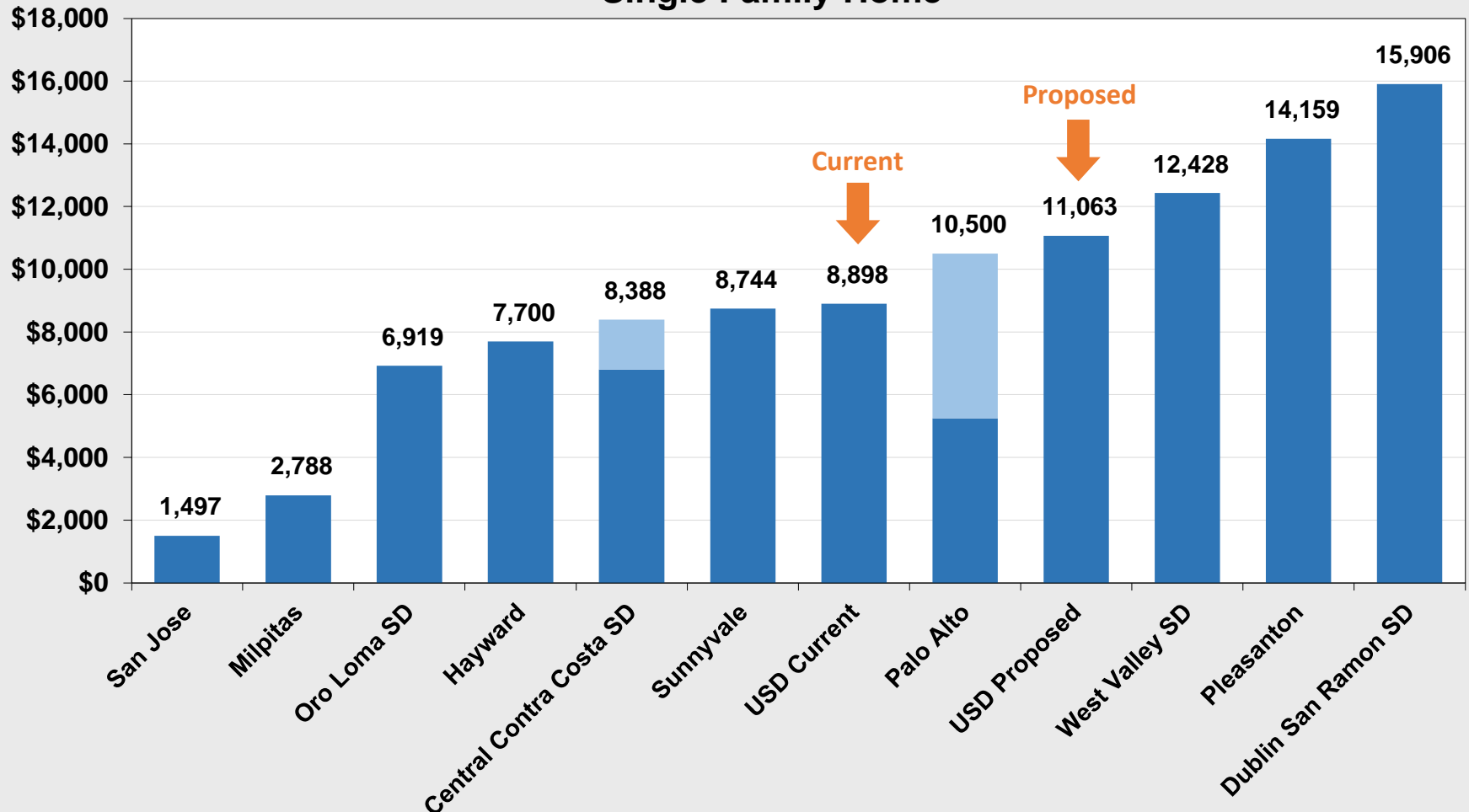
\$0      \$2,500      \$5,000      \$7,500      \$10,000      \$12,500      \$15,000      \$17,500      \$20,000



- Criteria for Agencies Surveyed**
1. Within approximately 30-mile radius of USD
  2. Having at least 100 miles of Collection System and/or 5 MGD of Treatment

\* Excludes future fee adjustments to account for construction cost inflation.

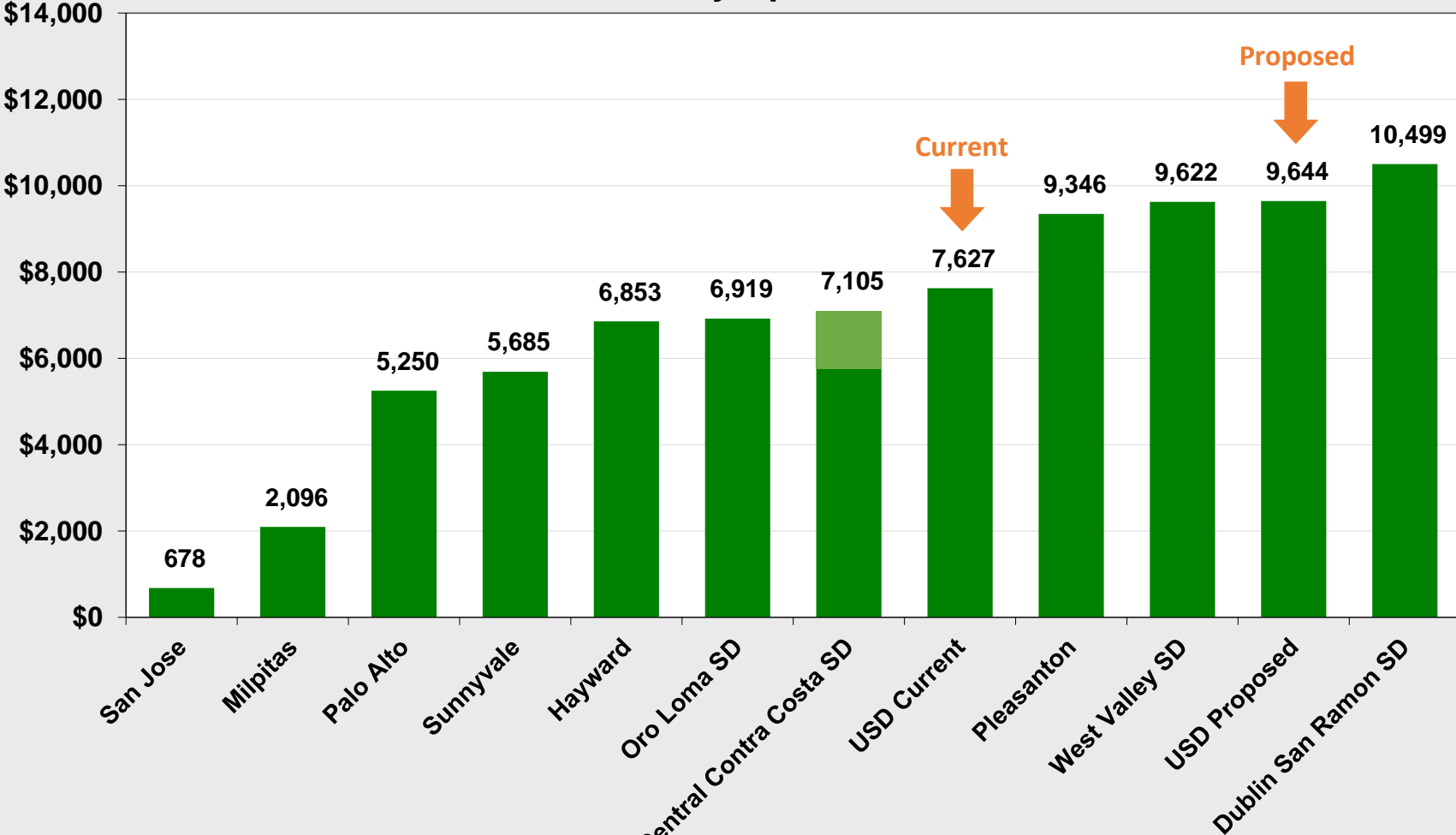
## Union Sanitary District Sewer Capacity Fee Survey Single Family Home



Range of fees shown for CCCSD based on Gravity Zone or Pumped Zone.  
 Range of fees shown for Palo Alto based on 5/8" vs 1" meter size.

*Fees Effective November 2020*

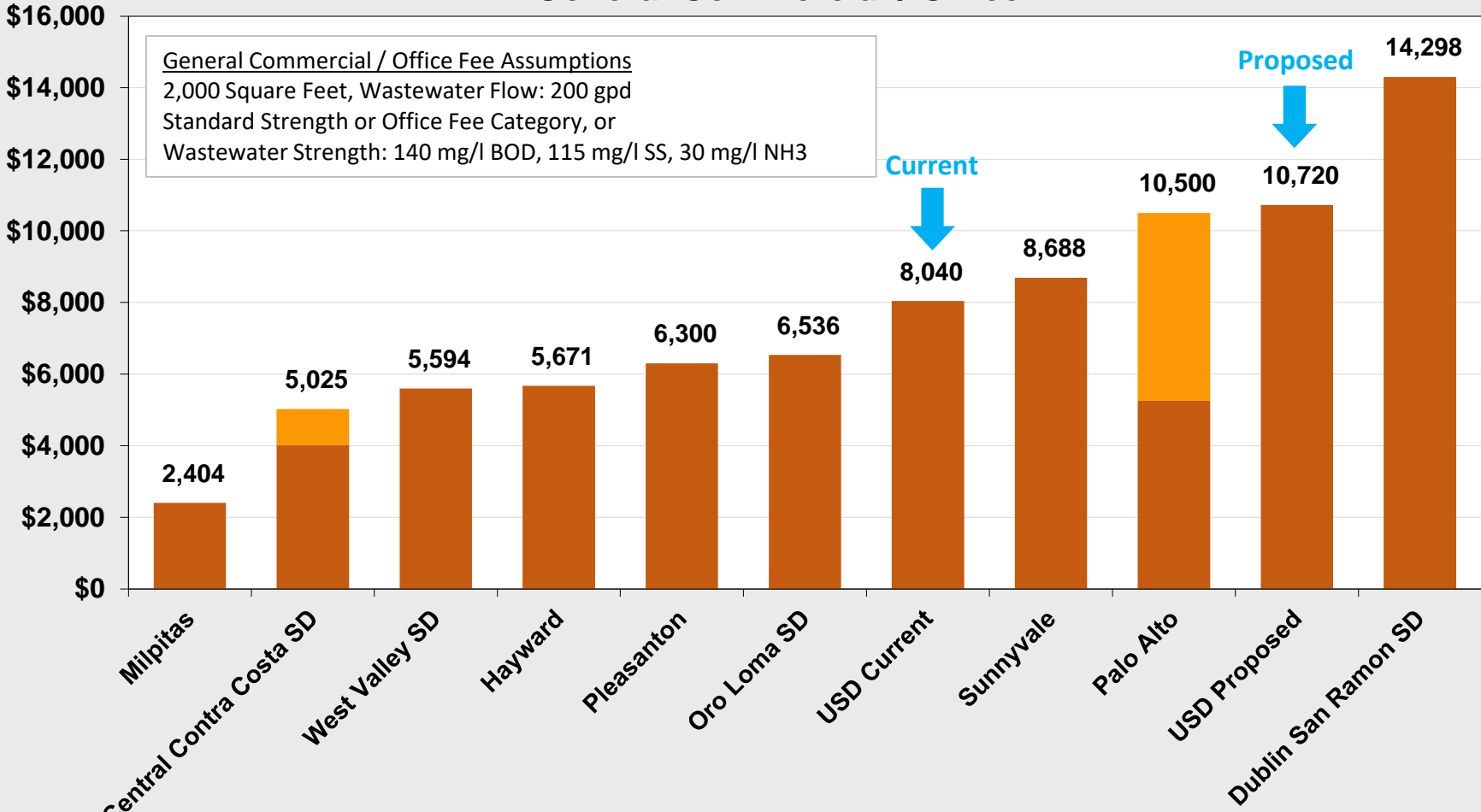
## Union Sanitary District Sewer Capacity Fee Survey Multi-Family/Apartment Unit



Palo Alto fee assumes a 10-unit building with a 2-inch water meter.  
 Range of fees shown for CCCSD based on Gravity Zone or Pumped Zone.

*Fees Effective November 2020*

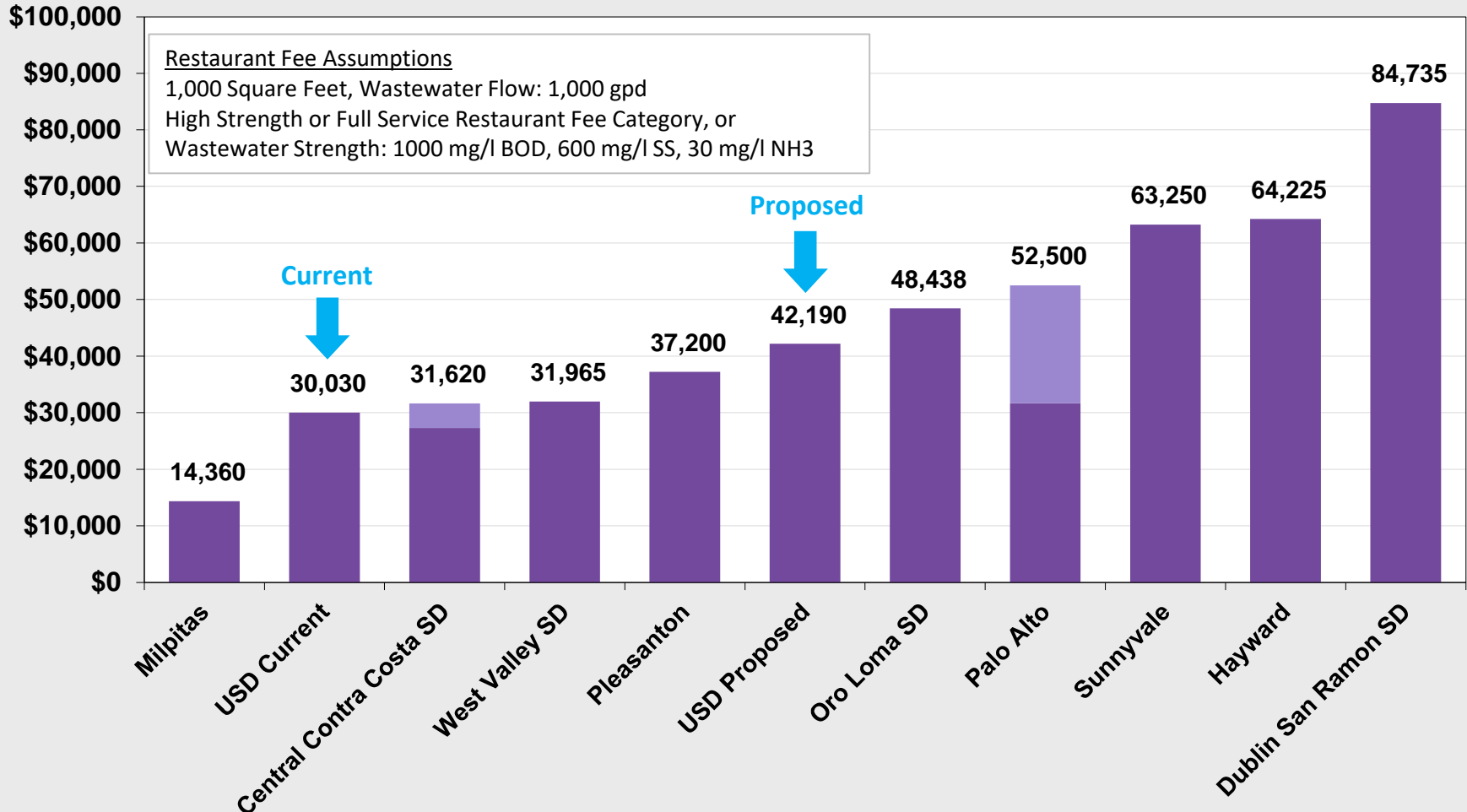
# Union Sanitary District Sewer Capacity Fee Survey General Commercial / Office



General Commercial / Office Fee Assumptions  
 2,000 Square Feet, Wastewater Flow: 200 gpd  
 Standard Strength or Office Fee Category, or  
 Wastewater Strength: 140 mg/l BOD, 115 mg/l SS, 30 mg/l NH3

Range of fees shown for CCCSD based on Gravity Zone or Pumped Zone.  
 Range of fees shown for Palo Alto based on 5/8" vs 1" meter size.

## Union Sanitary District Sewer Capacity Fee Survey Restaurant



Range of fees shown for CCCSD based on Gravity Zone or Pumped Zone.

Range of fees shown for Palo Alto based on 5/8" vs 1" meter size.

*Fees Effective November 2020*