2024

SANTA CRUZ COUNTY SANITATION DISTRICT

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

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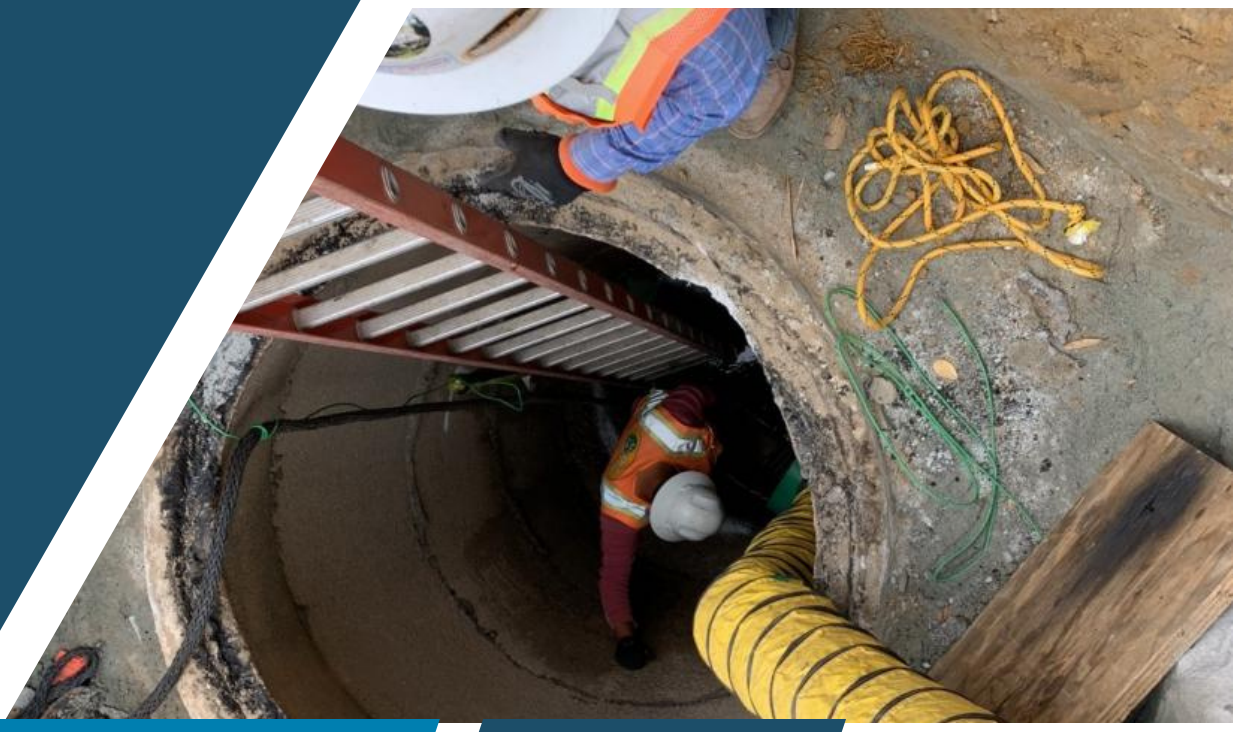
SANTA CRUZ COUNTY
SANITATION DISTRICT

CAPITAL IMPROVEMENT PROGRAM



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INTRODUCTION

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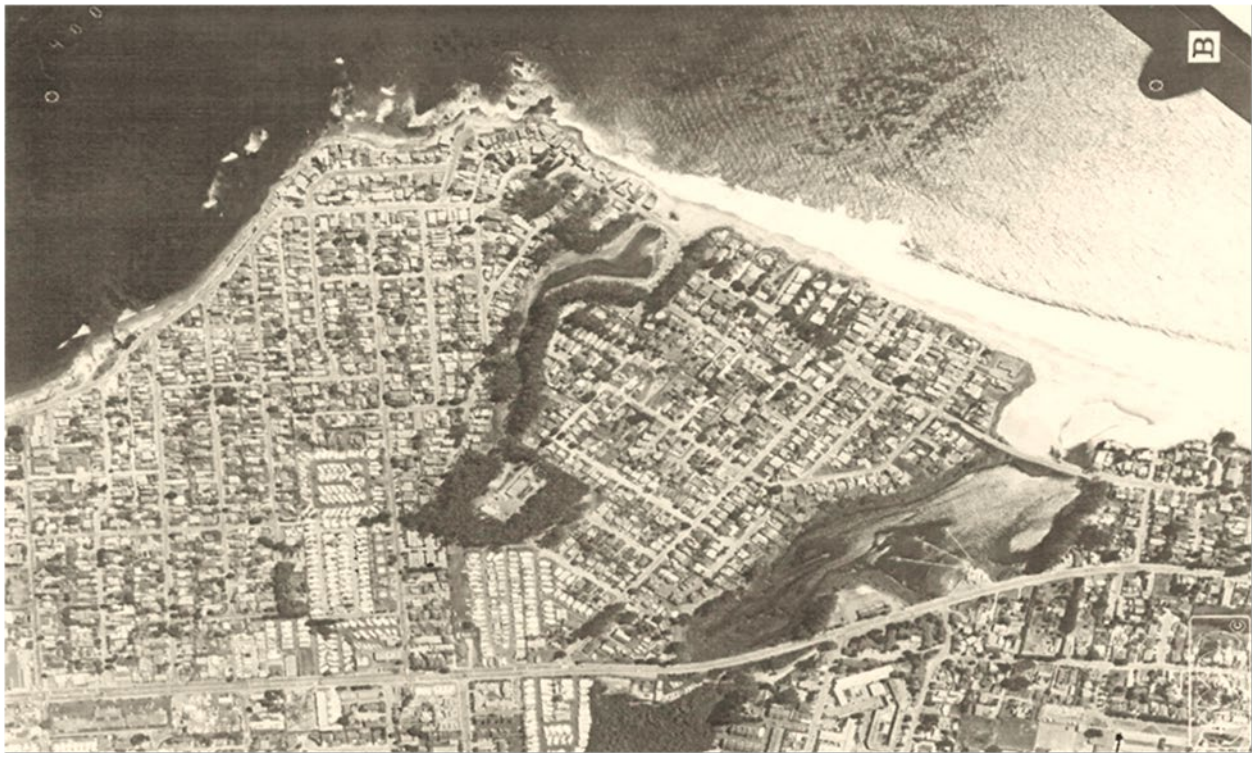
INTRODUCTION

The purpose of this Capital Improvement Program is to identify and prioritize needs and project costs, under the direction of the Santa Cruz County Sanitation District's Board of Directors, for planned improvements to the infrastructure that will serve the District's ratepayers in an efficient and cost-effective manner throughout the next four-plus years of growth and change.

Worn out and antiquated facilities must be repaired or replaced in a timely manner in order to protect public health and safety. This report will help identify and describe specific sanitary sewer projects for pump stations, transmission lines and collector lines which are planned to take place over the next four-plus years, along with their estimated project costs. It will help prevent sudden shifts in the debt service requirements, inform the Board and the public about future projects, provide coordination with other County projects, and plan budget allocations for the identified capital needs. This report may also aid the District in obtaining grants and may improve the District's credit rating.



D.A. Porath Facility overview

FACTS ABOUT UNDERGROUND CONSTRUCTION

Underground construction is complex and costly compared to other types of construction. According to the U. S. National Committee on Tunneling Technology, Subcommittee on Management of Major Underground Construction Projects, in their executive presentation, "Recommendations for Better Management of Major Underground Construction Projects," they state that "Among today's most complicated and costly large projects are those being built underground…because geotechnical considerations assume greater importance than in other types of construction, and because the nature of underground work requires special equipment, techniques, and skills."[1] Because of this, in 1976, three Federal agencies requested that the National Research Council obtain a set of guidelines that could be used to address the problems of underground construction.

Underground construction is quite unique among the different types of construction projects, mainly due to the fact that you cannot see, ahead of time, the exact conditions that you will be encountering during the construction of the project. You can't physically see if there are underground waterways, huge rocks, underground utilities, buried structures, or soft or hard soil conditions.

Prior to construction, various measures are typically used to investigate what may be hidden underground; however, it is nearly impossible and not cost effective to test every square inch of the project area, thus large rocks, underground streams, undocumented utilities, old septic tanks, tree roots, old contaminated soil, gases and other noxious waste, unsuitable soils, and other surprises often show up and lead to contract change orders and increased costs to deal with the obstacle or condition. From the time of testing to the time of actual construction, soil conditions may change appreciably[2]. Thus, economic risk, geotechnical uncertainties, and complex technologies are inherent in underground projects.[3]

In addition, there is high wear and tear on equipment when having to bore or cut through rock, especially rock with high uniaxial compressive strength. This is illustrated in one project where the average strength of the rock was about 120 Megapascals and the average penetration rate was less than 1 meter/hour, sometimes going as slow as 0.36 meter/hour.[3] The average cutter life was far less (37.3 cubic meters[4]/disc) than desired (100 cubic meters/disc) and cutter replacement led to a long downtime, contributing to higher costs and delays.

Even when an underground construction project is well-planned at its inception, conditions and requirements change during execution. The key to a project's ultimate success is the identification and management of risks during construction.[5]

1. U. S. National Committee on Tunneling Technology, Subcommittee on Management of Major Underground Construction Projects, in their executive presentation, "Recommendations for Better Management of Major Underground Construction Projects
2. Problems of Underground Construction in a Dense Urban Setting.
3. Rock Mechanics in Underground Construction, at the 2006 International Society of Rock Mechanics* International Symposium
4. Contracting Practices for the Underground Construction of the Superconducting Super Collider.
5. Problems in Underground Construction: Lessons learned and Methods Developed for Success (M. Petrov and P. Galloway, 2004

BOARD OF DIRECTORS

The Santa Cruz County Sanitation District Board of Directors is comprised of three elected officials plus alternates:

The County Supervisor from the Branciforte - Soquel (1st) District, plus an alternate;

The County Supervisor from the Aptos (2nd) District, plus an alternate;

A member of the Capitola City Council, plus an alternate.

The Chairperson of the Board is a member of the Capitola City Council. The Vice-Chairperson is the 1st District representative during even-numbered years and the 2nd District representative during odd-numbered years.

BOARD OF DIRECTORS	
Chairperson Kristen Brown, *Representative from the City of Capitola*	
Director Manu Koenig, *1st District Supervisor*	
Director Zach Friend, *2nd District Supervisor*	

DISTRICT PERSONNEL

Current District personnel include the following:	
District Engineer	Matt Machado
Assistant District Engineer	Vacant
Assistant Director of Administrative Services	Kim Moore
District Counsel	Michael De Smidt
Sanitation Engineer	Ashleigh Trujillo
Water/Wastewater Operations Manager	Beatriz Barranco
Environmental Programs Coordinator	Monica Tomlinson
Construction Managers	Carisa Duran and Katie Beach
District Secretary	Terra Prestwich
Deputy Secretary (part-time)	Andrea Gifford

SANTA CRUZ COUNTY
SANITATION DISTRICT

HISTORY & PURPOSE

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

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HISTORY AND PURPOSE OF THE DISTRICT

The Santa Cruz County Sanitation District (District) was formed as an autonomous district under the State of California, on May 9, 1973, and encompasses the community of Live Oak, the City of Capitola and portions of the communities of Aptos and Soquel. It previously consisted of three separate districts: Aptos Sanitation District, Capitola Sanitation District, and East Cliff Sanitation District. At the time of formation, it was one of the largest of its type in the State and had the highest per capita assessed valuation of any Sanitation District.

The objectives of the formation were to:

- Merge resources to pay for improvements in order to be in compliance with federal orders to clean up the quality of wastewater discharged into the Pacific Ocean.
- Shut down individual sewage treatment facilities and build a sewage transmission line, from Aptos to the City of Santa Cruz's treatment facility at Neary Lagoon in the City of Santa Cruz.
- Join with the City of Santa Cruz in tripling the capacity of the City treatment facility and build a new outfall line into the Pacific Ocean.
- Secure a favorable bond rate (the larger District allowed bonds to sell at one-fourth to one-half percent lower interest rates than if they were issued by individual Districts).

The purpose of the District is to construct and maintain pipelines transporting waste from the District to the Santa Cruz City Wastewater Treatment Facility, located at Neary Lagoon, as well as to provide instruction, services, and monitoring for environmental compliance. To accomplish this last item, the District's Environmental Compliance Unit conducts programs to educate residents, professionals, and business owners about the proper use of their sewer and drainage systems in order to help preserve their own, as well as the District's, facilities and to help protect the environment.

SANTA CRUZ COUNTY
SANITATION DISTRICT

REVENUE STUDY & BUDGET

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

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CAPITAL IMPROVEMENT BUDGET PROGRAM

Unlike the Capital Improvement Program, the Capital Improvement Budget normally only includes the current fiscal year's projects and is prepared each year as part of the overall budget of the District.

The Santa Cruz County Sanitation District funds its capital improvement projects through collection of sewer service fees, grants, bond sales, and various state and federal loan programs.

Of the fifty-four capital improvements planned for the 2024-2028 fiscal years, the most significant are the Arana Trunkline Repcement – Phase 1; Rodeo Pump Station Capacity Upgrade; Upper Rodeo Trunkline Replacements; Seacliff/Rio Del Mar Sewer Rehabilitation; Capitola Village Sewer Rehabilitation – Phase 1; Rio Del Mar Sewer Rehabilitation – Phases 2; Santa Cruz Harbor Area Sewer Rehabilitation – Phase 2; Soquel Village Sewer Rehabilitation – Phase 2; West Seacliff Sewer Rehabilitation – Phase 1; Soquel Pump Station Auxiliary Wet Well; and the 2027 Sewer Pipe Rehabilitation projects. Additionally, the East Cliff Transmission Main Relocation project will be a significant project when the City of Santa Cruz retrofits the Murray Street Bridge during the next couple of years. Design continues on the D.A. Porath Facility project which will provide necessary extra workspace and upgraded facility improvements at the District's operation's center.

Significant pipe projects recently completed include the Rio Sands Sewer Rehabilitation, Lower Rodeo Trunkline Replacement, and East Cliff Drive Sewer Replacement (pipe work is completed and final pavement work and striping will be completed in spring 2024). Together these projects installed approximately 8,990 linear feet of gravity sewer main. Manual transfer switch upgrades were completed at the D.A. Porath Facility, and we continue to work on Programmable Logic Controller (PLC) upgrades. Also, in the last year, construction has begun on the 2022 Sewer Rehabilitation Project, Arana Trunkline Replacement – Phase 1, Flush Truck Fill Station, and Valencia Creek Sewer Relocation projects.

For a more in-depth study of the District's financial outlook, attached is the 2023/24 Revenue Study prepared by Hornberger Engineering, which includes a projection of revenue requirements through the year 2025/26 fiscal year.

Also attached is the District's budget for the 2023/24 fiscal year. This budget is based on the sewer service charge rates which were adopted by the District's Board on May 18, 2023. The budget has expected expenditures and contingencies of $91.1 million and reserves of $3.9 million for a total of $95 million. This includes expenditures of $28.1 million in operating expenses ($9 million of which is for the District's share of operating expenses at the City of Santa Cruz's wastewater treatment plant and ocean outfall), $2.6 million in loan payments, $11.9 million in wastewater capital improvement projects, and $48.4 million in construction improvement projects.

SANTA CRUZ COUNTY
SANITATION DISTRICT

2023-24 REVENUE STUDY

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

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2661 Thrasher Lane • San Jose, CA • 95125 • (408) 264-5029

January 23, 2023

Mr. Matt Machado, P.E.
District Engineer
Santa Cruz County Sanitation District
701 Ocean Street
Santa Cruz, CA 95060

Subject: Santa Cruz County Sanitation District
2023/24 Revenue Study

Dear Mr. Machado,

We are pleased to submit this five-year program of sewer service charges for the Santa Cruz County Sanitation District. The purpose of this study is to incorporate the latest costs associated with the District's projects and programs and to project revenue requirements for the years 2023/24 through 2027/28. The study is based on the projected capital costs, operation and maintenance expenses and customer information prepared by the District staff.

This study assumes five bond issues will be issued as part of the District's Capital Improvement Program funding over the next ten years. The first bond will be for $38.0 million in June 2024 to fund ten projects. A second bond will be for $27.0 million in April 2025 to fund the D.A. Porath facility improvements. A third bond will be for $34.1 million in June 2026 to fund eight projects. Additional bond issues would include $25 million in June 2028 and $20 million in June 2030. Additional staff will also be required for the administration of those projects.

As a result of this study, the overall fee increase for fiscal year 2023/24 is 6.1%. Proposed fees for the individual user groups are shown in the following table. Similar increases are projected for the following years of the study period.

We appreciate this opportunity to prepare this revenue study for the Santa Cruz County Sanitation District. Please do not hesitate to contact me if you have any questions or would like any additional information.

Sincerely,

Hornberger Engineering

Gary Hornberger

PROPOSED 2023/24 FEES

User Group	Proposed 2023/24 Fees		Existing 2022/23 Fees		2023/24 Increases		
	Flat Fee ($/year)	Volume Fee ($/HCF) (1)	Flat Fee ($/year)	Volume Fee ($/HCF)(1)	Flat Fee ($/year)	Volume Fee ($/HCF)	Change (%)
Single Family	$997.56		$939.96		$57.60		6.1%
Townhomes & Condominiums	$861.36		$812.28		$49.08		6.0%
Multiple Family & ADUs	$861.36		$812.28		$49.08		6.0%
Mobile Homes	$738.84		$697.44		$41.40		5.9%
Bakeries/Donut Shops (1)	$407.64	$18.68	$390.12	$17.41	$17.52	$1.27	7.0%
Restaurants/Catering (1)	$407.64	$18.68	$390.12	$17.41	$17.52	$1.27	7.1%
Food Processing (1)	$407.64	$22.05	$390.12	$20.43	$17.52	$1.63	7.9%
Morturaries (1)	$407.64	$22.05	$390.12	$20.43	$17.52	$1.63	7.9%
Hospitals/Convalecent Hospitals (1)	$407.64	$14.72	$390.12	$13.27	$17.52	$1.46	10.9%
Other Businesses (1)	$407.64	$14.11	$390.12	$13.27	$17.52	$0.85	5.8%
Schools (Sr. High ADA Basis)	$407.64	$36.89	$390.12	$34.75	$17.52	$2.14	6.1%
Schools (Sr. High Usage Basis)	$407.64	$13.63	$390.12	$12.84	$17.52	$0.79	6.1%
Schools (Elem. & Jr. High ADA Basis)	$407.64	$24.63	$390.12	$23.20	$17.52	$1.43	5.8%
Schools (Elem. & Jr. High Usage Basis)	$407.64	$13.63	$390.12	$12.84	$17.52	$0.79	5.8%
Junior Colleges (FTES Basis)	$407.64	$32.50	$390.12	$30.61	$17.52	$1.89	5.9%
State Parks (1)	$407.64	$13.63	$390.12	$12.84	$17.52	$0.79	6.0%
Dominican Hospital (1)	$407.64	$14.72	$390.12	$13.83	$17.52	$0.90	6.5%
Chaminade (1)	$407.64	$19.20	$390.12	$17.85	$17.52	$1.35	7.5%
Overall Increase							6.1%

(1) Annual volume charge based on January-September 2022 usage times volume fee.

SANTA CRUZ COUNTY SANITATION DISTRICT

2023/24 REVENUE STUDY

January 2023

Hornberger Engineering
San Jose, California

SANTA CRUZ COUNTY SANITATION DISTRICT
2023/24 REVENUE STUDY

Introduction

The Santa Cruz County Sanitation District will require approximately 6.1% to 7.6% annual increases in revenue from fees for sewer service in the next five fiscal years, 2023/24 through 2027/28. The overall fee increase for 2023/24 developed in this study is 6.1%. These increases are primarily related to increased operating expenses, increased capital projects at the wastewater treatment plant operated by the City of Santa Cruz, the District's capital program with an additional $144 million in bonds, and general inflation.

The District staff has reviewed connection charge revenue, capital outlay needs, operation and maintenance expenses, debt service and miscellaneous revenues for the next five fiscal years. Based on this updated information, proposed fees for sewer service in 2023/24 and estimated fees through 2027/28 have been calculated. The development of these fees is discussed in the following sections.

Requirements for Sewer Service Fees

The District's fees for sewer service are subject to the requirements contained in the Revenue Program Guidelines issued by the California State Water Resources Control Board. This is a condition of the State and Federal grants and loans received by the District.

The Guidelines require that fees for sewer service be designed to recover adequate revenues for the operation and maintenance of the District's facilities. In addition, each user and user class must pay its proportional share of those costs, based on its proportional contribution to the total wastewater loadings from all users. The District's sewer service fees have been reviewed by the State Water Resources Control Board staff and are in compliance with the Guidelines.

The District's fees are also subject to the requirements of Proposition 218. This proposition, passed in 1996, requires that fees shall not exceed the proportional cost of service attributable to any parcel.

Customer Revenue

The projected revenue received for sewer service under the current 2022/23 fees has increased by $418,000, as shown in Table 1. This is a combination of a $143,000 increase in residential revenue and a $275,000 increase in nonresidential revenue. The most significant usage increases in 2022 were for restaurants, which were up 11%, and Other Businesses, which were up 9%. This increase in customer revenue has the effect of decreasing the proposed 2023/24 sewer service fees by 1.4%.

Table 1
Customer Revenue at Current 2022/23 Fees

Year	Residential Revenue ($/year)	Nonresidential Revenue ($/year)	Total Revenue ($/year)
2022/23	$25,511,000	$4,758,000	$30,269,000
2023/24	$25,654,000	$5,033,000	$30,687,000
Difference	$143,000 0.6%	$275,000 5.8%	$418,000 1.4%

Connection Charge Revenue

Actual connection charge revenue the past two and one half years has averaged $315,000. Based on actual revenues, connection charges of $300,000 have been projected for 2023/24 and the following years.

Capital Improvement Program Funding

Connection charge revenue and contributions from rates are used to fund the District's Capital Improvement Program projects that are not funded by loans or grants. The funding for 2023/24 is $3,422,000. This will be generated by $300,000 in connection charge revenue and $3,122,000 in sewer service fees. The funding for those projects in the five years of the study period is show in Table 2. The projects included in this program are listed in Table 3. Existing fund balances will be used for the additional costs of these projects.

Table 2
Capital Improvement Program Funding

Item	Annual Capital Improvement Program Funding				
	2023/24 ($/year)	2024/25 ($/year)	2025/26 ($/year)	2026/27 ($/year)	2027/27 ($/year)
Connection Charge Revenue	$300,000	$300,000	$300,000	$300,000	$300,000
Contribution from Rates	$3,122,000	$2,594,000	$2,652,000	$2,540,000	$4,247,000
Capital Improvement Program Funding	$3,422,000	$2,894,000	$2,952,000	$2,840,000	$4,547,000

Table 3
District Funded Capital Improvement Program

Project	2023/24	2024/25	2025/26	2026/27	2027/28
Upper Rodeo Trunkline Replacement & Pump Station	$500,000				
East Cliff Trans. Main Replacement at Murray St. Bridge	$200,000	$1,500,000			
D.A. Porath Facility Improvements	$1,390,000				
Flowmeter Replacements and Repairs	$40,000		$40,000		$45,000
Transmission Line Inspection	$100,000	$100,000	$100,000	$100,000	$100,000
SCADA System Improvements	$150,000	$150,000	$150,000	$150,000	$150,000
Pump Station Sewage Level Monitoring	$50,000	$50,000	$50,000	$50,000	$50,000
Cathodic Protection	$100,000	$100,000	$100,000	$100,000	$100,000
Road Repairs	$50,000	$50,000	$50,000	$50,000	$50,000
Consulting Engineering Services	$200,000	$100,000	$100,000	$200,000	$300,000
Minor Projects	$700,000	$200,000	$200,000	$700,000	$1,000,000
Soquel FM Inspection			$200,000		
East Cliff Force Main Inspection			$200,000		
East Cliff Force Main Repairs - II				$900,000	
Arana Pump Station			$360,000	$40,000	
Soquel Village Phase 2	$20,000				
Townsend Area Sewer Rehab	$25,000				
Santa Cruz Harbor Area Sewer Rehab Phase 2		$100,000	$70,000		
Capitola Village	$170,000	$40,000			
Rio Del Mar Sewer Rehab Phase 2	$90,000	$30,000			
Vienna Woods Phase 1				$27,000	
Seacliff/Rio Del Mar Sewer Rehabilitation	$27,000				
West Seacliff Sewer Rehabiliation	$110,000	$40,000			
Electrical Upgrades - Hidden Beach Pump Station		$140,000			
Capitola Pump Station Roof/Drainage		$400,000			
Emergency Bypass Improvements (Soquel & Capitola)		$220,000			
Concrete Stairs Rehab			$360,000		
Access Hatch at Moran Pump Station		$50,000			
Access Hatch Schwan Pump Station			$250,000		
Soquel Pump Station Auxilary Wet Well			$395,000	$50,000	
Rio Del Mar Sewer Rehabilitation Phase 3			$80,000	$100,000	
38th Avenue Area Sewer Rehabiliation			$20,000		
41st and Capitola Avenue Area Sewer Rehbilitation			$25,000		
Live Oak Sewer Rehabilitation Phase 1			$20,000		
Beach Drive Sewer Rehabilitation			$80,000		
Contingencies	$300,000	$300,000	$300,000	$300,000	$300,000
Total District Funded Capital Projects	$4,222,000	$3,570,000	$3,150,000	$2,767,000	$2,095,000

Operation and Maintenance Expenses

The projected operation and maintenance expenses include treatment costs paid to the City of Santa Cruz and the District's expenses for pump station and collection line maintenance, engineering, source control and fixed assets.

As shown in Table 4, projected treatment expenses have increased from those used in the 2022/23 fees. The District's share of treatment operations costs has increased by $148,000 due to inflation. Significant increases in projects at the treatment plant are projected for the five-year study period. These projects are shown in Table 5. The District's 8/17 share of capital projects has increased by $930,000. The total increase in City treatment costs for 2023/24 is $1,078,000.

Table 4
2023/24 City Treatment Expenses

Year	Operations ($/year)	Capital ($/year)	Total ($/year)
2022/23	$5,660,000	$2,227,000	$7,887,000
2023/24	$5,808,000	$3,157,000	$8,965,000
Difference	$148,000 2.6%	$930,000 41.8%	$1,078,000 13.7%

As shown in Table 6, the District's O&M expense projections for the next fiscal year have increased by $943,000 from those used in the 2022/23 fees. This includes increases of 5.1%, or $756,000, in operating costs and a $187,000 increase in routine capital expenses.

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Table 5
Treatment Plant Capital Improvement Program

Project	2023/24	2024/25	2025/26	2026/27	2027/28
Equipment Replacement	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000
Neary Park Mitigation CIP	$250,000	$250,000	$250,000	$250,000	$250,000
Jessie Street Park CIP	$200,000				
Upgrade Digester Equipment		$500,000		$500,000	
Modernize Laboratory	$2,000,000				
WWTP Infrastructure and Major Equipment	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Total Treatment Plant Capital Projects (1)	$6,450,000	$4,750,000	$4,250,000	$4,750,000	$4,250,000

(1) Excluding $40 million Electrical Project.

Table 6
2023/24 District Operation and Maintenance Expenses

Year	Operations ($/year)	Capital ($/year)	Total ($/year)
2022/23	$14,800,000	$1,670,000	$16,470,000
2023/24	$15,556,000	$1,857,000	$17,413,000
Difference	$756,000 5.1%	$187,000 11.2%	$943,000 5.7%

Debt Service

The District currently has three projects funded by State Revolving Fund (SRF) loans. These include $12 million for the Aptos Transmission Relocation Project, $5 million for the Soquel Creek Pump Station Force Main and $1.4 million for the Valencia Creek Sewer Relocation. The Capitola/Jewel Box Sewer project was funded by a $7 million California Infrastructure and Economic Development Bank (IBank) loan.

In June 2022 the District issued $19.9 million in revenue bonds to fund three projects. These included the East Cliff, Portola and Richmond Drive Trunklines, the Upper and Lower Rodeo Gulch Trunklines and Pump Station and the Arana Trunkline.

An assessment in 2021 of the condition of the District determined sewer infrastructure requires over $143 million in capital improvement projects to rehabilitate

and/or replace all infrastructure poorly rated. Another $80 million in capital improvements is required to address capacity issues that put the system at risk of overflowing in large storm events. The District's 10-year plan included $31 million in funding for these projects in 2022/23. An additional $190 million in capital projects for the following nine years would fix approximately 95% of the significant deficiencies identified in 2021. The District plans to issue four revenue bonds starting in 2023/24. These include a $38 million issue in June of 2024 to fund ten projects, a $27 million issue in April 2025 to fund the D.A. Porath Facility improvements, a $34 million issue in June of 2026 to fund eight projects, a $25 million issue in 2028 and a $20 million issue in 2030. An additional $46 million would be generated from sewer service fees.

The District is participating in a $3.5 million IBank loan for the Ultraviolet System Replacement project at the City wastewater treatment plant. In addition, the District will be participating in the funding for the Electrical System Upgrade at the plant. The latter project is under design with a preliminary cost of $40 million. The actual project cost and funding have not been established at this time. Estimated debt service for this project has been included for the study period but is subject to change at a later date. The District will pay 8/17 of the debt service for both those projects.

The proposed projects funded by these loans and bonds over the next five fiscal years are shown in Table 7. The debt service schedules for all the District's loans and bonds for the study period are shown in Table 8.

Table 7
District Loan and Bond Funded Capital Improvement Program

Project	Prior Years	2023/24	2024/25	2025/26	2026/27	2027/28
State Revolving Fund Loans:						
Aptos Transmission Relocation	$11,982,000					
Soquel Ck. PS FM Replacement	$5,002,000					
Valencia Creek Sewer Relocation	$1,393,000					
Ibank Loans:						
Capitola / Jewel Box Sewer	$7,000,000					
2022 Bond Issue:						
East Cliff, Portola, & Richmond Dr.	$7,300,000					
Rodeo Gulch Trunklines/Pump Station	$8,500,000					
Arana Trunkline	$4,100,000					
Non Project	$45,000					
Total 2022 Bond Issue	$19,945,000					
2024 Bond Issue:						
Capitola Village Sewer Rehabilitation		$5,900,000				
Santa Cruz Harbor Area Sewer Rehab. - Ph. 2		$3,820,200				
Soquel Village Sewer Rehabilitation		$4,700,000				
Townsend Area Sewer Rehabilitation		$2,650,000				
Rio Del Mar Sewer Rehabilitation Phase 2		$8,486,240				
Seacliff/Rio Del Mar Sewer Rehabilitation		$2,173,000				
Hidden Beach Bypass		$668,000				
Emergency Bypass Improvements		$135,000				
DA Porath Bypass		$1,129,000				
West Seaciff Sewer Rehabilitation		$8,292,000				
Total 2024 Bond Issue		$37,953,440				
2025 Bond Issue:						
DA Porath Facility			$27,000,000			
2026 Bond Issue:						
Arana Pump Station				$4,587,000		
Vienna Woods Phase 1				$1,690,000		
Soquel Pump Station Auxillary Wet Well				$2,558,100		
Rio Del Mar Sewer Rehabilitation Phase 3				$8,342,000		
Beach Drive Sewer Rehabilitation				$5,874,400		
38th Avenue Area Sewer Rehabilitation				$2,744,000		
41st Avenue Area Sewer Rehabilitation				$5,528,000		
Live Oak Area Sewer Rehabilitation Phase 1				$2,744,000		
Total 2026 Bond Issue				$34,067,500		
2028 Bond Issue:						$25,000,000
City WWTP Projects:						
UV Replacement ($3.5 milliion X 8/17)	$1,647,000					
Electrical System ($40.0 million X 8/17)			$18,824,000			
Total City WWTP Projects	$1,647,000	$0	$18,824,000	$0	$0	$0
Total Loan and Bond Funded Projects	$46,969,000	$37,953,440	$45,824,000	$34,067,500	$0	$25,000,000

Table 8
District Debt Service

Item	Annual Debt Service				
	2023/24 ($/year)	2024/25 ($/year)	2025/26 ($/year)	2026/27 ($/year)	2027/28 ($/year)
SRF Loan - Aptos Transmission Project	$790,000	$790,000	$790,000	$790,000	$790,000
SRF Loan - Soquel Creek Pump Station	$219,000	$219,000	$219,000	$219,000	$219,000
SRF Loan - Valencia Creek Sewer Relocation	$53,000	$53,000	$53,000	$53,000	$53,000
IBank Loan - Capitola/Jewel Box	$403,000	$403,000	$402,000	$401,000	$401,000
2022 Bond Issue - 3 Projects	$1,196,000	$1,199,000	$1,197,000	$1,199,000	$1,200,000
2024 Bond Issue - 10 Projects		$2,530,000	$2,530,000	$2,530,000	$2,530,000
2025 Bond Issue - D.A. Porath Facility			$1,855,000	$1,855,000	$1,855,000
2026 Bond Issue - 8 Projects				$2,340,000	$2,340,000
City WWTP Ultraviolet System Replacement	$83,000	$83,000	$83,000	$83,000	$83,000
City WWTP Electrical System Upgrade		$1,200,000	$1,200,000	$1,200,000	$1,200,000
Total Debt Service	$2,744,000	$6,477,000	$8,329,000	$10,670,000	$10,671,000

Revenue Trust Interest Income

The District uses the investment income received in the Revenue Trust Fund to fund a portion of its operating expenses every year. This reduces the total revenues required from fees for sewer service. Based on actual earnings, the projected annual interest income for 2023/24 and the following years is $100,000.

Reserve Fund

The District's Reserve Fund will have a balance of $4,200,000 at the beginning of 2023/24. The District's plan is to continue annual increases of $100,000 over the next ten years, which will bring the balance to $4,700,000 by the end of 2027/28. This amount will be recovered annually in the sewer service fees.

Total Revenues

Projected revenues required for 2023/24 through 2027/28 from fees for sewer service are shown in Table 9. The total revenue required in 2023/24 is $32,570,000, which will require an overall fee increase of $1,883,000 or 6.1%. Annual fee increases for the following four years are projected to be 7.0% to 7.6%

Table 9
Total Revenue Requirements

	Annual Revenue Requirement				
Item	2023/24 ($/year)	2024/25 ($/year)	2025/26 ($/year)	2026/27 ($/year)	2027/28 ($/year)
Capital Improvement Funding	$3,122,000	$2,594,000	$2,652,000	$2,540,000	$4,247,000
Debt Service	$2,744,000	$6,477,000	$8,329,000	$10,670,000	$10,671,000
City Treatment	$8,965,000	$8,365,000	$8,362,000	$8,858,000	$8,875,000
District O&M	$17,413,000	$17,258,000	$17,954,000	$17,951,000	$19,028,000
Reserve Fund	$100,000	$100,000	$100,000	$100,000	$100,000
Revenue Collection Expense	$326,000	$351,000	$377,000	$405,000	$433,000
Interest Earnings	($100,000)	($100,000)	($100,000)	($100,000)	($100,000)
Total Revenue Requirement	$32,570,000	$35,045,000	$37,674,000	$40,424,000	$43,254,000
Fee Increase	6.1%	7.6%	7.5%	7.3%	7.0%

Sewer Service Fees

The proposed 2023/24 fees for sewer service, based on increased customer usage and total revenue requirements, are shown in Table 10. The overall 2023/24 fee increase is 6.1%. Residential increases are in the range of 5.9% to 6.1%.

These proposed fees are based the average wastewater discharges for the three residential classifications, as adopted by the District Board in January 2022. The discharge by customers in the single family classification is 5.1 HCF per month. The discharge by customers in the combined multiple family classification is 4.1 HCF per month. Mobile home discharge is 3.2 HCF per month.

Nonresidential fee increases vary based on customer size and strength of wastewater discharged. Restaurants, which have high strength wastewater, will have higher increases. Pollutant costs are a significant portion of their fees and those costs are increased as total City treatment costs increase in 2023/24. Increases for other high strength customers are similar.

The Hospital/Convalescent Hospital classification is new and those customers were previously included in the Other Business classification. The volume fee for this classification reflects higher pollutant strengths for hospitals and convalescent hospitals.

A five-year fee program for the study period is shown in Table 11. This table includes adopted fees since 1991/92 and proposed increases through 2027/28.

Table 10
Proposed 2023/24 Fees

User Group	Proposed 2023/24 Fees		Existing 2022/23 Fees		2023/24 Increases		
	Flat Fee ($/year)	Volume Fee ($/HCF) (1)	Flat Fee ($/year)	Volume Fee ($/HCF)(1)	Flat Fee ($/year)	Volume Fee ($/HCF)	Change (%)
Single Family	$997.56		$939.96		$57.60		6.1%
Townhomes & Condominiums	$861.36		$812.28		$49.08		6.0%
Multiple Family & ADUs	$861.36		$812.28		$49.08		6.0%
Mobile Homes	$738.84		$697.44		$41.40		5.9%
Bakeries/Donut Shops (1)	$407.64	$18.68	$390.12	$17.41	$17.52	$1.27	7.0%
Restaurants/Catering (1)	$407.64	$18.68	$390.12	$17.41	$17.52	$1.27	7.1%
Food Processing (1)	$407.64	$22.05	$390.12	$20.43	$17.52	$1.63	7.9%
Morturaries (1)	$407.64	$22.05	$390.12	$20.43	$17.52	$1.63	7.9%
Hospitals/Convalecent Hospitals (1)	$407.64	$14.72	$390.12	$13.27	$17.52	$1.46	10.9%
Other Businesses (1)	$407.64	$14.11	$390.12	$13.27	$17.52	$0.85	5.8%
Schools (Sr. High ADA Basis)	$407.64	$36.89	$390.12	$34.75	$17.52	$2.14	6.1%
Schools (Sr. High Usage Basis)	$407.64	$13.63	$390.12	$12.84	$17.52	$0.79	6.1%
Schools (Elem. & Jr. High ADA Basis)	$407.64	$24.63	$390.12	$23.20	$17.52	$1.43	5.8%
Schools (Elem. & Jr. High Usage Basis)	$407.64	$13.63	$390.12	$12.84	$17.52	$0.79	5.8%
Junior Colleges (FTES Basis)	$407.64	$32.50	$390.12	$30.61	$17.52	$1.89	5.9%
State Parks (1)	$407.64	$13.63	$390.12	$12.84	$17.52	$0.79	6.0%
Dominican Hospital (1)	$407.64	$14.72	$390.12	$13.83	$17.52	$0.90	6.5%
Chaminade (1)	$407.64	$19.20	$390.12	$17.85	$17.52	$1.35	7.5%
Overall Increase							6.1%

(1) Annual volume charge based on January-September 2022 usage times volume fee.

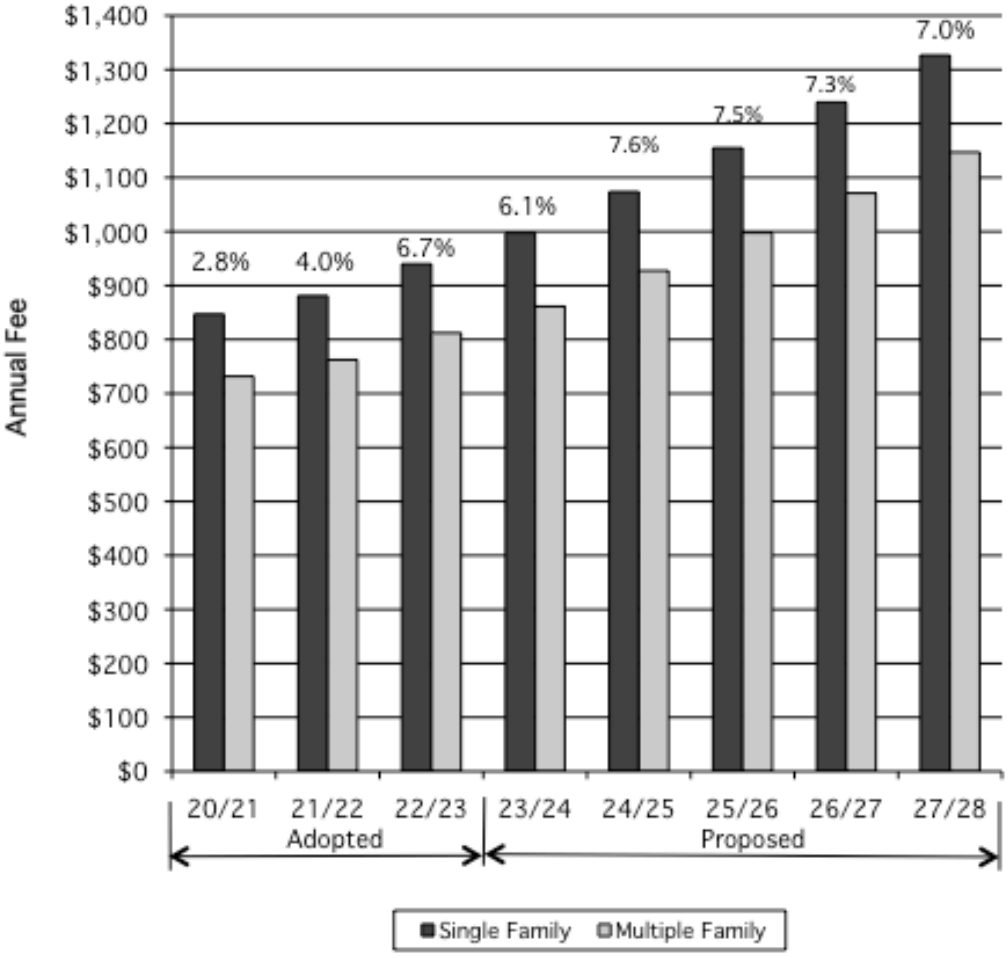
Summary

The overall projected increase in fees for sewer service for fiscal year 2023/24 is 6.1%. The annual increases for the following four years are 7.0% to 7.6%. These increases reflect increased customer usage, additional debt service, treatment plant operating costs and capital improvements and District operating costs and capital improvements. The proposed single family and multiple family annual fees are shown in Figure 1. Future fee increases are dependent upon the magnitude of treatment and collection operating costs, general inflationary trends, interest rates and customer usage.

Table 11
Five-Year Fee Program

Fiscal Year	Average Increase					
	Single Family	Multiple Family	Mobile Home	Average Other Business	Average Restaurant	Elementary School
	5.1 HCF/mo.	4.1 HCF/mo.	3.2 HCF/mo.	12 HCF/mo.	44 HCF/mo.	369 ADA
Adopted						
1991/92	27.1%	23.9%	23.9%			
1992/93	4.2%	13.5%	13.5%	4.5%	8.2%	0.4%
1993/94	22.4%	35.7%	35.7%	25.9%	30.3%	19.4%
1994/95	5.6%	5.4%	5.4%	5.9%	9.5%	5.5%
1995/96	5.3%	5.7%	5.7%	5.5%	-1.1%	5.9%
1996/97	4.4%	4.3%	4.3%	3.5%	9.6%	-25.8%
1997/98	3.1%	2.1%	2.1%	2.6%	12.5%	-2.0%
1998/99	2.9%	3.3%	3.3%	2.6%	2.2%	1.7%
1999/00	2.9%	3.3%	3.3%	3.2%	0.3%	2.1%
2000/01	4.7%	3.9%	3.9%	4.9%	7.9%	6.3%
2001/02	3.3%	3.0%	3.0%	3.8%	4.7%	4.0%
2002/03	9.8%	20.6%	-5.4%	-1.1%	-2.3%	-1.1%
2003/04	4.1%	4.1%	4.0%	4.6%	3.4%	5.1%
2004/05	4.9%	5.1%	5.3%	4.6%	3.7%	4.3%
2005/06	3.7%	1.2%	6.8%	5.7%	1.6%	4.9%
2006/07	2.3%	2.3%	2.5%	2.2%	-1.1%	2.7%
2007/08	3.2%	2.9%	2.6%	3.1%	6.5%	3.2%
2008/09	1.3%	0.9%	2.5%	7.2%	10.0%	7.8%
2009/10	5.2%	5.1%	5.0%	5.0%	4.3%	-30.6%
2010/11	4.2%	4.0%	4.0%	3.9%	5.5%	4.3%
2011/12	1.6%	3.9%	4.3%	11.0%	10.7%	10.6%
2012/13	3.7%	3.7%	3.7%	3.4%	2.0%	4.0%
2013/14	2.7%	2.8%	2.9%	2.0%	2.6%	2.0%
2014/15	0.2%	1.5%	3.9%	8.3%	9.9%	8.2%
2015/16	4.8%	4.9%	5.0%	2.3%	1.3%	2.4%
2016/17	2.7%	2.7%	2.7%	3.1%	1.1%	3.9%
2017/18	1.2%	4.5%	3.6%	8.7%	7.2%	9.3%
2018/19	3.3%	3.5%	3.7%	5.2%	0.7%	3.4%
2019/20	5.3%	5.3%	5.4%	5.2%	2.0%	5.7%
2020/21	2.8%	2.7%	2.6%	1.3%	2.2%	2.4%
2021/22	4.0%	4.2%	4.4%	4.3%	-0.4%	4.4%
2022/23	6.7%	6.5%	6.3%	6.4%	8.5%	-3.7%
Proposed						
2023/24	6.1%	6.0%	5.9%	5.9%	7.2%	6.1%
2024/.5	7.6%	7.7%	7.7%	7.4%	7.3%	7.6%
2025/26	7.5%	7.6%	7.7%	7.5%	5.9%	7.9%
2026/27	7.3%	7.3%	7.3%	7.2%	6.9%	7.5%
2027/28	7.0%	7.1%	7.2%	7.1%	5.6%	7.3%

Figure 1
Annual Residential Fees



SANTA CRUZ COUNTY SANITATION DISTRICT

2023-24 BUDGET

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

WWW.SCCSD.US

SANTA CRUZ COUNTY SANITATION DISTRICT

701 OCEAN STREET, SUITE 410 · SANTA CRUZ, CA · 95060-4073
(831) 454-2160 · FAX (831) 454-2089 · TDD: (831) 454-2123 · WWW.SCCSD.US
MATT MACHADO, DISTRICT ENGINEER

Adopted by the Board of Directors, SCCSD on October 19, 2023
ATTEST: _____ Secretary

AGENDA DATE: OCTOBER 19, 2023

BOARD OF DIRECTORS
SANTA CRUZ COUNTY SANITATION DISTRICT
701 Ocean Street, Room 410
Santa Cruz, California 95060

SUBJECT: ADOPTION OF 2023-24 SANTA CRUZ COUNTY SANITATION DISTRICT FINAL BUDGET

Members of the Board:

Attached is the Santa Cruz County Sanitation District Final Budget for the 2023-24 fiscal year. This budget has been adjusted to include the fiscal year 2023-24 year-end revenues, expenditures, and fund balances.

Minor adjustments from the Proposed Budget, presented to the Board in June, to the Final Budget, were made based on year-end expenditure data for the 2023-24 fiscal year. More significant adjustments are summarized in the following tables. Overall expenditures for 2023-24 have increased from $58.8M to $91.1M. These additional expenditures will be funded by a new Bond measure, proposed for April 2024, in the amount of $22.6M, $1.8M in increased loan funding for the Valencia Creek Sewer Relocation project, $0.8M from the Department of Community Development & Infrastructure Roads Division for their portion of the East Cliff Drive Sewer Rehabilitation project, $5.1M in excess fund balance from fiscal year 2022-23, and $2M from reserves.

625175 OPERATING FUND – FIXED ASSETS (50/175)

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P53194	Operations Lab Work	$6,704	$12,498	$28,080	$20,000	This decrease is due to the completion of the Local Limits Study in collaboration with the City of Santa Cruz.
P53352	M&O Training	$0	$0	$25,000	$50,000	This increase is due to the added employee safety trainings and trainings for revised Waste Discharge Requirements.

625175 OPERATING FUND – FIXED ASSETS (50/175) - CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P53178	Legal Costs and Fees	$97,775	$91,503	$20,000	$75,000	This increase covers legal review of upcoming code changes and negotiations with landowners for easement rights.
P53246	Motorized Valves	$130,603	$272,933	$150,000	$75,000	This decrease is a result of motorized valve purchases completed in prior fiscal years.
P53357	PLC Upgrades	$90,564	$300,236	$350,000	$650,478	This increase is due to the long lead times for PLCs ordered in 2022-23 and includes PLC upgrades for 2023-24.
P53358	VFD Replacements	$149,564	$161,478	$75,000	$95,343	This increase is due to the long lead time for the VFD replacements ordered in 2022-23 and includes VFD replacements for 2023-24
P53361	Pump Station Grinders	$188,760	$305,308	$90,000	$40,000	This decrease is due to a majority of grinder replacements completed in prior fiscal years.
P53375	Air Relief Valves	-$1,458	$0	$90,000	$45,000	This decrease is due to the reduced costs for the air relief valve model that will be utilized for the replacements.
P29053	Combo Truck	$0	$0	$0	$567,938	This increase is due to the long lead time for the combo truck ordered in 2022-23.
P53285	F550 Truck with Boom	$0	$0	$0	$166,496	This increase is due to the long lead time for the boom truck ordered in 2022-23.

625195 WASTEWATER CAPITAL IMPROVEMENT FUND – FIXED ASSETS (50/195)

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P54002	D.A. Porath Lode St. Facility Improvements	$164,207	$338,785	$600,000	$1,811,000	$1.8M was budgeted fiscal year 2022-23 but $1.46M was not spent, so this increase allows spending of the previously budgeted amount in 2023-24 to cover design costs, project oversight, constructability review, and permits costs.

625195 WASTEWATER CAPITAL IMPROVEMENT FUND – FIXED ASSETS (50/195) – CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P54062	E. Cliff Transmission Secondary Force Main Feasibility Study	$0	$0	$0	$228,654	The original scope of work for this contract included work for a flow meter to be installed on the E. Cliff force main; this contract has been reactivated to allow a portion of the unused budget to cover the new flow meter that will be installed on the new force main as part of the force main relocation project led by the City of Santa Cruz.
P54119	Bypass (Capitola & Soquel)	$0	$0	$0	$500,000	This project will be funded by Bonds. The Bonds are targeted to close in 2023-24 instead of 2024-25 as originally planned, to move along high priority projects, such as installing emergency bypass systems at these two pump stations.
P54120	Hidden Beach Bypass	$0	$0	$0	$800,000	This project will be funded by Bonds. The Bonds are targeted to close in 2023-24 instead of 2024-25 as originally planned, to move along high priority projects, such as installing an emergency bypass system at this pump station.

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185)

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P53601	Rio Sands Sewer Rehabilitation	$4,032	$234,566	$0	$10,000	The sewer work was completed in 2022-23 but the contractor's retention payment has not been released yet. These funds will cover this for 2023-24.
P53610	2022 Sewer Pipe Repair	$0	$15,585	$280,000	$977,861	$920,000 was budgeted in 2022-23 but the project construction did not start until 2023-24. These funds will cover construction and construction management.

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185) - CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P53611	Hidden Beach Sewer/PS Upgrade	$0	$5,740	$0	$150,000	This increase is to cover a hoist (structural design and construction) and other necessary upgrades at the pump station.
P53613	Flush Truck Fill Station	$0	$249,758	$0	$289,000	$350,000 was budgeted in 2022-23 but the project construction was only partially completed. These funds will cover construction and construction management in 2023-24.
P53616	Seacliff/Rio Del Mar Sewer Rehabilitation	$0	$17,915	$800,000	$2,700,000	This project will be funded by Bonds. The Bonds are targeted to close in 2023-24 instead of 2024-25 as originally planned to move along high priority projects which will enable this project to be constructed in 2023-24 rather than split over two fiscal years as originally planned.
P53618	22-23 Seacliff A1 PS Protection	$0	$124,266	$0	$60,000	The temporary rip-rap protection that was installed during the 2022-23 storms must be removed; this will cover removal costs.
P53619	22-23 Estates Dr. Trunk Line Emergency	$0	$223,269	$0	$25,000	Some construction management time for this emergency project was not paid in 2022-23 and must be paid in 2023-24.
P53620	Phase 2 Soquel Village Sewer	$0	$0	$0	$6,000,000	This project will be funded by Bonds. The Bonds are targeted to close in 2023-24 instead of 2024-25 as originally planned, to move along high priority projects, such as rehabilitating sewers in the Soquel Village area.

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185) - CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P53622	Seacliff at Oakdale Sewer Emergency	$0	$799,227	$0	$70,000	Some construction management time for this emergency project was not paid in 2022-23 and must be paid in 2023-24.
P53633	Gross Rd. Sewer Repair E18/E19	$0	$0	$0	$70,000	This emergency occurred after the proposed budget was presented; this will cover the construction and other project costs.
P53634	R2 6560 Muriel Dr. Sewer Repair	$0	$0	$0	$78,400	This emergency occurred after the proposed budget was presented; this will cover the construction and other project costs.
P53636	2023 JOC No. 1 Pipe Repairs	$0	$0	$0	$640,000	These required repairs were identified after the proposed budget was presented; this will cover the repairs and other project costs.
P53637	2023 JOC No. 3 Slurry Seal and Power Wash	$0	$0	$0	$21,000	The pavement restoration work was not completed for the Rio Sands project due to wet weather; these funds will cover this work in 2023-24.
P53638	R3 0262 El Dorado Sewer Repair	$0	$0	$0	$44,800	This emergency occurred after the proposed budget was presented; this will cover the construction and other project costs.
P53812	Minor Projects	$0	$0	$500,000	$785,352	Due to cost escalation, more funds are set aside for future emergency work.
P53817	Consulting Engineering Services	$0	$0	$200,000	$579,875	Due to cost escalation in consultants' fees, more funds are set aside for consultants to assist with tasks outside the area of expertise of District staff.
P53824	Cabrillo Park Sewer Replacement	$3,748	$1,764	$0	$173,794	The design contract for the second phase of this work has been on hold but may be reactivated in 2023-24 to complete work adjacent to the W. Seacliff Sewer Rehab project.

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185) - CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ACTUAL	2023-24 RECOMMENDED	2023-24 ADOPTED	EXPLANATION
P53630	W. Seacliff Sewer Rehab Phase 1	$0	$0	$90,000	$8,300,000	This project will be funded by Bonds. The Bonds are targeted to close in 2023-24 instead of 2024-25 as originally planned to move along high priority projects, such as sewer rehabilitation work in West Seacliff that must occur before Measure D paving.
P53870	Valencia Creek Sewer Relocation	$22,587	$177,323	$2,310,000	$3,500,000	Bid costs were higher than expected; this increase will cover the construction and management costs for the project. This project is loan funded and additional loan funding is expected to cover the additional costs.
P53881	East Cliff Drive Sewer Replacement	$645,061	$5,563,193	$300,000	$7,100,000	$1.8M budgeted in 2022-23 was not expended and has been added here; the remaining increase is due to unforeseen site conditions. The Board approved an additional $3M of contingencies in August. Additional funds are required to cover construction management and other associated project costs.
P53890	Capitola Pump Station Pumps, Motors & Controls	$0	$0	$0	$300,000	This increase is to cover upgrades required at this critical pump station.

It is therefore recommended that the Board of Directors take the following actions:

1. Approve the 2023-24 Final Budget as presented; and

2. Adopt the attached resolution adopting the Final Budget.

Yours truly,

DocuSigned by:
Matt Machado
50EBAC64454C48C...

MATT MACHADO
District Engineer

AT/BB/tlp:B2636.docx

Attachments:
A. Resolution Adopting Final Budget
B. Final 2023-24 Budget
C. Board letter of May 18, 2023

Copy to:
Nathan Nguyen, Director, City of Santa Cruz, Public Works
Auditor Controller
Business Services

BEFORE THE BOARD OF DIRECTORS
OF THE SANTA CRUZ COUNTY SANITATION DISTRICT
SANTA CRUZ COUNTY, CALIFORNIA

RESOLUTION NO. 23-07

On the motion of **Alternate Director Klosinski** duly seconded by **Alternate Director Bertrand** the following resolution is adopted:

RESOLUTION ADOPTING FINAL BUDGET

WHEREAS, the Board of Directors of the Santa Cruz County Sanitation District held a public hearing on its proposed budget on June 8, 2023, after duly published notice, and

WHEREAS, said hearings have been terminated, during which time all additions and deletions to the proposed budget for 2023-24 were made or authorized, and

NOW THEREFORE, IT IS HEREBY RESOLVED the final budget of the Santa Cruz County Sanitation District, for which the Board of Directors is the governing board, for the fiscal year 2023-24 be and is hereby adopted by reference to the attached final budget.

BE IT FURTHER RESOLVED that the District Engineer is authorized, as follows, to approve changes in equipment classification of fixed asset acquisitions as to quantity, type, and cost as long as the original total budget unit amounts approved by the Board of Directors are not exceeded:

1. Substitution or other items shall be limited to items of original appropriation of $1,000 or less with a substitution cost not to exceed a unit cost of $1,000.

2. Original items unit cost can be increased up to 15 percent provided that appropriation savings are available within the expenditure subobject. Changes in items costing more than that will continue to be approved by the Board of Directors regardless of amount.

BE IT FURTHER RESOLVED that the means of financing the expenditure programs will be by monies derived from revenue to accrue and fund balance available, and they are attached hereto and made a part hereof (on file with the District Secretary).

PASSED AND ADOPTED by the Board of Directors of the Santa Cruz County Sanitation District this 19th day of October, 2023, by the following vote:

AYES: ATERNATE DIRECTOR KLOSINSKI AND ALTERNATE DIRCTOR BERTRAND
NOES: NONE
ABSENT: DIRECTOR KOENIG, DIRECTOR FRIEND, AND DIRECTOR BROWN
ABSTAIN: NONE

DocuSigned by:
Jacques Bertrand
DC6F2E653764D7...
Alternate Chairperson of said Board

ATTEST: DocuSigned by: Andrea Gifford 1AD7DA21E774498D...
Deputy Secretary of said Board

Approved as to Form: DocuSigned by: Michael De Smidt 77B7BAAA5B324F0...
District Counsel

State of California)
County of Santa Cruz)

I the undersigned Secretary of the Board of Directors of the Santa Cruz County Sanitation District, County of Santa Cruz, State of California do hereby certify that the foregoing is a true and correct copy of a resolution passed and adopted by and entered in the Minutes of said Board.

In witness whereof, I have hereunto set my hand and affixed the seal of the said Board on October 23, 2023

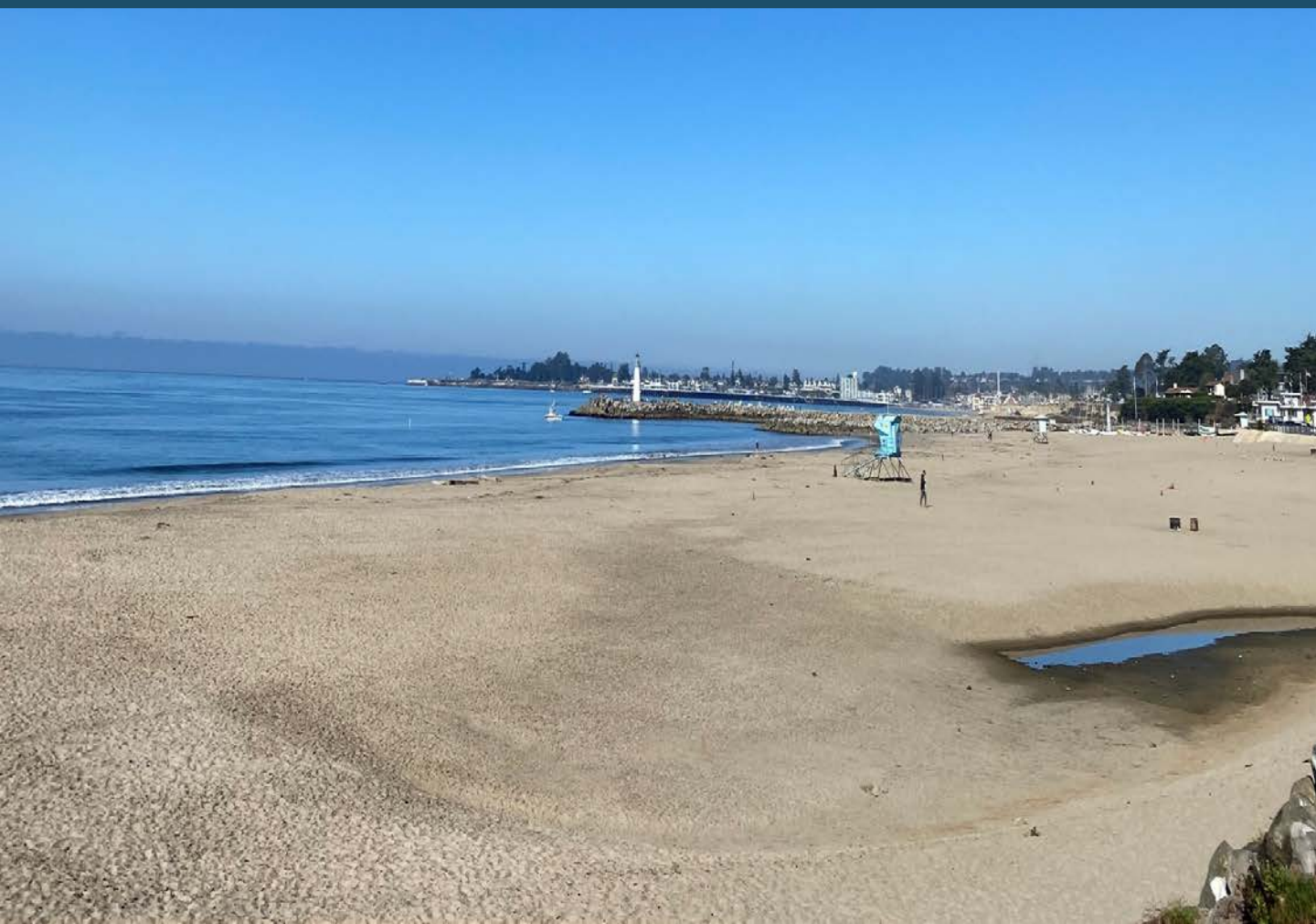
Signed:

Distribution: Auditor-Controller; Business Services; Sanitation Engineer

Attachment B

SANTA CRUZ COUNTY SANITATION DISTRICT

2023-24 *FINAL* BUDGET



SANTA CRUZ COUNTY SANITATION DISTRICT
ADOPTED BUDGET 2023/2024

625175 SCCSD OPERATING FUND (50/175)

The Operating Fund is responsible for funding the expenses for the general operations of the District. No sewer connection fee revenue can be used to fund these operations.

				21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted	% Change
EXPENDITURES:								
P53378	62330	SCCSD-Sewage Treatment - City Of Santa Cruz	Engr	7,292,875	8,507,420	8,965,000	8,965,000	0%
Maintenance and Operations:								
P53107	62330	Public Outreach	Opns	27,831	64,912	60,240	60,240	0%
P53110	62330	Permit Reviews	Opns	18,142	15,538	20,000	20,000	0%
P53113	62330	Spill Response-Private Prop	Opns	3,213	5,335	10,710	10,710	0%
P53115	62330	Spill Response-Main Sewer Spill	Opns	29,548	11,484	35,000	35,000	0%
P53128	62330	Pump Stations	Opns	2,302,409	2,197,222	2,255,060	2,255,060	0%
P53130	62330	Collection System	Opns	2,026,418	2,340,144	2,744,950	2,744,950	0%
P53132	62330	East Cliff Facility	Opns	1,436,776	1,516,316	1,815,700	1,815,700	0%
P53133	62330	Electrical	Opns	1,626,694	1,586,534	1,933,330	1,933,330	0%
P53136	62330	Sulfide Control	Opns	1,214,491	1,307,296	1,643,000	1,643,000	0%
P53138	62330	Utilities	Opns	629,272	686,585	780,000	730,000	-6%
P53140	62330	Tree Trimming	Opns	58,206	63,149	131,040	131,040	0%
P53142	62330	Source Control Lab Work	Opns	5,773	3,262	37,860	37,860	0%
P53174	62330	Source Control Program	Opns	556,676	500,272	558,250	558,250	0%
P53193	62330	Green Business Program	Opns	98,318	109,041	124,800	124,800	0%
P53194	62330	Operations Lab Work	Opns	6,704	12,498	28,080	20,000	-29%
P53195	62330	Annual Cathodic Protection Testing & Repairs	Opns	16,240	-	53,920	53,920	0%
P53198	62330	Permit Fees	Opns	53,966	71,856	49,280	49,280	0%
P53352	62330	M&O Training	Opns	-	-	25,000	50,000	100%
P53367	62330	TLC Truck Fill Station	Opns	5,664	42,520	-	-	0%
P53372	62330	Monarch Butterfly Habitat Plan	Opns	65,598	11,200	10,000	10,000	0%
Engineering:								
Various	62330	Permit Reviews	Engr	1,486	146		-	100%
P53259	62330	SCCSD Encroachment Permits	Engr	-	8,662	7,000	7,000	0%
P53164	62330	General Engineering	Engr	1,654,244	2,065,199	2,430,000	2,350,000	-3%
P53168	62330	Service Charge Administration	Engr	1,895	-	-	-	100%
Salaries and Wages:								
P53102	62330	Salaries-Secretaries	Engr	216,368	269,042	453,455	453,455	0%
P53104	62330	Salaries-Directors	Engr	5,040	4,368	5,000	5,000	0%
Miscellaneous:								
P53105	62330	Printing & Mailing	Engr	22,628	27,575	40,000	40,000	0%
P53106	62330	Office Expenses	Engr	6,313	13,746	12,100	12,100	0%
P53108	62330	Telephone & Communications	Engr	35,189	36,560	37,080	37,080	0%
P53170	62330	Accounting & Audit Fees	Engr	9,492	9,492	16,500	16,500	0%
P53178	62330	Legal Costs & Fees	Engr	97,775	91,503	20,000	75,000	275%
P53182	62330	Travel & Transportation	Both	-	-	-	-	100%
P53171	62330	IRWM Coordination	Engr	11,200	11,200	11,250	11,250	0%
P53188	62330	Codification Of Ordinances	Engr	4,776	1,306	7,500	7,500	0%
P53165	62330	SSMP	Opns	-	7,392	-	-	100%
P53196	62330	Revenue Study	Engr	26,068	16,366	28,000	28,000	0%
P29057	62330	SCCSD 22-23 Storm Response	Engr	-	146	-	-	100%
Computers:								
P53180	62330	Systems & Programming	MIS	11,123	(3,300)	51,500	51,500	0%
P53186	62330	Computers-Software	MIS	77,973	84,063	82,400	82,400	0%
P53192	62330	Computers-Facility Computer Mapping	MIS	52,059	103,178	61,800	61,800	0%
Routine Equipment Repair & Replacement:								
P53152	62330	East Cliff Pump Station and Line Equip	Opns	140,480	107,592	200,000	200,000	0%
Fixed Assets:								
See Pg2	86204	Equipment		813,668	1,148,881	1,367,000	1,517,821	11%
See Pg2	86209	Mobile Equipment		360,084	224,808	1,150,000	1,884,434	64%
Contingencies:								
P53499	98700	Contingencies		-	-	50,000	50,000	0%
TOTAL EXPENDITURES				21,040,639	23,280,509	27,311,805	28,138,979	3%
SOURCE OF FUNDS:								
	34400	Fund Balance		826,088	3,180,588	-	(126,980)	100%
	41308	In-Lieu Development Fees		10,000	-	-	-	0%
	41322	Plan Checking Fees		13,827	8,577	2,000	2,000	0%
	42047	Other Charges Current Services		23,597	4,465	5,000	5,000	0%
	42384	Other Revenues, Transfers and Adjustments		878,842	1,456,144	-	-	0%
	42450	Sales of Fixed Assets-Non Taxable		-	9,409	-	-	0%
	42462	Transfer from Revenue Trust		22,468,873	18,494,346	27,304,805	28,258,959	3%
AVAILABLE FUNDS				24,221,227	23,153,530	27,311,805	28,138,979	6%

Engr = Engineering
Opns = Operations
Both = Engineering & Operations
MIS = Management Information Services

SANTA CRUZ COUNTY SANITATION DISTRICT
ADOPTED BUDGET 2023/2024

625175 SCCSD OPERATING FUND - SCHEDULE OF FIXED ASSETS

Equipment					21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted	% Change
P53226	86204	Emergency Diesel Generators (4)	R	Opns	-	87,684	90,000	90,000	0%
P53240	86204	Network Equipment	R	MIS	-	-	40,000	40,000	0%
P53246	86204	Motorized Valves	N	Opns	130,603	272,933	150,000	75,000	-50%
P53256	86204	Radios	R	Opns	-	-	12,000	12,000	0%
P29054	86204	Cameras -TV'ing Sewer Mains	R	Opns	-	-	40,000	40,000	0%
P29055	86204	Mixers	R	Opns	-	-	100,000	100,000	0%
P53357	86204	PLC Upgrades	R	Opns	90,564	300,236	350,000	650,478	86%
P53358	86204	VFD Replacements	R	Opns	149,564	161,478	75,000	95,343	27%
P53359	86204	Pumps	R	Opns	255,636	-	75,000	75,000	0%
P53361	86204	PS Grinders	R	Opns	188,760	305,308	90,000	40,000	-56%
P53375	86204	Air Relief Valves	R	Opns	(1,458)	-	90,000	45,000	-50%
P53376	86204	Electrical Equipment	R	Opns	-	-	200,000	200,000	0%
P53377	86204	Smartcovers	R	Opns	-	21,242	40,000	40,000	0%
P53381	86204	Smart UPS	R	Opns	-	-	15,000	15,000	0%
Subtotal					813,668	1,148,881	1,367,000	1,517,821	11%
Mobile Equipment									
P53293	86209	Ford F250 Pickups	R	Opns	60,151	-	-	-	100%
P53287	86209	Vac Truck	R	Opns	-	-	500,000	500,000	0%
P53285	86209	F550 Trucks w/ Boom	R	Opns	-	-	-	166,496	100%
P53292	86209	Fleet Pickups	R	Engr	-	224,808	-	-	100%
P29053	86209	Combination Vacuum Truck	N	Opns	-	-	-	567,938	100%
P53353	86209	Fleet - Vehicle	R	Opns	-	-	125,000	125,000	0%
P53354	86209	Flush Truck Reel	R	Opns	35,159	-	-	-	100%
P53355	86209	Line Equipment	R	Opns	-	-	525,000	525,000	0%
P53374	86209	Replace CCTV Van	R	Opns	264,774	-	-	-	100%
Subtotal					360,084	224,808	1,150,000	1,884,434	64%
TOTAL					1,173,752	1,373,689	2,517,000	3,402,255	35%

N = New
R = Replacement
E = Existing

625195 SCCSD WASTEWATER CAPITAL IMPROVEMENT FUND (50/195)

The Wastewater Capital Improvement fund is required by the provisions of the Clean Water Grants we accepted to build the East Cliff and Aptos Transmission Projects. The fund receives cash, which represents the depreciation on the facilities constructed with Clean Water grant funds. These funds are accumulated so that the facilities can be repaired or reconditioned to insure continued use.

				21/22	22/23	23/24	23/24	
EXPENDITURES:				Actual	Actual	Recommended	Adopted	% Change
P54002	86110	DA Porath - Facility Improvements	Opns	164,207	338,785	600,000	1,811,000	202%
P54005	86110	Transmission Line Inspection	Both	-	-	100,000	100,000	0%
P54023	86110	SCADA System Improvements	Opns	-	-	248,570	248,570	0%
P54038	86110	Pump Station Sewage Level Monitoring Improvement	Opns	-	-	50,000	50,000	0%
P54041	86110	Concrete Repairs at Various Pump Stations	Engr	-	-	150,000	150,000	0%
P54048	86110	Santa Cruz Harbor Transmission Main Rehabilitation	Engr	489,179	6,316	6,000,000	6,012,707	0%
P54051	86110	Soquel Pump Station Force Main Replacement	Engr	60,860	-	-	-	0%
P54062	86110	E. Cliff Trans Secondary Forcemain Feasibility Study	Engr	-	-	-	228,654	100%
P54110	86110	DA Porath Valve Replacement	Engr	10,094	13,492	-	1,700,000	100%
P54111	86110	DA Porath Access Hatch	Engr	-	50,225	291,000	291,000	0%
P54119	86110	Bypass (Capitola & Soquel)		-	-	-	500,000	100%
P54120	86110	Hidden Beach Bypass		-	-	-	800,000	100%
P54099	86110	Wastewater Capital Reserves	Engr	-	-	200,000	200,000	0%
P54018	86110	Flow Meter Replacement & Repairs	Opns	-	-	40,000	40,000	0%
TOTAL EXPENDITURES				724,339	408,818	7,679,570	12,131,930	58%
SOURCE OF FUNDS:								
	34400	Fund Balance		1,016,550	1,467,960	200,085	1,248,815	524%
	40810	ST-Natural Disastor Assistance		-	-	68,000	-	-100%
	40877	SWRCB Prop 84 - Soquel P.S. (P54051)		104,436	189,673	100,000	-	-100%
	41093	FED-FEMA		-	-	275,000	-	-100%
	42384	Other Revenues, Transfers and Adjustments		(218,411)	-	4,000,000	4,000,000	0%
	42500	Bond Proceeds(P54110,P54119,P54120)		-	-	-	3,000,000	100%
	42462	Transfer from Revenue Trust Fund		803,801	-	3,036,485	3,883,115	28%
AVAILABLE FUNDS				1,706,375	1,657,633	7,679,570	12,131,930	58%

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185)

The Construction Improvement Fund was established to construct needed improvements in the District.

		EXPENDITURES:	21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted	% Change
P53601	86110	Rio Sands Sewer Rehab	4,032	234,566	-	10,000	100%
P53602	86110	Cliff Drive Sewer Trench Rep	187,090	-	-	-	0%
P53603	86110	Eddy Lane Sewer Relocations	424	5,565	1,000,000	1,000,000	0%
P53604	86110	Rodriguez Street Sewer Rehab	3,402	635,152	-	-	0%
P53606	86110	Portath Parking Improvements	6,828	-	-	-	0%
P53608	86110	R3-0180 & R3-0181 38th Ave (MH EK 16 to Exit)	-	540,474	-	-	0%
P53609	86110	Rodeo PS Capacity Upgrade	-	-	2,600,000	2,600,000	0%
P53610	86110	2022 Sewer Pipe Repair	-	15,585	280,000	977,861	249%
P53611	86110	Hidden Beach Sewer/PS Upgrade	-	5,740	-	150,000	100%
P53612	86110	Sanitation Sewer Trench Work	-	30,891	30,000	30,000	0%
P53613	86110	Flush Truck Fill Station	-	249,758	-	289,000	100%
P53616	86110	Seacliff/RDM Sewer Rehab	-	17,915	800,000	2,700,000	238%
P53618	86110	22-23 Seacliff A1 Ps Protection	-	124,266	-	60,000	100%
P53619	86110	22-23 Estates Dr Trunk Line Emerg.	-	223,269	-	25,000	100%
P53620	86110	Phase 2 Soquel Village Sewer	-	-	-	6,000,000	100%
P53622	86110	Seacliff @ Oakdale Sewer Emergency	-	799,227	-	70,000	100%
P53625	86110	Sccsd Capitola Ave Ce18-Ce27 Emerg.	-	178,635	-	-	0%
P53632	86110	CD1/CD2 Clean Out Installation	-	-	-	5,000	100%
P53633	86110	Gross Rd Sewer Repair E18/E19	-	-	-	70,000	100%
P53634	86110	R2 6560 Muriel Dr Sewer Repair	-	-	-	78,400	100%
P53636	86110	2023 JOC No. 1 - Pipe Repairs	-	-	-	640,000	100%
P53637	86110	2023 JOC No. 3 - Slurry Seal and Power Wash	-	-	-	21,000	100%
P53638	86110	R3 0262 EL Dorado Sewer Repair	-	-	-	44,800	100%
P53802	86110	Pump Station Repair/Modifications	169,703	44,430	-	-	0%
P53804	86110	Cathodic Protection Construction	-	-	100,000	100,000	0%
P53812	86110	Minor Projects	-	-	500,000	785,352	57%
P53816	86110	Arana Trunkline Emergency Repair	890	-	-	-	0%
P53817	86110	Consulting Engineering Services	-	-	200,000	579,875	190%
P53824	86110	Cabrillo Park Sewer Replacement	3,748	1,764	-	173,794	100%
P53626	86110	Capitola Village Sewer Rehab	-	-	170,000	170,000	0%
P53627	86110	Townsend Area Sewer Rehab	-	-	25,000	25,000	0%
P53628	86110	Rio Del Mar Sewer Rehab Ph 2	-	-	90,000	90,000	0%
P53630	86110	W. Seacliff Sewer Rehab Ph 1	-	-	90,000	8,300,000	9122%
P53827	86110	Lower Rodeo Trunkline	32,179	214,216	2,200,000	2,200,000	0%
P53840	86110	Road/Trench Repairs	-	86,016	50,000	50,000	0%
P53854	86110	2021 Pipe Rehabilitation	1,106,584	-	-	-	0%
P53870	86110	Valencia Creek Sewer Relocation	22,587	177,323	2,310,000	3,500,000	52%
P53876	86110	Upper Rodeo Gulch Trunkline & Soquel Sewer Bridge	135,708	234,449	5,800,000	5,800,000	0%
P53881	86110	East Cliff Drive Sewer Replacement Project	645,061	5,563,193	300,000	7,100,000	2267%
P53890	86110	Capitola Pump Station Pumps, Motors & Controls	-	-	-	300,000	100%
P53892	86110	Arana Trunkline Replacement	328,052	208,582	4,850,000	4,470,000	-8%
P53997	74425	Interest Expense (Valencia and Jewel Box)	-	(4,685)	-	-	0%
P53999	98700	Contingencies	-	-	75,768	75,769	0%
TOTAL EXPENDITURES			2,646,288	9,586,328	21,470,768	48,490,851	126%
SOURCE OF FUNDS:							
	34400	Fund Balance	4,938,401	25,474,961	12,105,000	16,061,413	33%
	40435	Interest-Non County Treasurer	-	52	-	-	0%
	40894	ST-Other (Natural Disaster)	-	-	-	50,994	100%
	41,093	Fed - FEMA	-	-	-	305,961	100%
	42384	Other Revenue	400,000	-	-	800,000	100%
	42,500	Bond Proceeds 2024	-	-	-	19,600,000	100%
	42506	Loan Proceeds - SRF for Valencia (53870)	-	-	1,393,000	3,265,220	134%
	42462	Transfer from Revenue Trust	3,466,525	172,728	7,972,768	8,407,264	5%
AVAILABLE FUNDS			8,804,926	25,647,741	21,470,768	48,490,851	126%

625177 SCCSD CLEAN WATER STATE REVOLVING FUND DEBT SERVICE FUND (50/177)

This fund was established to receive the transfers from the Revenue Trust for the payment of principle and interest to repay money borrowed under various Clean Water State Revolving Installment Agreements.

For Finance Agreement No. 09-848-550-0, the total amount borrowed was $11,981,910 and the principal balance on June 30, 2023 was $6,299,477. This debt will be retired in 2032.

EXPENDITURES:			21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted
P54610	74110	Principal	602,333	617,391	632,826	632,826
P54611	74310	Interest	187,980	172,922	157,487	157,487
TOTAL EXPENDITURES			790,313	790,313	790,313	790,313
SOURCE OF FUNDS:						
	34400	Fund Balance	588,655	128,598	-	132,919
	40430	Interest	2,902	3,276	2,000	2,000
	42384	Other Rev, T-fers & Adjustments	(65,927)	-	-	-
	42462	Transfer from Revenue Trust	393,281	791,358	788,313	655,394
AVAILABLE FUNDS			918,911	923,232	790,313	790,313

For Finance Agreement No. D17-01046, the total amount borrowed was $5,000,000 and the principal balance on June 30, 2023 was $4,788,079. This debt will be retired in 2051.

EXPENDITURES:			21/22 Actual	22/23 Actual	23/24 Recommended	**23/24** Adopted
P54610	74110	Principal	135,700	130,665	133,017	133,017.33
P54611	74310	Interest	137,947	88,537	86,185	86,185.43
TOTAL EXPENDITURES			273,647	219,203	219,203	219,203
SOURCE OF FUNDS:						
	34400	Fund Balance	71,990	-	-	-
	40430	Interest	-	-	-	-
	42384	Other Rev, T-fers & Adjustments	201,657	-	-	-
	42462	Transfer from Revenue Trust	-	219,203	219,203	219,203
AVAILABLE FUNDS			273,647	219,203	219,203	219,203

625179 SCCSD DEBT SERVICE FUND (50/179)

This fund was established to receive the transfers from the Revenue Trust for the payment of principal and interest on the money borrowed through various lenders and instruments.

For the California Infrastructure and Economic Development Bank (iBank) Installment Sale Agreement #ISRF 19-129, the total amount borrowed was $7M and the principle balance at June 30, 2023 was $6,393303. Payments of principle began in August of 2021 and the debt will be retired in 2048.

			21/22	22/23	23/24	23/24
EXPENDITURES:			Actual	Actual	Recommended	Adopted
54901	74110	Principal - Jewel Box Loan	149,009	154,164	159,498	159,498
54903	74310	Interest - Jewel Box Loan	234,639	229,394	226,432	226,432
54903	74310	Annual Fee	20,568	20,121	20,121	20,121
TOTAL EXPENDITURES			404215.45	403,679	406,052	406,052
SOURCE OF FUNDS:						
	34400	Fund Balance	252,801	175,027	-	5,743
	40430	Interest	1,742	6,461	2,000	2,000
	42462	Transfer from Revenue Trust	175,691	227,934	404,052	398,308
AVAILABLE FUNDS			430,234	409,423	406,052	406,052

The District issued Revenue Bonds for $20,000,000 on June 30, 2022. Drawdowns are expected to begin FY 2023. Payments on this bond debt are payable semiannually starting on December 1, 2022 until the debt expires in 2052.

			21/22	22/23	23/24	23/24
EXPENDITURES:			Est Actual	Actual	Recommended	Adopted
54901	74110	Principal - 2022 Revenue Bonds	-	380,000	325,000	325,000
54903	74310	Interest - 2022 Revenue Bonds	-	817,649	870,669	870,669
			-			
TOTAL DEBT SERIVICE			-	1,197,649	1,195,669	1,195,669
SOURCE OF FUNDS:						
	34400	Fund Balance	-	-	-	-
	40430	Interest	-	-	-	-
	42462	Transfer from Revenue Trust	-	1,278,249	1,195,669	1,195,669
AVAILABLE FUNDS			-	1,278,249	1,195,669	1,195,669

SCCSD DEBT RESERVE FUNDS

625178 SCCSD CLEAN WATER STATE REVOLVING FUND DEBT RESERVE FUND (50/178)

This fund was established during the 2019/20 fiscal year as a condition of the Clean Water State Revolving Fund, Finance Agreement No. D17-01046. The agreement requires the District to establish a Restricted Reserve Fund equal to one year's debt service. The annual payments are $216,646 and the debt will be expired in 2050.

	21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted
Contribution to Reserves	-	-	-	-
	-	-	-	-
TOTAL EXPENDITURES	-	-	-	-
SOURCE OF FUNDS:				
Fund Balance (Restricted)	218,469	219,715	222,235	228,577
Interest	1,246	8,862	2,500	2,500
Other Rev, T-fers & Adjustments	271,357	-	-	-
RESERVE BALANCE	491,072	228,577	224,735	231,077

625171 SCCSD CLEAN WATER STATE REVOLVING FUND DEBT RESERVE FUND (50/178-100)

This fund was established during the 2021/22 fiscal year as a condition of the Clean Water State Revolving Fund, Finance Agreement No. 09-848-550-0. The agreement requires the District to establish a Restricted Reserve Fund equal to one year's debt service. The annual payments are $790,313 and the debt will be expired in 2032.

	21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted
Contribution to Reserves	790,313	-	-	-
TOTAL EXPENDITURES	790,313	-	-	-
SOURCE OF FUNDS:				
Fund Balance (Restricted)	-	791,029	800,129	805,304
Interest	716	14,275	6,000	6,000
Transfer from Revenue Trust	790,313	-	-	-
RESERVE BALANCE	791,029	805,304	806,129	811,304

625174 SCCSD CLEAN WATER STATE REVOLVING FUND DEBT RESERVE FUND (50/178-400)

This fund was established during the 2021/22 fiscal year as a condition of the Clean Water State Revolving Fund, Finance Agreement No. C-06-8436-110. The agreement requires the District to establish a Restricted Reserve Fund equal to one year's debt service. The annual payments are $53,178 and the debt will be expired in 2053.

	21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted
Contribution to Reserves	53,178	-	-	-
TOTAL EXPENDITURES	53,178	-	-	-
SOURCE OF FUNDS:				
Fund Balance (Restricted)	-	53,226	53,876	54,187
Interest	48	961	420	420
Transfer from Revenue Trust	53,178	-	-	-
RESERVE BALANCE	53,226	54,187	54,296	54,607

SCCSD DEBT RESERVE FUNDS (Continued)

625172 CA INFRASTRUCTURE & ECONOMIC DEVELOPMENT BANK RESERVE FUND (50/178-200)

This fund was established during the 2021/22 fiscal year as a condition of the California Infrastructure and Development Bank Installment Sale Agreement #19-129. This agreement requires a reserve if any parity debt incurred after the effective date of this debt requires a reserve. The required reserve is an amount equal to the reserve requirement of the new parity debt multiplied by the proportion of this debt to the incurred parity debt. This reserve was triggered by the latest SWRCB loan to construct the Valencia Creek Sewer Relocation.

	21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted
Contribution to Reserves	-	-	-	-
	-	-	-	-
TOTAL EXPENDITURES	-	-	-	-
SOURCE OF FUNDS:				
Fund Balance (Restricted)	-	271,357	274,467	271,357
Interest	-	-	3,000	3,000
Other Rev, T-fers & Adjustments	-	-	-	-
Transfer from Revenue Trust	271,357	-	-	-
RESERVE BALANCE	271,357	271,357	277,467	274,357

625205 SCCSD REVENUE TRUST (50/205)

The Revenue Trust was created to receive the general revenue for Santa Cruz County Sanitation District. It makes payments to the Debt Service, Operating, Wastewater Capital Improvement and Construction Improvement Funds as needed to fund those activities.

		EXPENDITURES:	21/22 Actual	22/23 Actual	23/24 Recommended	23/24 Adopted	% Change
		Transfers to:					
54500	90000	Operating Fund (625175)	22,468,873	18,494,346	27,304,805	28,258,959	3%
54500	90000	Wastewater Capital Improvement Fund (625195)	803,801	-	3,036,485	3,883,115	28%
54500	90000	Construction Improvement Fund (136409)	3,466,525	172,728	7,972,768	8,407,264	5%
54500	90000	2008 Clean Water State Revolving Fund Debt Service (625177)	393,281	791,358	788,313	655,394	-17%
54500	90000	2018 Clean Water State Revolving Fund Debt Servcie (625177)	-	219,203	219,203	219,203	0%
54500	90000	2019 iBank Debt Service (625179)	175,691	227,934	404,052	398,308	-1%
54500	90000	2022 Revenue Bonds Debt Service (625179)	-	1,278,249	1,195,669	1,195,669	0%
54500	90000	Clean Water State Revolving Fund Debt Reserve (625178)	1,114,848			-	0%
		TOTAL EXPENDITURES	28,423,019	21,183,818	40,921,294	43,017,912	5%
		SOURCE OF FUNDS (FOR TRANSFERS):					
34400		Beginning Fund Balance (Unrestricted)	3,556,912	3,453,638	12,726,995	12,823,612	1%
		Revenues					
40430		Interest	72,240	343,488	50,000	50,000	0%
41842		Connection Fees	494,673	173,004	200,000	200,000	0%
41859		SCCO Sanit Dis rust FD Proc	-	463	-	-	0%
41866		Sewer Service Charges	27,752,704	30,003,083	32,244,300	32,244,300	0%
42367		Contributions From Other Funds	-	33,755	-	-	0%
42384		Other Revenues	128	-	-	-	0%
		Revenues Subtotal	28,319,745	30,553,792	32,494,300	32,494,300	0%
		SOURCE OF FUNDS SUBTOTAL	31,876,657	34,007,431	45,221,295	45,317,912	0%
		Reserves	-	-	(4,300,000)	(2,300,000)	-47%
		AVAILABLE FUNDS	31,876,657	34,007,431	40,921,295	43,017,912	5%

SANTA CRUZ COUNTY SANITATION DISTRICT
ADOPTED BUDGET 2023/2024

.

USES OF FUNDS		**23/24 Adopted**
Expenditures		
625175	Operating Fund	28,138,979
625195	Wastewater Capital Impr Projects	11,931,930
136409	Construction Improvement Fund	48,415,083
625177	Clean Water State Revovling Fund Debt Service	1,009,516
625179	iBank - Jewel Box Debt Service	406,052
625179	2022 Green Bonds Debt Service	1,195,669
	Total Expenditures	91,097,228
Reserves		
625195	Wastewater Capital Improvement	200,000
136409	Construction Improvement Fund	75,769
625178	SWRCB Debt Reserves	1,096,987
625172	iBank Debt Reserves	274,357
625205	Revenue Trust	2,300,000
	Total Reserves	3,947,112
TOTAL EXPENDITURES AND RESERVES		95,044,340.66
SOURCES OF FUNDS		
Fund Balances		
625175	Operating Fund	(126,980)
625195	Wastewater Capital Improvement	1,248,815
136409	Construction Improvement Fund	16,061,413
625177	Clean Water State Revolving Fund Debt Service	132,919
625179	iBank - Debt Service	5,743
625179	2022 Green Bonds Debt Service	-
625178	Clean Water State Revolving Fund Debt Reserve	1,088,067
625172	iBank Debt Reserve	271,357
625205	Revenue Trust	12,823,612
	Total Fund Balance	31,504,947
Revenues		
625175	Plan Checking Fees	2,000
625175	Other Charges Current Services	5,000
625195	Other Revenue	4,000,000
625195	2024 Bond	3,000,000
136409	Loan Proceeds - SRF for Valencia (53870)	3,265,220
136409	FED-FEMA	305,961
136409	ST-Natural Disastor Assistance	50,994
136409	Other Revenue - Roads East Cliff Contribution	800,000
136409	2024 Bond	19,600,000
625177	Interest	2,000
625178	Interest	8,920
625172	Interest	3,000
625179	Interest	2,000
625205	Interest	50,000
625205	Connection Fees	200,000
625205	Sewer Service Charges	32,244,300
	Total Revenues	63,539,394
TOTAL FUND BALANCES AND REVENUES		95,044,340.66
DIFF THIS SCHEDULE		-

Attachment C

SANTA CRUZ COUNTY SANITATION DISTRICT

701 OCEAN STREET, SUITE 410 · SANTA CRUZ, CA · 95060-4073
(831) 454-2160 · FAX (831) 454-2089 · TDD: (831) 454-2123 · WWW.SCCSD.US
MATT MACHADO, DISTRICT ENGINEER

Accepted by the Board of Directors, SCCSD on May 18, 2023
ATTEST: _____ Secretary

AGENDA DATE: MAY 18, 2023

BOARD OF DIRECTORS
SANTA CRUZ COUNTY SANITATION DISTRICT
701 Ocean Street, Room 410
Santa Cruz, California 95060

SUBJECT: PROPOSED 2023-24 SANTA CRUZ COUNTY SANITATION DISTRICT BUDGET

Members of the Board:

Attached for the Boards review is the proposed District budget for the 2023-24 fiscal year. The budget is based on raising the sewer service charge rates 6.1%. The proposed budget has expected expenditures of $58,797,611 and reserves of $5,938,394 for a total of $64,736,005. This includes expenditures of $27,311,805 in operating expenses (including $8.97 million for the District's share of operating the City of Santa Cruz wastewater treatment plant and capital improvements at the plant), $2,611,237 in loan payments, $7,479,570 in wastewater capital improvement projects, and $21,395,000 in construction improvement projects.

The following projects are among those proposed to be under construction in 2023-24 or are currently under construction during these last months of fiscal year 2022-23:

1) 2022 Sewer Pipe Rehabilitation Project
2) Eddy Lane Sewer Relocation
3) Lower Rodeo Trunkline Replacement
4) Upper Rodeo Gulch Trunkline & Soquel Sewer Bridge Sewer Replacement
5) Rodeo Pump Station Capacity Upgrade
6) East Cliff Drive Sewer Replacement
7) Valencia Creek Sewer Relocation
8) Arana Trunkline Replacement
9) D.A. Porath Pump Station Access Hatch
10) Capitola Pump Station Pump Replacement
11) East Cliff Transmission Main Relocation at Murray Street Bridge
12) Flush Truck Fill Station

District staff obtained $20 million in bonds to cover the improvements to the Lower Rodeo Trunkline Replacement; Rodeo Pump Station Capacity Upgrade; Upper Rodeo Gulch Trunkline; East Cliff Drive Sewer Replacement; and Arana Trunkline Replacement projects. The District has secured a $1.4 million loan from the State Water Resources Control Board's State Revolving fund for the Valencia Creek Sewer Relocation project.

The resulting debt service on these loans is similar to that presented in this fiscal year's rate study by Hornberger Engineering.

FIXED ASSETS

This year's proposed fixed assets budget includes funding for network equipment, radios, cameras, mixers, programmable logic controllers' upgrades, variable frequency drives, air relief valves, motorized valves, pump station grinders, emergency electrical generators, electrical equipment, and manhole smart covers. The proposed budget includes funding for a straight jetter in line equipment, and a vacuum truck for the line crew to replace aging equipment.

OVERHEAD

The department overhead of 12 percent includes administrative service salaries within the Public Works Department (personnel, fiscal, safety, MIS, and clerical) and executive salaries for staff providing oversight of the District as well as County Overhead (A-87 Cost Plan). The County overhead charges allocate the cost related to central support departments such as County Counsel, Personnel Department, Auditor-Controller-Treasurer-Tax Collector, Purchasing, and other miscellaneous departments that provide a direct service to the District, as well as general costs for such items as facilities management, building use allowance, communications, and warehouse storage. There is also an 18.01 percent Division overhead that pays for insurance, training, salaries not billable to specific projects, and other indirect costs.

The following budgetary items reflect significant differences between the current and proposed budget amounts (see explanation below):

625175 OPERATING FUND (50/175)

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ADOPTED	2023-24 RECOMMENDED	EXPLANATION
P53366, P53378, P53380	City of Santa Cruz Treatment Costs	$7,007,459	$7,887,000	$8,965,000	This increase is due to new capital improvement projects at the City's treatment plant.
P53102	Salaries - Secretaries	$216,368	$312,000	$453,455	This increase is to add a Board Clerk position and convert the Senior Board Clerk position to a Departmental Administrative Analyst position to meet the administrative needs of the District.

625175 OPERATING FUND (50/175) CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ADOPTED	2023-24 RECOMMENDED	EXPLANATION
P53105	Printing & Mailing	$22,628	$26,000	$40,000	This increase is due to the larger volume of projects in construction that will require neighborhood noticing and planned District Code revisions that will require District-wide noticing.
P53110	Permit Reviews	$18,141	$8,200	$20,000	This increase is to allocate staff time for review of project plans to approve permits.
P29054	Cameras	$0	$35,000	$40,000	This increase is for a new camera and tracks for CCTV of sewer mains.
P29055	Mixers	$0	$100,000	$100,000	Mixers were not purchased in 2022-23; new mixers for the pump stations and wet wells are needed.
P53246	Motorized Valves	$130,603	$221,856	$150,000	This decrease is a result of motorized valve purchases completed in prior fiscal years.
P53358	VFD Replacements	$149,564	$185,000	$75,000	This decrease is a result of VFD replacements completed in prior fiscal years.
P53359	Pumps	$255,635	$0	$75,000	This increase is due to pump purchases necessary for 2023-24.
P53361	Pump Station Grinders	$188,760	$380,000	$90,000	This decrease is due to a majority of grinder replacements completed in previous years.
P53375	Air Relief Valves	$0	$40,000	$90,000	This increase is due to no air relief valves purchased in 2022-23; multiple will be purchased this fiscal year.
P53376	Electrical Equipment	$0	$140,000	$200,000	This increase is to replace aging electrical equipment in pump stations; none was purchased in 2022-23
P29053	Combo Truck	$0	$570,000	$0	A new combination vacuum truck is not necessary for 2023-24.
P53285	F550 Truck with Boom	$0	$329,491	$0	Trucks with booms are not necessary for 2023-24.
P53287	Vac Truck	0	0	$500,000	A new vac truck purchase is necessary for 2023-24

625175 OPERATING FUND (50/175) CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ADOPTED	2023-24 RECOMMENDED	EXPLANATION
P53292	Fleet - Pickup	$0	$272,400	$0	No fleet pickup purchases are planned for 2022-23.
P53353	Fleet - Vehicle	$0	$0	$125,000	Replacements of aging fleet vehicles are needed for 2023-24.
P53355	Line Equipment	$0	$350,000	$525,000	This increase is to replace aging fleet equipment and to account for increased costs in equipment; no purchase was made in 2022-23.

625195 SCCSD WASTEWATER CAPITAL IMPROVEMENT FUND (50/195)

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ADOPTED	2023-24 RECOMMENDED	EXPLANATION
P54002	D.A. Porath Lode St – Facility Improvements	$164,207	$1,800,000	$600,000	An increase is necessary to cover the design costs, project oversight, constructability review and permits costs for 2023-24.
P54005	Transmission Line Inspection	$0	$300,000	$100,000	Due to inspections performed in 2022-23, less is required for 2023-24.
P54048	Santa Cruz Harbor Transmission Main Rehabilitation	$489,178	$2,200,000	$6,000,000	This project did not begin in 2022-23; District funds will be required to cover a portion of the construction not covered by the City's FHWA grant (2/3 reimbursement is likely).

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185)

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ADOPTED	2023-24 RECOMMENDED	EXPLANATION
P53603	Eddy Lane Sewer Relocation	$424	$880,000	$1,000,000	Site conditions made this project more challenging than anticipated; construction is delayed to 2023-24 and additional budget is required for trenchless construction.
P53610	2022 Sewer Pipe Rehabilitation	$0	$920,000	$280,000	A portion of construction will be in 2022-23; budget is required to finish the project in 2023-24.

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185) CONTINUED

BUDGET NO.	ITEM	2021-22 ACTUAL	2022-23 ADOPTED	2023-24 RECOMMENDED	EXPLANATION
P53612	Sanitation Sewer Trench Work	$0	$20,000	$30,000	Failing sewer trenches require repairs prior to road paving projects.
P53616	Seacliff/Rio Del Mar Sewer Rehabilitation	$0	$0	$800,000	The first portion of construction work for this project is planned for 2023-24.
P53626	Capitola Village Sewer Rehab	$0	$0	$170,000	Costs for the initial design to replace aging sewer mains is included for 2023-24.
P53627	Townsend Area Sewer Rehab	$0	$0	$25,000	Costs for the initial design to replace aging sewer mains is included for 2023-24.
P53628	Rio Del Mar Sewer Rehab Ph 2	$0	$0	$90,000	Costs for the initial design to replace aging sewer mains is included for 2023-24.
P53630	W. Seacliff Sewer Rehab Ph 1	$0	$0	$90,000	Costs for the initial design to replace aging sewer mains is included for 2023-24.
P53804	Cathodic Protection Construction	$0	$200,000	$100,000	Less replacement of anodes and other appurtenances in the cathodic protection systems are necessary in 2023-24 due to annual inspections and work completed in previous years.
P53817	Consulting Engineers	$0	$650,000	$200,000	This decrease is due to more design work being performed by District staff to save on high consulting rates.
P53827	Lower Rodeo Gulch Trunkline Replacement	$32,179	$2,300,000	$2,200,000	Funds allocated in FY 2021-22 for this project included funds to upsize storage at the Rodeo Pump Station; this is now budgeted as a separate project.
P53840	Road Trench Repairs	$0	$93,300	$50,000	In 2022-23 sanitation projects were completed without finishing the roadways. The roadway finishing funds were banked for the County Roads section to use in their larger paving projects for those stretches of roadway; these funds are in the 2023-24 budget.
P53881	East Cliff Drive Sewer Replacement	$789,196	$7,600,000	$300,000	The majority of this project will be completed in 2022-23; these funds will be used to finish off the project in 2023-24.

136409 SCCSD CONSTRUCTION IMPROVEMENT FUND (50/185) CONTINUED

BUDGET NO.	ITEM	2020-21 ACTUAL	2021-22 ADOPTED	2022-23 RECOMMENDED	EXPLANATION
P53892	Arana Trunkline Replacement	$328,052	$4,120,00	$4,850,000	This increase is due to prolonged negotiations with Harbor High resulting in the project being broken into two construction phases.

The final budget hearing is set for 4:45 p.m., Thursday, June 8, 2023. This public hearing will employ a hybrid meeting format that combines face-to-face and virtual (Zoom video/audio-conferencing) meeting components. The District is mindful of the need to provide a variety of methods for the public to receive information and provide input, while meeting public health guidelines and protecting vulnerable populations. The attached Notice of Public Hearing will be published in the Santa Cruz Sentinel 15 days and 7 days prior to the budget hearing.

It is therefore recommended that the Board of Directors accept this proposed budget and direct the District Secretary to publish the Notice of Public Hearing.

Yours truly,

DocuSigned by:
Matt Machado
50EBAC64454C48C...
MATT MACHADO
District Engineer

AT:tlp/B2561.docx

Copy to: Nathan Nguyen, Director, City of Santa Cruz, Public Works

Attachments:
Proposed 2023-24 District Budget
Public Hearing Notice

SANTA CRUZ COUNTY
SANITATION DISTRICT

DESCRIPTION OF FACILITIES

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

WWW.SCCSD.US

DESCRIPTION OF FACILITIES

The Santa Cruz County Sanitation District maintains 200 miles of sanitary sewer pipeline (186 miles of gravity lines, which use gravity to move the sewage along, and 14 miles of force main, which is pressurized), 4,780 manholes and 35 sanitary sewer pump stations. The District serves a population of 72,200 with approximately 36,000 sewer lateral connections.

The D. A. Porath Sanitation Facility is the District's main pump station and is the location of the Board of Directors' in-person meetings. It is located at 2750 Lode Street, Santa Cruz, California. This pump station receives wastewater from the collection system which is pumped through a force main to the City of Santa Cruz's Wastewater Treatment Facility which is a publicly owned treatment works (POTW) plant at Neary Lagoon, in the City of Santa Cruz.

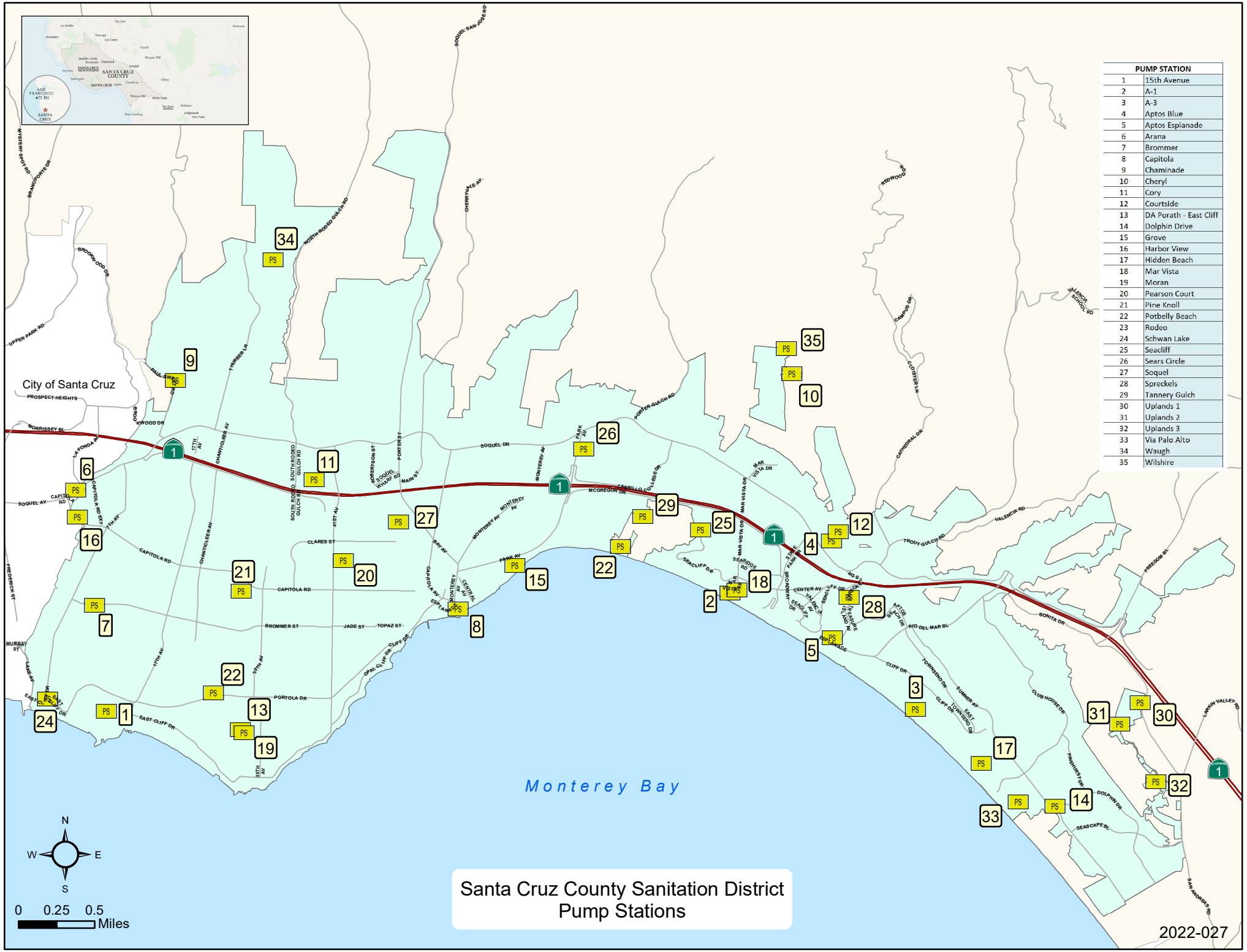
Pump stations (or lift stations) are designed to move raw sewage that is fed from gravity pipelines to pipelines at a higher elevation. Sewage flows into an underground pit, called a wet well. The wet well is equipped with electrical instrumentation to detect the level of sewage, and when the sewage level rises to a pre-set point, a pump motor creates pressure to push the sewage into a force main where it is eventually discharged into a gravity manhole. The cycle then starts over again until the sewage reaches the City Treatment Facility. The size of the pump station depends on the connections being served and the pumps are between 2hp to 230hp. Typically, large pump stations are located in above ground enclosed structures and smaller pump wet wells are located below ground in residential streets.

SCCSD PUMP STATIONS

15th Avenue +	Pearson Court +	KEY
A-1[1]	Pine Knoll +	
A-3[2]	Potbelly Beach [3]	+On site generator
Aptos Blue +	Rodeo +	[1] Fed from Aptos Esplanade Pump Station
Aptos Esplanade +	Schwan Lake +	[2] Can also gravity to Hidden Beach Pump Station
Arana +	Seacliff +	[3] Fed from Tannery Pump Station
Brommer +	Sears Circle	
Capitola +	Soquel (at Nob Hill) +	
Chaminade +	Spreckels +	
Cheryl Way+	Tannery Gulch +	
Cory Street +	Uplands 1 +	
Courtside +	Uplands 2 +	
D. A. Porath +	Uplands 3 +	
Dolphin Drive +	Via Palo Alto +	
Grove +	Waugh +	
Harbor View +	Wilshire +	
Hidden Beach +		
Mar Vista +		
Moran +		

OTHER FACILITIES

SCADA Repeater Sites: Mt. Toro (Monterey County) and Empire Grade (Santa Cruz County)


PUMP STATION
1 15th Avenue
2 A-1
3 A-3
4 Aptos Blue
5 Aptos Esplanade
6 Arana
7 Brommer
8 Capitola
9 Chaminade
10 Cheryl
11 Cory
12 Courtside
13 DA Porath - East Cliff
14 Dolphin Drive
15 Grove
16 Harbor View
17 Hidden Beach
18 Mar Vista
19 Moran
20 Pearson Court
21 Pine Knoll
22 Potbelly Beach
23 Rodeo
24 Schwan Lake
25 Seacliff
26 Sears Circle
27 Soquel
28 Spreckels
29 Tannery Gulch
30 Uplands 1
31 Uplands 2
32 Uplands 3
33 Via Palo Alto
34 Waugh
35 Wilshire
City of Santa Cruz
Monterey Bay
N
W
E
S
0 0.25 0.5 Miles
Santa Cruz County Sanitation District
Pump Stations
2022-027

SANTA CRUZ COUNTY
SANITATION DISTRICT

PUMP STATIONS

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

WWW.SCCSD.US


262
15th AVENUE


A1
(At Seacliff Beach)


A3
(At end of Beach Drive)

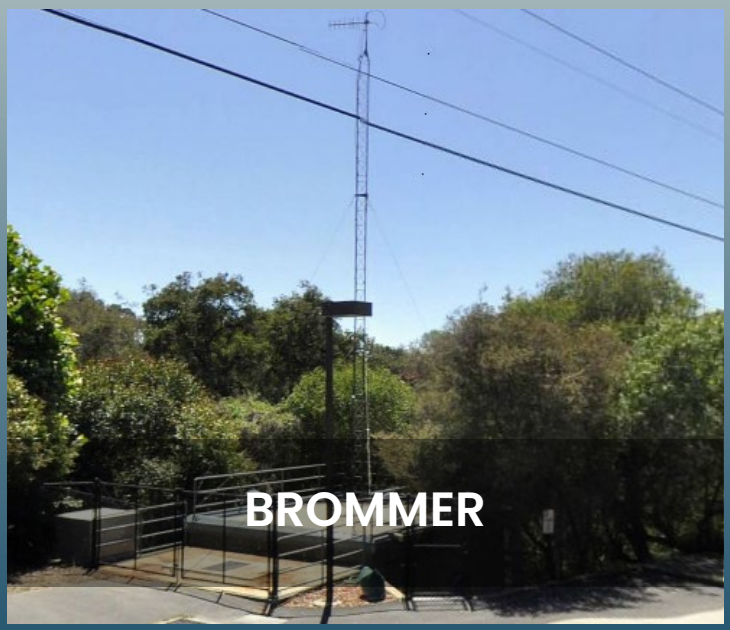

APTOS BLUE

APTOS ESPLANADE

(At Rio Del Mar Beach)

ARANA

(2 stories underground)

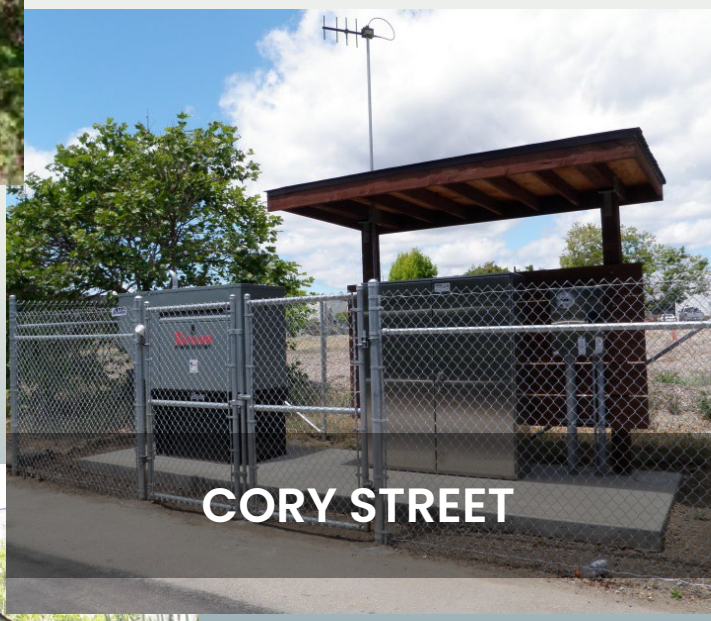


BROMMER


CAPITOLA


CHAMINADE


CHERYL WAY


CORY STREET


COURTSIDE


D.A. PORATH


DOLPHIN DRIVE

GROVE

HARBOR VIEW

HIDDEN BEACH


MAR VISTA


MORAN


PEARSON COURT

PINE KNOLL

POTBELLY BEACH

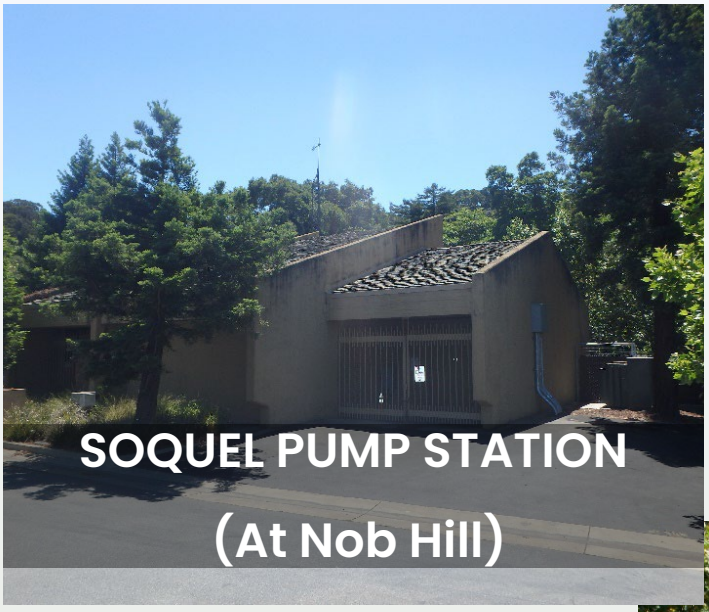
RODEO

(On Richmond Drive)


SCHWAN LAKE


SEACLIFF


SEARS CIRCLE



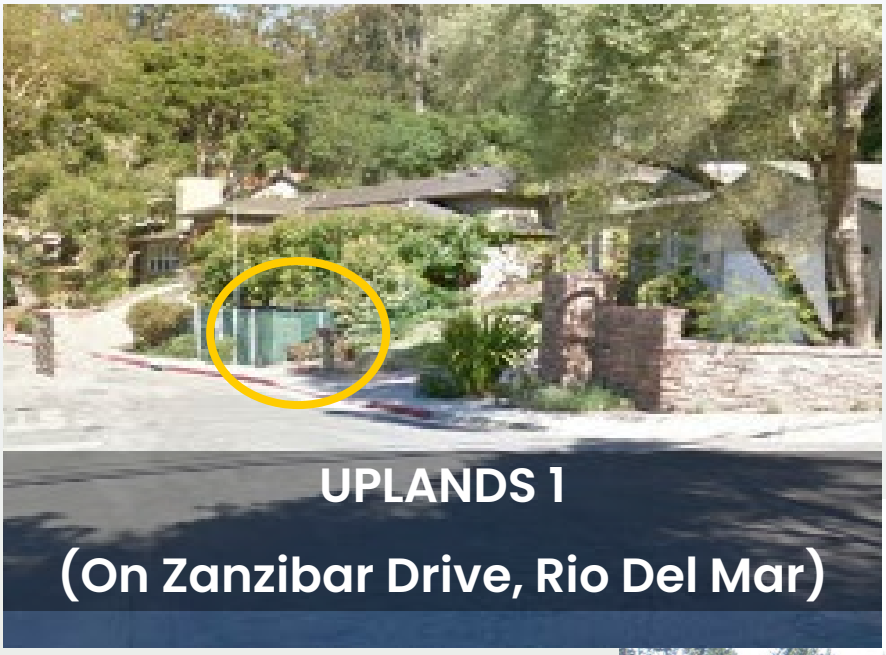
SOQUEL PUMP STATION

(At Nob Hill)

SPRECKELS

TANNERY GULCH

(On New Brighton Road)



UPLANDS 1

(On Zanzibar Drive, Rio Del Mar)

UPLANDS 2

(Also on Zanzibar Drive)

UPLANDS 3

(On Castillo Court)


VIA PALO ALTO


WAUGH AVENUE


WILSHIRE

SANTA CRUZ COUNTY
SANITATION DISTRICT

SUMMARY OF PROJECTS

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

WWW.SCCSD.US

SUMMARY OF PROJECTS

PROJECT NO.	PROJECT	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	TOTAL PROJECT COST ESTIMATE	YEAR	STATUS
P54116	MANUAL TRANSFER SWITCH INSTALLATION 2021/22—2022/23		X	X		$ 50,000	2021/22	COMPLETED
P53358	VFD REPLACEMENT 2021/22—2022/23	X	X	X		$ 311,042	2021/22	IN PROGRESS
P53357	PLC UPGRADES 2022/23—2023/24	X	X	X		$ 300,478	2022/23	IN DESIGN
P53601	RIO SANDS SEWER REHABILITATION			X		$ 296,000	2022/23	COMPLETED
P53604	RODRIGUEZ STREET SEWER REHABILITATION		X			$ 737,000	2022/23	COMPLETED
P54112	UPS UPGRADES 2022/23—2023/24	X	X	X		$ 40,000	2022/23	IN PROGRESS
P53358	VFD REPLACEMENT 2022/23—2023/24	X	X	X		$ 95,343	2022/23	IN PROGRESS
P53610	2022 SEWER PIPE REPAIR PROJECT	X	X			$ 934,735	2023/24	IN CONSTRUCTION
P53892	ARANA TRUNK LINE REPLACEMENT—PHASE 1		X			$ 5,250,680	2023/24	IN CONSTRUCTION
P53802	CAPITOLA PUMP STATION PUMP REPLACEMENT	X		X		$ 400,000	2023/24	IN DESIGN

SUMMARY OF PROJECTS

PROJECT NO.	PROJECT	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	TOTAL PROJECT COST ESTIMATE	YEAR	STATUS
P54111	D.A. PORATH PUMP STATION ACCESS HATCHES		X			$ 508,460	2023/24	IN DESIGN
P53881	EAST CLIFF DRIVE SEWER REPLACEMENT		X			$ 12,027,440	2023/24	IN CONSTRUCTION
P54048	EAST CLIFF TRANSMISION MAIN RELOCATION AT MURRAY STREET BRIDGE				X	$ 9,592,740	2023/24	AWARD PENDING
P53603	EDDY LANE SEWER RELOCATION		X			$ 1,646,460	2023/24	IN DESIGN
P53613	FLUSH TRUCK FILL STATION			X		$ 606,300	2023/24	IN CONSTRUCTION
P54115	GENERATOR PLUG AND MANUAL TRANSFER SWITCH UPGRADES 2023/24		X	X		$ 150,000	2023/24	IN PROGRESS
P54114	GENERATOR REPLACEMENT 2023/24			X		$ 90,000	2023/24	IN DESIGN
TBD	HIDDEN BEACH METER MAIN AND AUTOMATIC TRANSFER SWITCH			X		$ 140,000	2023/24	IN PROGRESS
P53611	HIDDEN BEACH PUMP STATION BYPASS			X		$ 802,300	2023/24	IN DESIGN
P53827	LOWER RODEO TRUNKLINE REPLACEMENT		X			$ 2,371,965	2023/24	IN CONSTRUCTION

SUMMARY OF PROJECTS

PROJECT NO.	PROJECT	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	TOTAL PROJECT COST ESTIMATE	YEAR	STATUS
P54116	MANUAL TRANSFER SWITCH INSTALLATION 2023/24	X		X		$ 50,000	2023/24	IN DESIGN
P53357	PLC UPGRADES 2023/24—2024/25		X	X		$ 350,000	2023/24	IN DESIGN
P53802	RODEO PUMP STATION CAPACITY UPGRADE		X			$ 3,267,600	2023/24	IN DESIGN
P53616	SEACLIFF/RIO DEL MAR SEWER REHABILITATION			X		$ 3,393,370	2023/24	IN DESIGN
P53876	UPPER RODEO GULCH TRUNKLINE AND SOQUEL BRIDGE SEWER REPLACEMENT		X			$ 8,216,940	2023/24	AWARDED
P54112	UPS UPGRADES 2023/24	X	X	X		$ 40,000	2023/24	IN PROGRESS
P53870	VALENCIA CREEK SEWER RELOCATION			X		$ 4,155,500	2023/24	IN CONSTRUCTION
P54113	ACCESS HATCH AT MORAN PUMP STATION		X			$ 75,000	2024/25	FUTURE DESIGN
P54117	CAPITOLA PUMP STATION ROOF/DRAINAGE IMPROVEMENTS	X		X		$ 400,000	2024/25	FUTURE DESIGN
P54110	D.A. PORATH VALVE REPLACEMENT AND EMERGENCY BYPASS		X			$ 1,615,900	2024/25	IN DESIGN

SUMMARY OF PROJECTS

PROJECT NO.	PROJECT	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	TOTAL PROJECT COST ESTIMATE	YEAR	STATUS
P54119	EMERGENCY BYPASS IMPROVEMENTS 2024/25	X		X		$ 706,400	2024/25	FUTURE DESIGN
P54115	GENERATOR PLUG AND MANUAL TRANSFER SWITCH UPGRADES		X	X		$ 240,000	2024/25	FUTURE DESIGN
P54114	GENERATOR REPLACEMENT 2024/25	X		X		$ 60,000	2024/25	FUTURE DESIGN
P53643	MAIN STREET SEWER		X			$ 309,100	2024/25	FUTURE DESIGN
P53357	PLC UPGRADES 2024/25		X	X		$ 250,000	2024/25	FUTURE DESIGN
P53620	SOQUEL VILLAGE SEWER REHABILITATION—PHASE 2		X			$ 8,822,600	2024/25	FUTURE DESIGN
P54112	UPS UPGRADES 2024/25—STAGE 1		X	X		$ 50,000	2024/25	FUTURE DESIGN
P54112	UPS UPGRADES 2024/25—STAGE 2	X	X	X		$ 65,000	2024/25	FUTURE DESIGN
P53358	VFD REPLACEMENT 2024/25		X			$ 75,000	2024/25	IN PROGRESS
P53630	WEST SEACLIFF SEWER REHABILITATION—PHASE 1			X		$ 8,870,000	2024/25	IN DESIGN

SUMMARY OF PROJECTS

PROJECT NO.	PROJECT	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	TOTAL PROJECT COST ESTIMATE	YEAR	STATUS
TBD	ACCESS HATCH AT SCHWAN LAKE PUMP STATION		X			$ 276,080	2025/26	FUTURE DESIGN
TBD	CONCRETE STAIRS REHABILITATION		X			$ 475,000	2025/26	FUTURE DESIGN
P54002	D.A. PORATH FACILITY IMPROVEMENTS		X			$ 27,241,240	2025/26	IN DESIGN
P53363	EAST CLIFF TRANSMISSION MAIN INSPECTION		X		X	$ 200,000	2025/26	FUTURE DESIGN
P54114	GENERATOR REPLACEMENT 2025/26			X		$ 65,000	2025/26	FUTURE DESIGN
P54116	MANUAL TRANSFER SWITCH INSTALLATION 2025/26		X	X		$ 160,000	2025/26	FUTURE DESIGN
TBD	2027 SEWER PIPE REHABILITATION	X	X	X		$ 4,452,400	2026/27	FUTURE DESIGN
P53626	CAPITOLA VILLAGE SEWER REHABILITATION—PHASE 1	X		X		$ 5,301,000	2026/27	FUTURE DESIGN
P54055	EAST CLIFF TRANSMISSION MAIN REPAIRS		X		X	$ 900,000	2026/27	FUTURE DESIGN
TBD	RIO DEL MAR SEWER REHABIILITATION—PHASE 2			X		$ 10,684,600	2026/27	FUTURE DESIGN

SUMMARY OF PROJECTS

PROJECT NO.	PROJECT	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	TOTAL PROJECT COST ESTIMATE	YEAR	STATUS
P53629	SANTA CRUZ HARBOR AREA SEWER REHABILITATION—PHASE 2		X			$ 6,556,900	2026/27	FUTURE DESIGN
TBD	SOQUEL PUMP STATION AUXILIARY WET WELL	X		X		$ 3,565,100	2026/27	FUTURE DESIGN

SANTA CRUZ COUNTY
SANITATION DISTRICT

ONGOING OPERATIONS PROJECTS

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

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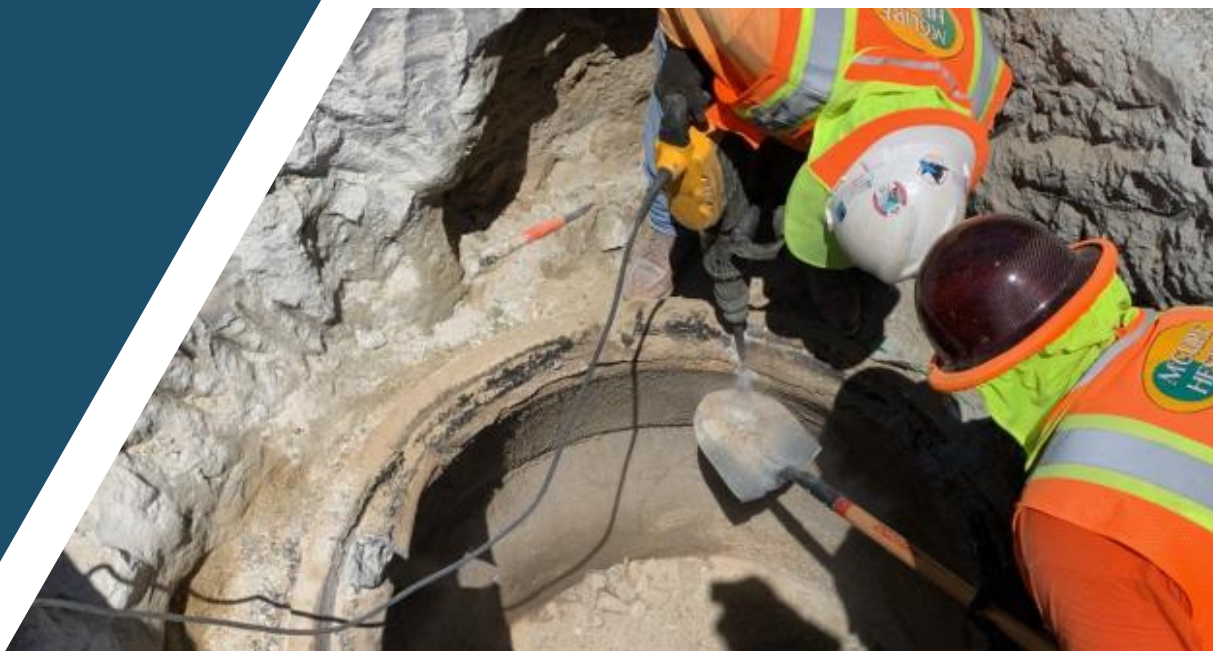
ONGOING OPERATIONS PROJECTS

PROJECT NO.	PROJECT	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
TBD	AIR RELIEF VALVE IMPROVEMENTS	$ 45,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
P53804	CATHODIC PROTECTION	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
P54018	FLOW METER IMPROVEMENTS	$ 40,000	$ 0	$ 40,000	$ 0	$ 45,000	$ 0
P54038	PUMP STATION SEWAGE LEVEL MONITORING IMPROVEMENTS	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
P54023	SCADA IMPROVEMENTS	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000
P54005	TRANSMISSION LINE INSPECTION	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000

SANTA CRUZ COUNTY
SANITATION DISTRICT

INDIVIDUAL PROJECTS



CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

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MANUAL TRANSFER SWITCH UPGRADES 2021/22- 2022/23

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
D.A. PORATH FACILITY	2750 LODE ST

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	COMPLETED
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2021/22-2022/23
DESCRIPTION:	Install a manual transfer switches for power shutoff at the D.A. Porath pump station.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	50,000
Total Estimated Project Costs	**$**	**50,000**

FUNDING SOURCES		
District Funds	$	50,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**50,000**
Funding Not Yet Identified	**$**	**-**

VFD REPLACEMENTS
2021/22-2022/23

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PROJECT TYPE:	SYSTEM IMPROVEMENTS	**PROJECT STATUS:**	IN PROGRESS
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2021/22-2022/23
DESCRIPTION:	Variable Frequency Drive (VFD) replacements at D.A. Porath Pump Station and Soquel Pump Station. Due to long lead times for equipment deliveries, the VFD replacements at D.A. Porath Pump Station will be completed in FY 2022/23. VFDs at Capitola Pump Station were replaced in FY 2021/22.		

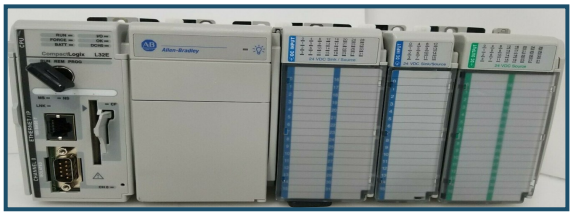
ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	-
Total Estimated Project Costs	**$**	**311,042**

FUNDING SOURCES		
District Funds	$	311,042
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**311,042**
Funding Not Yet Identified	**$**	**-**

PLC UPGRADES 2022/23 — 2023/24

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PROJECT	LOCATION	EXISTING PLC MODEL
A3	440 BEACH DRIVE	MicroLogix 1500
CHERYL	1829 CHERYL WAY	MicroLogix 1500
CORY	4035 CORY STREET	MicroLogix 1500
GROVE	100 GROVE LANE	MicroLogix 1500
HARBOR VIEW	CAPITOLA AND HARBOR VIEW	MicroLogix 1500
PEARSON CT.	4146 PEARSON COURT	MicroLogix 1500
POTBELLY BEACH	23 POTBELLY BEACH ROAD	Compact Logix L23E



PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2022/23—2023/24
DESCRIPTION:	Replace and upgrade older Programmable Logic Controllers (PLCs) at seven pump stations. Due to the long lead times in material procurement, PLC upgrades will be completed in FY 2023/24.		

ESTIMATED PROJECT COSTS	
Land Survey	$ -
Preliminary Design	$ -
Environmental	$ -
Geotechnical	$ -
Engineering Design	$ -
Acquisition	$ -
Construction	$ -
Construction Management	$ -
Construction Inspection	$ -
Other	$ -
Total Estimated Project Costs	**$ 300,478**

FUNDING SOURCES	
District Funds	$ 300,478
Loans	$ -
Grants	$ -
Other	$ -
Total Project Funding	**$ 300,478**
Funding Not Yet Identified	**$ -**

RIO SANDS SEWER REHABILITATION

CAPITOLA	☐
DISTRICT 1	☐
DISTRICT 2	X
CITY OF SANTA CRUZ	☐

PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	COMPLETED
LOCATION:	RIO DEL MAR	**ESTIMATED CONSTRUCTION YEARS:**	2022/23
DESCRIPTION:	Replaced 500± linear feet of deteriorating public gravity sewer mains and manholes located on the Rio Sands Hotel property. This portion of sewer main becomes plugged with roots and has become too deteriorated to apply traditional flushing techniques to clear the blockages.		

ESTIMATED PROJECT COSTS		
Land Survey	$	4,000
Preliminary Design	$	-
Environmental	$	1,000
Geotechnical	$	-
Engineering Design	$	50,000
Acquisition/Appraisal	$	-
Construction	$	188,400
Construction Management	$	10,000
Construction Inspection	$	20,000
Other	$	22,600
Total Estimated Project Costs	**$**	**296,000**

FUNDING SOURCES		
District Funds	$	296,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**296,000**
Funding Not Yet Identified	**$**	**-**

RODRIGUEZ STREET SEWER REHABILITATION

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	COMPLETED
LOCATION:	LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2022/23
DESCRIPTION:	Replaced 600± linear feet of deteriorating gravity sewer mains and repair associate manholes. The sewer lines are old, deteriorating and at the end of their design life.		

ESTIMATED PROJECT COSTS		
Land Survey	$	10,000
Preliminary Design	$	
Environmental	$	2,000
Geotechnical	$	
Engineering Design	$	50,000
Acquisition	$	
Construction	$	415,000
Construction Management	$	44,000
Construction Inspection	$	99,000
Other	$	117,000
Total Estimated Project Costs	**$**	**$737,000**

FUNDING SOURCES		
District Funds	$	**$737,000**
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**$737,000**
Funding Not Yet Identified	**$**	**-**

UPS UPGRADES 2022/23- 2023/24

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION	UPS MODEL
APTOS ESPLANADE	104 MARINA AVE	MARATHON VTWE-0700-01
D.A. PORATH	2750 LODE ST	MARATHON VTWE-0700-01
DOLPHIN	SUMNER AVE	MARATHON VTWE-0700-01
HIDDEN BEACH	770 CLIFF DR	MARATHON VTWE-0700-01
SCHWAN LAKE	EAST CLIFF AND 7TH AVE	MARATHON VTWE-0700-01
SOQUEL	809 BAY AVE	MARATHON VTWE-0700-01

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	IN PROGRESS
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2022/23-2023/24
DESCRIPTION:	Install Smart UPS at various pump stations to monitor on SCADA.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	40,000
Total Estimated Project Costs	**$**	**40,000**

FUNDING SOURCES		
District Funds	$	40,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**40,000**
Funding Not Yet Identified	**$**	**-**

VFD REPLACEMENTS
2022/23—2023/24

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

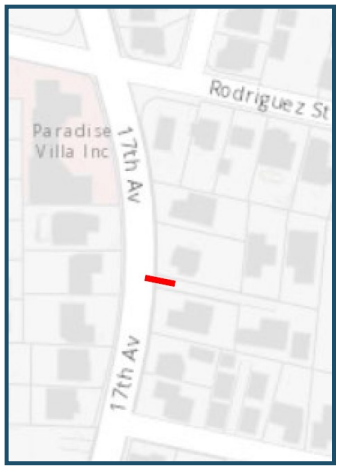
PROJECT TYPE:	SYSTEM IMPROVEMENTS	**PROJECT STATUS:**	IN PROGRESS
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2022/23—2023/24
DESCRIPTION:	Variable Frequency Drive (VFD) replacements at D.A. Porath Pump Station. Due to long lead times for equipment deliveries, the VFD replacements will be completed in FY 2023/24.		

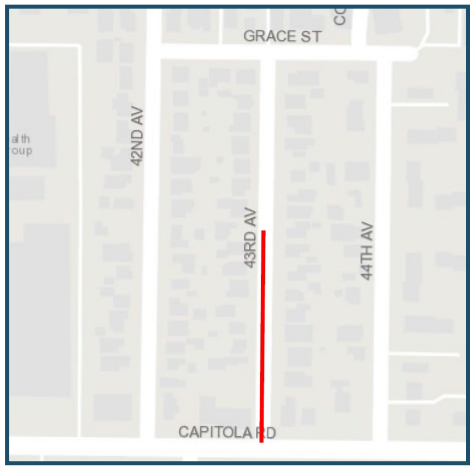
ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	-
Total Estimated Project Costs	**$**	**95,343**

FUNDING SOURCES		
District Funds	$	95,343
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**95,343**
Funding Not Yet Identified	**$**	**-**

2022 SEWER PIPE REPAIR PROJECT

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	





PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN CONSTRUCTION
LOCATION:	SCCSD—WEST	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Replaced 1,040 ± linear feet of deteriorating gravity sewer mains and manholes that caused operational issues. The sewer lines were old, deteriorating and at the end of their design life.		

ESTIMATED PROJECT COSTS		
Land Survey	$	3,000
Preliminary Design	$	-
Environmental	$	1,000
Geotechnical	$	-
Engineering Design	$	20,000
Acquisition	$	-
Construction	$	550,000
Construction Management	$	45,000
Construction Inspection	$	149,060
Other	$	166,675
Total Estimated Project Costs	**$**	**934,735**

FUNDING SOURCES		
District Funds	$	934,735
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**934,735**
Funding Not Yet Identified	**$**	

ARANA TRUNK LINE REPLACEMENT—PHASE 1

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

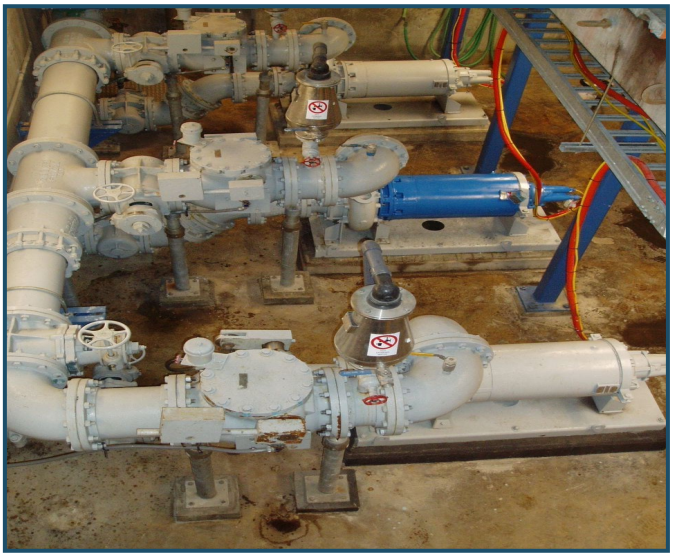
PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN CONSTRUCTION
LOCATION:	LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Replace/rehabilitate 1,400± linear feet of sewer line. Line is old and deteriorating and in low lying areas. Besides replacing and rehabilitating the sewer lines, manholes are being raised above grade to keep surface water out.		

ESTIMATED PROJECT COSTS		
Land Survey	$	40,000
Preliminary Design	$	-
Environmental	$	427,565
Geotechnical	$	157,225
Engineering Design	$	447,330
Acquisition	$	214,705
Construction	$	2,924,000
Construction Management	$	40,000
Construction Inspection	$	341,675
Other	$	658,180
Total Estimated Project Costs	**$**	**5,250,680**

FUNDING SOURCES		
District Funds	$	1,150,680
Loans	$	-
Grants	$	-
Other (Bonds)	$	4,100,000
Total Project Funding	**$**	**5,250,680**
Funding Not Yet Identified	**$**	**-**

CAPITOLA PUMP STATION
PUMP REPLACEMENT

CAPITOLA	X
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	



PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	CAPITOLA	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Replace three 75 HP aging pumps with Flygt pumps. The existing pumps were installed in 2006. The new Flygt pumps were purchased in FY 2020-21, and will be installed in 2023/24. The valves purchased in FY 2021-22 will be installed at this time as well.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction/Installation	$	350,000
Construction Management	$	-
Construction Inspection	$	-
Other	$	50,000
Total Estimated Project Costs	**$**	**400,000**

FUNDING SOURCES		
District Funds	$	-
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**-**
Funding Not Yet Identified	**$**	**400,000**

D.A. PORATH PUMP STATION ACCESS HATCHES

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PROJECT TYPE:	SYSTEM IMPROVEMENTS	**PROJECT STATUS:**	IN DESIGN
LOCATION:	D.A. PORATH PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Installation of two access hatches on the wet well at the D.A. Porath Pump Station and associated improvements.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	80,000
Acquisition	$	-
Construction	$	260,000
Construction Management	$	10,000
Construction Inspection	$	75,000
Other	$	83,460
Total Estimated Project Costs	**$**	**508,460**

FUNDING SOURCES		
District Funds	$	508,460
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**508,460**
Funding Not Yet Identified	**$**	**-**

EAST CLIFF DRIVE SEWER REPLACEMENT

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PROJECT TYPE:	SYSTEM UPGRADE & IMPROVED	**PROJECT STATUS:**	IN CONSTRUCTION
LOCATION:	LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Replace 7,390 ± linear feet of sewer line that is old and deteriorating. This project also has a portion of work paid for by Measure D and Roads funds to rehabilitate the pavement and add green bike lanes (est. $800,000).		

ESTIMATED PROJECT COSTS		
Land Survey	$	60,000
Preliminary Design	$	-
Environmental	$	50,000
Geotechnical	$	40,000
Engineering Design	$	100,000
Acquisition	$	25,000
Construction	$	9,877,200
Construction Management	$	100,000
Construction Inspection	$	1,071,000
Other	$	704,240
Total Estimated Project Costs	**$**	**12,027,440**

FUNDING SOURCES		
District Funds	$	4,727,440
Loans	$	-
Grants	$	-
Other (Bonds)	$	7,300,000
Total Project Funding	**$**	**12,027,440**
Funding Not Yet Identified	**$**	**-**

EAST CLIFF TRANSMISSION MAIN RELOCATION AT MURRAY STREET BRIDGE

CAPITOLA	☐
DISTRICT 1	☐
DISTRICT 2	☐
CITY OF SANTA CRUZ	X

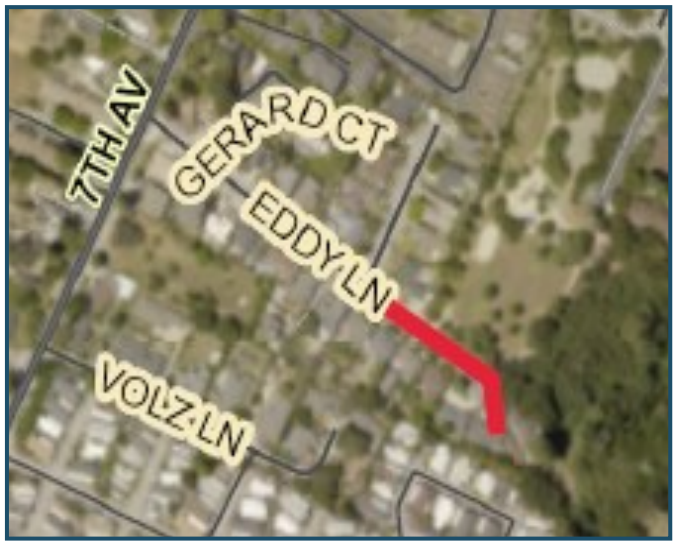
PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	AWARD PENDING
LOCATION:	CITY OF SANTA CRUZ	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2025/26
DESCRIPTION:	Relocate approximately 700 linear feet of transmission main out of the harbor and attach to the bridge in coordination with the City of Santa Cruz's Murray Street Bridge Project. Line is in a sensitive area and is near the end of its useful life.		

ESTIMATED PROJECT COSTS		
Land Survey	$	40,060
Preliminary Design	$	105,850
Environmental	$	17,070
Geotechnical	$	38,880
Engineering Design	$	721,780
Acquisition	$	-
Construction	$	6,000,000
Construction Management	$	386,000
Construction Inspection	$	1,000,000
Other	$	1,283,100
Total Estimated Project Costs	**$**	**9,592,740**

FUNDING SOURCES		
District Funds	$	4,409,571
Loans	$	
Grants	$	5,183,169
Other	$	
Total Project Funding	**$**	**9,592,740**
Funding Not Yet Identified	**$**	

EDDY LANE SEWER RELOCATION

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	



PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Replace 800± linear feet of deteriorating public gravity sewer mains and manholes located on Eddy Lane and private property. This portion of main is deteriorated and beyond its design life. The new sewer mains will be aligned to avoid the building foundation that is over the exiting sewer main. This project will serve to reduce the risk of sanitary sewer overflows in Leona Creek.		

ESTIMATED PROJECT COSTS		
Land Survey	$	10,000
Preliminary Design	$	
Environmental	$	5,000
Geotechnical	$	30,000
Engineering Design	$	50,000
Acquisition/Appraisal	$	70,000
Construction	$	820,000
Construction Management	$	115,000
Construction Inspection	$	260,000
Other	$	286,460
Total Estimated Project Costs	**$**	**1,646,460**

FUNDING SOURCES		
District Funds	$	346,460
Loans	$	-
Grants	$	-
Other (Bonds)	$	
Total Project Funding	**$**	**1,646,460**
Funding Not Yet Identified	**$**	**1,300,000**

FLUSH TRUCK FILL STATION

CAPITOLA	
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	

PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN CONSTRUCTION
LOCATION:	APTOS	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Construct a flush truck fill station that will utilize backwash from the Soquel Creek Water District injection well site at Twin Lakes Church; the project will serve to keep backwash water from the shallow, low-capacity sewer system in the area and provide an additional source for flushing water.		

ESTIMATED PROJECT COSTS		
Land Survey	$	10,000
Preliminary Design	$	-
Environmental	$	2,000
Geotechnical	$	-
Engineering Design	$	35,000
Acquisition	$	-
Construction	$	376,475
Construction Management	$	30,000
Construction Inspection	$	70,000
Other	$	82,825
Total Estimated Project Costs	**$**	**606,300**

FUNDING SOURCES		
District Funds	$	606,300
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**606,300**
Funding Not Yet Identified	**$**	**-**

GENERATOR PLUG AND MANUAL TRANSFER SWITCH UPGRADES 2023/24

CAPITOLA	☐
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	☐

PUMP STATION	LOCATION
DOLPHIN	SUMNER AVENUE
RODEO	1400 BLOCK OF RICHMOND DR

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	IN PROGRESS
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Install generator plugs to add redundancy to onsite standby generators and install manual transfer switches for power shutoff at the pump stations.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	150,000
Total Estimated Project Costs	**$**	**150,000**

FUNDING SOURCES		
District Funds	$	150,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**150,000**
Funding Not Yet Identified	**$**	**-**

GENERATOR REPLACEMENT 2023/24

CAPITOLA	☐
DISTRICT 1	☐
DISTRICT 2	X
CITY OF SANTA CRUZ	☐

PROJECT	LOCATION
MAR VISTA	100 MAR VISTA
GROVE	110 GROVE LN

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	MAR VISTA PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Replace existing onsite standby generators with new generators at the pump station.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	90,000
Total Estimated Project Costs	**$**	**90,000**

FUNDING SOURCES		
District Funds	$	90,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**90,000**
Funding Not Yet Identified	**$**	**-**

HIDDEN BEACH METER MAIN AND AUTOMATIC TRANSFER SWITCH

CAPITOLA	☐
DISTRICT 1	☐
DISTRICT 2	X
CITY OF SANTA CRUZ	☐

PUMP STATION	LOCATION
HIDDEN BEACH	770 CLIFF DRIVE

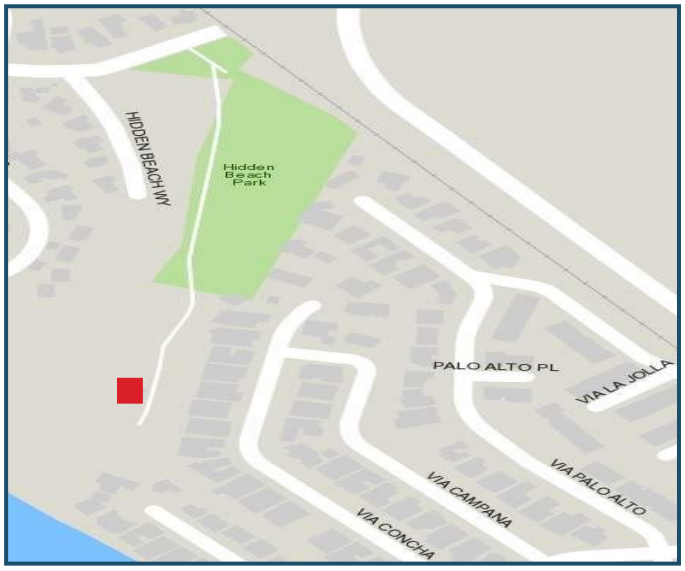
PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	IN PROGRESS
LOCATION:	HIDDEN BEACH PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Replace existing automatic transfer switch and meter main with new equipment.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	50,000
Construction Management	$	-
Construction Inspection	$	-
Other	$	80,000
Total Estimated Project Costs	**$**	**140,000**

FUNDING SOURCES		
District Funds	$	140,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**140,000**
Funding Not Yet Identified	**$**	**-**

HIDDEN BEACH PUMP STATION BYPASS

CAPITOLA	
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	



PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	HIDDEN BEACH, APTOS	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Install an external emergency bypass at the Hidden Beach Pump Station.		

ESTIMATED PROJECT COSTS		
Land Survey	$	5,000
Preliminary Design	$	-
Environmental	$	2,000
Geotechnical	$	-
Engineering Design	$	20,000
Acquisition	$	-
Construction	$	500,000
Construction Management	$	30,000
Construction Inspection	$	100,000
Other	$	145,300
Total Estimated Project Costs	**$**	**802,300**

FUNDING SOURCES		
District Funds	$	202,300
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**202,300**
Funding Not Yet Identified	**$**	**600,000**

LOWER RODEO TRUNKLINE REPLACEMENT

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PROJECT TYPE:	SYSTEM UPSIZE	**PROJECT STATUS:**	IN CONSTRUCTION
LOCATION:	TWIN LAKES	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Replace 1,100 ± linear feet of gravity sewer mains and manholes. The sewer line is undersized for the existing flows, therefore a moratorium is restricting new development. Completion of this project (along with the Rodeo Pump Station Capacity Upgrade and Upper Rodeo Gulch Trunkline & Soquel Bridge Sewer Replacement projects) will allow the District to lift a long-standing moratorium for the Rodeo Gulch Sewer Basin.		

ESTIMATED PROJECT COSTS		
Land Survey	$	20,000
Preliminary Design	$	-
Environmental	$	30,000
Geotechnical	$	-
Engineering Design	$	63,000
Acquisition/Appraisal	$	182,925
Construction	$	1,404,565
Construction Management	$	25,000
Construction Inspection	$	297,075
Other	$	349,400
Total Estimated Project Costs	**$**	**2,371,965**

FUNDING SOURCES		
District Funds	$	371,965
Loans	$	-
Grants	$	-
Other (Bond)	$	2,000,000
Total Project Funding	**$**	**2,371,965**
Funding Not Yet Identified	**$**	**-**

MANUAL TRANSFER SWITCH INSTALLATION
2023/24

CAPITOLA	X
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
SOQUEL PUMP STATION	809 BAY AVE

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	SOQUEL PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Install manual transfer switches at Soquel pump station to shutoff power to connect a portable generator.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	50,000
Total Estimated Project Costs	**$**	**50,000**

FUNDING SOURCES		
District Funds	$	50,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**50,000**
Funding Not Yet Identified	**$**	**-**

PLC UPGRADES 2023/24 — 2024/25

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PROJECT	LOCATION	EXISTING PLC MODEL
ARANA	2001 SOQUEL DRIVE	Compact Logix L23E
COURTSIDE	7848 TANIAS COURT	MicroLogix 1500
MAR VISTA	100 MAR VISTA	MicroLogix 1500
PINE KNOLL	2546 CAPITOLA ROAD	MicroLogix 1500
UPLANDS #1	102 ZANZIBAR DRIVE	MicroLogix 1500
UPLANDS #2	162 ZANZIBAR DRIVE	MicroLogix 1500
UPLANDS #3	144 CASTILLO COURT	MicroLogix 1500

PROJECT TYPE:	OPERATIONS AND MAINTENACE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Replace and upgrade older Programmable Logic Controllers (PLCs) at nine pump stations.		

ESTIMATED PROJECT COSTS	
Land Survey	$ -
Preliminary Design	$ -
Environmental	$ -
Geotechnical	$ -
Engineering Design	$ -
Acquisition	$ -
Construction	$ -
Construction Management	$ -
Construction Inspection	$ -
Other	$ -
Total Estimated Project Costs	**$ 350,000**

FUNDING SOURCES	
District Funds	$ 350,000
Loans	$ -
Grants	$ -
Other	$ -
Total Project Funding	**$ 350,000**
Funding Not Yet Identified	**$ -**

RODEO PUMP STATION CAPACITY UPGRADE

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

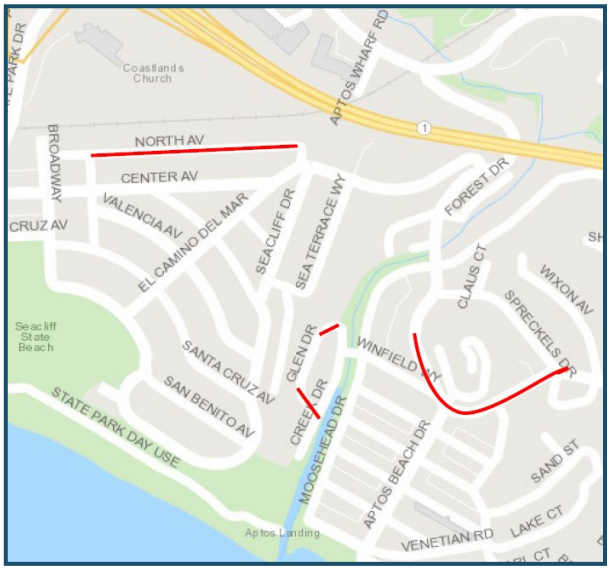
PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Construct an auxiliary wet well for additional storage of current and projected sewer flows during wet weather storm events. Completion of this project (along with the Lower Rodeo Trunkline Replacement and Upper Rodeo Gulch Trunkline & Soquel Bridge Sewer Replacement projects) will allow the District to lift a long-standing moratorium for the Rodeo Gulch Sewer Basin.		

ESTIMATED PROJECT COSTS		
Land Survey	$	15,000
Preliminary Design	$	87,500
Environmental	$	5,000
Geotechnical	$	51,600
Engineering Design	$	330,900
Acquisition	$	-
Construction	$	2,000,000
Construction Management	$	25,000
Construction Inspection	$	300,000
Other	$	452,600
Total Estimated Project Costs	**$**	**3,267,600**

FUNDING SOURCES		
District Funds	$	1,467,600
Loans	$	-
Grants	$	-
Other (Bonds)	$	1,800,000
Total Project Funding	**$**	**3,267,600**
Funding Not Yet Identified	**$**	**-**

SEACLIFF/RIO DEL MAR SEWER REHABILITATION

CAPITOLA	☐
DISTRICT 1	☐
DISTRICT 2	X
CITY OF SANTA CRUZ	☐



PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	SEACLIFF AND RIO DEL MAR	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Rehabilitate 2,300± linear feet of sewer mains that are old and deteriorating. A portion of this project may be completed using Job Order Contracting.		

ESTIMATED PROJECT COSTS		
Land Survey	$	20,000
Preliminary Design	$	-
Environmental	$	5,000
Geotechnical	$	-
Engineering Design	$	30,000
Acquisition	$	60,000
Construction	$	2,500,000
Construction Management	$	50,000
Construction Inspection	$	200,000
Other	$	528,370
Total Estimated Project Costs	**$**	**3,393,370**

FUNDING SOURCES		
District Funds	$	693,370
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**693,370**
Funding Not Yet Identified	**$**	**2,700,000**

UPPER RODEO GULCH TRUNKLINE AND SOQUEL BRIDGE SEWER REPLACEMENT

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PROJECT TYPE:	SYSTEM UPGRADE/ INCREASE CAPACITY	**PROJECT STATUS:**	AWARDED
LOCATION:	LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2023/24—2024/25
DESCRIPTION:	Line 4,900± linear feet of sewer line and replace 450± feet of sewer line. Lines are deteriorating and allow for ground water infiltration that cause the sewer mains to operate over capacity. Pipe under bridge has lost some of its supports and is an exposed asbestos cement pipe. Completion of this project (along with the Lower Rodeo Trunkline Replacement and Rodeo Pump Station Capacity Upgrade projects) will allow the District to lift a long-standing moratorium for the Rodeo Gulch Sewer Basin.		

ESTIMATED PROJECT COSTS		
Land Survey	$	45,000
Preliminary Design	$	109,000
Environmental	$	340,000
Geotechnical	$	80,000
Engineering Design	$	352,940
Acquisition/Appraisal	$	223,000
Construction	$	5,176,355
Construction Management	$	67,000
Construction Inspection	$	800,375
Other	$	1,023,270
Total Estimated Project Costs	**$**	**8,216,940**

FUNDING SOURCES		
District Funds	$	866,940
Loans	$	-
Grants	$	-
Other (Bonds)	$	4,700,000
Total Project Funding	**$**	**5,566,940**
Funding Not Yet Identified	**$**	**2,650,000**

UPS UPGRADES 2023/24

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION	UPS MODEL
APTOS ESPLANADE	104 MARINA AVE	MARATHON VTWE-0700-01
D.A. PORATH	2750 LODE ST	MARATHON VTWE-0700-01
DOLPHIN	SUMNER AVE	MARATHON VTWE-0700-01
HIDDEN BEACH	770 CLIFF DR	MARATHON VTWE-0700-01
SCHWAN LAKE	EAST CLIFF AND 7TH AVE	MARATHON VTWE-0700-01
SOQUEL	809 BAY AVE	MARATHON VTWE-0700-01

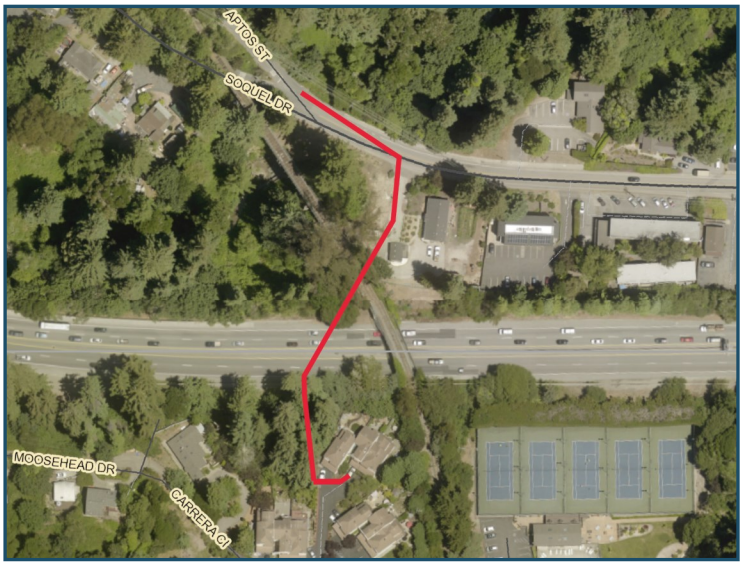
PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	IN PROGRESS
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Install Smart UPS at various pump stations to monitor on SCADA.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	40,000
Total Estimated Project Costs	**$**	**40,000**

FUNDING SOURCES		
District Funds	$	40,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**40,000**
Funding Not Yet Identified	**$**	**-**

VALENCIA CREEK SEWER RELOCATION

CAPITOLA	
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	



PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN CONSTRUCTION
LOCATION:	APTOS	**ESTIMATED CONSTRUCTION YEARS:**	2023/24
DESCRIPTION:	Replace 730+ linear feet of 10-inch pipeline beneath Highway 1, east of the existing 10-inch sewer main and away from Valencia Creek. Replace a temporary repair.		

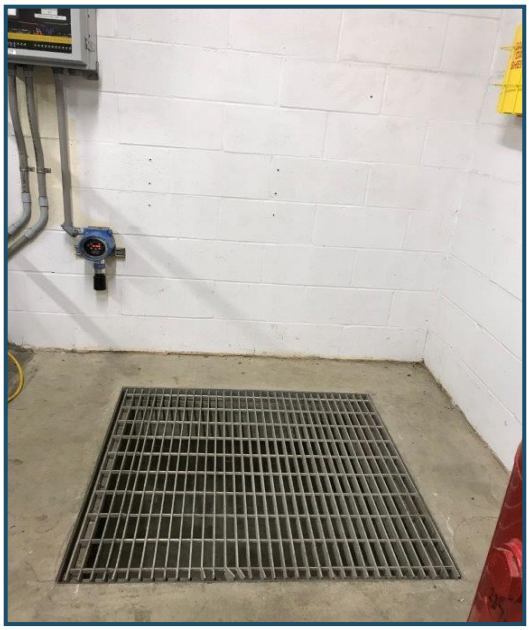
ESTIMATED PROJECT COSTS		
Land Survey	$	20,000
Preliminary Design	$	-
Environmental	$	100,000
Geotechnical	$	50,000
Engineering Design	$	250,000
Acquisition	$	222,580
Construction	$	2,364,837
Construction Management	$	181,000
Construction Inspection	$	351,725
Other	$	615,358
Total Estimated Project Costs	**$**	**4,155,500**

FUNDING SOURCES		
District Funds	$	890,280
Loans	$	2,154,000
Grants	$	-
Other	$	-
Total Project Funding	**$**	**3,044,280**
Funding Not Yet Identified	**$**	**1,111,220**

ACCESS HATCH AT MORAN PUMP STATION

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
MORAN	2750 LODE ST



PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	MORAN PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Replace existing grate with a double leaf hatch to pull pumps from lower level.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	75,000
Total Estimated Project Costs	**$**	**75,000**

FUNDING SOURCES		
District Funds	$	75,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**75,000**
Funding Not Yet Identified	**$**	**-**

CAPITOLA PUMP STATION ROOF/DRAINAGE IMPROVEMENTS

CAPITOLA	X
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	

PROJECT TYPE:	FACILITY UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	CAPITOLA	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Replace the existing roof and improve the drainage in the rear of the Capitola Pump Station building to eliminate standing water during rain events.		

ESTIMATED PROJECT COSTS		
Land Survey	$	
Preliminary Design	$	40,000
Environmental	$	10,000
Geotechnical	$	
Engineering Design	$	50,000
Acquisition	$	
Construction/Installation	$	150,000
Construction Management	$	60,000
Construction Inspection	$	70,000
Other	$	20,000
Total Estimated Project Costs	**$**	**400,000**

FUNDING SOURCES		
District Funds	$	
Loans	$	
Grants	$	
Other	$	
Total Project Funding	**$**	
Funding Not Yet Identified	**$**	**400,000**

D.A. PORATH VALVE REPLACEMENT AND EMERGENCY BYPASS

CAPITOLA	☐
DISTRICT 1	X
DISTRICT 2	☐
CITY OF SANTA CRUZ	☐

PROJECT TYPE:	SYSTEM IMPROVEMENTS	**PROJECT STATUS:**	IN DESIGN
LOCATION:	D.A. PORATH PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	The existing gate valve on the force main leaving the station is deteriorated and will be replaced. Improvements to install an emergency bypass will be installed as part of the project and used to facilitate the valve replacement.		

ESTIMATED PROJECT COSTS		
Land Survey	$	7,000
Preliminary Design	$	-
Environmental	$	7,000
Geotechnical	$	35,000
Engineering Design	$	70,000
Acquisition	$	-
Construction	$	1,000,000
Construction Management	$	40,000
Construction Inspection	$	175,000
Other	$	281,900
Total Estimated Project Costs	**$**	**1,615,900**

FUNDING SOURCES		
District Funds	$	315,900
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**315,900**
Funding Not Yet Identified	**$**	**1,300,000**

EMERGENCY BYPASS IMROVEMENTS 2024/25

CAPITOLA	X
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
CAPITOLA	110 MONTEREY AVE
SOQUEL	809 BAY AVE

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Improve valve vault access and extend connections to bypass valves for quick install of emergency bypass equipment for Capitola and Soquel pump stations.		

ESTIMATED PROJECT COSTS		
Land Survey	$	25,000
Preliminary Design	$	12,000
Environmental	$	20,000
Geotechnical	$	-
Engineering Design	$	150,000
Acquisition	$	160,000
Construction	$	100,000
Construction Management	$	30,000
Construction Inspection	$	100,000
Other	$	109,400
Total Estimated Project Costs	**$**	**706,400**

FUNDING SOURCES		
District Funds	$	100,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**100,000**
Funding Not Yet Identified	**$**	**606,400**

GENERATOR PLUG AND MANUAL TRANSFER SWITCH UPGRADES 2024/25

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
BROMMER	960 BROMMER ST
MORAN	2750 LODE ST
SPRECKLES	211 FOREST DR
TANNERY GULCH	181 NEW BRIGHTON RD

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Install generator plugs to add redundancy to onsite standby generators and install manual transfer switches for power shutoff at the pump stations.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	240,000
Total Estimated Project Costs	**$**	**240,000**

FUNDING SOURCES		
District Funds	$	240,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**240,000**
Funding Not Yet Identified	**$**	**-**

GENERATOR REPLACEMENT 2024/25

CAPITOLA	X
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	

PROJECT	LOCATION
GROVE	110 GROVE LANE

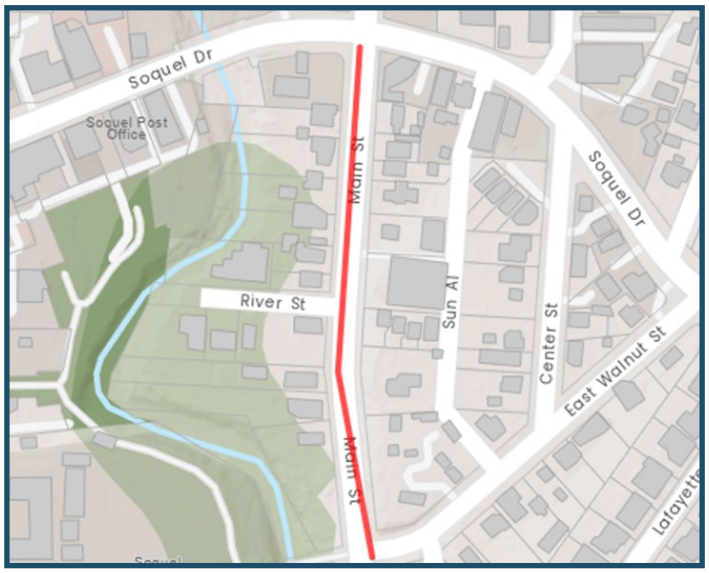
PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	GROVE LANE PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Replace existing onsite standby generator with a new generator.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	60,000
Total Estimated Project Costs	**$**	**60,000**

FUNDING SOURCES		
District Funds	$	60,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**60,000**
Funding Not Yet Identified	**$**	**-**

MAIN STREET SEWER

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	



PROJECT TYPE:	SEWER ABANDONMENT	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	SOQUEL VILLAGE	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Abandon 970± linear feet of deteriorated sewer main and route connected laterals to adjacent parallel sewer main. This project may be completed using Job Order Contracting.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	1,000
Geotechnical	$	-
Engineering Design	$	8,000
Acquisition	$	-
Construction	$	200,000
Construction Management	$	10,000
Construction Inspection	$	25,000
Other	$	65,100
Total Estimated Project Costs	**$**	**309,100**

FUNDING SOURCES		
District Funds	$	-
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**-**
Funding Not Yet Identified	**$**	**309,100**

PLC UPGRADES 2024/25

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PROJECT	LOCATION	PLC MODEL
APTOS ESPLANADE	104 MARINA AVENUE	Compact Logix L23E
APTOS ESPLANADE REPEATER & GENERATOR	104 MARINA AVENUE	DeviceNet
D.A PORATH GENERATOR	2750 LODE STREET	MicroLogix 1400
HIDDEN BEACH GENERATOR	770 CLIFF DRIVE	MicroLogix 1400
VIA PALO ALTO	1096 VIA PALO ALTO	Compact Logix L23E

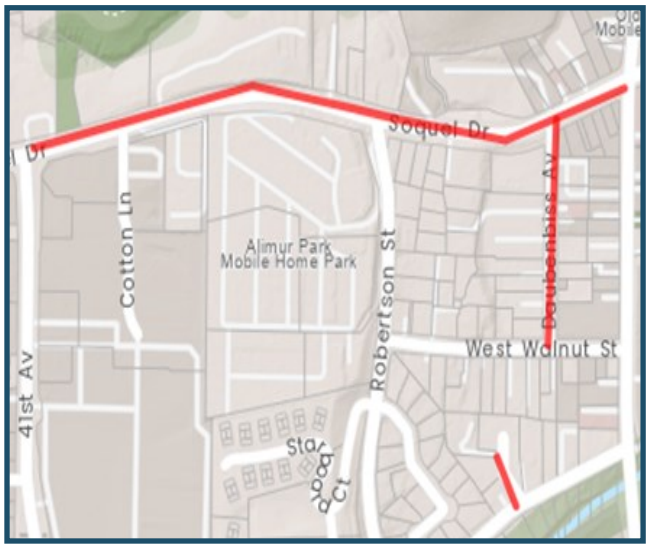
PROJECT TYPE:	OPERATIONS AND MAINTENACE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Replace and upgrade older Programmable Logic Controllers (PLCs) at five locations in the District.		

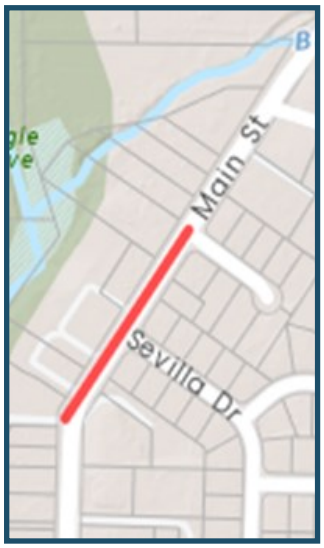
ESTIMATED PROJECT COSTS	
Land Survey	$ -
Preliminary Design	$ -
Environmental	$ -
Geotechnical	$ -
Engineering Design	$ -
Acquisition	$ -
Construction	$ -
Construction Management	$ -
Construction Inspection	$ -
Other	$ -
Total Estimated Project Costs	**$ 250,000**

FUNDING SOURCES	
P53357 PLC Upgrades	$ 250,000
Loans	$ -
Grants	$ -
Other	$ -
Total Project Funding	**$ 250,000**
Funding Not Yet Identified	**$ -**

SOQUEL VILLAGE SEWER REHABILITATION PHASE 2

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	





PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	SOQUEL VILLAGE	**ESTIMATED CONSTRUCTION YEARS:**	2024/25—2025/26
DESCRIPTION:	Rehabilitate 6,650± linear feet of deteriorating sewer mains and associated manholes. The sewer lines and manholes are old, deteriorating, and at the end of their design life. A portion of this project may be completed using Job Order Contracting.		

ESTIMATED PROJECT COSTS		
Land Survey	$	50,000
Preliminary Design	$	-
Environmental	$	2,000
Geotechnical	$	
Engineering Design	$	80,000
Acquisition	$	80000
Construction	$	6,517,500
Construction Management	$	100,000
Construction Inspection	$	800,000
Other	$	1,193,100
Total Estimated Project Costs	**$**	**8,822,600**

FUNDING SOURCES		
District Funds	$	82,600
Loans	$	-
Grants	$	-
Other (Bonds)	$	-
Total Project Funding	**$**	**82,600**
Funding Not Yet Identified	**$**	**8,740,000**

UPS UPGRADES 2024/25—STAGE 1

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION	UPS MODEL
A1	201 STATE PARK DRIVE	MARATHON VTWE-0700-01
ARANA	2201 SOQUEL DR	MARATHON VTWE-0700-01
CHAMINADE	3700 PAUL SWEET RD	MARATHON VTWE-0700-01
COURTSIDE	7848 TANIAS CT	MARATHON VTWE-0700-01
SEACLIFF	837 SEACLIFF DR	MARATHON VTWE-0700-01

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Install Smart UPS at various pump stations to monitor on SCADA.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	50,000
Total Estimated Project Costs	**$**	**50,000**

FUNDING SOURCES		
District Funds	$	50,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**50,000**
Funding Not Yet Identified	**$**	**-**

UPS UPGRADES 2024/25 —STAGE 2

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION	UPS MODEL
A-3	440 BEACH DR	SMART UPS DR 500
CHERYL	1829 CHERYL WAY	SMART UPS DR 500
MAR VISTA	100 MAR VISTA	SMART UPS DR 500
PINE KNOLL	2546 CAPITOLA RD	SMART UPS DR 500
UPLANDS 1	102 ZANZIBAR	SMART UPS DR 500
UPLANDS 2	162 ZANZIBAR	SMART UPS DR 500
UPLANDS 3	1096 CASTILLO CT	SMART UPS DR 500

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Install Smart UPS at various pump stations to monitor battery power on SCADA.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	65,000
Total Estimated Project Costs	**$**	**65,000**

FUNDING SOURCES		
District Funds	$	65,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**65,000**
Funding Not Yet Identified	**$**	**-**

VFD REPLACEMENTS 2024/25

CAPITOLA	☐
DISTRICT 1	☒
DISTRICT 2	☐
CITY OF SANTA CRUZ	☐

PROJECT TYPE:	SYSTEM IMPROVEMENTS	**PROJECT STATUS:**	IN PROGRESS
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2024/25
DESCRIPTION:	Variable Frequency Drive (VFD) will be replaced with soft starts at 15th Avenue Pump Station and Arana Pump Station.		

ESTIMATED PROJECT COSTS	
Land Survey	$ -
Preliminary Design	$ -
Environmental	$ -
Geotechnical	$ -
Engineering Design	$ -
Acquisition	$ -
Construction	$ -
Construction Management	$ -
Construction Inspection	$ -
Other	$ -
Total Estimated Project Costs	**$ 75,000**

FUNDING SOURCES	
District Funds	$ 75,000
Loans	$ -
Grants	$ -
Other	$ -
Total Project Funding	**$ 75,000**
Funding Not Yet Identified	**$ -**

WEST SEACLIFF SEWER REHABILITATION

PHASE 1

CAPITOLA	☐
DISTRICT 1	☐
DISTRICT 2	☒
CITY OF SANTA CRUZ	☐

PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	APTOS	**ESTIMATED CONSTRUCTION YEARS:**	2024/25—2025/26
DESCRIPTION:	Replace or repair 5,000± linear feet of deteriorating gravity sewer mains and manholes located throughout the west Seacliff area. The sewer lines are old, deteriorating and at the end of their design life.		

ESTIMATED PROJECT COSTS		
Land Survey	$	100,000
Preliminary Design	$	
Environmental	$	30,000
Geotechnical	$	
Engineering Design	$	80,000
Acquisition	$	40000
Construction	$	6,350,000
Construction Management	$	100,000
Construction Inspection	$	800,000
Other	$	1,270,000
Total Estimated Project Costs	**$**	**8,870,000**

FUNDING SOURCES		
District Funds	$	200,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**200,000**
Funding Not Yet Identified	**$**	**8,670,000**

ACCESS HATCH AT SCHWAN LAKE PUMP STATION

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
SCHWAN LAKE	E.CLIFF AND 7TH AVE

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	SCHWAN LAKE PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2025/26
DESCRIPTION:	Install a double leaf hatch for access over wet well for improved maintenance.		

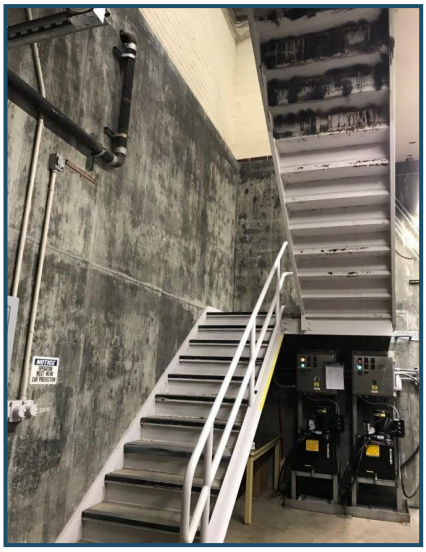
ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	5,000
Environmental	$	5,000
Geotechnical	$	-
Engineering Design	$	10,000
Acquisition	$	-
Construction	$	140,000
Construction Management	$	10,000
Construction Inspection	$	60,000
Other	$	46,080
Total Estimated Project Costs	**$**	**276,080**

FUNDING SOURCES		
District Funds	$	276,080
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**276,080**
Funding Not Yet Identified	**$**	**-**

CONCRETE STAIRS REHABILITATION

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
BROMMER	960 BROMMER ST
D.A. PORATH	2750 LODE ST
MORAN	2750 LODE ST



PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2025/26
DESCRIPTION:	Existing concrete stairs' steel supports and threads are rusted and require rehabilitation at Brommer, D.A. Porath and Moran pump stations.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	20,000
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	80,000
Acquisition	$	-
Construction	$	200,000
Construction Management	$	20,000
Construction Inspection	$	80,000
Other	$	75,000
Total Estimated Project Costs	**$**	**475,000**

FUNDING SOURCES		
District Funds	$	475,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**475,000**
Funding Not Yet Identified	**$**	**-**

D.A. PORATH FACILITY IMPROVEMENTS

CAPITOLA	☐
DISTRICT 1	X
DISTRICT 2	☐
CITY OF SANTA CRUZ	☐

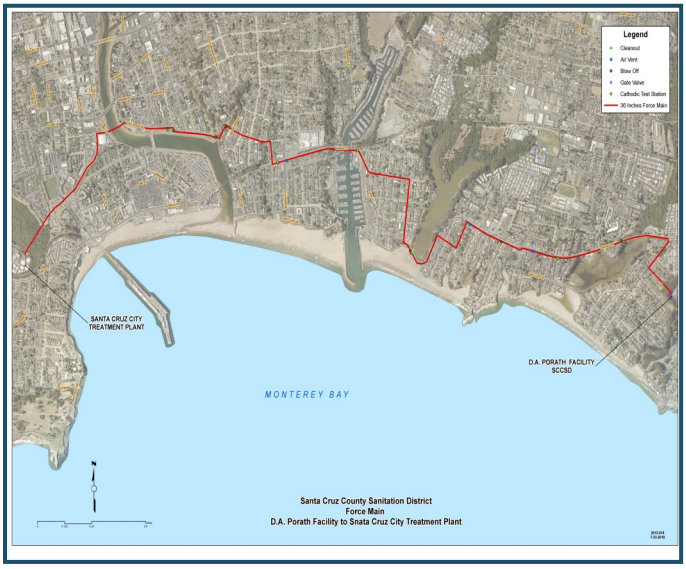
PROJECT TYPE:	FACILITY UPGRADE	**PROJECT STATUS:**	IN DESIGN
LOCATION:	LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2025/26—2026/27
DESCRIPTION:	Renovation and expansion of the existing Operations building within the existing building footprint. Administration and shop areas will be consolidated in the new building.		

ESTIMATED PROJECT COSTS		
Land Survey	$	25,000
Preliminary Design	$	255,840
Environmental	$	225,000
Geotechnical	$	40,000
Engineering Design	$	1,840,000
Swing Space	$	150,000
Construction	$	20,200,000
Construction Management	$	200,000
Construction Inspection	$	1,000,000
Other	$	3,305,400
Total Estimated Project Costs	**$**	**27,241,240**

FUNDING SOURCES		
District Funds	$	3,300,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**3,300,000**
Funding Not Yet Identified	**$**	**23,941,240**

EAST CLIFF TRANSMISSION MAIN INSPECTION

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	X



PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	CITY OF SANTA CRUZ & LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2025/26
DESCRIPTION:	The force main from the D.A Porath Facility to the City of Santa Cruz was inspected by Pure Technologies in 2014. The District plans to inspect the force main every 10 years.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	200,000
Total Estimated Project Costs	**$**	**200,000**

FUNDING SOURCES		
District Funds	$	200,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**200,000**
Funding Not Yet Identified	**$**	**-**

GENERATOR REPLACEMENT 2025/26

CAPITOLA	☐
DISTRICT 1	☐
DISTRICT 2	X
CITY OF SANTA CRUZ	☐

PROJECT	LOCATION
VIA PALO ALTO	1096 VIA PALO ALTO

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VIA PALO ALTO PUMP STATION	**ESTIMATED CONSTRUCTION YEARS:**	2025/26
DESCRIPTION:	Replace existing onsite standby generator with a new generator.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	65,000
Total Estimated Project Costs	**$**	**65,000**

FUNDING SOURCES		
District Funds	$	65,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**65,000**
Funding Not Yet Identified	**$**	**-**

MANUAL TRANSFER SWITCH INSTALLATION
2025/26

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

PUMP STATION	LOCATION
APTOS ESPLANADE	104 MARINA AVE
ARANA	2201 SOQUEL DR

PROJECT TYPE:	OPERATIONS AND MAINTENANCE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	VARIOUS LOCATIONS	**ESTIMATED CONSTRUCTION YEARS:**	2025/26
DESCRIPTION:	Install manual transfer switches at Aptos Esplanade and Arana pump stations to shutoff power to connect a portable generator.		

ESTIMATED PROJECT COSTS		
Land Survey	$	-
Preliminary Design	$	-
Environmental	$	-
Geotechnical	$	-
Engineering Design	$	-
Acquisition	$	-
Construction	$	-
Construction Management	$	-
Construction Inspection	$	-
Other	$	160,000
Total Estimated Project Costs	**$**	**160,000**

FUNDING SOURCES		
District Funds	$	160,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**160,000**
Funding Not Yet Identified	**$**	**-**

2027 SEWER PIPE REHABILITATION

CAPITOLA	X
DISTRICT 1	X
DISTRICT 2	X
CITY OF SANTA CRUZ	

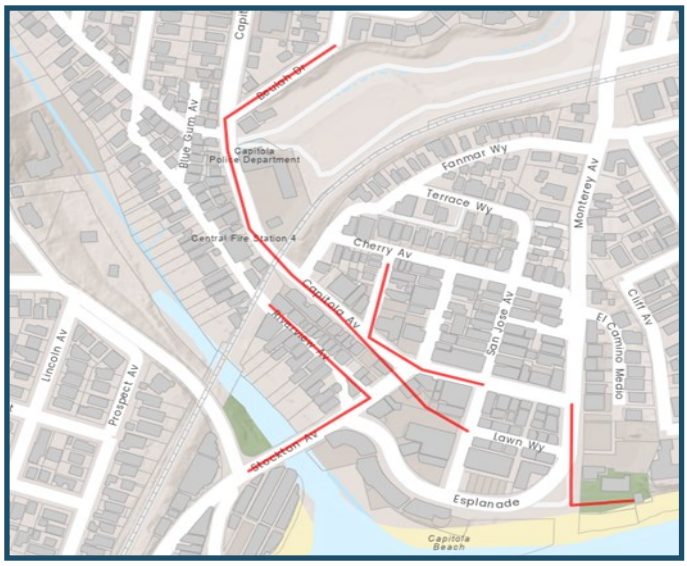
PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	DISTRICT WIDE	**ESTIMATED CONSTRUCTION YEARS:**	2026/27
DESCRIPTION:	Rehabilitate sewer mains and manholes identified by video assessment as critical to repair.		

ESTIMATED PROJECT COSTS		
Land Survey	$	30,000
Preliminary Design	$	0
Environmental	$	50,000
Geotechnical	$	
Engineering Design	$	50,000
Acquisition	$	150,000
Construction	$	3,060,000
Construction Management	$	50,000
Construction Inspection	$	400,000
Other	$	662,400
Total Estimated Project Costs	**$**	**4,452,400**

FUNDING SOURCES		
District Funds	$	100,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**100,000**
Funding Not Yet Identified	**$**	**4,352,400**

CAPITOLA VILLAGE SEWER REHABILITATION—PHASE 1

CAPITOLA	X
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	



PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	CAPITOLA VILLAGE	**ESTIMATED CONSTRUCTION YEARS:**	2026/27
DESCRIPTION:	Rehabilitate 3,500± linear feet of deteriorating sewer mains. Perform pre-design flow monitoring to determine if some sewer mains are undersized as indicated by 2019 regional flow monitoring. Upsize required sewer mains if required.		

ESTIMATED PROJECT COSTS		
Land Survey	$	20,000
Preliminary Design	$	-
Environmental	$	50,000
Geotechnical	$	-
Engineering Design	$	50,000
Acquisition	$	60,000
Construction	$	3,900,000
Construction Management	$	50,000
Construction Inspection	$	400,000
Other	$	771,000
Total Estimated Project Costs	**$**	**5,301,000**

FUNDING SOURCES		
District Funds	$	170,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**170,000**
Funding Not Yet Identified	**$**	**5,131,000**

EAST CLIFF TRANSMISSION MAIN REPAIRS

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	X

PROJECT TYPE:	ASSET MANAGEMENT	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	CITY OF SANTA CRUZ & LIVE OAK	**ESTIMATED CONSTRUCTION YEARS:**	2026/27
DESCRIPTION:	Complete repairs identified in the 2025/26 inspection of the force main.		

ESTIMATED PROJECT COSTS		
Land Survey	$	10,000
Preliminary Design	$	-
Environmental	$	10,000
Geotechnical	$	40,000
Engineering Design	$	60,000
Acquisition	$	-
Construction	$	470,000
Construction Management	$	60,000
Construction Inspection	$	140,000
Other	$	110,000
Total Estimated Project Costs	**$**	**900,000**

FUNDING SOURCES		
District Funds	$	900,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**900,000**
Funding Not Yet Identified	**$**	**-**

RIO DEL MAR SEWER REHABILITATION—PHASE 2

CAPITOLA	
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	

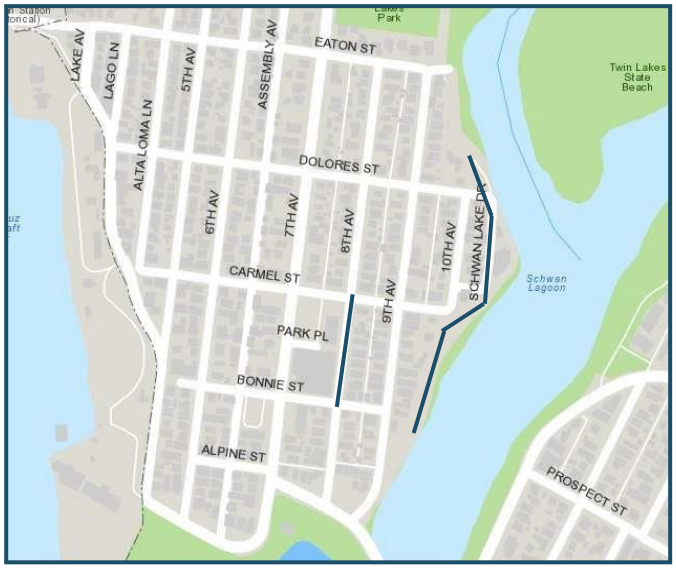
PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	RIO DEL MAR	**ESTIMATED CONSTRUCTION YEARS:**	2026/27
DESCRIPTION:	Rehabilitate 7,100± linear feet of sewer mains that often become clogged with roots, which required frequent maintenance and can lead to sewer overflows. This project will eliminate the need for Smart Cover monitoring on two manholes.		

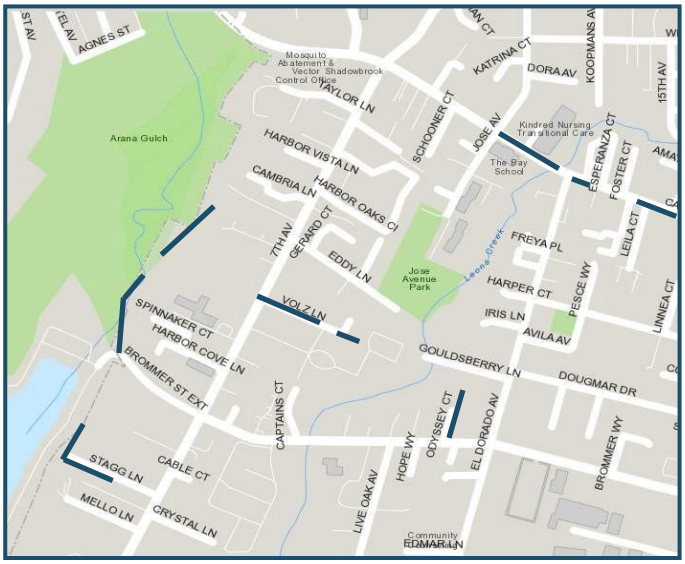
ESTIMATED PROJECT COSTS		
Land Survey	$	60,000
Preliminary Design	$	0
Environmental	$	150,000
Geotechnical	$	
Engineering Design	$	80,000
Acquisition	$	300,000
Construction	$	7,800,000
Construction Management	$	100,000
Construction Inspection	$	800,000
Other	$	1,394,600
Total Estimated Project Costs	**$**	**10,684,600**

FUNDING SOURCES		
District Funds	$	90,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**90,000**
Funding Not Yet Identified	**$**	**10,594,600**

SANTA CRUZ HARBOR AREA SEWER REHABILITATION—PHASE 2

CAPITOLA	
DISTRICT 1	X
DISTRICT 2	
CITY OF SANTA CRUZ	





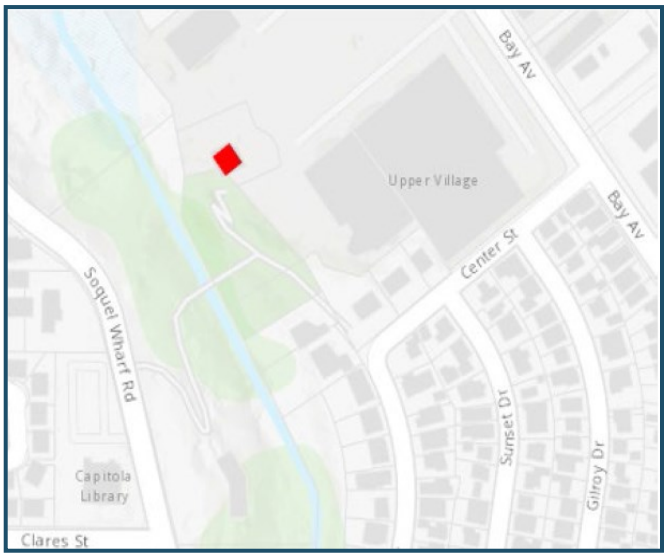
PROJECT TYPE:	SYSTEM UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	TWIN LAKES	**ESTIMATED CONSTRUCTION YEARS:**	2026/27
DESCRIPTION:	Replace or repair 4,400± linear feet of deteriorating gravity sewer mains and manholes located throughout the east Santa Cruz Harbor area. The sewer lines are old, deteriorating and at the end of their design life.		

ESTIMATED PROJECT COSTS		
Land Survey	$	30,000
Preliminary Design	$	-
Environmental	$	70,000
Geotechnical	$	-
Engineering Design	$	60,000
Acquisition	$	150,000
Construction	$	4,840,000
Construction Management	$	80,000
Construction Inspection	$	400,000
Other	$	926,900
Total Estimated Project Costs	**$**	**6,556,900**

FUNDING SOURCES		
District Funds	$	100,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**100,000**
Funding Not Yet Identified	**$**	**6,456,900**

SOQUEL PUMP STATION AUXILIARY WET WELL

CAPITOLA	X
DISTRICT 1	
DISTRICT 2	X
CITY OF SANTA CRUZ	



PROJECT TYPE:	CAPACITY UPGRADE	**PROJECT STATUS:**	FUTURE DESIGN
LOCATION:	CAPITOLA	**ESTIMATED CONSTRUCTION YEARS:**	2026/27
DESCRIPTION:	Construct and auxiliary wet well at the existing Soquel Pump Station to increase holding capacity which will reduce the probability of the existing wet wells overtopping during system failures and other emergencies.		

ESTIMATED PROJECT COSTS		
Land Survey	$	15,000
Preliminary Design	$	
Environmental	$	20,000
Geotechnical	$	60,000
Engineering Design	$	420,000
Acquisition	$	100,000
Construction	$	2,100,000
Construction Management	$	3,000
Construction Inspection	$	350,000
Other	$	497,100
Total Estimated Project Costs	**$**	**3,565,100**

FUNDING SOURCES		
District Funds	$	100,000
Loans	$	-
Grants	$	-
Other	$	-
Total Project Funding	**$**	**100,000**
Funding Not Yet Identified	**$**	**3,465,100**

SANTA CRUZ COUNTY
SANITATION DISTRICT

UNPROGRAMMED PROJECTS

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

WWW.SCCSD.US

UNPROGRAMMED PROJECTS 2028/29+

DESCRIPTION	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	ESTIMATED COST	2028/29 ESTIMATED COST	2033/34 ESTIMATED COST
38TH AVENUE AREA SEWER REHABILITATION	X	X			$ 4,420,000	$ 5,377,606	$ 6,542,680
41ST AND CAPITOLA ROAD AREA SEWER REHABILITATION	X	X			$ 8,840,000	$ 10,755,212	$ 13,085,359
42ND AVENUE SEWER REPLACEMENT—CLARES STREET TO CAPITOLA ROAD	X	X			$ 1,616,000	$ 1,966,111	$ 2,392,075
ARANA GULCH SEWER REHABILITATION—PH 2		X			$ 2,190,000	$ 2,664,470	$ 3,241,735
ARANA GULCH SOUTH SEWER REHABILITATION		X			$ 4,000,000	$ 4,866,612	$ 5,920,977
ARANA PUMP STATION REHABILITATION		X			$ 6,070,000	$ 7,385,083	$ 8,985,083
BEACH DRIVE SEWER REHABILITATION			X		$ 10,180,000	$ 12,385,527	$ 15,068,887
BORREGAS GULCH TRUNKLINE REPLACEMENT—PH 2			X		$ 4,080,000	$ 4,963,944	$ 6,039,397
BORREGAS GULCH TRUNKLINE REPLACEMENT—PH 3			X		$ 4,160,000	$ 5,061,276	$ 6,157,816
CAPITOLA ROAD EXTENSION SEWER REPLACEMENT	X		X		$ 1,120,000	$ 1,362,651	$ 1,657,874
CAPITOLA VILLAGE SEWER REHABILITATION - PH 2	X		X		$ 5,200,000	$ 6,326,595	$ 7,697,270
CAPITOLA VILLAGE SEWER REHABILITATION - PH 3	X		X		$ 8,600,000	$ 10,463,215	$ 12,730,101
COASTVIEW DRIVE SEWER LINE REPLACEMENT		X			$ 3,232,000	$ 3,932,222	$ 4,784,150

UNPROGRAMMED PROJECTS 2028/29+

DESCRIPTION	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	ESTIMATED COST	2028/29 ESTIMATED COST	2033/34 ESTIMATED COST
HILL STREET/CAPITOLA AVENUE AREA SEWER REPLACEMENT	X		X		$ 704,000	$ 856,524	$ 1,042,092
LIVE OAK SEWER REHABILITATION — PH 1		X			$ 4,820,000	$ 5,864,267	$ 7,134,777
LIVE OAK SEWER REHABILITATION — PH 2		X			$ 8,000,000	$ 9,733,223	$ 11,841,954
MORAN TRANSMISSION MAIN REPLACEMENT		X			$ 1,320,000	$ 1,605,982	$ 1,953,922
OPAL CLIFF DRIVE SEWER REPLACEMENT		X			$ 2,112,000	$ 2,569,571	$ 3,126,276
PAUL SWEET ROAD SEWER RELOCATION		X			$ 2,112,000	$ 2,569,571	$ 3,126,276
PORTOLA DRIVE SEWER REPLACEMENT 26TH AVENUE TO 49TH AVENUE		X			$ 6,216,000	$ 7,562,714	$ 9,201,198
REHABILITATION OF SEWERS ON ROOT CONTROL—PH1	X	X	X		$ 6,400,000	$ 7,786,579	$ 9,473,563
REHABILITATION OF SEWERS ON ROOT CONTROL—PH2	X	X	X		$ 6,400,000	$ 7,786,579	$ 9,473,563
REHABILITATION OF SEWERS ON ROOT CONTROL—PH3	X	X	X		$ 6,400,000	$ 7,786,579	$ 9,473,563
REHABILITATION OF SEWERS ON ROOT CONTROL—PH4	X	X	X		$ 6,400,000	$ 7,786,579	$ 9,473,563
RIO DEL MAR SEWER REHABILITATION—PH 3		X			$ 6,210,000	$ 7,555,415	$ 9,192,317
RIO DEL MAR SEWER REHABILITATION—PH 4		X			$ 14,570,000	$ 17,726,633	$ 21,567,159

UNPROGRAMMED PROJECTS 2028/29+

DESCRIPTION	CAPITOLA	DISTRICT 1	DISTRICT 2	CITY OF SC	ESTIMATED COST	2028/29 ESTIMATED COST	2033/34 ESTIMATED COST
SCHWAN FORCE MAIN REPLACEMENT			X		$ 6,150,000	$ 7,482,415	$ 9,103,502
SEARIDGE ROAD SEWER REPLACEMENT		X			$ 1,280,000	$ 1,557,316	$ 1,894,713
SEASCAPE BOULEVARD, PROVINCETOWN COURT TO SUMNER AVENUE SEWER REPLACEMENT			X		$ 1,136,000	$ 1,382,118	$ 1,681,558
SOQUEL DRIVE, EAST OF 41ST AVENUE TO PORTER STREET SEWER REPLACEMENT		X			$ 3,392,000	$ 4,126,887	$ 5,020,989
SOQUEL VILLAGE SEWER REHABILITATION—PH 3		X			$ 2,830,000	$ 3,443,128	$ 4,189,091
TOWNSEND AREA SEWER REHABILITATION			X		$ 4,920,000	$ 5,985,932	$ 7,282,802
VIENNA WOODS SEWER REHABILITATION—PH 1			X		$ 3,750,000	$ 4,562,448	$ 5,550,916
UPPER HARBOR SEWER REPLACEMENT		X			$ 16,000,000	$ 19,466,446	$ 23,683,909
TOTAL ESTIMATED COST					**$ 174,830,000**	**$ 212,707,427**	**$ 258,791,108**

SANTA CRUZ COUNTY
SANITATION DISTRICT

GLOSSARY

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024-2028

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GLOSSARY OF TERMS

ACP:	Asbestos Cement Pipe
ARV:	Air Relief Valve
Asbestos Cement Pipe:	Asbestos is a set of six naturally occurring silicate minerals used commercially for their desirable physical properties. The inhalation of asbestos fibers can cause serious illnesses. Asbestos was mixed into cement for cement pipes because of its sound absorption, average tensile strength, and resistance to heat, electrical, and chemical damage. As long as the cement remains whole and in good condition, the mineral is not a serious problem. When the pipes are cut and removed from the ground, however, asbestos fibers can be released into the air and inhaled by workers and others.
Asset Management:	The managing of assets to achieve the greatest return. The process of monitoring and maintaining facility systems and public infrastructure, with the goal of providing the best possible service to users.
CIPP:	Cast in Place Pipe. CIPP is made of Portland cement concrete and is cast in one piece in a prepared trench using specifically designed equipment. The trench is dug with a round bottom bucket and the earthen trench is the outside form.
Directional Boring/Drilling:	Directional boring (or drilling or HDD) is a steerable trenchless method of installing underground pipes, conduits and cables in a shallow arc along a prescribed bore path using a surface-launched drilling rig, with minimal impact on the surrounding area. For more information, see the end of this section.
Drive Shafts:	Also known as a jacking shaft and describes the excavated pit into which the jacking equipment is placed in order to carry out trenchless construction or rehabilitation activities. Jacking of new pipes or replacement pipes into the bore is done from the drive shaft. When the pipe reached the receiving shaft, the installation is complete.
Effluent:	Sewer water consisting of human waste, wash water, food preparation waste, laundry water and other wastes which is transported from residences and institutions to a treatment plant.

Electrical Panel:	The part of an electricity supply system which distributes electrical current to various circuits in a pump station, while providing a protective fuse or circuit breaker for each circuit, in a common enclosure.
Force main:	A pressurized main sewer pipeline, used where gravity will not work, such as in low-lying areas. The pipe is pressurized to force the sewage along in a particular direction. An entire length of pipe may be a force main, or the pipeline may alternate between force and gravity.
Generator:	A gas- or diesel-powered engine which provides temporary electrical power. The engine turns a small turbine, which then creates usable electricity.
Gravity Sewer:	Allows gravity to move the sewage. Functions when there is no power, is easy to maintain, and is designed so that the contents flow in a certain direction. To ensure that untreated sewage does not back up and pose a public health risk, gravity sewer lines are designed so the pressure of water entering the inflow pipes, combines with the flow of the gravity-fed outflow pipes, preventing backflow.
Hatch:	A ground level access door used at some sanitary sewer pump stations for access to wet wells, valves, pump station controls and equipment.
HDPE:	High Density Polyethylene Pipe. HDPE can carry potable water, wastewater, slurry, chemicals, hazardous wastes, and compressed gases. HDPE is strong, extremely tough, flexible, and very durable. Joining HDPE pipe segments requires fusing.
Lateral:	The part of the sewer line which connects the residence's or business's sewer to the sewer main in the street. Laterals are owned and maintained by the property owners.
Lift Station:	An assembly of a wet well, level controls, and pumps designed to take the flow from a gravity sewer system and transport it uphill where the use of a gravity sewer line would not be feasible. (Also called a pump station.)
Linear Foot:	A system of measurement in which only the length is considered.
Microtunneling	Microtunneling is a digging process that uses a remotely controlled microtunnel boring machine (MTBM) combined with the pipe jack-

	and-bore method to directly install pipes underground in a single pass. (See also "pipe jacking.")
Moratorium:	A suspension in allowed new sewer connections.
Outfall:	The place where treated effluent is discharged.
Parallel Sewers:	Where two or more sewer lines are installed next to each other. These are required, at times, when an area's sewer lines need to be gravity sewered in one direction to a nearby pump station and then pumped in the opposite direction to the next pump station. Also, when upsizing an existing sewer line is not possible or cost effective, a parallel line may be installed to add capacity to the sytem.
Pipe Bursting:	A trenchless method of replacing buried pipelines (such as sewer, water, or natural gas pipes) without the need for a traditional construction trench. For more information, see the end of this section.
Pipe jacking	A microtunneling process where pipes are pushed behind the microtunneling machine. The speed of the microtunneling machine is controlled by how fast the pipe is inserted.
Programmable Logic Controller (PLC):	An industrial digital computer that is used for managing pump station automation.
Pump Station:	Pump stations (or lift stations) are designed to move raw sewage that is fed from gravity pipelines to pipelines at a higher elevation. Sewage flows into an underground pit, called a wet well. The well is equipped with electrical instrumentation to detect the level of sewage, and when the sewage level rises to a pre-set point, a pump motor creates pressure to push the sewage into a force main where it is eventually discharged into a gravity manhole. The cycle then starts over again until the sewage reaches the City Treatment Facility. The size of the pump station depends on the connections being served and the pumps are between 2hp to 230hp. Typically, large pump stations are located in above ground enclosed structures and smaller pump wet wells are located below ground in residential streets.
POTW	Public Owned Treatment Works. Any device of system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of liquid nature which is owned by a "State" or "municipality."

RWQCB:	Regional Water Quality Control Board
Riparian Corridor:	The part of a watershed adjacent to a body of water, such as a creek, river, or stream.
SCADA:	Supervisory Control and Data Acquisition. A computer-based control system for monitoring pump station conditions throughout the District.
Sewer Force main:	See “Force main.”
Sewer Lateral:	See “Lateral.”
Sewer Moratorium:	See “Moratorium.”
Shaft Driven Pumps:	Pumps that are powered by drive shafts.
SSFM:	Sanitary Sewer Force Main
Submersible Pumps:	Submersible pumps are submerged below the effluent, where the motor is cooled and overheating less likely to occur.
SWQCB:	State Water Quality Control Board
Sliplining:	Sliplining is completed by installing a smaller, "carrier pipe" into a larger "host pipe.” For more information, see article at end of this section.
Trenchless Sewer Technology:	Methods of pipe replacement that can be completed without continuous open trenching of the pipe alignment. For more information, see the end of this section.
Variable Frequency Drive (VFD):	A type of motor controller that drives an electric motor by varying the frequency and voltage supplied to the electric motor.
Vitrified Clay Pipe (VCP):	Pipe made from clay that has been vitrified, a process which fuses the clay particles into a hard, inert, glass-like state. This type of pipe is usually used in gravity sewer lines because it is reasonably priced and resistant to sulfuric acid which is generated by hydrogen sulfide, a common component of sewage. Hydrofluoric acid and highly-concentrated caustic wastes are the only components known to harm VCP.
Wet well:	A chamber which is used to lift the sewage out of the wet well when it reaches a certain level and pump it on towards a treatment plant.

TRENCHLESS TECHNOLOGY

Trenchless technology is a type of subsurface construction work that requires few trenches or no continuous trenches. It is a rapidly growing sector of the construction and civil engineering industry. It can be defined as "a family of methods, materials, and equipment capable of being used for the installation of new or replacement or rehabilitation of existing underground infrastructure with minimal disruption to surface traffic, business, and other activities."[1]

Trenchless construction includes such construction methods as tunneling, microtunneling (MTM), horizontal directional drilling (HDD) also known as directional boring, pipe ramming (PR), pipe Jacking (PJ), moling, horizontal auger boring (HAB) and other methods for the installation of pipelines and cables below the ground with minimal excavation. Large diameter tunnels such as those constructed by a tunnel boring machine (TBM), and drilling and blasting techniques are larger versions of subsurface construction. The difference between trenchless and other subsurface construction techniques depends upon the size of the passage under construction.

The method requires considering soil characteristics and the loads applied to the surface. In cases where the soil is sandy, the water table is at shallow depth, or heavy loads such as from traffic are expected, the depth of excavation has to be at a depth such that the pressure of the load on the surface does not affect the bore, otherwise there is danger of surface caving in.

TRENCHLESS REHABILITATION

Trenchless rehabilitation includes such construction methods as sliplining, thermoformed pipe, pipe bursting, shotcrete, gunite, cured-in-place pipe (CIPP), grout-in-place pipe, mechanical spot repair, and other methods for the repair, rehabilitation, or replacement of existing buried pipes and structures without excavation, or at least with minimal excavation. Mechanical Spot Repair is applied where damaged pipelines require the re-instatement of structural integrity. Sliplining, CIPP, and thermoformed pipe lining involve pulling or inverting a new liner into an existing pipe, then applying heat and/or pressure to force the liner to expand to fill the pipe. CIPP technologies combine a carrier (felt or fiberglass) impregnated with heat, ultraviolet light, or ambient curable resin to form a "pipe within a pipe". Pipe bursting fractures a pipe from the inside and forces the fragments outwards while a new pipe is drawn in to replace the old.[2] The other methods are primarily for fixing spot leaks. Trenchless rehabilitation methods are generally more cost-effective than traditional exhume (dig) and replace methods.

References (from Wikipedia)http://www.nastt.org/ North American Society for Trenchless Technology

Simicevic, Jadranka and Sterling, Raymond L. (March 2001) (PDF). *Guidelines for Pipe Bursting,TTC Technical Report #2001.02*. U.S. Army Corps of Engineers Engineering Research and Development Center. http://www.ttc.latech.edu/publications/guidelines_pb_im_pr/bursting.pdf.

DIRECTIONAL BORING

Directional boring, commonly called horizontal directional drilling or HDD, is a steerable trenchless method of installing underground pipes, conduits and cables in a shallow arc along a prescribed bore path by using a surface-launched drilling rig, with minimal impact on the surrounding area. Directional boring is used when trenching or excavating is not practical. It is suitable for a variety of soil conditions and jobs including road, landscape and river crossings. Installation lengths up to 2000m have been completed, and diameters up to 1200mm have been installed in shorter runs. Pipes can be made of materials such as PVC, polyethylene, polypropylene, Ductile iron, and steel if the pipes can be pulled through the drilled hole. Directional boring is not practical if there are voids in the rock or incomplete layers of rock. The best material is solid rock or sedimentary material. Soils with cobble stone are not recommended. There are different types of heads used in the pilot-hole process, and they depend on the geological material.

The equipment used in a horizontal directional drilling depends on the outer diameter of the pipe, length of the run, ground conditions and the surroundings above ground. For the large bores, directional drills equipped with as much as 450,000kg (or more) of thrust/pullback is used in conjunction with a mud reclaimer, excavator, and multiple pumps and hoses to supply the drilling fluid to the drillstem. The directional drilling stem is made from heat-treated high-carbon steel for strength and ships in diameters of 8 - 15cm. Drill stem sections are manufactured in 3.0 or 4.6 and also 9.1-meter lengths and have male threading on one end, and female on the other. It is common for a directional drill to carry as much as 305m of rod on board. Drilling heads come in multiple designs and depend on the rock or soil being penetrated. The drilling head has multiple water ports to allow removal of material. A talon bit involves carbide-tipped cutters. These allow for steering and cutting the material. Another head is a mud-motor that is used in rocky landscapes.

Furthermore, supporting equipment is needed to assist directional-drilling or HDD to work smoothly, such as drilling mud recycling system, shale shaker, mud cleaner, centrifugal pump, mud tanks, etc.

Directional boring is used for installing infrastructure such as telecommunications and power cable conduits, water lines, sewer lines, gas lines, oil lines, product pipelines, and environmental remediation casings. It is used for crossing waterways, roadways, shore approaches, congested areas, environmentally sensitive areas, and areas where other methods are costlier or not possible. It is used instead of other techniques to provide less traffic disruption, lower cost, deeper and/or longer installation, shorter completion times, directional capabilities, and environmental safety.

The technique has extensive use in urban areas for developing subsurface utilities as it helps in avoiding extensive open cut trenches. The use requires that the operator have complete information about existing utilities so that he can plan the alignment to avoid damaging those utilities. Since uncontrolled drilling can lead to damage, different agencies/government authorities owning the urban *right-of-way* or the utilities have rules for safe work execution. For standardization of the techniques, different trenchless technology promoting organizations have developed guidelines for this technique.

The process starts with receiving hole and entrance pits. These pits will allow the drilling fluid to be collected and reclaimed to reduce costs and prevent waste. The first stage drills a pilot hole on the designed path, and the second stage (reaming) enlarges the hole by passing a larger cutting tool known as the back reamer. The reamer's diameter depends on the size of the pipe to be pulled back through the bore hole. The driller increases the diameter according to the outer diameter or the conduit and to achieve optimal production. The third stage places the product or casing pipe in the enlarged hole by way of the drill stem; it is pulled behind the reamer to allow centering of the pipe in the newly reamed path.

Horizontal directional drilling is done with the help of a viscous fluid known as drilling fluid. It is a mixture of water and, usually, bentonite or polymer continuously pumped to the cutting head or drill bit to facilitate the removal of cuttings, stabilize the bore hole, cool the cutting head, and lubricate the passage of the product pipe. The drilling fluid is sent into a machine called a reclaimer which removes the drill cuttings and maintains the proper viscosity of the fluid. Drilling fluids hold the cuttings in suspension to prevent them from clogging the bore. A clogged bore creates back pressure on the cutting head, slowing production.

Location and guidance of the drilling is an important part of the drilling operation, as the drilling head is under the ground while drilling and, in most cases, not visible from the ground surface. Uncontrolled or unguided drilling can lead to substantial destruction, which can be eliminated by properly locating and guiding the drill head.

There are three types of locating equipment for locating the bore head: the *walk-over* locating system, the *wire-line* locating system and gyro-guided drilling, where a full inertial navigation system is located close to the drill head. In the first system, a sonde, or transmitter, behind the bore head registers angle, rotation, direction, and temperature data. This information is encoded into an electro-magnetic signal and transmitted through the ground to the surface in a walk-over system. At the surface, a receiver (usually a hand-held *locator*) is manually positioned over the sonde, the signal is decoded, and steering directions are relayed to the bore machine operator. The wire-line system is a Magnetic Guidance System. With a Magnetic Guidance System (MGS), the tool reads Inclination and Azimuth. The MGS, also has a secondary means of location verification utilizing wire grids laid on the ground surface. It is the only system that has the capability of verifying the location. This information is transmitted through the wire-line fitted within the drill string. At the surface, the Navigator in the drill cab performs the necessary calculations to confirm the parameters have been met. The MGS even without the use of the wire grid, has been accurate over a distance of 2km to within 1.5m. The gyro-based system is fully autonomously working and therefore one of the most accurate system where sufficient diameter (200mm) is available and where long distances (up to 2km) have to be performed with small deviation (less than 1m position error). All three systems have their own merits, and a particular system is chosen depending upon the site requirements.

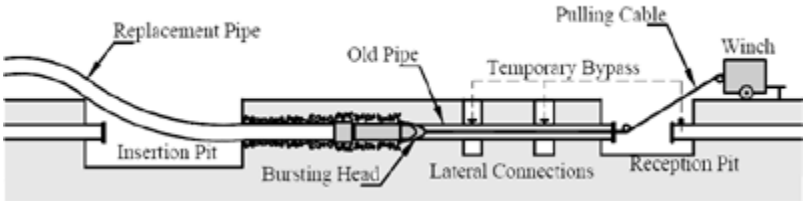
A directional boring unit in action.

Starting pit with pilot hole and some drilling fluid in the pit.

References (from Wikipedia)

- Willoughby, David (2005). *Horizontal Directional Drilling*, p. 1-263. Mcgraw-Hill, New York. ISBN 0-07-145473-X.
- Short, Jim (1993). *Introduction to Directional and Horizontal Drilling*, p. 1-222. PennWell Books, Tulsa, Oklahoma. ISBN 0-87814-395-5.
- v. Hinueber, Edgar (iMAR Navigation) (2006). *Most accurate drilling guidance by dead-reckoning using high precision optical gyroscopes*, Proceedings NoDig Conference of Horizontal Directional Drilling, Brisbane 2006.

PIPE BURSTING



Pipe replacement by pipe bursting

Pipe bursting is a trenchless method of replacing buried pipelines (such as sewer, water, or natural gas pipes) without the need for a traditional construction trench. "Launching and receiving pits" replace the trench needed by conventional pipe-laying.

There are five key pieces of equipment used in a pipe-bursting operation: the expander head, pulling rods, a pulling machine, a retaining device, and a hydraulic power pack.

Today's expander heads have a leading end much smaller in diameter than the trailing (bursting) end, small enough to fit through the pipe that will be replaced. The smaller leading end is designed to guide the expander head through the existing pipe; earlier models did not have this feature and lost course at times, resulting in incomplete pipe bursts and project failures.

The transition from the leading end to the trailing end can include "fins" that make first contact with the existing pipe. Using these fins as the primary breaking point is a very effective way to ensure that the pipe is broken along the entire circumference.

A machine is set in the receiving pit to pull the expander head and new pipe into the line. The head is pulled by heavy, interlocking links that form a chain. Each link weighs several hundred pounds.

All of the equipment used in a pipe-bursting operation is powered by one or multiple hydraulic power generators.

Pipe-bursting may also be used to expand pipeline carrying capacity by replacing smaller pipes with larger ones, or "upsizing." Extensive proving work by the gas and water industries has demonstrated the feasibility of upsizing gas mains, water mains and sewers. Upsizing from 100mm to 225mm diameter is now well established, and pipes of up to 900mm [1]diameter and greater have been replaced.

References (From Wikipedia): B. W. LaMay, P.E., R. E. Hutchinson, P.E., and V. H. Herrera, P.E. (2010). *Pipe Bursting Repair of the City of Tallahassee: Capital Circle 36-Inch Hobas Force Main*. American Society of Civil Engineers. http://cedb.asce.org/cgi/WWWdisplay.cgi?268408.

SLIPLINING

Sliplining is one of the oldest methods for trenchless rehabilitation of existing pipelines. Sliplining is used to repair leaks or restore structural stability to an existing pipeline. Sliplining is completed by installing a smaller, "carrier pipe" into a larger "host pipe", grouting the annular space between the two pipes, and sealing the ends. Sliplining has been used since the 1940s.[1] The most common material used to slipline an existing pipe is high density polyethylene (HDPE), but fiberglass reinforced pipe (FRP) and PVC are also common.[2] Sliplining can be used to stop infiltration and restore structural integrity to an existing pipe. The most common size is 0.20m - 1.5m (8"-60"), but sliplining can occur in any size given appropriate conditions.

There are two methods used to install a slipline: continuous and segmental.

Continuous sliplining uses a long continuous pipe, such as HDPE or fusible PVC, that can be welded into continuous pieces of any length. The continuous carrier pipe is pulled through the existing host pipe starting at an insertion pit and continuing to a receiving pit. Either the insertion pit, the receiving pit, or both can be manholes or other existing access points if the size and material of the new carrier pipe can maneuver through the existing facilities.

Segmental sliplining is very similar to continuous sliplining. The difference is primarily based on the pipe material used as the new carrier pipe. When using any bell and spigot pipe such as FRP, PVC, or HDPE the individual pieces of pipe are lowered into place, pushed together, and pushed along the existing pipe corridor.

Using either method the annular space between the two pipes must be grouted. In the case of sanitary sewer lines, the service laterals must be reconnected via open-trench excavation.

Sliplining is generally a very cost effective rehabilitation method. It is also very easy to install and requires tools and equipment widely available to any pipeline contractor. Segmental sliplining may not require bypassing of the existing flow. However, the new pipe will generally have a significantly reduced cross sectional area because of the size difference between the inside diameter of the existing pipe and the outside diameter of the new pipe, as well as the wall thickness of the new pipe. Continuous sliplining generally requires bypassing the existing flow.

References (from Wikipedia):
Mohammed Najafi, PhD, PE and Sanjov Gokhale, PhD, PE, Trenchless Technology (New York: McGraw Hill, 2004), p. 295-311. Available from Water Environment Federation at http://www.e-wef.org/timssnet/static/OM/WPM404.htm
Mohammed Najafi, PhD, PE and Sanjov Gokhale, PhD, PE, Trenchless Technology (New York: McGraw Hill, 2004), p. 295-311. Available from Water Environment Federation at http://www.e-wef.org/timssnet/static/OM/WPM404.htm
Center for Underground Infrastructure Research and Education CUIRE, Mohammed Najafi, PhD, PE and Sanjov Gokhale, PhD, PE, Trenchless Technology (New York: McGraw Hill, 2004), p. 295-311. Available from Water Environment Federation at http://www.e-wef.org/timssnet/static/OM/WPM404.htm

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