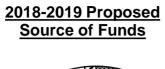
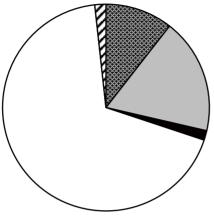
## SANITARY SEWER SYSTEM 2019-2023 Capital Improvement Program



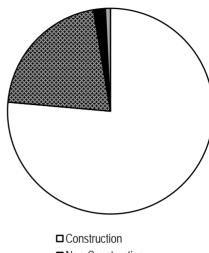


**□** Other Government Agencies

□ Loans & Transfers

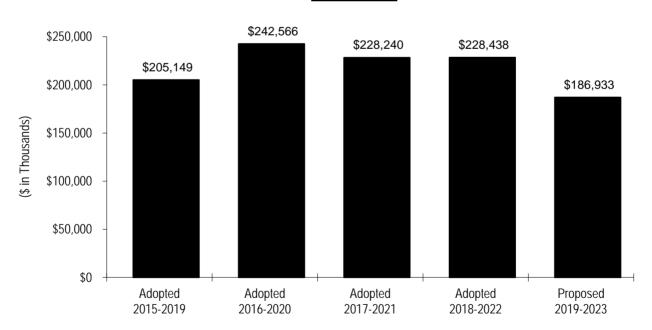
- Beginning Fund Balance
- Taxes, Fees and Charges
- Interest

#### 2018-2019 Proposed Use of Funds



- Non-Construction
- Ending Fund Balance
- Loans & Transfers

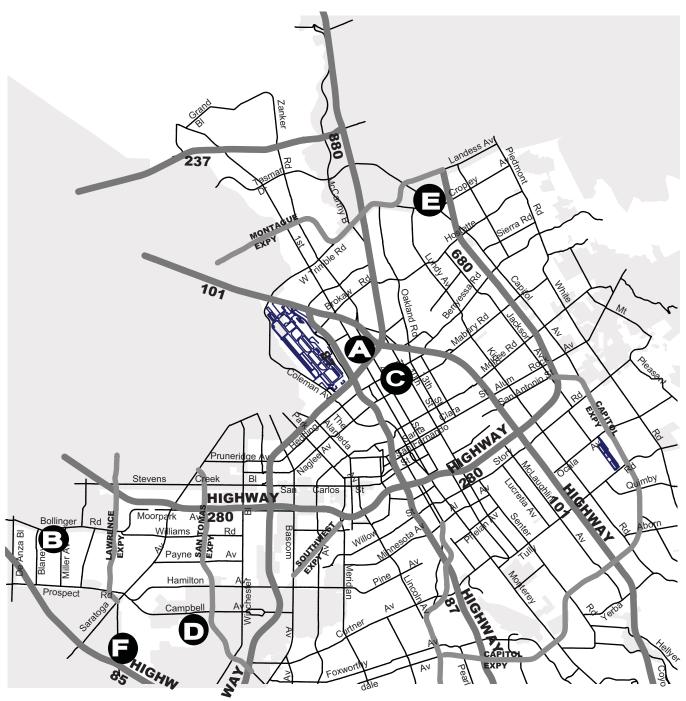
#### **CIP History**





#### 2019-2023 Proposed Capital Improvement Program

- **A)** 60" Brick Interceptor, Phase VIA and VIB
- **B)** Bollinger Rd. Moorpark Ave. Williams Rd. Sanitary Sewer Imp.
- **C)** Fourth Major Interceptor, Phase VIIA
- **D)** Rincon Ave. Virginia Ave. Sanitary Sewer Imp.
- **E)** Trimble Rd. and Capewood Ln. Sanitary Sewer Imp.
- **F)** Westmont Ave. and Harriet Ave. Sanitary Sewer Imp.





#### 2019-2023 Proposed Capital Improvement Program

#### Overview

#### INTRODUCTION

The Sanitary Sewer System of the City of San José consists of approximately 2,030<sup>1</sup> miles of sewer mains ranging in diameter from 6 to 90 inches. The system serves the City, as well as several other jurisdictions, including West Valley Sanitation District (WVSD), City of Santa Clara, County Sanitation Districts 2-3, and Burbank Sanitation District, and conveys sewage to the San José-Santa Clara Regional Wastewater Facility (RWF). The replacement value of the system is estimated at approximately \$3.5 billion.

SANITARY SEWER SYST PUBLIC INFRASTRUCT	
MILES OF SEWER MAINS 6" TO 8" in diameter 10" TO 12" in diameter OVER 12" in diameter	1,580 200 250
NUMBER OF MANHOLES	45,000
NUMBER OF PUMP STATIONS	18

The 2019-2023 Proposed Capital Improvement Program (CIP) provides funding of \$186.9 million, of which \$46.9 million is allocated in 2018-2019. This program is part of the Environmental and Utility Services City Service Area (CSA) and supports the following outcome: Reliable Utility Infrastructure.

#### PROGRAM PRIORITIES AND OBJECTIVES

The 2019-2023 Proposed Sanitary Sewer System CIP supports the priorities and objectives of the Environmental and Utility Services CSA by maintaining the following strategic priorities:

- Ensure adequate capacity within the system and to reduce Sanitary Sewer Overflows (SSOs);
- Support the goal of preventing SSOs by providing sufficient system capacity and maintaining system structure integrity;
- Manage system capacity, assess the system's condition, and construct sewer improvement projects;
- Improve sewer capacity in substantially built-out areas and less-developed areas to accommodate economic development; and
- Rehabilitate existing sewers with a higher priority given to those with extensive, severe deterioration.

The Sanitary Sewer System CIP is guided by several interrelated plans, and chief among them is the Envision San José 2040 General Plan (General Plan). The General Plan provides a guide for all capital improvement programs to align public infrastructure investment with San José's plans for future growth. This means that the projects included in the Sanitary Sewer System CIP ensure adequate sewer capacity and reliability to safely convey sewage city-wide, as well as within those areas designated for future development. The land uses and growth included in the General Plan were also used in the development of the Sanitary Sewer Master Plan that was completed in early 2013.

<sup>&</sup>lt;sup>1</sup> Total length was updated in 2016 based on the latest GIS data to exclude sewer mains that were abandoned or owned by adjacent agencies or private developers.

#### 2019-2023 Proposed Capital Improvement Program

Overview

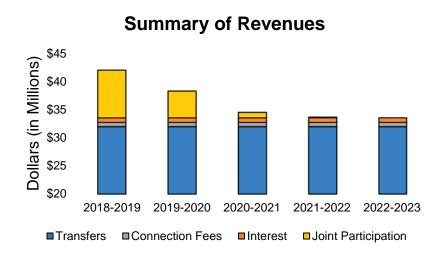
#### PROGRAM PRIORITIES AND OBJECTIVES

The Master Plan helped identify and address trunk sewer capacity deficiencies in the existing system and forecast additional capacity-enhancing projects required to meet future demands in the context of the General Plan.

As identified in the Status Report on Deferred Maintenance and Infrastructure Backlog accepted by City Council on March 6, 2018, the Sanitary Sewer Collection System has estimated unfunded needs of approximately \$1.5 million per year. With this remaining backlog, the City will continue to evaluate staffing levels and resources and overall strategic capital improvement priorities at both the RWF and the sanitary collection system to address the remaining unfunded needs in the future.

#### **SOURCES OF FUNDING**

The 2019-2023 Proposed CIP provides funding of \$186.9 million, of which \$46.9 million is allocated in 2018-2019. The program funding level decreased by \$41.5 million from \$228.4 million in the 2018-2022 Adopted CIP, mainly due to the award and completion of several multi-million dollar projects in 2017-2018. Revenue for this CIP is derived from the following sources: transfers from the Sewer Service and Use Charge (SSUC) Fund, Sanitary Sewer Connection Fees, and "Joint Participation" contributions from other jurisdictions served by the Sanitary Sewer System for the use of San José sewer lines. Among these revenues, the SSUC Fund transfer continues to be the primary funding source for the program.



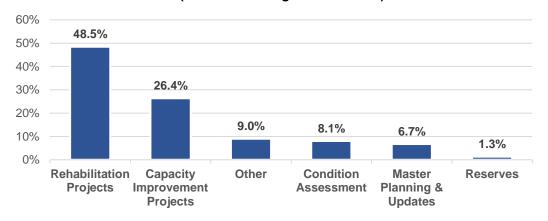
#### **PROGRAM HIGHLIGHTS**

The Sanitary Sewer System Capital Program's expenditures are organized to show the use of funds in several categories. The following highlights the major projects in the program. For further information on the program's individual projects, please refer to the Detail Pages.

#### 2019-2023 Proposed Capital Improvement Program

Overview

#### 2019-2023 Sanitary Sewer System Capital Program Expenditures \$185.7 million (excludes Ending Fund Balance)



#### <u>Capacity Improvement and Rehabilitation – North San José Interceptors</u>

For the North San José Interceptor System, funding totaling \$9.0 million is programmed in this Proposed CIP for the construction of the 60" Brick Interceptor, Phase VIA (\$3.5 million) and the award of the Fourth Major Interceptor Phase VIIA (\$5.5 million) in 2019-2020. The North San José Interceptor System is a collection of very large sanitary sewer pipes with diameters ranging from 54 to 90 inches. In general, an interceptor can be defined as a large pipe built by the City to serve as the primary sewage collector. Interceptors carry flows from the sub-collector sewers in the drainage basin to the point of treatment or disposal of the wastewater. The North San José Interceptor System Master Plan, originally drafted in 1986, was updated in 2002 and includes an assessment of the hydraulic condition of the large sewers, a determination of the level of corrosion in the pipelines, and validated capacity of the system. The final recommendations for programmed rehabilitation and construction of new sewer interceptors have been incorporated into the 2019-2023 Proposed CIP and will be referred to in the preparation of subsequent CIPs. Capital improvements to the interceptor system consist of large interrelated projects that must be staged in a specified sequence for logical construction of the system.

Presently, the City has three major sewer interceptors in the North San José Interceptor System that originate at the intersection of Seventh and Empire Streets and continue northward to the RWF, mostly along the full length of Zanker Road. The multi-phased fourth major interceptor is currently under construction; five out of seven phases have been completed. The 60" Brick Interceptor, Phase VIA is scheduled to start construction in 2017-2018. The scope and costs for Phase VIB will be determined after Phase VIA is complete. The Forth Major Interceptor, Phase VII is scheduled to begin design in 2018-2019. Once completed, this project will allow one of the three older interceptors to be removed from service during dry weather periods for the purpose of routine maintenance or rehabilitation. Such flexibility is important and currently not available in all reaches of the system.

#### 2019-2023 Proposed Capital Improvement Program

#### Overview

#### **PROGRAM HIGHLIGHTS**

#### <u>Capacity Improvement – Other Projects</u>

Funding totaling \$40.0 million, is programmed in this Proposed CIP to improve capacity of the Sanitary Sewer system. These capacity improvement projects are selected using a computerized sewer flow model (which uses the General Plan to project sewage flows in the system), City maintenance records, and flow monitoring to identify sewer capacity constraints. When combined with the North San José Interceptor projects described above, capacity improvement projects total \$49.0 million.

#### Rehabilitation - Other Projects

Funding totaling \$90.0 million is programmed for sewer rehabilitation and/or replacement in other areas of the City, mostly targeted toward older neighborhoods facing structural deterioration or changes in sewage flow patterns. Rehabilitation projects are selected based on hydrogen sulfide studies that analyze pipe corrosion, condition assessment studies, video inspections, maintenance records and reports, and actual pipe failures, whether due to pipe corrosion or other physical deficiencies. This funding also is used to support the newly developed Exfiltration Abatement Program to search for and repair any damages on existing sewer mains to prevent leakage to adjacent storm sewer mains.



Williams Rd – Moorpark Ave Sanitary Sewer Improvement

#### Other Project Highlights

The Master Planning Program actively monitors and manages sewer system capacity needs using a computerized hydraulic model of the San José sewer system, supported by sewer flow

monitoring that collects flow data at strategic locations within the system. The Master Planning Program continues to enhance the accuracy of the computerized model by incorporating land use changes and updated sewer and flow data. The Master Planning Program also supports economic development in the City by providing sewer capacity review and planning using the models.

The Sanitary Sewer Condition Assessment Program, initiated in 2009, is an ongoing program to assess the structural integrity of the collection system including pipes, force mains, manholes, junction structures, and pump stations. Data collected through visual and closed circuit television inspection and as-built information will be reviewed, analyzed, and prioritized based on a risk analysis approach using information such as pipe size, location, design flow, physical conditions, and maintenance histories. With this information, rehabilitation budgets and preventive maintenance and improvement programs can be planned and prioritized.

#### 2019-2023 Proposed Capital Improvement Program

Overview

#### MAJOR CHANGES FROM THE 2018-2022 ADOPTED CIP

The overall size of the Sanitary Sewer System CIP has decreased by \$41.5 million from \$228.4 million in the 2018-2022 Adopted CIP to \$186.9 million in the 2019-2023 Proposed CIP, mainly due to the award and completion of several multi-million dollar projects in 2017-2018, including the 60" Brick Intercpetor, Phase VIA and VIB project, which has \$42.4 million allocated in 2017-2018. The following table outlines the most significant changes to project budgets, including new/augmented allocations and reduced/eliminated allocations.

Project	Incr/(Decr)
Rincon Avenue – Virginia Avenue Sanitary Sewer Improvements	\$1.7 million
Westmont Avenue and Harriet Avenue Sanitary Sewer Improvements	\$1.5 million
60" Brick Interceptor, Phase VIA and VIB	(\$26.5 million)
Urgent Rehabilitation and Repair Projects	(\$3.5 million)
Immediate Replacement and Diversion Projects	(\$2.2 million)

#### **OPERATING BUDGET IMPACT**

All the projects in the Proposed Sanitary Sewer System CIP rehabilitate or replace existing sewers in order to avoid possible future maintenance costs and therefore do not incur additional long-term operating and maintenance costs.



## 2018-2019 CAPITAL BUDGET

## 2019-2023 CAPITAL IMPROVEMENT PROGRAM

# SANITARY SEWER SYSTEM

Source and Use of Funds Statements

### V-49

## Sanitary Sewer System

## 2019-2023 Proposed Capital Improvement Program

## **Source of Funds (Combined)**

	Estimated <u>2017-2018</u>	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
Sewer Service and Use Charge Capital Improvement Fund (545)							
Beginning Balance	52,878,254	3,230,888	402,888	1,150,888	186,888	475,888	3,230,888
Reserve for Encumbrance	32,107,587						
Transfers Transfer from the Sewer Service and Use Charge Fund (541) TOTAL Transfers	32,000,000 <b>32,000,000</b>	32,000,000 <b>32,000,000</b>	32,000,000 <b>32,000,000</b>	32,000,000 <b>32,000,000</b>	32,000,000 <b>32,000,000</b>	32,000,000 <b>32,000,000</b>	160,000,000 <b>160,000,000</b>
Revenue from Use of Money and Property Interest Income TOTAL Revenue from Use of Money and Property	531,000 <b>531,000</b>	749,000 <b>749,000</b>	754,000 <b>754,000</b>	759,000 <b>759,000</b>	764,000 <b>764,000</b>	769,000 <b>769,000</b>	3,795,000 <b>3,795,000</b>
Revenue from Local Agencies Sanitary Sewer Joint Participation- TOTAL Revenue from Local Agencies	725,000 <b>725,000</b>	8,370,000 <b>8,370,000</b>	4,658,000 <b>4,658,000</b>	870,000 <b>870,000</b>			13,898,000 <b>13,898,000</b>
Total Sewer Service and Use Charge Capital Improvement Fund (545)	118,241,841	44,349,888	37,814,888	34,779,888	32,950,888	33,244,888	180,923,888
Sanitary Sewer Connection Fee Fund (540)							
Beginning Balance	3,322,752	1,729,997	447,997	478,997	510,997	543,997	1,729,997
Reserve for Encumbrance	1,283,090						

#### V-50

## Sanitary Sewer System

## 2019-2023 Proposed Capital Improvement Program

## **Source of Funds (Combined)**

	Estimated <b>2017-2018</b>	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
Revenue from Use of Money and Property							
Interest Income	67,000	68,000	69,000	70,000	71,000	72,000	350,000
TOTAL Revenue from Use of Money and Property	67,000	68,000	69,000	70,000	71,000	72,000	350,000
Revenue from Local Agencies							
Sanitary Sewer Joint Participation-	110,000	110,000	110,000	110,000	110,000		440,000
TOTAL Revenue from Local Agencies	110,000	110,000	110,000	110,000	110,000		440,000
Fees, Rates and Charges							
Sanitary Sewer Connection Fees	700,000	700,000	700,000	700,000	700,000	700,000	3,500,000
TOTAL Fees, Rates and Charges	700,000	700,000	700,000	700,000	700,000	700,000	3,500,000
Total Sanitary Sewer Connection Fee Fund (540)	5,482,842	2,607,997	1,326,997	1,358,997	1,391,997	1,315,997	6,019,997
TOTAL SOURCES	123,724,683	46,957,886	39,141,886	36,138,886	34,342,886	34,560,886	186,943,886

### 2019-2023 Proposed Capital Improvement Program

**Use of Funds (Combined)** 

		03E 01 1	ulius (C	Ullibilieu			
	Estimated 2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
Sanitary Sewer System							
2017 Flood - Nordale Pump Station Flood Wall	427,000						
30 inch Old Bayshore Supplement	1,677,663						
60 inch Brick Interceptor, Phase VIA and VIB	42,432,274	1,624,000	1,882,000	24,000			3,530,000
Bollinger Road - Moorpark Avenue - Williams Road Sanitary Sewer Improvements	522,223	7,672,000	283,000	27,000			7,982,000
Capitol Avenue Sanitary Sewer Improvements	703,062						
Coleman Road Sanitary Sewer Improvements	354,002						
Fourth Major Interceptor, Phase VIIA		500,000	5,000,000				5,500,000
Immediate Replacement and Diversion Projects	11,114,232	3,700,000	5,400,000	5,400,000	5,900,000	5,900,000	26,300,000
Monterey-Riverside Relief Sanitary Sewer Improvements	674,000						
Rincon Avenue - Virginia Avenue Sanitary Sewer Improvements	4,418,000	701,000					701,000
Stevens Creek Boulevard Sanitary Sewer Improvements	562,000						
Trimble Road and Capewood Lane Sanitary Sewer Improvements	4,975,890	18,000					18,000
Westmont Avenue and Harriet Avenue Sanitary Sewer Improvements	561,000	4,545,000	466,000				5,011,000
Capacity Improvement Projects	68,421,346	18,760,000	13,031,000	5,451,000	5,900,000	5,900,000	49,042,000
Almaden Supplement Sewer Rehabilitation (North)				2,730,000	400,000		3,130,000
Cast Iron Pipe - Remove and Replace	7,004,546	4,500,000	4,500,000	5,000,000	5,000,000	5,000,000	24,000,000
Condition Assessment Sewer Repairs	12,077,316	5,500,000	5,500,000	6,000,000	6,000,000	6,000,000	29,000,000
Fourth Major Interceptor, Phase IIB/IIIB	706,000						
Inflow and Infiltration Reduction	285,608	200,000	200,000	200,000	200,000	200,000	1,000,000

### 2019-2023 Proposed Capital Improvement Program

**Use of Funds (Combined)** 

	036 01 1	ullus (O	ombined			
Estimated						
2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
4,957,242	575,000	320,000	16,000			911,000
500,142	500,000	500,000	500,000	500,000	500,000	2,500,000
282,381						
11,542,572	4,000,000	4,500,000	7,000,000	7,000,000	7,000,000	29,500,000
37,355,807	15,275,000	15,520,000	21,446,000	19,100,000	18,700,000	90,041,000
105,777,153	34,035,000	28,551,000	26,897,000	25,000,000	24,600,000	139,083,000
84,000	84,000	85,000	85,000	85,000	85,000	424,000
1,331,961	925,000	880,000	880,000	880,000	900,000	4,465,000
5,630,728	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000
1,572,956	1,965,000	1,700,000	1,500,000	1,400,000	1,500,000	8,065,000
10,000	10,000	10,000	10,000	10,000	10,000	50,000
25,000	25,000	25,000	25,000	25,000	25,000	125,000
950,000	950,000	950,000	950,000	950,000	950,000	4,750,000
	300,000	300,000				1,500,000
40,000	40,000	40,000	40,000	40,000	40,000	200,000
9,944,645	7,299,000	6,990,000	6,790,000	6,690,000	6,810,000	34,579,000
9,944,645	7,299,000	6,990,000	6,790,000	6,690,000	6,810,000	34,579,000
1,170,000	172,000	127,000	50,000	55,000	55,000	459,000
1,170,000	172,000	127,000	50,000	55,000	55,000	459,000
1,512,000	1,820,000	1,458,000	1,316,000	1,188,000	1,188,000	6,970,000
33,000	34,000	36,000	38,000	40,000	42,000	190,000
1,545,000	1,854,000	1,494,000	1,354,000	1,228,000	1,230,000	7,160,000
327,000	347,000	350,000	350,000	350,000	350,000	1,747,000
327,000 327,000	347,000 347,000	350,000 350,000	350,000 350,000	350,000 350,000	350,000 350,000	1,747,000 1,747,000
	2017-2018 4,957,242 500,142 282,381 11,542,572 37,355,807 105,777,153 84,000 1,331,961 5,630,728 1,572,956 10,000 25,000 950,000 300,000 40,000 40,000 9,944,645 1,170,000 1,170,000 1,512,000 33,000 1,545,000 327,000	Estimated         2017-2018         2018-2019           4,957,242         575,000           500,142         500,000           282,381         11,542,572         4,000,000           37,355,807         15,275,000           105,777,153         34,035,000           84,000         84,000           1,331,961         925,000           5,630,728         3,000,000           1,572,956         1,965,000           10,000         10,000           25,000         950,000           300,000         300,000           40,000         40,000           9,944,645         7,299,000           1,170,000         172,000           1,512,000         1,820,000           33,000         34,000           1,545,000         347,000           327,000         347,000	Estimated 2017-2018         2018-2019         2019-2020           4,957,242         575,000         320,000           500,142         500,000         500,000           282,381         11,542,572         4,000,000         4,500,000           37,355,807         15,275,000         15,520,000           105,777,153         34,035,000         28,551,000           84,000         84,000         85,000           1,331,961         925,000         880,000           5,630,728         3,000,000         3,000,000           10,000         10,000         10,000           25,000         25,000         25,000           950,000         950,000         950,000           300,000         300,000         300,000           40,000         40,000         40,000           40,000         40,000         40,000           9,944,645         7,299,000         6,990,000           1,170,000         172,000         127,000           1,512,000         1,820,000         1,458,000           33,000         34,000         36,000           1,545,000         1,854,000         1,494,000           327,000         347,000         350,000	Estimated 2017-2018         2018-2019         2019-2020         2020-2021           4,957,242         575,000         320,000         16,000           500,142         500,000         500,000         500,000           282,381	2017-2018         2018-2019         2019-2020         2020-2021         2021-2022           4,957,242         575,000         320,000         16,000           500,142         500,000         500,000         500,000         500,000           282,381         11,542,572         4,000,000         4,500,000         7,000,000         7,000,000           37,355,807         15,275,000         15,520,000         21,446,000         19,100,000           84,000         84,000         85,000         85,000         85,000           84,000         84,000         85,000         85,000         880,000           1,331,961         925,000         880,000         880,000         3,000,000           1,572,956         1,965,000         1,700,000         1,500,000         1,400,000           10,000         10,000         10,000         10,000         10,000         10,000           25,000         25,000         25,000         25,000         25,000         25,000           950,000         950,000         950,000         950,000         950,000         950,000           9,944,645         7,299,000         6,990,000         6,790,000         6,690,000           1,170,000         172,000 </td <td>Estimated 2017-2018         2018-2019         2019-2020         2020-2021         2021-2022         2022-2023           4,957,242         575,000         320,000         16,000         500,000         7,000,000         7,000,000         7,000,000         7,000,000         7,000,000         7,000,000         7,000,000         18,700,000         18,700,000         18,700,000         18,700,000         25,0</td>	Estimated 2017-2018         2018-2019         2019-2020         2020-2021         2021-2022         2022-2023           4,957,242         575,000         320,000         16,000         500,000         7,000,000         7,000,000         7,000,000         7,000,000         7,000,000         7,000,000         7,000,000         18,700,000         18,700,000         18,700,000         18,700,000         25,0

### 2019-2023 Proposed Capital Improvement Program

## **Use of Funds (Combined)**

TOTAL	123,724,683	46,957,886	39,141,886	36,138,886	34,342,886	34,560,886	186,943,886
Ending Fund Balance	4,960,886	850,886	1,629,886	697,886	1,019,886	1,515,886	1,515,886
Total Expenditures	118,763,797	46,107,000	37,512,000	35,441,000	33,323,000	33,045,000	185,428,000
Expense Reserves - Non Construction		2,400,000					2,400,000
Montague Sanitary Sewer Pump Station Reserve	2017-2018	<b>2018-2019</b> 2,400,000	2019-2020	2020-2021	2021-2022	2022-2023	<b>5-Year Total</b> 2,400,000
	Estimated						



## 2018-2019 CAPITAL BUDGET

## 2019-2023 CAPITAL IMPROVEMENT PROGRAM

# SANITARY SEWER SYSTEM

**D**ETAIL OF **P**ROJECTS

2019-2023 Proposed Capital Improvement Program

#### **Detail of One-Time Construction Projects**

#### 60 inch Brick Interceptor, Phase VIA and VIB

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2009
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2013

Department Public Works Revised Start Date

Location5th and Commercial Streets to Zanker Road and Old Bayshore HighwayRevised End Date2nd Qtr. 2021Council Districts3Initial Project Budget\$10,442,000AppropriationA4969FY Initiated1991-1992

**Description**This project replaces approximately 5,000 linear feet of existing 54-inch reinforced concrete sanitary sewer with an 84-inch lined reinforced concrete pipe. This CIP only provides funding to complete Phase VIA. Phase VIB will rehabilitate

the existing 60-inch brick sewer after the completion of Phase VIA.

**Justification** Based on the North San José Interceptor Study, this portion of the interceptor system requires additional capacity to

serve the ultimate build out of the City.

Notes The FY Initiated date and Initial Project Budget shown above refer to Phase IIIA, IVB, and VIB of the project.

The costs for Phase VIB will be determined after Phase VIA is completed to determine the scope of Phase VIB. The start and completion dates above refer to Phase VIA. The prior year funding shown in the chart below includes earlier

phases of this project.

Major Cost Changes Prior to 2010-2011 - Increase of \$65.3 million due to changes in scope, construction costs, and additional project phases. 2011-2015 CIP - Decrease of \$19.7 million due to scope refinement. 2012-2016 CIP - Increase of \$17.7 million due to scope changes and cost estimate updates. 2014-2018 CIP - Decrease of \$6.3 million due to scope changes. 2015-2019 CIP - Decrease of \$1.2 million due to relocation of utilities on Fourth Street by the utility companies and cost adjustment by design consultant. 2016-2020 CIP - Increase of \$2.2 million due to scope change and cost estimate updates. 2017-2021 CIP - Decrease of \$392,000 due to scope change. 2019-2023 CIP - Increase of \$15.2 million after further analysis and review with design-build contractor.

	PRIOR	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR	BEYOND	<b>PROJECT</b>
	YEARS	EST						TOTAL	<b>5 YEARS</b>	TOTAL
			Expenditu	ure Sched	dule (000s	)				
Project Feasibility Development	63					•				63
Design	4,589	500								5,089
Bid & Award	10									10
Construction	32,932	41,932	1,624	1,882				3,506		78,370
Post Construction	9				24			24		33
Total	37,603	42,432	1,624	1,882	24			3,530		83,566

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	37,417	42,432	1,624	1,882	24	3,530	83,380	
Sanitary Sewer Connection Fee Fund (540)	186						186	
Total	37,603	42,432	1,624	1,882	24	3,530	83,566	

Annual	Operating	<b>Budget</b>	Impact	(000s)

Total

2019-2023 Proposed Capital Improvement Program

#### **Detail of One-Time Construction Projects**

#### **Bollinger Road - Moorpark Avenue - Williams Road Sanitary Sewer**

CSA	Environmental and Othity Services	Initial Start Date	3rd Qtr. 2012
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2015
		illiliai Ellu Dale	2110 Qtt. 2015

Department Public Works Revised Start Date

Location Blaney Ave, Bollinger Rd, Moorpark Ave, and Williams Rd to Saratoga Ave
Revised Start Date

Council Districts 1 Initial Project Budget \$5,404,000
Appropriation A7478

Appropriation A7478 FY Initiated 2012-2013

**Description**The project includes the capacity upgrade of approximately 17,000 feet of sanitary sewer mains. The project will be completed in two phases. The first phase is at Moorpark Avenue from Lawrence Expressway to Williams Road and

along Williams Road to Saratoga Avenue. The second phase is at Bollinger Road from Blaney Avenue to Lawrence

2nd Qtr. 2021

Expressway.

**Justification** This project will provide additional capacity to the Forest-Rosa Basin as identified in the Sanitary Sewer Master Plan

Capacity Assessment Phase I and Phase I - Update.

Notes CEQA Project: FSR-7 - Bollinger Road - Blaney Avenue Sanitary Sewer Improvements. Phase 1 construction was

completed in 2016-2017, while Phase 2 construction is anticipated to begin in 2018-2019 and was held up due to a

paving moratorium delay.

Major Cost 2014-2018 CIP - Increase of \$2.7 million due to change in scope to include an additional 6,000 feet of sanitary sewer mains along Williams Road.

2015-2019 CIP - Decrease of \$6.8 million due to a moratorium on trench work.

2016-2020 CIP - Increase of \$3.1 million due to project schedule change.

2017-2021 CIP - Increase of \$8.9 million due to project re-scope to include an additional project phase.

	PRIOR	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR	<b>BEYOND</b>	<b>PROJECT</b>
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sched	dule (000s	5)				
Project Feasibility										_
Development	26									26
Design	491		116					116		607
Bid & Award	7		63					63		70
Construction	3,382	522	7,493	283				7,776		11,680
Post Construction					27			27		27
Total	3,906	522	7,672	283	27			7,982		12,411

		Fu	ınding Soı	urce Sche	dule (000s)		
Sewer Service and Use Charge Capital Improvement Fund (545)	3,341	522	7,000	283	27	7,310	11,174
Sanitary Sewer Connection Fee Fund (540)	565		672			672	1,237
Total	3,906	522	7,672	283	27	7,982	12,411

	Annual Operating Budget Impact (000s)
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of One-Time Construction Projects**

#### Fourth Major Interceptor, Phase VIIA

CSAEnvironmental and Utility ServicesInitial Start Date3rd Qtr. 2018CSA OutcomeReliable Utility InfrastructureInitial End Date2nd Qtr. 2020

Department Public Works Revised Start Date

North 5th Street/Commercial Street and North 7th Street/Empire Street

Revised Start Date

**Location** North 5th Street/Commercial Street and North 7th Street/Empire Street Revised End Date

Council Districts3Initial Project Budget\$5,500,000AppropriationTEMP\_312FY Initiated2013-2014

Description This project will install approximately 7,200 linear feet of 66-inch reinforced concrete pipe. Completion of the Phase VIIA

project will conclude capacity improvements for the Fourth Major Interceptor system between the intersections of North

5th Street and Commercial Street, and North 7th Street and Empire Street.

**Justification** The Fourth Major Interceptor is required for capacity, in addition to maintenance redundancy for the other three existing

interceptors.

**Notes** 

Major Cost Changes

	PRIOR	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
Expenditure Schedule (000s)										
Design			500	5,000				5,500		5,500
Total			500	5,000				5,500		5,500

	Funding So	urce Schedule (000s)		
Sewer Service and Use Charge Capital	500	5.000	5 500	5 <b>5</b> 00
Improvement Fund (545)	500	5,000	5,500	5,500
Total	500	5,000	5,500	5,500

Annual Operati	ng Budget Impact (000s)
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of One-Time Construction Projects**

#### Rincon Avenue - Virginia Avenue Sanitary Sewer Improvements

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2012
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2014
Department	Public Works	Revised Start Date	3rd Qtr. 2017
Location	Rincon Avenue, Virginia Avenue, Middleton Drive, and Twyla Lane		
Council Districts	•	Revised End Date	2nd Qtr. 2019
Appropriation	A7474	Initial Project Budget	\$3,529,000
Appropriation		FY Initiated	2012-2013

This project upsizes approximately 5,060 feet of 6-inch, 8-inch, and 10-inch sanitary sewer pipes along Campbell Avenue from San Tomas Expressway to Virginia Avenue, along Virginia Avenue from Campbell Avenue to Rincon Avenue, along Rincon Avenue from Virginia Avenue to Montezuma Drive, along Montezuma Drive from Rincon Avenue to Acapulco Drive, along Acapulco Drive from Montezuma Drive to Middleton Drive, along Middletown Drive from Acapulco Drive to Valerie Drive.

**Justification** This project will provide additional capacity to the Forest-Rosa Basin as identified in the Sanitary Sewer Master Plan Capacity Assessment Phase II and Phase I - Update.

Notes CEQA Project: FSR1 - Rincon Avenue - Virginia Avenue Sanitary Sewer Improvements.

**Major Cost** 2019-2023 CIP - Increase of \$1.7 million due to a change in project scope. **Changes** 

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
	TEARS		Expenditu	ıre Sched	dule (000:	s)		IUIAL	5 TEARS	IOTAL
Bid & Award		11								11
Construction		4,407	686					686		5,093
Post Construction			15					15		15
Total		4,418	701					701		5,119

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	4,418	591	591	5,009				
Sanitary Sewer Connection Fee Fund (540)		110	110	110				
Total	4,418	701	701	5,119				

	Annual Operating Budget Impact (000s)	
Total		·

2019-2023 Proposed Capital Improvement Program

#### **Detail of One-Time Construction Projects**

#### **Trimble Road and Capewood Lane Sanitary Sewer Improvements**

**CSA Environmental and Utility Services** 

Reliable Utility Infrastructure **CSA Outcome** 

Department Public Works

Location Between Treewood Lane and Capitol Avenue

**Council Districts 4** 

Description

Appropriation A7620

**FY Initiated** 2013-2014 This project upsizes approximately 8,200 feet of 8-inch diameter vitrified clay pipe (VCP) sanitary sewer main in the

North San José area along Drywood Lane, Warmwood Lane, Laneview Drive, Morrill Avenue, Amberwood Lane,

Suttergate Way, Sierra Wood Drive, and Trimble Road, between Treewood Lane and Capitol Avenue with 10- and 12-

**Initial Start Date** 

**Initial End Date** 

**Revised Start Date** 

**Revised End Date** 

Initial Project Budget

2nd Qtr. 2014

2nd Qtr. 2016

2nd Qtr. 2019

\$5,233,000

inch diameter VCP.

This project will provide additional capacity of the Trimble-Morrill Basin as identified in the Sanitary Sewer Master Plan **Justification** 

Capacity Assessment Phase II and Phase I - Update.

**Notes** CEQA Project: TRM1 - Trimble Road and Capewood Lane Sanitary Sewer Improvement.

**Major Cost** Changes

	PRIOR	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expendit	ure Sche	dule (000s	s)				
Project Feasibility										
Development	168									168
Design	241									241
Bid & Award	8									8
Construction	4	4,959								4,962
Post Construction		17	18					18		35
Total	420	4,976	18					18		5,414

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund (545)	420	4,603	18		18	5,041			
Sanitary Sewer Connection Fee I (540)	und	373				373			
Total	420	4,976	18		18	5,414			

Annual Operating Budget Impact (000s)	
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of One-Time Construction Projects**

#### **Westmont Avenue and Harriet Avenue Sanitary Sewer Improvements**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure Initial Start Date 2nd Qtr. 2017

Department Public Works Revised Start Date
Location Westmont Ave. Harriet Ave

Location Westmont Ave, Harriet Ave

Revised End Date

Council Districts 1

Appropriation A404A Initial Project Budget \$4,075,000

FY Initiated 2013-2014

**Description** This project will install 6,300 linear feet of new sanitary sewer and a new siphon along Westmont Avenue from San

Tomas Aquino Creek to Harriet Avenue, and along Harriet Avenue from Westmont Avenue to San Tomas Aquino Creek.

Justification This project is required to provide more capacity to meet existing and future demand. Capacity of existing sanitary

sewer system in the area was found to be insufficient to meet existing demand.

Notes CEQA Project - Forest-Rosa 5 - Westmont and Harriet Sanitary Sewer Improvement.

Major Cost Changes 2019-2023 CIP - Increase of \$1.5 million due to a refined project scope and cost estimate.

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL		
Expenditure Schedule (000s)												
Design			204	47				251		251		
Bid & Award			21					21		21		
Construction		561	4,320	397				4,717		5,278		
Post Construction				22				22		22		
Total		561	4,545	466				5,011		5,572		

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund (545)	561	4,425	466	4,891	5,452					
Sanitary Sewer Connection Fee Fund (540)		120		120	120					
Total	561	4,545	466	5,011	5,572					

Annual Operating Budget Impact (000s)	
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Construction Projects**

#### **Cast Iron Pipe - Remove and Replace**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

**Appropriation** A7472

**Initial Start Date** 

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This project removes and replaces cast iron sewer pipes city-wide that are aging or corroded. It is estimated that

between 38,000 to 40,000 feet of cast iron pipe will be replaced over the next five years.

**Justification** 

This project replaces and/or removes the existing aging or corroded cast iron sewer pipes with new pipes, which will improve flow, thereby reducing the frequency of maintenance activity performed by the Department of Transportation.

Notes

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
Project Feasibility Development	50	50	50	50	50	50	250
Design	200	200	200	200	200	200	1,000
Bid & Award	20	20	20	20	20	20	100
Construction	6,735	4,230	4,230	4,730	4,730	4,730	22,650
Total	7,005	4,500	4,500	5,000	5,000	5,000	24,000

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement							_		
Fund (545)	7,005	4,500	4,500	5,000	5,000	5,000	24,000		
Total	7,005	4,500	4,500	5,000	5,000	5,000	24,000		

	Annual Operating Budget Impact (000s)
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Construction Projects**

#### **Condition Assessment Sewer Repairs**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

**Appropriation** A7356

Initial Start Date

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This allocation funds the identification and repair of damaged pipes in the sanitary sewer system, and includes multiple projects each year as they are identified. Areas in which a sanitary sewer overflow would have high consequences will be the focus of these identify-and-repair contracts.

Justification

This allocation is required due to the structural deterioration of aging sewers.

**Notes** 

Total

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
Project Feasibility Development	4	4	4	4	4	4	20
Design	200	200	200	200	200	200	1,000
Bid & Award	10	10	10	10	10	10	50
Construction	11,863	5,286	5,286	5,786	5,786	5,786	27,930
Total	12.077	5.500	5.500	6.000	6.000	6.000	29.000

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund (545)	12,077	5,500	5,500	6,000	6,000	6,000	29,000		
Total	12,077	5,500	5,500	6,000	6,000	6,000	29,000		

Ar	nnual Operating Budget Impact (000s)

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Construction Projects**

#### **Immediate Replacement and Diversion Projects**

**CSA** Environmental and Utility Services

**CSA Outcome** Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

**Appropriation** A4272

Initial Start Date

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This allocation funds immediate needs that arise from Department of Transportation (DOT) maintenance and response activities. DOT identifies areas that require immediate sewer replacement as part of their maintenance activities and in response to sanitary sewer overflows. If replacement of the sewer is not feasible or cost effective, sewage may be rerouted (diverted) by installing a new or supplemental sewer along a different route. If these needs are not addressed in a timely manner, additional operations and maintenance costs will be incurred, and an increased possibility of sanitary sewer overflows will result.

Justification

This allocation is needed to address immediate replacement and supplemental sewer needs.

**Notes** 

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR
	EST						TOTAL
		Expenditure	Schedule (0	00s)			
General Administration						35	35
Project Feasibility							
Development	40	30	35	35	35		135
Design	500	300	400	400	400	400	1,900
Bid & Award	30	10	20	20	20	20	90
Construction	10,544	3,360	4,945	4,945	5,445	5,445	24,140
Total	11,114	3,700	5,400	5,400	5,900	5,900	26,300

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund (545)	9,137	3,000	5,000	5,000	5,500	5,500	24,000		
Sanitary Sewer Connection Fee Fund (540)	1,977	700	400	400	400	400	2,300		
Total	11,114	3,700	5,400	5,400	5,900	5,900	26,300		

Annual Operating	Budget Impact (000s)

Total

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Construction Projects**

#### **Inflow and Infiltration Reduction**

**CSA Environmental and Utility Services** 

Reliable Utility Infrastructure **CSA Outcome** 

Department Public Works Location City-wide Council Districts City-wide

A6444 Appropriation

**Initial Start Date** 

Ongoing

**Initial End Date** 

Ongoing

**Revised Start Date Revised End Date Initial Project Budget** 

Description

This project rehabilitates sanitary sewers and manholes that have groundwater or storm water penetration. The Flow Monitoring Program and maintenance reports from the Department of Transportation identify sewers ranging from 6 inches to 36 inches in diameter in various locations throughout the City that require rehabilitation.

**Justification** 

This allocation reduces groundwater infiltration into the sanitary sewer collection system, thereby reducing the volume of effluent discharged by the San José/Santa Clara Water Pollution Control Plant into the San Francisco Bay.

**Notes** 

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

**Major Cost** Changes

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL			
Expenditure Schedule (000s)										
Construction	286	200	200	200	200	200	1,000			
Total	286	200	200	200	200	200	1.000			

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement	286	200	200	200	200	200	1,000	
Fund (545)	200	200	200	200	200	200	1,000	
Total	286	200	200	200	200	200	1,000	

Annual Operating Budget Impact (000s)	
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Construction Projects**

#### **Rehabilitation of Sanitary Sewer Pump Stations**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

**Department** Public Works

Location City-wide
Council Districts City-wide

**Appropriation** A6527

Initial Start Date

3rd Qtr. 2008

Initial End Date

2nd Qtr. 2009

**Revised Start Date** 

Revised End Date 2nd Qtr. 2019

Initial Project Budget \$500,000

Description

This allocation is used to assess, rehabilitate, and/or replace the mechanical and electrical components of the City's sanitary sewer pump stations and manhole structures. At the start of this project, the average age of the City's sanitary sewer pump stations was approximately 30 years. Electrical and mechanical components should be rehabilitated or replaced at a minimum every 25 years.

**Justification** 

Redesigning and/or replacing aging pump stations will achieve cost savings and enhance the efficiency of the sanitary sewer system.

Notes

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. While this is an ongoing project, funding will be allocated as rehabilitation needs are identified.

Major Cost Changes Prior to 2012-2013 - Increase of \$9.0 million to rehabilitate additional sanitary sewer pump stations. 2013-2017 CIP - Decrease of \$2.9 million because a portion of the work in this project will now be addressed under the new Cast Iron Pipe - Remove and Replace project. 2014-2018 CIP - Increase of \$1.2 million to rehabilitate additional sanitary sewer pump stations. 2016-2020 CIP - Increase of \$890,000 to rehabilitate additional sanitary sewer pump stations. 2017-2021 CIP - Decrease of \$1.4 million due to changes in project scope and the reallocation of \$2.4 million to establish the Montague Sanitary Sewer Pump Station Reserve. 2018-2022 CIP - Increase of \$703,000 to rehabilitate additional sanitary sewer pump stations.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL			
Expenditure Schedule (000s)										
Property & Land		272					272			
Design		13					13			
Bid & Award		26					26			
Construction	4,932	204	320				524			
Post Construction	25	60		16			76			
Total	4,957	575	320	16			911			

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement								
Fund (545)	4,957	575	320	16	911			
Total	4,957	575	320	16	911			

	Annual Operating Budget Impact (000s)
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Construction Projects**

#### **Reinforced Concrete Pipe Rehabilitation Program**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wideAppropriationA7361

Initial Start Date
Initial End Date

Ongoing Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This allocation is used to investigate the structural condition of approximately 70,000 feet of reinforced concrete pipe (RCP) and rehabilitate as necessary. Due to the wide range of lengths, diameters, and locations of RCP throughout the City's sanitary sewer system, projects which may contain multiple construction locations will be developed. This allocation provides the flexibility to develop and construct projects which group locations, pipe lengths, and diameters in a cost effective manner.

Justification

There are approximately 70,000 feet of RCP pipes in the City that may require lining or rehabilitation to prevent them from being corroded. All RCP lines requiring rehabilitation will be repaired or lined as they are identified.

Notes

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL					
	Expenditure Schedule (000s)											
Project Feasibility Development	35	35	35	35	35	35	175					
Design	140	140	140	140	140	140	700					
Bid & Award	5	5	5	5	5	5	25					
Construction	320	320	320	320	320	320	1,600					
Total	500	500	500	500	500	500	2,500					

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	500	500	500	500	500	500	2,500	
Total	500	500	500	500	500	500	2,500	

	Annual Operating Budget Impact (000s)
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Construction Projects**

#### **Urgent Rehabilitation and Repair Projects**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Appropriation A4271

**Initial Start Date** 

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This ongoing allocation is used to investigate, prioritize, and rehabilitate neighborhood sewers that exhibit structural deterioration, root intrusion, and/or blockages. The projects will be developed to respond to the Department of Transportation's ongoing maintenance activities and sewer overflow incidents that are urgent and cannot be programmed during the annual CIP preparation process.

Justification

This allocation is required due to the structural deterioration of aging sewers.

**Notes** 

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL			
Expenditure Schedule (000s)										
Design	600	300	400	500	500	500	2,200			
Bid & Award	40	40	40	40	40	40	200			
Construction	10,883	3,650	4,050	6,450	6,450	6,450	27,050			
Post Construction	20	10	10	10	10	10	50			
Total	11.543	4.000	4.500	7.000	7.000	7.000	29.500			

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund (545)	11.543	4.000	4.500	7.000	7.000	7.000	29,500		
Fulla (343)	11,545	4,000	4,500	7,000	7,000	7,000	29,500		
Total	11,543	4,000	4,500	7,000	7,000	7,000	29,500		

	Annual Operating Budget Impact (000s)
Total	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Fee Administration - Sanitary Sewer**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

**Department** Public Works

Council Districts N/A
Appropriation A5241

**Description** This allocation provides funding for the Public Works Development Program to collect Sanitary Sewer Connection

Fees.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL			
Expenditure Schedule (000s)										
General Administration	84	84	85	85	85	85	424			
Total	84	84	85	85	85	85	424			

Funding Source Schedule (000s)								
Sanitary Sewer Connection								
Fee Fund (540)	84	84	85	85	85	85	424	
Total	84	84	85	85	85	85	424	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### Flow Monitoring Program (Master Planning)

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA4696

**Description** This allocation funds a city-wide sanitary sewer master planning effort to identify capacity improvement needs and

provides for future updates, flow analysis, and condition assessments.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
		Expenditure	Schedule (00	00s)			
Project Feasibility		-	•	•			
Development	520	100	100	100	100	100	500
Design	100						
Maintenance, Repairs, Other	712	825	780	780	780	800	3,965
Total	1,332	925	880	880	880	900	4,465

Funding Source Schedule (000s)									
Sewer Service and Use									
Charge Capital Improvement									
Fund (545)	902	825	780	780	780	800	3,965		
Sanitary Sewer Connection									
Fee Fund (540)	430	100	100	100	100	100	500		
Total	1,332	925	880	880	880	900	4,465		

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Infrastructure - Sanitary Sewer Condition Assessment**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA6521

**Description** This allocation funds an ongoing condition assessment program to inspect and evaluate the condition of the existing

pipelines and identify the needs for pipeline rehabilitation and/or replacement.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL			
Expenditure Schedule (000s)										
Project Feasibility Development	3,000	3,000	3,000	3,000	3,000	3,000	15,000			
Construction	2,631									
Total	5,631	3,000	3,000	3,000	3,000	3,000	15,000			

Funding Source Schedule (000s)									
Sewer Service and Use									
Charge Capital Improvement									
Fund (545)	5,631	3,000	3,000	3,000	3,000	3,000	15,000		
Total	5,631	3,000	3,000	3,000	3,000	3,000	15,000		

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Master Planning Updates**

CSA **Environmental and Utility Services** 

**CSA Outcome** Reliable Utility Infrastructure

**Public Works** Department Council Districts City-wide A7242 Appropriation

Description

This allocation funds the updates to the sewer system database and computer models based on land use development, sewer system improvements, survey and field investigations, and record research.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
Project Feasibility Development	216		•				
Maintenance, Repairs, Other	1,357	1,965	1,700	1,500	1,400	1,500	8,065
Total	1,573	1,965	1,700	1,500	1,400	1,500	8,065

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund (545)	1,384	1,865	1,600	1,400	1,300	1,400	7,565			
Sanitary Sewer Connection				,						
Fee Fund (540)	189	100	100	100	100	100	500			
Total	1,573	1,965	1,700	1,500	1,400	1,500	8,065			

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Payments to West Valley Sanitation District**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

**Department** Public Works

Council Districts N/A
Appropriation A4230

**Description** This allocation reimburses the West Valley Sanitation District for the City's share of potential joint sanitary sewer

projects within the District's jurisdiction.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL			
Expenditure Schedule (000s)										
General Administration	10	10	10	10	10	10	50			
Total	10	10	10	10	10	10	50			

Funding Source Schedule (000s)								
Sanitary Sewer Connection								
Fee Fund (540)	10	10	10	10	10	10	50	
Total	10	10	10	10	10	10	50	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Permit Review and Inspection for Outside Agencies - Sanitary Sewer**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works
Council Districts City-wide
Appropriation A5149

**Description** This allocation provides for the review and inspection of projects for the Santa Clara Valley Water District (SCVWD)

by City staff. As is customary practice between public agencies, as well as State law, the City and SCVWD do not

charge one another for these services.

	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR				
	EST						TOTAL				
Expenditure Schedule (000s)											
General Administration	25	25	25	25	25	25	125				
Total	25	25	25	25	25	25	125				

Funding Source Schedule (000s)								
Sewer Service and Use								
Charge Capital Improvement								
Fund (545)	25	25	25	25	25	25	125	
Total	25	25	25	25	25	25	125	

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Preliminary Engineering - Sanitary Sewer**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA4284

**Description** This allocation supports preliminary engineering, including surveys and evaluations, that evaluates the potential

effects of projects not yet funded in this program.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
		<b>Expenditure</b>	Schedule (00	00s)			
Project Feasibility				-			
Development	950	950	950	950	950	950	4,750
Total	950	950	950	950	950	950	4.750

Funding Source Schedule (000s)									
Sewer Service and Use									
Charge Capital Improvement									
Fund (545)	900	900	900	900	900	900	4,500		
Sanitary Sewer Connection									
Fee Fund (540)	50	50	50	50	50	50	250		
Total	950	950	950	950	950	950	4.750		

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Program Management - Sanitary Sewer**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA4286

**Description** This allocation funds the administration and management of this Capital Improvement Program.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
General Administration	300	300	300	300	300	300	1,500
Total	300	300	300	300	300	300	1.500

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund (545)	250	250	250	250	250	250	1,250		
Sanitary Sewer Connection Fee Fund (540)	50	50	50	50	50	50	250		
Total	300	300	300	300	300	300	1,500		

2019-2023 Proposed Capital Improvement Program

#### **Detail of Ongoing Non-Construction Projects**

#### **Public Works Engineering Services Equipment (Materials Lab)**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

**Department** Public Works

**Council Districts** N/A **Appropriation** A4135

**Description** This ongoing allocation funds the purchase of equipment necessary to perform quality assurance testing on

materials used in sewer rehabilitation projects.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL			
Expenditure Schedule (000s)										
Equipment, Materials and										
Supplies	40	40	40	40	40	40	200			
Total	40	40	40	40	40	40	200			

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement								
Fund (545)	40	40	40	40	40	40	200	
Total	40	40	40	40	40	40	200	

## 2018-2019 CAPITAL BUDGET

## 2019-2023 CAPITAL IMPROVEMENT PROGRAM

# SANITARY SEWER SYSTEM

SUMMARY OF PROJECTS THAT START AFTER 2018-2019

SUMMARY OF RESERVES

2019-2023 Proposed Capital Improvement Program

#### **Summary of Projects that Start After 2018-2019**

Project NameAlmaden Supplement Sewer Rehabilitation (North)Initial Start Date3rd Qtr. 20205-Yr CIP Budget\$ 3,130,000Initial End Date2nd Qtr. 2022

Total Budget\$ 3,130,000Revised Start DateCouncil Districts7Revised End Date

Description This project will rehabilitate approximately 3,690 feet of 42-inch and 48-inch diameter reinforced concrete pipe with a cured-

in-place pipe liner located on East Alma Avenue between Monterey Highway and South 9th Street.

2019-2023 Proposed Capital Improvement Program

#### **Summary of Reserves**

Project NameMontague Sanitary Sewer Pump Station ReserveInitial Start DateN/A5-Yr CIP Budget\$ 2,400,000Initial End DateN/A

Total Budget \$2,400,000 Revised Start Date
Council Districts 4 Revised End Date

Description This reserve sets aside funding to rehabilitate and/or upgrade the pump station located on First Street and Montague

Expressway. Due to real estate-related uncertainties, construction is currently delayed.