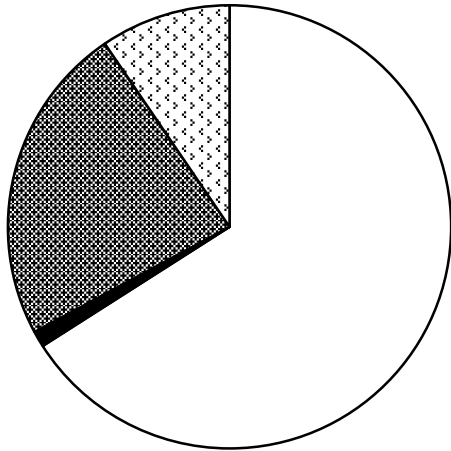


STORM SEWER SYSTEM

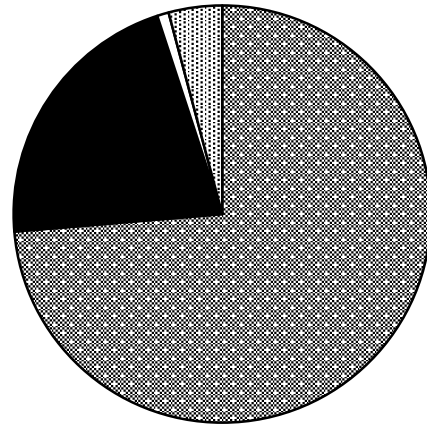
2019-2023 Capital Improvement Program

2018-2019 Adopted Source of Funds



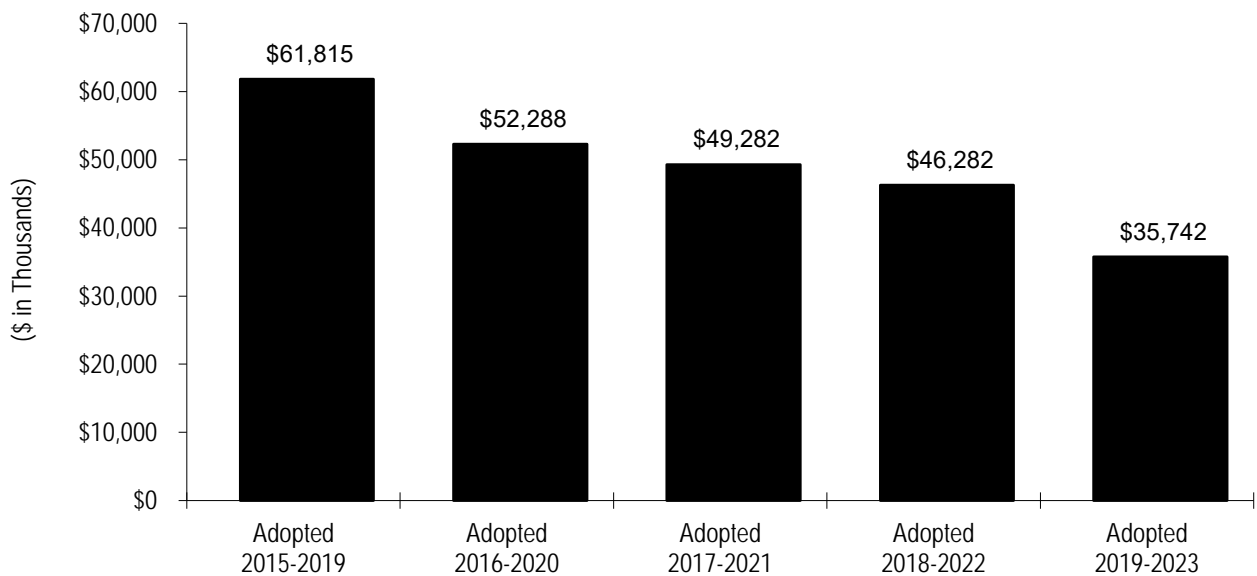
- Beginning Fund Balance
- Taxes, Fees, and Charges
- ▨ Loans and Transfers
- ▩ Interest and Miscellaneous

2018-2019 Adopted Use of Funds



- ▨ Construction
- Non-Construction
- Loans and Transfers
- ▩ Ending Fund Balance

CIP History



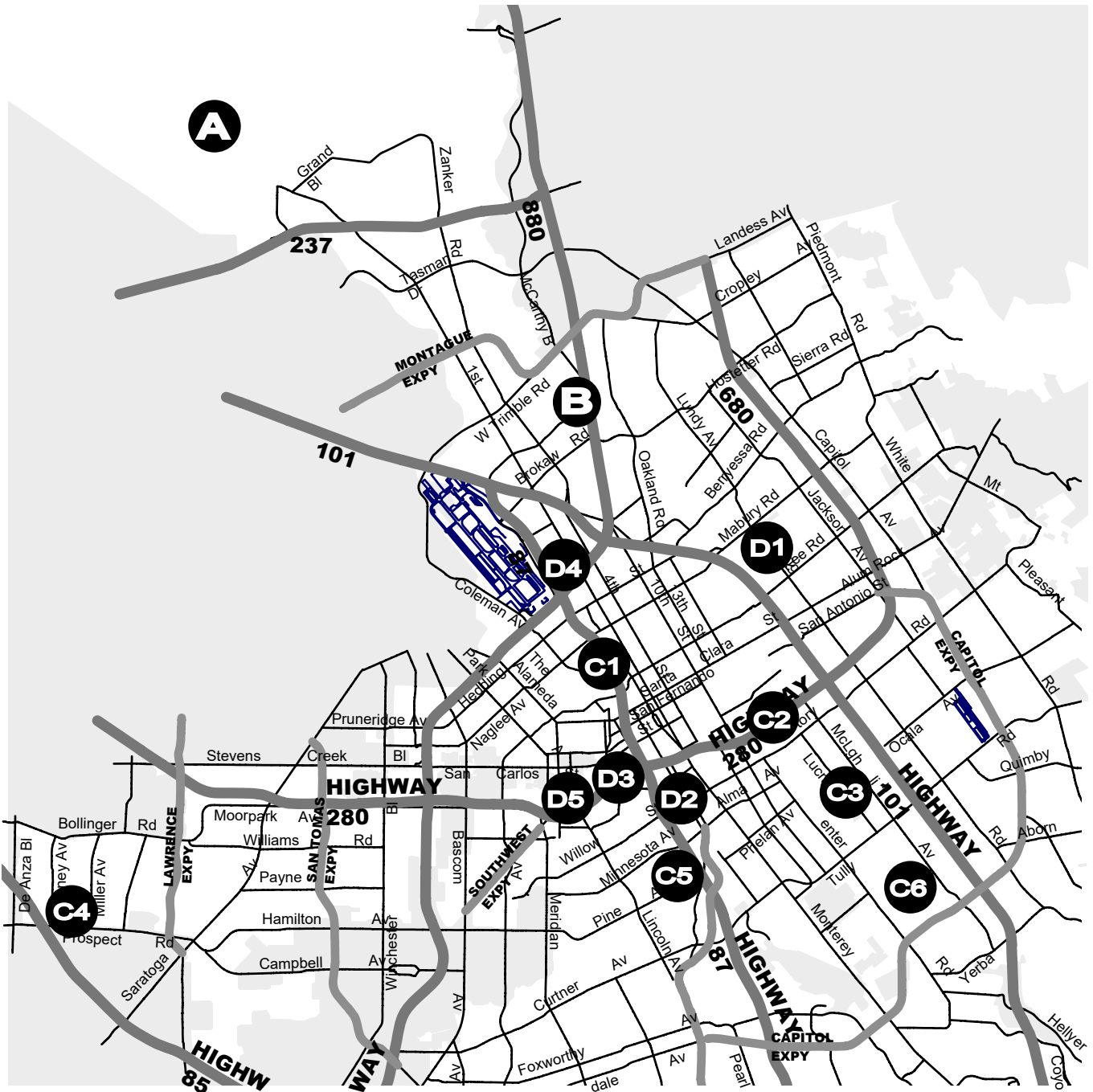
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Storm Sewer System

2019-2023 Adopted Capital Improvement Program

North

- A)** Alviso Storm Pump Station
- B)** Charcot Storm Pump Rental
- C)** Citywide Outfall Rehabilitation (1, 2, 3, 4, 5, 6)
- D)** Large Trash Capture Devices (1, 2, 3, 4, 5)



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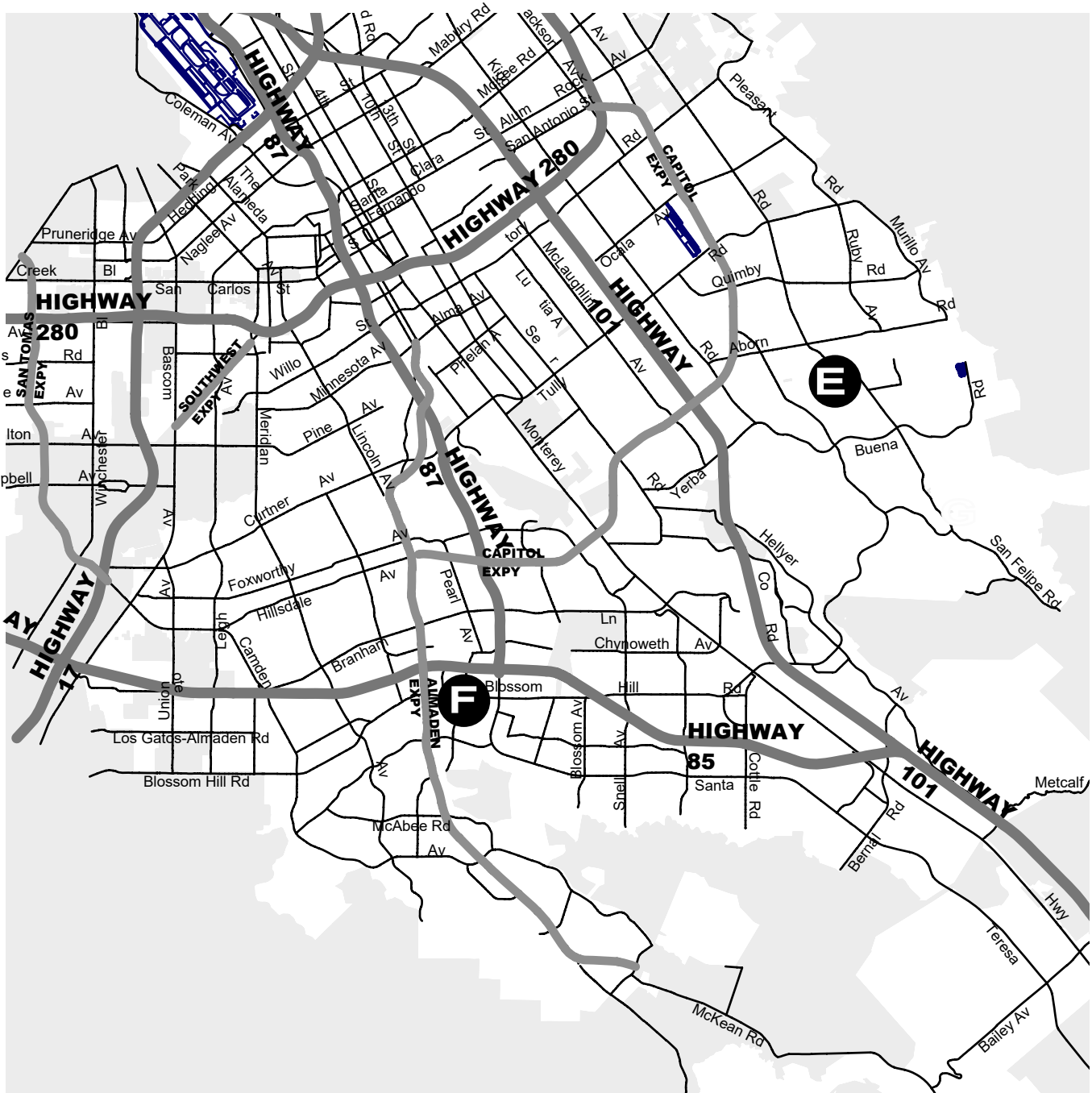
Storm Sewer System

2019-2023 Adopted Capital Improvement Program

South

E) Citywide Outfall Rehabilitation

F) Large Trash Capture Device



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Storm Sewer System

2019-2023 Adopted Capital Improvement Program

Overview

INTRODUCTION

The Storm Sewer System of the City of San José consists of approximately 1,100 miles of sewer mains and 30 stormwater pump stations. The Storm Sewer System, which is separate from the Sanitary Sewer System, collects storm water and eventually conveys into the Guadalupe River or Coyote Creek. The City is responsible for designing, constructing, and maintaining facilities for conveyance of stormwater runoff within the City's Urban Service Area to adjacent stream channels in accordance with the available budget and City Council priorities. Most of the design and construction of flood control facilities and the modification and maintenance of stream channels is the responsibility of the Santa Clara Valley Water District and the U.S. Army Corps of Engineers.

STORM SEWER SYSTEM PUBLIC INFRASTRUCTURE	
MILES OF STORM MAINS	
Smaller than 12" in diameter	80
12" to 18" in diameter	500
Over 18" in diameter	550
NUMBER OF INLETS	32,200
NUMBER OF MANHOLES	27,530
NUMBER OF OUTFALLS	1,510
NUMBER OF PUMP STATIONS	30

The 2019-2023 Adopted Capital Improvement Program (CIP) provides funding of \$35.7 million, of which \$17.1 million is allocated in 2018-2019. The 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 primary objective of the Storm Sewer Capital Program is to plan and construct improvements to the storm sewer collection system that reduce the risk of flooding and prevent property damage while managing the quality of stormwater runoff. Based on the CSA outcome supported by this program, the following list of priorities has been developed:

- Area-wide drainage capacity projects are identified and developed through the Storm Sewer Master Plan, which is based on the Envision San José 2040 General Plan (General Plan);
- Critical storm sewer system improvements that address localized ponding and flooding are generally identified through inspection and maintenance activities; and
- Regulatory compliance as required by the Municipal Stormwater Regional Permit.

SOURCES OF FUNDING

The 2019-2023 Adopted CIP provides funding of \$35.7 million, of which \$17.1 million is allocated in 2018-2019. The program funding level decreased by \$10.5 million from \$46.3 million in the 2018-2022 Adopted CIP, mainly due to the completion of several multi-million dollar projects anticipated to be completed in 2017-2018. Revenues for this CIP are derived from the following sources: transfers from the Storm Sewer Operating Fund, California Proposition 84 Grants, and Storm Sewer Connection Fees. The Adopted CIP assumes no rate increase for the Storm Sewer Operating Fund for 2018-2019.

Storm Sewer System

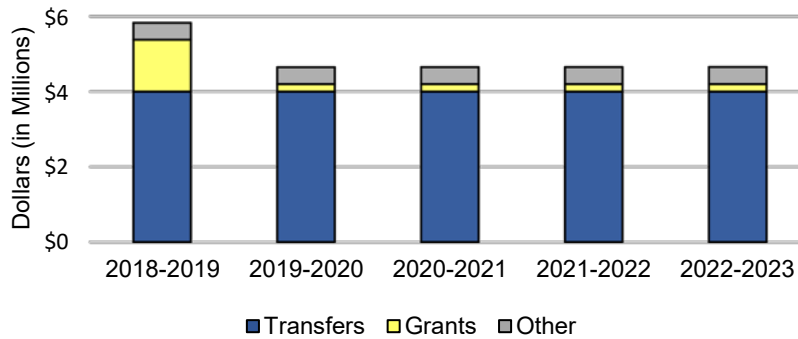
2019-2023 Adopted Capital Improvement Program

Overview

SOURCES OF FUNDING

Funding from the California Proposition 84 Stormwater Grant and the Integrated Regional Water Management Program Grant will support the design and construction of the Park Avenue Green Street Pilot, and Chynoweth Avenue Green Street projects. The Storm Drainage Fee is charged to developers as a connection fee for any project that will discharge storm water, surface water, or ground water runoff into the City's storm sewer system. The fee is based on the use and size of the parcel being developed.

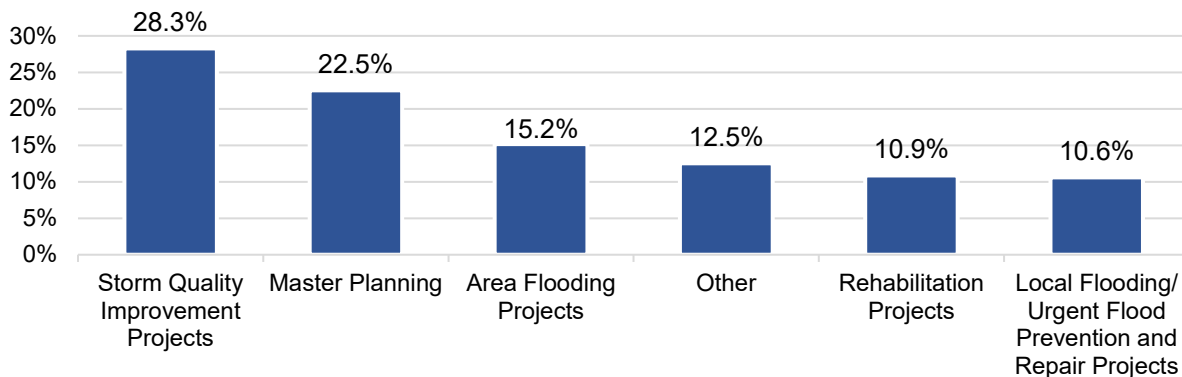
Summary of Revenues



PROGRAM HIGHLIGHTS

The Storm 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 Storm Sewer System Capital Program Expenditures \$34.7 million (excludes Ending Fund Balance)



Storm Sewer System

2019-2023 Adopted Capital Improvement Program

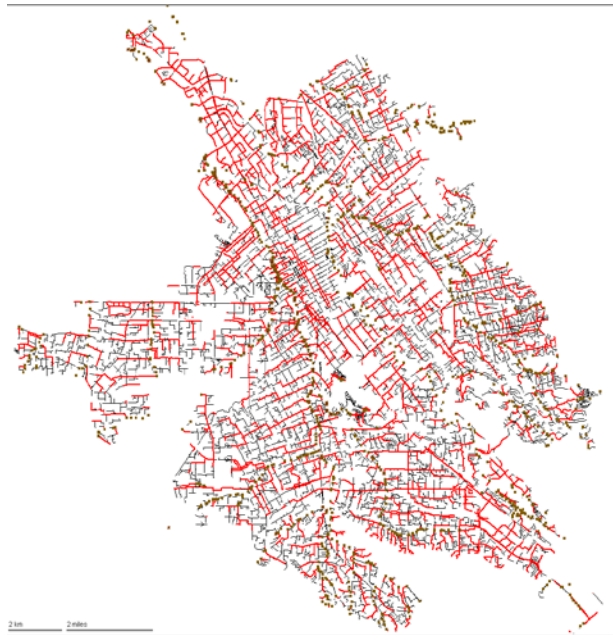
Overview

PROGRAM HIGHLIGHTS

Projects in this Adopted CIP include the installation of technology and infrastructure to maximize the efficiency of the storm sewer collection system and the reliability of storm pump stations, manage the quality of storm water runoff, and minimize ponding and flooding in residential areas.

Storm Sewer Master Plan

The Storm Sewer Master Plan is a comprehensive effort to identify and prioritize needed capacity-related improvements to the storm sewer system by analyzing current conditions and the anticipated future land use developments in the General Plan. Since the mid-1980s, the City's design standard required that storm drain systems be designed to convey a 10-year storm event. The city-wide storm sewer master plan study using the fully dynamic, integrated urban and river catchments modeling platform began in 2013-2014. The first phase was completed in 2017 and has identified storm drain capacity deficiencies and improvement needs. Over 20 high priority projects totaling \$230 million, including a new Charcot Avenue Pump Station, were identified to address known flooding due to capacity concern and predicted flooding at a 3-year storm event. The ongoing Storm Sewer Master Plan will incorporate the Green Infrastructure Plan into the hydrologic and hydraulic model and recommend projects with optimized green (infrastructures) plus grey (conveyance) solutions. This effort will be used as the framework for development of future Storm CIPs. The ongoing planning efforts have a total allocation of \$7.9 million in the 2019-2023 Adopted CIP, which includes \$6.3 million for Master Planning and \$1.6 million for Flow Monitoring. Once the master plan study is completed, staff will develop and recommend a financing strategy to construct the desired improvements.



Storm Sewer Master Plan Model

Storm Sewer Capacity Improvements, Rehabilitation, and Flood Prevention

Storm Sewer Capacity Improvement

Capacity improvement projects are those that prevent flooding over larger areas or drainage basins by constructing large-diameter storm sewers or new pump stations that are identified through past area-specific capacity studies and validated through the ongoing master plan effort. The most significant project in recent years, the new Alviso Storm Pump Station, was awarded in 2017-2018 and is anticipated to complete in 2019-2020.

Storm Sewer System

2019-2023 Adopted Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

Rehabilitation of Existing Facilities

The primary focus of rehabilitation projects is to address deteriorated outfall structures and aging mechanical and electrical components at storm sewer pump stations. Over the five-year Adopted CIP, total funding of approximately \$3.8 million is programmed for rehabilitation projects, which include: \$1.3 million for Condition Assessment Storm Sewer Repairs, \$1.3 million for Outfall Rehabilitation – Capital, and \$1.3 million for Storm Pump Station Rehabilitation and Replacement.

Local Flooding/Urgent Flood Prevention and Repair

Localized ponding and flooding projects can be addressed by installing new and/or relocated storm inlets, laterals, and the reconstruction of displaced flow lines or minor extensions of local storm sewer systems that are generally identified through reoccurring maintenance activities at specific locations. Funding of approximately \$2.5 million is programmed for rehabilitation projects under Storm Sewer Improvements. Funding of \$1.0 million for Urgent Flood Prevention and Repair is also programmed to address issues that may fall into any of the above categories. These projects are developed during the year in response to urgent needs.

Regulatory Compliance for Stormwater Quality Improvement Projects



Example of a Stormwater Bioretention Treatment Facility in South San José

Provision C.3 (New Development and Redevelopment) of the San Francisco Bay Regional Water Quality Control Board Municipal Regional Permit (MRP) requires development projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows to local water bodies through the implementation of Low Impact Development (LID) techniques. The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source.

The City has delivered both Chynoweth Avenue Green Street and Park Avenue Green Street Pilot, which are green street retrofit pilot projects: Green elements included in these projects consist of bioretention areas, or “rain gardens”, that function as a soil- and plant-based filtration measure, and pervious pavers and infiltration trenches, which will allow stormwater run-off to infiltrate into the ground. Funding for Horace Mann and Washington Neighborhood Green Alleyways Improvements in the amount of \$1.1 million is provided through the Federal CDBG funding.

Storm Sewer System

2019-2023 Adopted Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

Provision C.10 of the MRP regulates the implementation of control measures and other actions required to reduce trash loads from the storm sewer system into the City’s receiving waters. One of the control measures required by the provision is the installation of trash capture devices near locations identified as high-trash impacted locations. Funding of approximately \$6.8 million over the five-year CIP will be used for the design and installation of Large Trash Capture Devices throughout the City to meet MRP Provision C.10 trash reduction requirements.

MAJOR CHANGES FROM THE 2018-2022 ADOPTED CIP

The overall size of the Storm Sewer System CIP has decreased by \$10.5 million from \$46.3 million in the 2018-2022 Adopted CIP to \$35.7 million in the 2019-2023 Adopted CIP, mainly due to the completion of several multi-million dollar projects (anticipated to be completed in 2017-2018). The following table outlines the most significant changes from the 2018-2022 Adopted CIP to the 2019-2023 Adopted CIP.

Project	Incr/(Decr)
San José Watershed Invasive Species Removal and Engagement	\$1.0 million
Alviso Storm Pump Station	(\$6.7 million)
Storm Sewer Pump Station Rehabilitation and Replacement	(\$1.4 million)
Urgent Flood Prevention and Repair Projects	(\$1.1 million)
Large Trash Capture Devices	(\$710,000)
Outfall Rehabilitation - Capital	(\$650,000)

In January 2018, the City obtained a grant through a D2 partnership fund established with the Santa Clara Valley Water District under their Safe, Clean Water and Natural Flood Protection Program that will be used to establish an invasive species identification and removal program on City-owned properties located along the Coyote Creek watershed and promote outreach to surrounding communities located within these areas.

The City is currently obtaining funds through the Federal Emergency Management Agency (FEMA) and California Office of Emergency Services (Cal OES) to repair existing storm infrastructure that was damaged during the February 2017 flood event. These projects are located near Bailey Avenue and Monterey Road and Kelley Park 60 inch storm sewer outfall. In addition, the City applied for FEMA Hazardous Mitigation grants that will help improve critical infrastructure located along Coyote Creek, such as Goldenwheel Pump Station and installation of flapgates on storm sewer pipes that discharge into Coyote Creek. These two projects will provide additional protection to sensitive areas along Coyote Creek in case of flood. Currently, the City is awaiting for a determination of approval from Cal OES for these two projects.

Storm Sewer System

2019-2023 Adopted Capital Improvement Program

Overview

OPERATING BUDGET IMPACT

The Department of Transportation maintains the City's Storm Sewer System. There are currently no additional operating and maintenance costs associated with the projects coming online after 2018-2019. However, the 2018-2019 Adopted Operating Budget includes additional resources for Trash Capture Device Maintenance, including a Positive Displacement Combination Cleaner and ongoing funding for three positions to establish an additional crew to maintain the increasing inventory of trash capture devices. In addition, the 2018-2019 Adopted Operating Budget adds ongoing funding for contractual maintenance and monitoring of Stormwater Treatment Control Measures located in the public right-of-way to operate and maintain Green Streets as part of the Green Infrastructure Plan project. Operation and maintenance costs for future Green Infrastructure Improvements are still under development and will be brought forward in conjunction with the upcoming Green Infrastructure Plan.

COUNCIL-APPROVED REVISIONS TO THE PROPOSED CAPITAL IMPROVEMENT PROGRAM

Changes to the Proposed Capital Improvement Program were brought forward in the Mayor's June Budget Message for Fiscal Year 2018-2019 and approved by the City Council on June 12, 2018. This included the rebudgeting of unexpended funding for projects totaling \$3.7 million due to project delays. For additional information regarding these rebudgets, please refer to the Manager's Budget Addendum #29 that was incorporated into the Mayor's June Budget Message.



2018-2019 CAPITAL BUDGET

**2019-2023 CAPITAL
IMPROVEMENT PROGRAM**

STORM SEWER SYSTEM

**SOURCE AND USE OF FUNDS
STATEMENTS**

Storm Sewer System
2019-2023 Adopted Capital Improvement Program
Source of Funds (Combined)

	Estimated						
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
Storm Sewer Capital Fund (469)							
Beginning Balance	18,067,562	10,684,160	136,160	99,160	147,160	342,160	10,684,160 *
Reserve for Encumbrance	4,986,956						
Transfers							
Transfer from Storm Sewer Operating Fund (446)	13,500,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	20,000,000
TOTAL Transfers	13,500,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	20,000,000
Revenue from Use of Money and Property							
Interest Income	237,000	239,000	241,000	243,000	245,000	247,000	1,215,000
TOTAL Revenue from Use of Money and Property	237,000	239,000	241,000	243,000	245,000	247,000	1,215,000
Revenue from Local Agencies							
San José Watershed Invasive Species Removal and Engagement	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
TOTAL Revenue from Local Agencies	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
Revenue from State of California							
CA Proposition 84 Integrated Regional Water Management Program Grant	900,000	900,000					900,000
CA Proposition 84 Stormwater Grant	350,000	280,000					280,000
TOTAL Revenue from State of California	1,250,000	1,180,000					1,180,000
Total Storm Sewer Capital Fund (469)	38,241,518	16,303,160	4,577,160	4,542,160	4,592,160	4,789,160	34,079,160 *

Storm Sewer System
2019-2023 Adopted Capital Improvement Program
Source of Funds (Combined)

	Estimated						
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
Storm Drainage Fee Fund (413)							
Beginning Balance	688,085	613,018	573,018	552,018	531,018	510,018	613,018 *
Reserve for Encumbrance	66,933						
Revenue from Use of Money and Property							
Interest Income	10,000	6,000	6,000	6,000	6,000	6,000	30,000
TOTAL Revenue from Use of Money and Property	10,000	6,000	6,000	6,000	6,000	6,000	30,000
Revenue from Local Agencies							
Joint Participation with the City of Cupertino	4,000	4,000	4,000	4,000	4,000	4,000	20,000
TOTAL Revenue from Local Agencies	4,000	4,000	4,000	4,000	4,000	4,000	20,000
Fees, Rates and Charges							
Storm Drainage Fees--	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
TOTAL Fees, Rates and Charges	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
Total Storm Drainage Fee Fund (413)	969,018	823,018	783,018	762,018	741,018	720,018	1,663,018 *
TOTAL SOURCES	39,210,536	17,126,178	5,360,178	5,304,178	5,333,178	5,509,178	35,742,178 *

* The 2019-2020 through 2022-2023 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

Storm Sewer System

2019-2023 Adopted Capital Improvement Program

Use of Funds (Combined)

	Estimated 2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
<u>Storm Sewer System</u>							
2017 Flood - Bailey Ave Storm Drain Inlet Repair	27,000	200,000					200,000
Alviso Storm Pump Station	14,384,796	2,447,000	123,000				2,570,000
Chynoweth Avenue Green Street	1,701,153	280,000					280,000
Condition Assessment Storm Sewer Repairs	30,000	670,000	150,000	150,000	150,000	150,000	1,270,000
Green Infrastructure Improvements	550,000	900,000	450,000	450,000	450,000	450,000	2,700,000
Large Trash Capture Devices	2,945,564	6,673,000	100,000				6,773,000
Outfall Rehabilitation - Capital	983,030	250,000	250,000	250,000	250,000	250,000	1,250,000
Park Avenue Green Street Pilot	622,020	45,000					45,000
Storm Pump Station Rehabilitation and Replacement	298,780	250,000	250,000	250,000	250,000	250,000	1,250,000
Storm Sewer Improvements	918,377	500,000	500,000	500,000	500,000	500,000	2,500,000
Storm Sewer Improvements - Special Corridors	178,298						
Urgent Flood Prevention and Repair Projects	1,339,865	200,000	200,000	200,000	200,000	200,000	1,000,000
Other Storm Sewer - Construction	23,978,883	12,415,000	2,023,000	1,800,000	1,800,000	1,800,000	19,838,000
Storm Sewer - Construction	23,978,883	12,415,000	2,023,000	1,800,000	1,800,000	1,800,000	19,838,000
Charcot Storm Pump Rental	300,000	300,000	300,000	300,000	300,000	300,000	1,500,000
Fee Administration - Storm Sewer	25,000	25,000	25,000	25,000	25,000	25,000	125,000
Flow Monitoring Program	300,000	365,000	270,000	375,000	280,000	285,000	1,575,000
Permit Review and Inspection for Outside Agencies - Storm Sewer	50,000	50,000	50,000	50,000	50,000	50,000	250,000
Preliminary Engineering - Storm Sewer	180,000	180,000	180,000	180,000	180,000	180,000	900,000
Program Management - Storm Sewer	150,000	150,000	150,000	150,000	150,000	150,000	750,000
San Jose Watershed Invasive Species Removal and Engagement	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000

Storm Sewer System

2019-2023 Adopted Capital Improvement Program

Use of Funds (Combined)

	Estimated						
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
Stockton Avenue - Julian Street Storm Sewer Improvements	300,000	50,000					50,000
Storm Sewer Master Plan - City-wide	1,372,475	1,400,000	1,200,000	1,250,000	1,200,000	1,200,000	6,250,000
General Non-Construction - Storm Sewer	2,877,475	2,720,000	2,375,000	2,530,000	2,385,000	2,390,000	12,400,000
Storm Sewer - Non Construction	2,877,475	2,720,000	2,375,000	2,530,000	2,385,000	2,390,000	12,400,000
Public Art Allocation	145,000	421,000	13,000	12,000	12,000	10,000	468,000
Public Art Projects	145,000	421,000	13,000	12,000	12,000	10,000	468,000
Capital Program and Public Works Department Support Service Costs	782,000	700,000	136,000	122,000	122,000	122,000	1,202,000
Infrastructure Management System	7,000	7,000	7,000	7,000	7,000	7,000	35,000
Allocations	789,000	707,000	143,000	129,000	129,000	129,000	1,237,000
City Hall Debt Service Fund	113,000	148,000	149,000	149,000	149,000	149,000	744,000
Transfers to Special Funds	113,000	148,000	149,000	149,000	149,000	149,000	744,000
General Fund - Interest Income	10,000	6,000	6,000	6,000	6,000	6,000	30,000
Transfers to the General Fund	10,000	6,000	6,000	6,000	6,000	6,000	30,000
Transfers Expense	123,000	154,000	155,000	155,000	155,000	155,000	774,000
Total Expenditures	27,913,358	16,417,000	4,709,000	4,626,000	4,481,000	4,484,000	34,717,000
Ending Fund Balance	11,297,178	709,178	651,178	678,178	852,178	1,025,178	1,025,178 *
TOTAL	39,210,536	17,126,178	5,360,178	5,304,178	5,333,178	5,509,178	35,742,178 *

* The 2018-2019 through 2021-2022 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.



2018-2019 CAPITAL BUDGET

**2019-2023 CAPITAL
IMPROVEMENT PROGRAM**



STORM SEWER SYSTEM

DETAIL OF PROJECTS

Storm Sewer Capital Program

2019-2023 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

2017 Flood - Bailey Ave Storm Drain Inlet Repair

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2017
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	4th Qtr. 2018
Department	Public Works	Revised Start Date	
Location	Bailey Avenue between Monterey Road and Santa Teresa Blvd	Revised End Date	
Council Districts	2	Initial Project Budget	\$227,000
Appropriation	A407U	FY Initiated	2017-2018

Description This project funds the removal and replacement of the existing storm and roadway infrastructure that was damaged by the February 2017 flood event. After the February 2017 flood event, excessive storm water runoff and increased groundwater infiltration along Bailey Avenue caused the storm drain inlet to uplift and disconnect from a 24-inch storm sewer pipe. The large volume of storm water flows also scoured and undermined the roadway in this area.

Justification This allocation is necessary to restore the storm sewer drainage system and existing roadway as a result of the February 2017 flood event.

Notes

Major Cost Changes

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Construction		27	200					200		227
Total		27	200					200		227

Funding Source Schedule (000s)										
Storm Sewer Capital Fund (469)		27	200					200		227
Total		27	200					200		227

Annual Operating Budget Impact (000s)										
Total										

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of One-Time Construction Projects

Alviso Storm Pump Station

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2013
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2014
Department	Public Works	Revised Start Date	
Location	Gold St and Catherine St; Catherine St, Guadalupe River	Revised End Date	3rd Qtr. 2019
Council Districts	4	Initial Project Budget	\$1,500,000
Appropriation	A7623	FY Initiated	2013-2014

Description This project will build a new 110 cubic feet per second (CFS) storm pump station with approximately 100 linear feet of 48-inch HDPE (High Density Polyethylene) force main on the north-west corner of Gold Street and Catherine Street. A new force main and outfall will be constructed along Catherine Street and through the levee into Guadalupe River.

Justification This project will provide a storm pump station with a 100-year storm event capacity. The existing Gold Street pump station will remain as additional back up.

Notes

Major Cost Changes 2015-2019 CIP - Increase of \$500,000 due to the inclusion of the "Gold Street Storm Pump Station Force Main" project.
 2016-2020 CIP - Increase of \$8.8 million due to liquidation of the Alviso Storm Pump Station Reserve for the final design and construction of the project.
 2017-2021 CIP - Decrease of \$566,000 due to a refined project scope and cost estimate.
 2018-2022 CIP - Increase of \$867,000 due to additional consultant needs, regulatory permits, and mitigation fees.
 2019-2023 CIP - Increase of \$7.5 million due to rising construction and permitting costs.

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development	247	1								248
Design	1,351	2								1,353
Bid & Award	61									61
Construction	4	14,382	2,425	100				2,525		16,911
Post Construction			22	23				45		45
Total	1,664	14,385	2,447	123				2,570		18,618

Funding Source Schedule (000s)										
Storm Sewer Capital Fund (469)	1,664	14,385	2,447	123				2,570		18,618
Total	1,664	14,385	2,447	123				2,570		18,618

Annual Operating Budget Impact (000s)										
Total										

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of One-Time Construction Projects

Chynoweth Avenue Green Street

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2014
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2017
Department	Public Works	Revised Start Date	
Location	Chynoweth Avenue from Snell Avenue to Canoas Creek	Revised End Date	3rd Qtr. 2018
Council Districts	10	Initial Project Budget	\$195,000
Appropriation	A7761	FY Initiated	2014-2015

Description This project will create bioretention areas and install permeable pavers along Chynoweth Avenue to meet stormwater treatment requirements set forth by the Municipal Regional Permit using Low Impact Development (LID) techniques.

Justification This project incorporates stormwater quality treatment using bioretention areas, a LID practice, to capture and treat stormwater. Installation of this type of treatment measure is expected to reduce the pollutants entering our local creeks and waterways from City streets. In addition, this project will allow the Environmental Services Department to monitor the effectiveness of retrofitting an existing urban street with bioretention areas.

Notes A portion of the Proposition 84 Integrated Regional Water Management (IRWM) Grant of approximately \$2 million and a local match of \$749,000 will fund this project. The costs to operate and maintain Green Streets are still under development, as this infrastructure is new to City operations. Future operation and maintenance costs will be developed in conjunction with the Green Infrastructure Plan.

Major Cost Changes 2016-2020 CIP - Increase of \$2.0 million due to an increase in project scope related to the Proposition 84 Integrated Regional Water Management grant requirements.
 2017-2021 CIP - Increase of \$453,000 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)										
Project Feasibility Development	71									71
Design	279									279
Bid & Award	14									14
Construction	303	1,701	252					252		2,257
Post Construction			28					28		28
Total	668	1,701	280					280		2,649

Funding Source Schedule (000s)										
Storm Sewer Capital Fund (469)	668	1,701	280					280		2,649
Total	668	1,701	280					280		2,649

Annual Operating Budget Impact (000s)										
Total										

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of One-Time Construction Projects

Large Trash Capture Devices

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2014
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2016
Department	Public Works	Revised Start Date	
Location	City-wide	Revised End Date	3rd Qtr. 2019
Council Districts	City-wide	Initial Project Budget	\$11,480,000
Appropriation	A7676	FY Initiated	2014-2015

Description This project includes the installation of Large Trash Capture (LTC) devices throughout the City in order to meet the Municipal Regional Permit Provision C.10 trash reduction requirements. The City must install certified LTC units in order for the treated acreage to count toward the City's trash reduction goals.

Justification This project will reduce and/or remove trash from the City's storm sewer system prior to discharging into local water ways.

Notes The 2018-2019 Adopted Operating Budget recommends adding resources for Trash Capture Device Maintenance, including a Positive Displacement Combination Cleaner and ongoing funding for three positions to establish an additional crew to maintain the increasing inventory of trash capture devices.

Major Cost Changes 2017-2021 CIP - Increase of \$1.7 million to support the installation of additional LTC devices.
 2018-2022 CIP - Increase of \$11.9 million million to support the installation of additional LTC devices.

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development	328									328
Design	799	100								900
Bid & Award	116	27								143
Construction	14,021	2,718	6,636	100				6,736		23,475
Post Construction	41	100	37					37		178
Total	15,306	2,946	6,673	100				6,773		25,024

Funding Source Schedule (000s)										
Storm Sewer Capital Fund (469)	15,306	2,946	6,673	100				6,773		25,024
Total	15,306	2,946	6,673	100				6,773		25,024

Annual Operating Budget Impact (000s)										
Total										

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of One-Time Construction Projects

Park Avenue Green Street Pilot

CSA	Environmental and Utility Services	Initial Start Date	2nd Qtr. 2013
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2014
Department	Public Works	Revised Start Date	3rd Qtr. 2014
Location	Park Avenue between Meridian Avenue and Sunol Street	Revised End Date	3rd Qtr. 2018
Council Districts	6	Initial Project Budget	\$347,000
Appropriation	A7500	FY Initiated	2012-2013

Description This project will install bioretention areas along Park Avenue between Meridian Avenue and Sunol Street in order to provide stormwater treatment for this segment of Park Avenue.

Justification This project incorporates stormwater quality treatment using bioretention areas, a Low Impact Development practice, to capture and treat stormwater. Installation of this type of treatment measure is expected to reduce the pollutants entering our local creeks and waterways from City streets. In addition, this project will allow the Environmental Services Department to monitor the effectiveness of retrofitting an existing urban street with bioretention areas.

Notes A portion of the California Proposition 84 Stormwater Grant of \$859,000 and a local match of \$592,000 will fund this project. The costs to operate and maintain Green Streets are still under development, as this infrastructure is new to City operations. Future operation and maintenance costs will be developed in conjunction with the Green Infrastructure Plan.

Major Cost Changes 2014-2018 CIP - Increase of \$859,000 due to an increase in project scope related to the California Proposition 84 grant requirements.
 2017-2021 CIP - Increase of \$207,000 due to an increase in project scope related to the California Proposition 84 grant requirements.

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development	22									22
Design	144									144
Bid & Award	30									30
Construction	586	622								1,208
Post Construction			45					45		45
Total	782	622	45					45		1,449

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Funding Source Schedule (000s)										
Storm Sewer Capital Fund (469)	782	622	45					45		1,449
Total	782	622	45					45		1,449

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Annual Operating Budget Impact (000s)										
Total										

Storm Sewer Capital Program

2019-2023 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Stockton Avenue - Julian Street Storm Sewer Improvements

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2016
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2017
Department	Public Works	Revised Start Date	3rd Qtr. 2017
Location	Stockton Avenue and Julian Street	Revised End Date	4th Qtr. 2018
Council Districts	3	Initial Project Budget	\$350,000
Appropriation	A7802	FY Initiated	2016-2017

Description This project installs approximately 4,500 feet of storm drain on Julian Street from Stockton Avenue that will connect to an existing 54-inch storm pipe and outfall system on Julian Street. In addition, it will construct a 30- to 54-inch pipe on Stockton Avenue between Schiele Avenue and The Alameda to convey storm runoff to Julian Street. Funding is allocated in 2017-2018 for the preliminary phase of the project, which will identify feasible storm pipe locations and routes and determine the phasing of specific improvements to occur in this area. It is preliminarily anticipated that this project will be further developed through 2019-2020, once further cost estimates are available as a result of this preliminary phase.

Justification This project is needed due to minimal storm capacity in the existing storm sewer system.

Notes

Major Cost Changes

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development		300	50					50		350
Total		300	50					50		350

	PRIOR YEARS	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Funding Source Schedule (000s)										
Storm Sewer Capital Fund (469)		300	50					50		350
Total		300	50					50		350

Annual Operating Budget Impact (000s)										
Total										

Storm Sewer Capital Program

2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Condition Assessment Storm Sewer Repairs

CSA	Environmental and Utility Services	Initial Start Date	Ongoing
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	Ongoing
Department	Public Works	Revised Start Date	
Location	City-wide	Revised End Date	
Council Districts	City-wide	Initial Project Budget	
Appropriation	A7801		

Description This allocation funds contracts to identify and repair damaged pipes in the storm sewer system, and includes multiple projects each year as they are identified. Areas with groundwater infiltration and significant structural deficiencies will be the focus of these identify-and-repair contracts.

Justification This allocation is required due to structural deterioration of aging storm 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)							
Project Feasibility Development	15	5	5	5	5	5	25
Design		25	25	25	25	25	125
Bid & Award	15	5	5	5	5	5	25
Construction		635	115	115	115	115	1,095
Total	30	670	150	150	150	150	1,270

Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	30	670	150	150	150	150	1,270
Total	30	670	150	150	150	150	1,270

Annual Operating Budget Impact (000s)							
Total							

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of Ongoing Construction Projects

Green Infrastructure Improvements

CSA	Environmental and Utility Services	Initial Start Date	Ongoing
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	Ongoing
Department	Public Works	Revised Start Date	
Location	City-wide	Revised End Date	
Council Districts	City-wide	Initial Project Budget	
Appropriation	A402P		

Description This allocation funds projects that will implement Green Infrastructure as required by the Municipal Regional Permit. The goal is to reduce impervious surfaces through the use of Low Impact Development that will reduce the flow rate and improve water quality by treating the urban stormwater runoff before it enters into waterways such as creeks and rivers in San José.

Justification This allocation will implement the State's requirement for agencies to overall reduce the amount of runoff into the waterways and allow groundwater infiltration to treat urban stormwater runoff and improve water quality.

Notes Selected budget information is 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							
Construction	550	900	450	450	450	450	2,700
Total	550	900	450	450	450	450	2,700

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	550	900	450	450	450	450	2,700
Total	550	900	450	450	450	450	2,700

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Annual Operating Budget Impact (000s)							
Total							

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of Ongoing Construction Projects

Outfall Rehabilitation - Capital

CSA	Environmental and Utility Services	Initial Start Date	Ongoing
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	Ongoing
Department	Public Works	Revised Start Date	
Location	City-wide	Revised End Date	
Council Districts	City-wide	Initial Project Budget	
Appropriation	A4245		

Description This allocation funds the construction or rehabilitation of storm drain outfalls at various locations throughout the City. The Department of Transportation (DOT) has identified more than 250 outfalls that are missing, deteriorated, or in need of improvement to bring them to current design standards. This ongoing allocation funds the most critical outfall construction based on priorities jointly established by DOT, the Public Works Department, and regulatory agencies.

Justification This allocation will repair aging outfall structures, enhance erosion protection and water quality, and alleviate maintenance operations.

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	93						
Construction	890	250	250	250	250	250	1,250
Total	983	250	250	250	250	250	1,250

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	983	250	250	250	250	250	1,250
Total	983	250	250	250	250	250	1,250

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Annual Operating Budget Impact (000s)							
Total							

Storm Sewer Capital Program

2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Storm Pump Station Rehabilitation and Replacement

CSA	Environmental and Utility Services	Initial Start Date	Ongoing
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	Ongoing
Department	Public Works	Revised Start Date	
Location	City-wide	Revised End Date	
Council Districts	City-wide	Initial Project Budget	
Appropriation	A5150		

Description This allocation funds the rehabilitation, reconstruction, or replacement of aging pump stations that require high levels of maintenance.

Justification Rehabilitating, redesigning, and/or replacing aging pump stations will achieve cost savings, optimize pump station performance, and enhance the efficiency of the storm system.

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		3	3	3	3	3	15
Design	1	50	50	50	50	50	250
Bid & Award		3	3	3	3	3	15
Construction	298	194	194	194	194	194	970
Maintenance, Repairs, Other	0						
Total	299	250	250	250	250	250	1,250

Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	299	250	250	250	250	250	1,250
Total	299	250	250	250	250	250	1,250

Annual Operating Budget Impact (000s)							
Total							

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of Ongoing Construction Projects

Storm Sewer Improvements

CSA	Environmental and Utility Services	Initial Start Date	Ongoing
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	Ongoing
Department	Public Works	Revised Start Date	
Location	City-wide	Revised End Date	
Council Districts	City-wide	Initial Project Budget	
Appropriation	A4483		

Description This allocation funds minor storm drain projects, such as construction of new inlets and laterals (storm pipe connections from the inlet to the main), and the establishment of flow-lines in various neighborhoods. Resources will be allocated to address these needs as funding permits.

Justification This allocation will provide relief for minor drainage problems on neighborhood streets and improve water quality in the runoff conducted by the system.

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	10	5	5	5	10	10	35
Design	50	20	20	20	40	40	140
Bid & Award	3	3	3	3	6	6	21
Construction	855	472	472	472	444	444	2,304
Total	918	500	500	500	500	500	2,500

Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	918	500	500	500	500	500	2,500
Total	918	500	500	500	500	500	2,500

Annual Operating Budget Impact (000s)							
Total							

Storm Sewer Capital Program

2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Urgent Flood Prevention and Repair Projects

CSA	Environmental and Utility Services	Initial Start Date	Ongoing
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	Ongoing
Department	Public Works	Revised Start Date	
Location	City-wide	Revised End Date	
Council Districts	City-wide	Initial Project Budget	
Appropriation	A4287		

Description This allocation funds unscheduled engineering and construction projects on an as-needed basis, including participation in cooperative projects with other agencies in support of the City's storm sewer system.

Justification These funds provide for unanticipated projects that are necessary to ensure public health and safety.

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	6	5	5	5	5	5	25
Design	20	10	10	10	10	10	50
Bid & Award	10	5	5	5	5	5	25
Construction	1,304	180	180	180	180	180	900
Total	1,340	200	200	200	200	200	1,000

Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	1,040	200	200	200	200	200	1,000
Storm Drainage Fee Fund (413)	300						
Total	1,340	200	200	200	200	200	1,000

Annual Operating Budget Impact (000s)							
Total							

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of Ongoing Non-Construction Projects

Charcot Storm Pump Rental

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts 4
Appropriation A6580

Description This project allocates funding for the rental of temporary storm pump equipment and permit fees from the Santa Clara Valley Water District (SCVWD), the owner of the property off of Charcot Avenue near Coyote Creek. Currently, the City maintains a two-year permit to use the SCVWD site.

Notes

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Expenditure Schedule (000s)							
Equipment, Materials and Supplies	300	300	300	300	300	300	1,500
Total	300	300	300	300	300	300	1,500

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	300	300	300	300	300	300	1,500
Total	300	300	300	300	300	300	1,500

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of Ongoing Non-Construction Projects

Fee Administration - Storm Sewer

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts N/A
Appropriation A5411

Description This allocation provides funding for the Department of Public Works Development Program to collect Storm Drainage Fees.

Notes Selected budget information is not provided due to the ongoing nature of this project.

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

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Drainage Fee Fund (413)	25	25	25	25	25	25	125
Total	25	25	25	25	25	25	125

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program
Detail of Ongoing Non-Construction Projects

Flow Monitoring Program

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts City-wide
Appropriation A5867

Description This allocation funds the installation of flow monitors and rain gauges, which measure the actual amount of flow in storm drains and precipitation at strategic locations. The data and information are used to calibrate and validate the flow/rainfall relationship in the hydrologic and hydraulic model of the storm drain system as part of the master plan study.

Notes Selected budget information is not provided due to the ongoing nature of this project.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Expenditure Schedule (000s)							
Project Feasibility Development	300	365	270	375	280	285	1,575
Total	300	365	270	375	280	285	1,575

Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	300	365	270	375	280	285	1,575
Total	300	365	270	375	280	285	1,575

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Permit Review and Inspection for Outside Agencies - Storm Sewer

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts City-wide
Appropriation A7075

Description This allocation funds the review and inspection of Santa Clara Valley Water District (SCVWD) projects. The City and the SCVWD do not charge one another for these services.

Notes Selected budget information is not provided due to the ongoing nature of this work.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Expenditure Schedule (000s)							
General Administration	50	50	50	50	50	50	250
Total	50	50	50	50	50	50	250

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	50	50	50	50	50	50	250
Total	50	50	50	50	50	50	250

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Preliminary Engineering - Storm Sewer

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts City-wide
Appropriation A400P

Description This allocation supports preliminary engineering, including surveys and evaluations, that evaluates the potential effects of projects not yet funded in this program.

Notes Selected budget information is not provided due to the ongoing nature of this project.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Expenditure Schedule (000s)							
Design	180	180	180	180	180	180	900
Total	180	180	180	180	180	180	900

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	180	180	180	180	180	180	900
Total	180	180	180	180	180	180	900

Storm Sewer Capital Program
 2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Program Management - Storm Sewer

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts City-wide
Appropriation A400Q

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

Notes Selected budget information is not provided due to the ongoing nature of this project.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Expenditure Schedule (000s)							
General Administration	150	150	150	150	150	150	750
Total	150	150	150	150	150	150	750

Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	150	150	150	150	150	150	750
Total	150	150	150	150	150	150	750

Storm Sewer Capital Program
2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

San Jose Watershed Invasive Species Removal and Engagement

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts City-wide
Appropriation A406I

Description The allocation will be used to establish an invasive species identification and removal program on City-owned properties located along the Coyote Creek watershed. In addition, this will include outreach opportunities to increase community awareness about the impacts of invasive species to the local ecosystems. Funding for this program is provided through the D2 Partnership fund established by the Santa Clara Valley Water District under their Safe, Clean Water and Natural Flood Protection Program.

Notes

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Expenditure Schedule (000s)							
Project Feasibility Development	200	200	200	200	200	200	1,000
Total	200	200	200	200	200	200	1,000

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	200	200	200	200	200	200	1,000
Total	200	200	200	200	200	200	1,000

Storm Sewer Capital Program
2019-2023 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Storm Sewer Master Plan - City-wide

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Public Works
Council Districts City-wide
Appropriation A5252

Description The first phase of master plan study was completed in 2017, which recommended capital costs totaling \$230 million for high priority capacity projects. This allocation funds an ongoing master planning effort for the storm sewer system, which will incorporate the Green Infrastructure Plan into the hydrologic and hydraulic computer model and recommend optimized green (infrastructure) plus grey (conveyance) projects for the future CIPs.

Notes Selected budget information is not provided due to the ongoing nature of this project.

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Expenditure Schedule (000s)							
Project Feasibility Development	1,016	1,400	1,200	1,250	1,200	1,200	6,250
Design	356						
Total	1,372	1,400	1,200	1,250	1,200	1,200	6,250

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
Funding Source Schedule (000s)							
Storm Sewer Capital Fund (469)	1,372	1,200	1,000	1,050	1,000	1,000	5,250
Storm Drainage Fee Fund (413)		200	200	200	200	200	1,000
Total	1,372	1,400	1,200	1,250	1,200	1,200	6,250