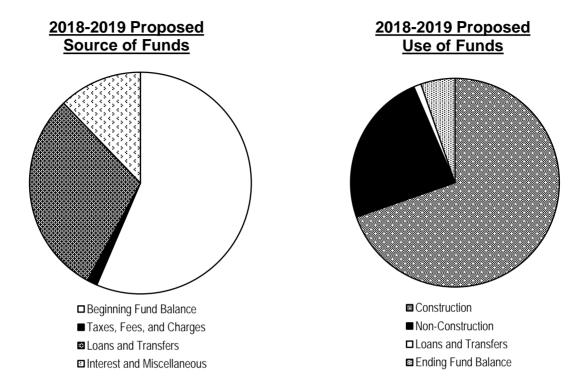
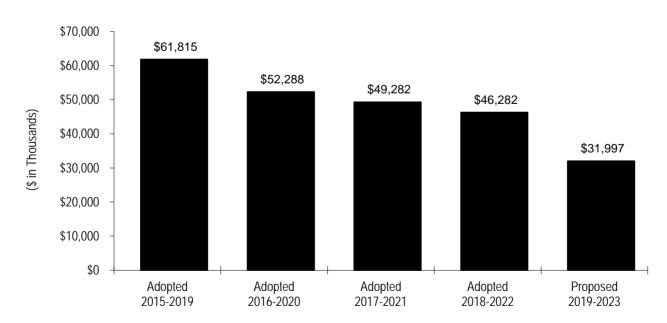
# STORM SEWER SYSTEM 2019-2023 Capital Improvement Program



## **CIP History**

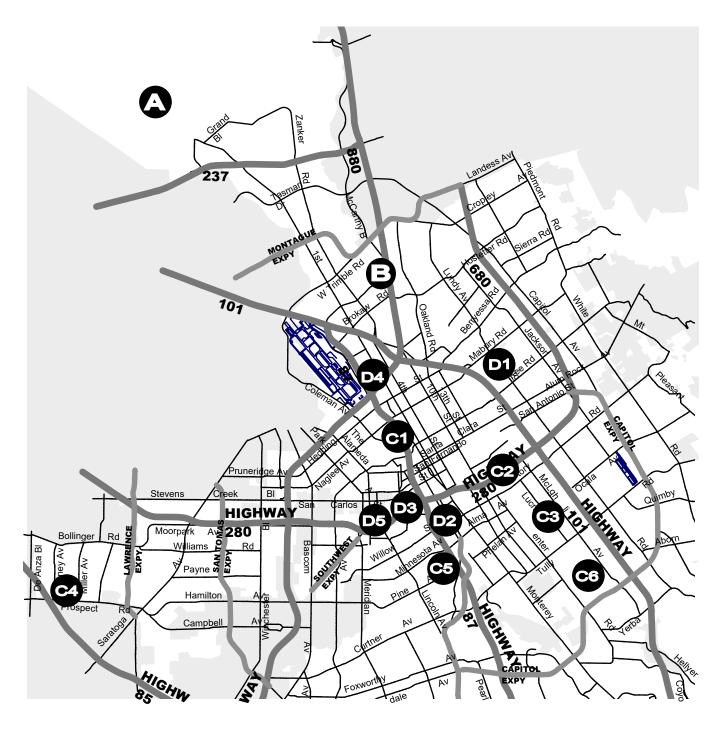




# 2019-2023 Proposed Capital Improvement Program

#### 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)

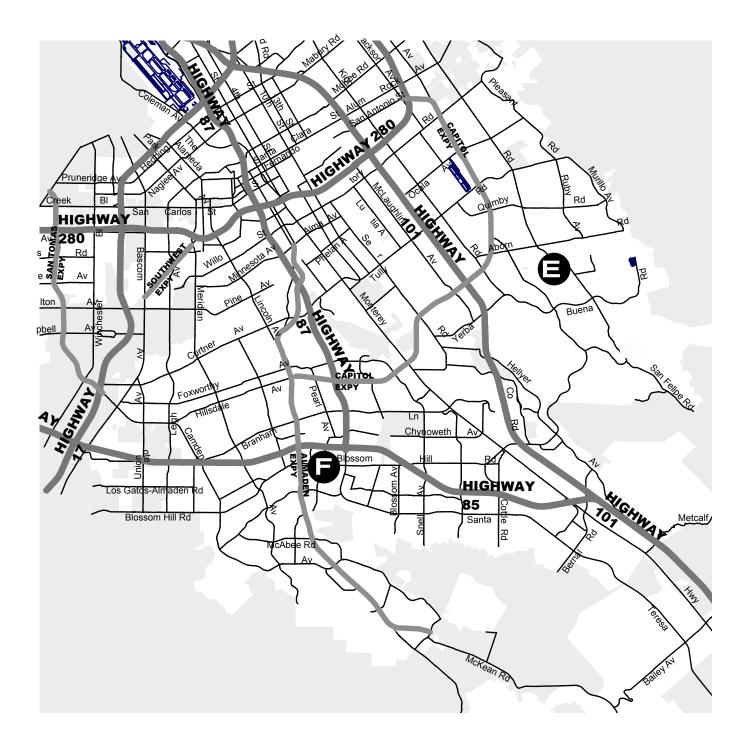




# 2019-2023 Proposed Capital Improvement Program

#### South

- **E)** Citywide Outfall Rehabilitation
- **F)** Large Trash Capture Device





#### 2019-2023 Proposed 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

STORM SEWER SYST	
PUBLIC INFRASTRUC	TURE
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	30
STATIONS	

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.

The 2019-2023 Proposed Capital Improvement Program (CIP) provides funding of \$32.0 million, of which \$13.4 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 Proposed CIP provides funding of \$32.0 million, of which \$13.4 million is allocated in 2018-2019. The program funding level decreased by \$14.3 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 Proposed CIP assumes no rate increase for the Storm Sewer Operating Fund for 2018-2019.

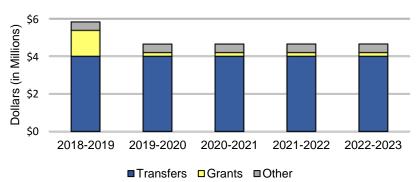
#### 2019-2023 Proposed Capital Improvement Program

#### 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.





#### **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 \$31.0 million (excludes Ending Fund Balance)

30% 26.7% 23.3% 25% 16.8% 20% 11.9% 11.2% 15% 10.1% 10% 5% 0% Area Flooding Storm Quality Master Rehabilitation Other Local Flooding/ Improvement **Projects** Planning **Projects** Urgent Flood **Projects** Prevention and Repair **Projects** 

#### 2019-2023 Proposed Capital Improvement Program

#### Overview

#### **PROGRAM HIGHLIGHTS**

Projects in this Proposed 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 capacityrelated improvements to the storm sewer system 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.



Storm Sewer Master Plan Model

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 \$7.8 million in the 2019-2023 Proposed 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 Capacity Improvements

#### **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.

#### 2019-2023 Proposed 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 Proposed CIP, total funding of approximately \$3.25 million is programmed for rehabilitation projects, which include: \$1.25 million for Outfall Rehabilitation – Capital, \$1.25 million for Storm Pump Station Rehabilitation and Replacement, and \$0.75 million for Condition Assessment Storm Sewer Repairs.

#### 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 infiltrating, and then storing, 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.

#### 2019-2023 Proposed 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 \$14.3 million from \$46.3 million in the 2018-2022 Adopted CIP to \$32.0 million in the 2019-2023 Proposed 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 to project budgets, including new/augmented allocations and reduced/eliminated allocations.

Project	Incr/(Decr)
Alviso Storm Pump Station	\$7.5 million
San José Watershed Invasive Species Removal and Engagement	\$1.0 million
Storm Sewer Pump Station Rehabilitation and Replacement	\$(1,350,000)
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 FEMA and 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 infrastructures 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.

#### 2019-2023 Proposed 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 Proposed Operating Budget recommends 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 Proposed Operating Budget recommends adding 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.

# 2018-2019 CAPITAL BUDGET

# 2019-2023 CAPITAL IMPROVEMENT PROGRAM

# STORM SEWER SYSTEM

Source and Use of Funds Statements

# V-94

# Storm Sewer System

# 2019-2023 Proposed 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	6,939,160	136,160	99,160	147,160	342,160	6,939,160
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	12,558,160	4,577,160	4,542,160	4,592,160	4,789,160	30,334,160

# V-95

# Storm 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
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	13,381,178	5,360,178	5,304,178	5,333,178	5,509,178	31,997,178

# 2019-2023 Proposed Capital Improvement Program

**Use of Funds (Combined)** 

		036 01 1	ullus (O	onibilied			
	Estimated 2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	5-Year Total
Storm Sewer System							
2017 Flood - Bailey Ave Storm Drain Inlet Repair	227,000						
Alviso Storm Pump Station	16,184,796	647,000	123,000				770,000
Chynoweth Avenue Green Street	1,981,153						
Condition Assessment Storm Sewer Repairs	550,000	150,000	150,000	150,000	150,000	150,000	750,000
Green Infrastructure Improvements	1,000,000	450,000	450,000	450,000	450,000	450,000	2,250,000
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	667,020						
San Jose Watershed Invasive Species Removal and Engagement	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
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	27,473,883	9,320,000	2,223,000	2,000,000	2,000,000	2,000,000	17,543,000
Storm Sewer - Construction	27,473,883	9,320,000	2,223,000	2,000,000	2,000,000	2,000,000	17,543,000
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

# 2019-2023 Proposed 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	350,000						
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	2,727,475	2,470,000	2,175,000	2,330,000	2,185,000	2,190,000	11,350,000
Storm Sewer - Non Construction	2,727,475	2,470,000	2,175,000	2,330,000	2,185,000	2,190,000	11,350,000
Public Art Allocation	545,000	21,000	13,000	12,000	12,000	10,000	68,000
Public Art Projects	545,000	21,000	13,000	12,000	12,000	10,000	68,000
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	31,658,358	12,672,000	4,709,000	4,626,000	4,481,000	4,484,000	30,972,000
Ending Fund Balance	7,552,178	709,178	651,178	678,178	852,178	1,025,178	1,025,178
TOTAL	39,210,536	13,381,178	5,360,178	5,304,178	5,333,178	5,509,178	31,997,178

# 2018-2019 CAPITAL BUDGET

# 2019-2023 CAPITAL IMPROVEMENT PROGRAM

# STORM SEWER SYSTEM

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

2019-2023 Proposed Capital Improvement Program

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

## **Alviso Storm Pump Station**

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2013
<b>CSA Outcome</b>	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2014

Department Public Works Revised Start Date

LocationGold St and Catherine St; Catherine St, Guadalupe RiverRevised End Date3rd Qtr. 2019Council Districts4Initial Project Budget\$1,500,000AppropriationA7623FY Initiated2013-2014

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.

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 costs.

	PRIOR	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR	BEYOND	<b>PROJECT</b>
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sche	dule (000:	s)				
Project Feasibility										
Development	247	1								248
Design	1,351	2								1,353
Bid & Award	61									61
Construction	4	16,182	625	100				725		16,911
Post Construction			22	23				45		45
Total	1.664	16.185	647	123				770		18.618

Funding Source Schedule (000s)										
Storm Sewer Capital Fund										
(469)	1,664	16,185	647	123	770	18,618				
Total	1,664	16,185	647	123	770	18,618				

Annual Operating Budget Impact (000s)	
Total	

2019-2023 Proposed 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	<b>Revised Start Date</b>							
Location	City-wide	Revised End Date	3rd Qtr. 2019						
<b>Council Districts</b>	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 Municipal Regional Permit Provision C.10 trash reduction requirements. T 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 Proposed 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** 2017-2021 CIP - Increase of \$1.7 million to support the installation of additional LTC devices. Changes

2018-2022 CIP - Increase of \$11.9 million million to support the installation of additional LTC devices.

	PRIOR	FY18	FY19	FY20	FY21	FY22	FY23	5 YEAR	<b>BEYOND</b>	<b>PROJECT</b>
	YEARS	EST						TOTAL	<b>5 YEARS</b>	TOTAL
			Expenditu	ure Sched	dule (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

		Fu	ınding So	urce 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)	
	Aimail Operating Badget impact (0000)	
Total		

2019-2023 Proposed Capital Improvement Program

## **Detail of Ongoing Construction Projects**

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

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

**Appropriation** A7801

Initial Start Date

Ongoing

Initial End Date Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This allocation funds the development and implementation of 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	75	25	25	25	25	25	125				
Bid & Award	15	5	5	5	5	5	25				
Construction	445	115	115	115	115	115	575				
Total	550	150	150	150	150	150	750				

Funding Source Schedule (000s)								
Storm Sewer Capital Fund								
(469)	550	150	150	150	150	150	750	
Total	550	150	150	150	150	150	750	

	Annual Operating Budget Impact (000s)
Total	

2019-2023 Proposed Capital Improvement Program

## **Detail of Ongoing Construction Projects**

#### **Green Infrastructure Improvements**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Appropriation A402P

Initial Start Date

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

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 (0	00s)			
Project Feasibility Development							
Construction	1,000	450	450	450	450	450	2,250
Total	1,000	450	450	450	450	450	2,250
	F	unding Sour	ce Schedule	(000s)			
Storm Sewer Capital Fund (469)	1,000	450	450	450	450	450	2,250
Total	1,000	450	450	450	450	450	2,250

Annual Operating Budget Impact (000s)	
Total	

2019-2023 Proposed Capital Improvement Program

## **Detail of Ongoing Construction Projects**

#### **Outfall Rehabilitation - Capital**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

**Appropriation** A4245

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.

This allocation funds the construction or rehabilitation of storm drain outfalls at various locations throughout the City.

**Initial Start Date** 

**Initial End Date** 

**Revised Start Date** 

**Revised End Date** 

**Initial Project Budget** 

Ongoing

Ongoing

**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

Description

	FY18 EST	FY19	FY20	FY21	FY22	FY23	5 YEAR TOTAL
	E31	Expenditure	Schedule (00	00s)			IOIAL
Design	93						
Construction	890	250	250	250	250	250	1,250
Total	983	250	250	250	250	250	1 250

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	

	Annual Operating Budget Impact (000s)	
Total		_

2019-2023 Proposed Capital Improvement Program

## **Detail of Ongoing Construction Projects**

#### **Storm Pump Station Rehabilitation and Replacement**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wideAppropriationA5150

Initial Start Date
Initial End Date

Ongoing Ongoing

Revised Start Date Revised End Date Initial Project Budget

**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 (000c)	
	Annual Operating Budget Impact (000s)	
Total		

2019-2023 Proposed Capital Improvement Program

## **Detail of Ongoing Construction Projects**

#### **Storm Sewer Improvements**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

**Appropriation** A4483

Initial Start Date Ongoing
Initial End Date Ongoing

Revised Start Date Revised End Date Initial Project Budget

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 (0	00s)			
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	

2019-2023 Proposed Capital Improvement Program

## **Detail of Ongoing Construction Projects**

#### **Urgent Flood Prevention and Repair Projects**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

**Appropriation** A4287

Initial Start Date Ongoing
Initial End Date Ongoing

Revised Start Date Revised End Date Initial Project Budget

**Description**This allocation funds unscheduled engineering and construction projects on an as-needed basis, including participation in connective projects with other granging in support of the Cityle sterm government.

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 (0	00s)			
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

2019-2023 Proposed Capital Improvement Program

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

#### **Charcot Storm Pump Rental**

**CSA Environmental and Utility Services** 

**CSA Outcome** Reliable Utility Infrastructure

Public Works Department

**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	FY19	FY20	FY21	FY22	FY23	5 YEAR
	EST						TOTAL
		Expenditure	Schedule (0	00s)			
Equipment, Materials and							
Supplies	300	300	300	300	300	300	1,500
Total	300	300	300	300	300	300	1,500

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	

2019-2023 Proposed 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		

Funding Source Schedule (000s)								
Storm Drainage Fee Fund								
(413)	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**

#### **Flow Monitoring Program**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA5867

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 (00	00s)			
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		

2019-2023 Proposed 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

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA7075

**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 (00	00s)			
General Administration	50	50	50	50	50	50	250
Total	50	50	50	50	50	50	250

Funding Source Schedule (000s)								
Storm Sewer Capital Fund								
(469)	50	50	50	50	50	50	250	
Total	50	50	50	50	50	50	250	

2019-2023 Proposed Capital Improvement Program

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

#### **Preliminary Engineering - Storm Sewer**

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA400P

**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			

Funding Source Schedule (000s)									
Storm Sewer Capital Fund									
(469)	180	180	180	180	180	180	900		
Total	180	180	180	180	180	180	900		

2019-2023 Proposed Capital Improvement Program

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

#### **Program Management - Storm Sewer**

**CSA** Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA400Q

**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		

2019-2023 Proposed 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 of this fund will be used to establish an invasive species identification and removal program on Cityowned 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	FY19	FY20	FY21	FY22	FY23	5 YEAR			
	EST						TOTAL			
Expenditure Schedule (000s)										
Project Feasibility		-		-						
Development	200	200	200	200	200	200	1,000			
Total	200	200	200	200	200	200	1,000			

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	

2019-2023 Proposed 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

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA5252

**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 (0	00s)			
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

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			