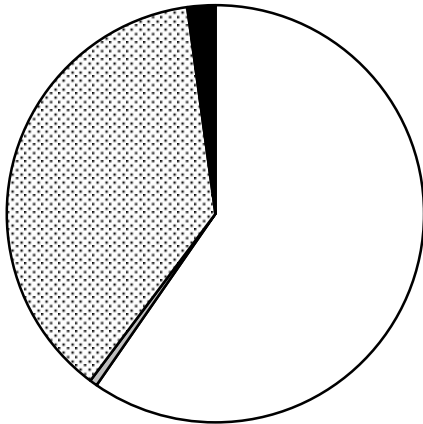


# WATER UTILITY SYSTEM

## 2020-2024 Capital Improvement Program

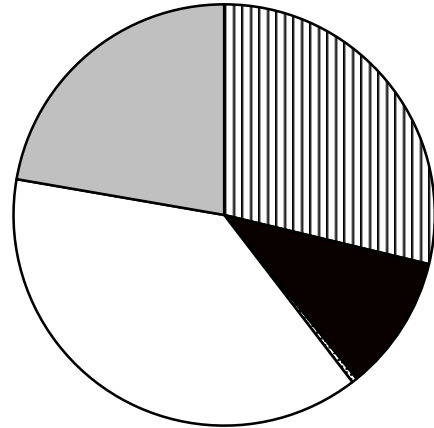
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**2019-2020 Proposed Source of Funds**



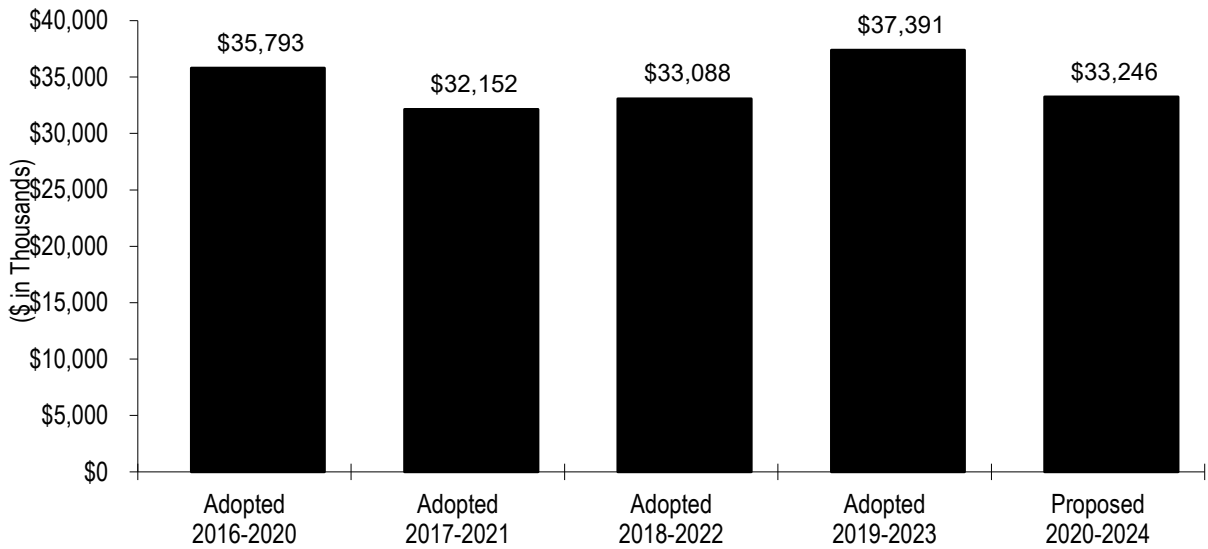
- Beginning Fund Balance
- ▒ Taxes, Fees and Charges
- ▓ Loans & Transfers
- Interest

**2019-2020 Proposed Use of Funds**



- ▒ Construction
- Non-Construction
- ▓ Loans and Transfers
- Reserves
- ▒ Ending Fund Balance

**CIP History**



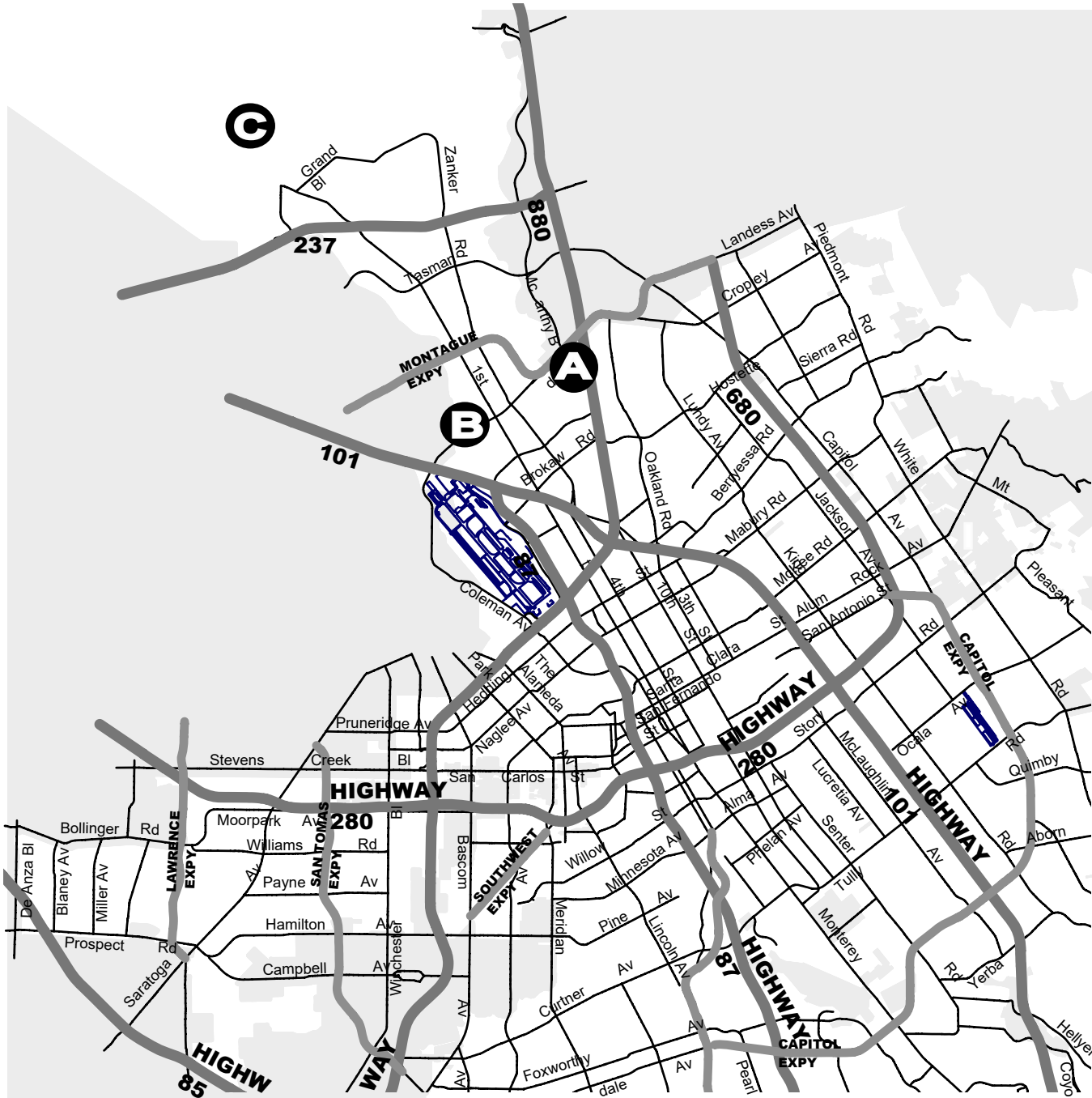
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# Water Utility System

## 2020-2024 Proposed Capital Improvement Program

### North

- A)** North San José Reliability Well #6 Construction
- B)** North San José Well #5 Development and Construction
- C)** Annual Main Replacement



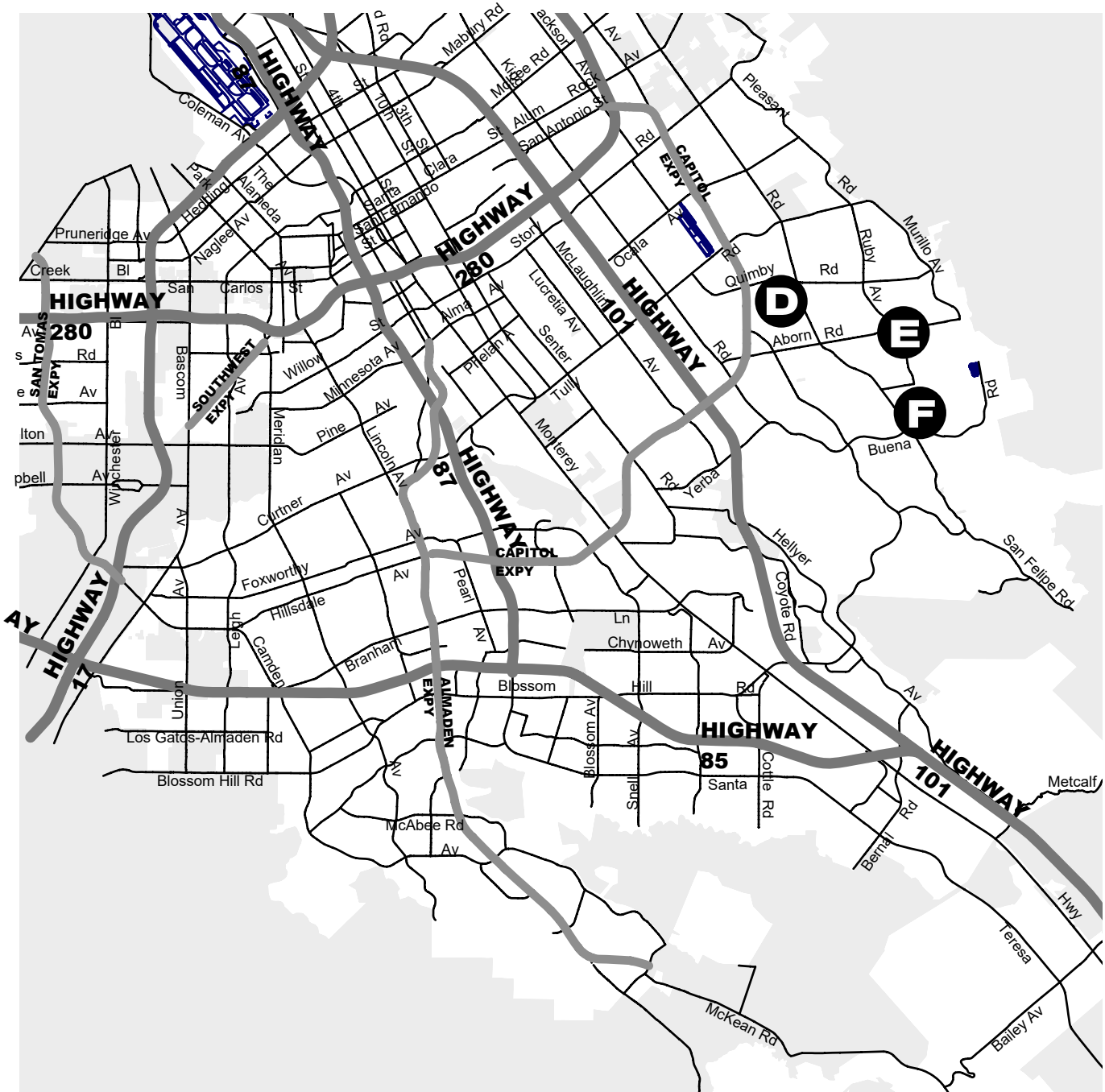
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# Water Utility System

## 2020-2024 Proposed Capital Improvement Program

### South

- D)** Annual Water Main Replacement
- E)** Fowler Pump Station Replacement
- F)** Safety and Security Improvements



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# Water Utility System

## 2020-2024 Proposed Capital Improvement Program

### Overview

#### INTRODUCTION

The Water Utility System Capital Program includes the Water Utility Capital Fund and the Major Facilities Fund. The Water Utility System Capital Program is developed to ensure reliable utility infrastructure for the San José Municipal Water System (Muni Water), which provides water utility service, in accordance with State of California State Water Resources Control Board requirements, to areas approved for development by the City Council and within the City’s water service area. The program’s mission is to provide superior water service at competitive rates. The 2020-2024 Proposed Capital Improvement Program (CIP) provides funding of \$33.2 million, of which \$12.8 million is allocated in 2019-2020.

MUNICIPAL WATER SYSTEM PUBLIC INFRASTRUCTURE	
MILES OF WATER MAINS	345
NUMBER OF RESERVOIRS	18
NUMBER OF PUMP STATIONS	15
NUMBER OF GROUNDWATER WELLS	14

Muni Water provides water service to approximately 24,000 customers in five service areas of the City of San José: Alviso, North San José, Coyote Valley, Edenvale, and Evergreen. The Alviso service area (Council District 4) includes the area within the former City of Alviso. The North San José service area (Council District 4) is generally north of Trimble Road, between the Guadalupe River and Coyote Creek. The Coyote Valley service area (Council District 2) encompasses the area generally south of Tulare Hill, west of Highway 101, and north of Palm Avenue. The Edenvale service area (Council District 8) is south of Hellyer Avenue and east of Coyote Creek. The Evergreen service area generally coincides with the boundaries of Council District 8, east of Highway 101.

This program is part of the Environmental and Utility Services City Service Area (CSA) and supports the following outcomes: *Reliable Utility Infrastructure* and *Safe, Reliable, Sufficient Water Supply*.

#### PROGRAM PRIORITIES AND OBJECTIVES

Muni Water’s CIP’s guiding objective is to provide a safe, reliable water supply. Based on the CSA outcomes supported by this program, the following list of priorities has been developed:

- Maintain the existing water utility system infrastructure;
- Provide facilities necessary for new development as identified in the Envision San José 2040 General Plan; and
- Ensure that the fire flow pressure and volume as recommended by the San José Fire Department is maintained.

# Water Utility System

## 2020-2024 Proposed Capital Improvement Program

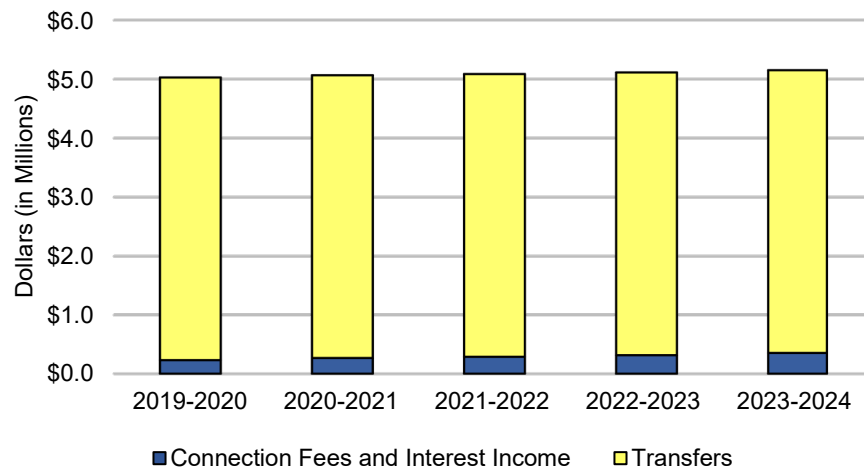
### Overview

#### SOURCES OF FUNDING

Over the five years of this Proposed CIP, the funds available for capital improvements are estimated to total \$33.2 million, which consists of \$28.6 million in the Water Utility Capital Fund and \$4.6 million in the Major Facilities Fund. Revenue for the Proposed CIP is derived from a combination of funding sources: transfers from the Water Utility Fund to the Water Utility Capital Fund, fee income, and interest income. The Water Utility Fund derives its revenue primarily from water sales in the service areas. The amount of the transfer from the Water Utility Fund is \$4.8 million in each year of the CIP. Fee revenue in the Water Utility Capital Fund is generated from Service Connection Fees, Advanced System Design Fees, and Meter Installation Fees.

Revenue in the Major Facilities Fund is generated primarily through development fees associated with the connection and operation of major water facilities in the five service areas. Revenues received from Major Water Facilities Fees are not budgeted due to the volatility of this revenue stream. Revenue will be recognized, and programmed as necessary during the year, as it is received.

#### Summary of Revenues



#### PROGRAM HIGHLIGHTS

The Water Utility 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 by service area. For further information on the program's individual projects, please refer to the Detail Pages.



# Water Utility System

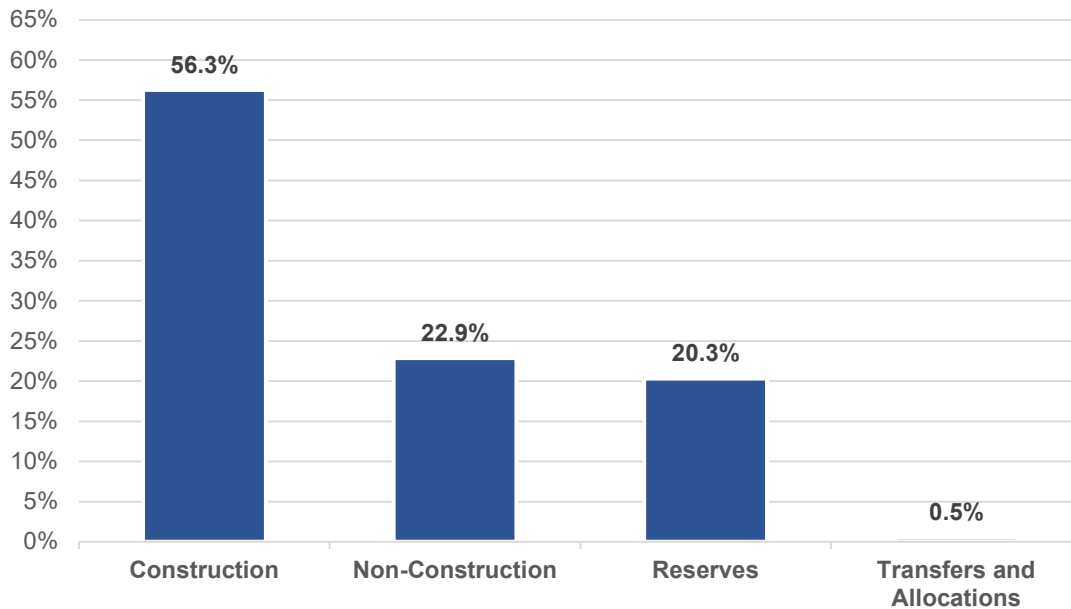
## 2020-2024 Proposed Capital Improvement Program

### Overview

#### PROGRAM HIGHLIGHTS

To meet the service needs of new developments in the Municipal Water System service area, the program continues its policy of requiring developers to construct distribution system improvements, such as pipelines, service connections, groundwater wells, and fire hydrants. Reservoirs, pump stations, and other large facilities are either constructed by developers or funded from the Major Facilities fees. Construction and reconstruction of projects for existing customers are funded from water sale revenues, which are displayed in the 2019-2020 Proposed Operating Budget in the Water Utility Fund.

**2020-2024 Water Utility System  
Capital Program Expenditures  
\$30.0 million  
(excludes Ending Fund Balance)**



# **Water Utility System**

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## **2020-2024 Proposed Capital Improvement Program**

### **Overview**

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#### **PROGRAM HIGHLIGHTS**

##### System-Wide

The Safety and Security Improvements project (\$500,000) in the Proposed CIP includes the installation of safety and security equipment at various system facilities in order to maintain reliable utility infrastructure, ensure water supplies remain secured, and provide a safe working environment for staff performing operations and maintenance. In an effort to maintain and upgrade the City's Muni Water distribution system, the 2020-2024 CIP includes funding for the Annual Water Main Replacement Project (\$9.3 million), which will prioritize water mains for replacement throughout the service areas of Muni Water System by rating pipe segments based on age, adequacy of size and flow, the number of leaks or failures that have occurred, and the difficulty to repair the pipe following an unexpected failure. The 2020-2024 CIP also includes funding for Infrastructure Improvement (\$4.2 million) and System Maintenance and Repairs (\$3.8 million).

The System Rehabilitation/Replacement Reserve totals \$4.3 million at the end of the 2020-2024 CIP, which is approximately seven percent of the projected potable water revenue for 2020-2024. In the event that economic or environmental conditions (e.g. drought, slowing economy, etc.) decrease revenues to the Water Utility System, use of the reserve may be required to maintain infrastructure.

##### North San José and Alviso Service Areas

The North San José and Alviso service areas use water supplied by the Hetch-Hetchy system under the Water Supply Agreement (WSA) with the City and County of San Francisco. San José is a party to the agreement with 27 suburban agencies. The current agreement, which will expire June 30, 2034, was approved by the City Council in June 2009.

The North San José and Alviso service areas have experienced some growth in the last several years, and continued growth is assumed in this CIP. In order to meet future demand forecasts, the City continues to work with developers to construct new groundwater wells once viable locations are determined. Increased focus on rehabilitation and construction of groundwater wells will enable the San José Municipal Water System to minimize costs to customers, supply groundwater under emergency situations, and take advantage of Indirect Potable Reuse of purified water when available. The Proposed CIP includes funding for the North San José Reliability Well #6 Construction project (\$1.5 million).

# Water Utility System

## 2020-2024 Proposed Capital Improvement Program

### Overview

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#### PROGRAM HIGHLIGHTS

##### Evergreen Service Area



**Installation of New Pipe at Gumdrop Drive**

The Evergreen service area contains approximately 92% of the total customers served by the water system and accounts for 72% of total water usage. Customers in the Evergreen area receive water supplied by the Santa Clara Valley Water District. The Evergreen service area has experienced minimal growth in the last several years. Included in the Proposed CIP is the completion of the Fowler Pump Station Replacement project, as well as other miscellaneous improvements to extend the useful life of the system.

##### Edenvale Service Area

Basic water facilities for domestic supply and fire protection for the Edenvale service area north of Silver Creek Valley Road include three wells and a reservoir. Groundwater from deep-water wells provides 100% of the supply in the Edenvale service area. The quality, supply, and management of this local groundwater basin are monitored by the Santa Clara Valley Water District. Projects scheduled in the 2020-2024 Proposed CIP in the Edenvale service area include minor improvements, such as vault site maintenance, asphalt restoration, pump station maintenance, other distribution system rehabilitation, and back-up generator replacement.

##### Coyote Valley Service Area

Groundwater from deep-water wells provides 100% of the supply in the Coyote Valley service area. City funding for developer-constructed water facilities in the primarily industrial North Coyote Valley service area was provided in accordance with the Master Development Agreement between the City and the coalition of North Coyote Valley developers. Once development occurs in this service area, developers will pay for the cost of expanding the water system into this area.

**Water Utility System**  
**2020-2024 Proposed Capital Improvement Program**  
**Overview**

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**MAJOR CHANGES FROM THE 2019-2023 ADOPTED CIP**

The overall size of the Water Utility System CIP has decreased by approximately \$4.2 million from \$37.4 million in the 2019-2023 Adopted CIP to \$33.2 million in the 2020-2024 Proposed CIP. The following table outlines the most significant changes to the CIP, which are primarily due to projects nearing completion, thereby falling out of the five-year window.

<b>Project</b>	<b>Incr/(Decr)</b>
Fowler Pump Station Replacement	(\$1.9 million)
North San José Well #5 Development and Construction	(\$1.6 million)

**OPERATING BUDGET IMPACT**

There are no additional maintenance and operating costs associated with the projects in the 2020-2024 Proposed CIP.



**2019-2020 CAPITAL BUDGET**

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**2020-2024 CAPITAL  
IMPROVEMENT PROGRAM**



**WATER UTILITY  
SYSTEM**

**SOURCE AND USE OF FUNDS  
STATEMENTS**

Water Utility System  
**2020-2024 Proposed Capital Improvement Program**  
**Source of Funds (Combined)**

	Estimated						
	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	5-Year Total
<b>Water Utility Capital Fund (500)</b>							
<b>Beginning Balance</b>	6,323,971	3,587,850	315,850	218,850	327,850	157,850	3,587,850 *
<b>Reserve for Encumbrance</b>	2,488,341						
<b>Transfers</b>							
Transfer from the Water Utility Fund	5,360,000	4,800,000	4,800,000	4,800,000	4,800,000	4,800,000	24,000,000
<b>TOTAL Transfers</b>	<b>5,360,000</b>	<b>4,800,000</b>	<b>4,800,000</b>	<b>4,800,000</b>	<b>4,800,000</b>	<b>4,800,000</b>	<b>24,000,000</b>
<b>Revenue from Use of Money and Property</b>							
Interest Income	203,000	151,000	99,000	116,000	130,000	141,000	637,000
<b>TOTAL Revenue from Use of Money and Property</b>	<b>203,000</b>	<b>151,000</b>	<b>99,000</b>	<b>116,000</b>	<b>130,000</b>	<b>141,000</b>	<b>637,000</b>
<b>Fees, Rates and Charges</b>							
Advance System Design Fees	15,000	25,000	25,000	25,000	25,000	25,000	125,000
Meter Installation Fees	15,000	25,000	25,000	25,000	25,000	25,000	125,000
Service Connection Fees	80,000	25,000	25,000	25,000	25,000	25,000	125,000
<b>TOTAL Fees, Rates and Charges</b>	<b>110,000</b>	<b>75,000</b>	<b>75,000</b>	<b>75,000</b>	<b>75,000</b>	<b>75,000</b>	<b>375,000</b>
<b>Total Water Utility Capital Fund (500)</b>	<b>14,485,312</b>	<b>8,613,850</b>	<b>5,289,850</b>	<b>5,209,850</b>	<b>5,332,850</b>	<b>5,173,850</b>	<b>28,599,850 *</b>
<b>Major Facilities Fund (502)</b>							
<b>Beginning Balance</b>	5,620,317	4,026,318	2,536,318	2,629,318	2,735,318	2,849,318	4,026,318 *

Water Utility System  
**2020-2024 Proposed Capital Improvement Program**  
**Source of Funds (Combined)**

	Estimated						
	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	5-Year Total
Reserve for Encumbrance	29,050						
<b>Revenue from Use of Money and Property</b>							
Interest Income	105,000	125,000	108,000	121,000	129,000	137,000	620,000
<b>TOTAL Revenue from Use of Money and Property</b>	<b>105,000</b>	<b>125,000</b>	<b>108,000</b>	<b>121,000</b>	<b>129,000</b>	<b>137,000</b>	<b>620,000</b>
<b>Total Major Facilities Fund (502)</b>	<b>5,754,367</b>	<b>4,151,318</b>	<b>2,644,318</b>	<b>2,750,318</b>	<b>2,864,318</b>	<b>2,986,318</b>	<b>4,646,318 *</b>
<b>TOTAL SOURCES</b>	<b>20,239,679</b>	<b>12,765,168</b>	<b>7,934,168</b>	<b>7,960,168</b>	<b>8,197,168</b>	<b>8,160,168</b>	<b>33,246,168 *</b>

\* The 2020-2021 through 2023-2024 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

# Water Utility System

## 2020-2024 Proposed Capital Improvement Program Use of Funds (Combined)

	Estimated 2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	5-Year Total
<b><u>Water Utility System</u></b>							
Annual Water Main Replacement	1,300,000	1,900,000	1,300,000	1,800,000	2,400,000	1,900,000	9,300,000
Backup Generator Replacement	200,000						
Cadwallader Reservoir Rehabilitation	40,978						
Edenvale Reservoir Rehabilitation	19,687						
Elkins Way Main Replacement							
Facility Sites Improvement	320,000						
Fowler Pump Station Replacement	2,545,000	250,000					250,000
Gumdrop Drive Main Replacement	1,653,499						
Infrastructure Improvements	1,034,567	810,000	820,000	830,000	840,000	850,000	4,150,000
Meter Installations	175,990	50,000	50,000	50,000	50,000	50,000	250,000
North San José Reliability Well #6 Construction		360,000	950,000	150,000			1,460,000
North San José Water Well Evaluation and Rehabilitation	647,007						
North San José Well #5 Development and Construction	1,560,000						
Safety and Security Improvements	319,335	100,000	100,000	100,000	100,000	100,000	500,000
Service Installations	286,835	200,000	200,000	200,000	200,000	200,000	1,000,000
<b>Other Water - Construction</b>	<b>10,102,898</b>	<b>3,670,000</b>	<b>3,420,000</b>	<b>3,130,000</b>	<b>3,590,000</b>	<b>3,100,000</b>	<b>16,910,000</b>
<b>Water - Construction</b>	<b>10,102,898</b>	<b>3,670,000</b>	<b>3,420,000</b>	<b>3,130,000</b>	<b>3,590,000</b>	<b>3,100,000</b>	<b>16,910,000</b>
Advance System Design	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
Major Facilities Fee Administration	15,000	15,000	15,000	15,000	15,000	15,000	75,000
Major Water Facility Fee Update	29,050						
Master Plan Engineering	164,617	160,000	165,000	170,000	175,000	180,000	850,000
Network System Flow Improvements	6,000	6,000	6,000	6,000	6,000	6,000	30,000



# Water Utility System

## 2020-2024 Proposed Capital Improvement Program Use of Funds (Combined)

	<b>Estimated</b>						
	<b>2018-2019</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>2022-2023</b>	<b>2023-2024</b>	<b>5-Year Total</b>
Preliminary Engineering - Water	160,000	145,000	150,000	155,000	160,000	165,000	775,000
GIS Support	75,680	65,000	65,000	65,000	65,000	65,000	325,000
System Maintenance/Repairs	1,221,267	740,000	760,000	760,000	780,000	780,000	3,820,000
Tuers Road Site Improvements	510,000						
<b>General Non-Construction - Water</b>	<b>2,381,613</b>	<b>1,331,000</b>	<b>1,361,000</b>	<b>1,371,000</b>	<b>1,401,000</b>	<b>1,411,000</b>	<b>6,875,000</b>
<b>Water - Non Construction</b>	<b>2,381,613</b>	<b>1,331,000</b>	<b>1,361,000</b>	<b>1,371,000</b>	<b>1,401,000</b>	<b>1,411,000</b>	<b>6,875,000</b>
Public Art Funding	126,000	16,000	4,000	4,000			24,000
<b>Public Art Projects</b>	<b>126,000</b>	<b>16,000</b>	<b>4,000</b>	<b>4,000</b>			<b>24,000</b>
Capital Program and Public Works Department Support Service Costs	7,000	22,000	20,000	18,000	21,000	18,000	99,000
<b>Allocations</b>	<b>7,000</b>	<b>22,000</b>	<b>20,000</b>	<b>18,000</b>	<b>21,000</b>	<b>18,000</b>	<b>99,000</b>
City Hall Debt Service Fund	8,000	6,000	6,000	6,000	6,000	6,000	30,000
<b>Transfers to Special Funds</b>	<b>8,000</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>	<b>30,000</b>
<b>Transfers Expense</b>	<b>8,000</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>	<b>30,000</b>
North Coyote Valley Water System Reserve		168,000					168,000
System Growth Related Projects Reserve		1,600,000					1,600,000
System Rehabilitation/Replacement Reserve		3,100,000	275,000	368,000	172,000	423,000	4,338,000
<b>Expense Reserves - Non Construction</b>		<b>4,868,000</b>	<b>275,000</b>	<b>368,000</b>	<b>172,000</b>	<b>423,000</b>	<b>6,106,000</b>
<b>Total Expenditures</b>	<b>12,625,511</b>	<b>9,913,000</b>	<b>5,086,000</b>	<b>4,897,000</b>	<b>5,190,000</b>	<b>4,958,000</b>	<b>30,044,000</b>
Ending Fund Balance	7,614,168	2,852,168	2,848,168	3,063,168	3,007,168	3,202,168	3,202,168 *
<b>TOTAL</b>	<b>20,239,679</b>	<b>12,765,168</b>	<b>7,934,168</b>	<b>7,960,168</b>	<b>8,197,168</b>	<b>8,160,168</b>	<b>33,246,168 *</b>

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



**2019-2020 CAPITAL BUDGET**

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**2020-2024 CAPITAL  
IMPROVEMENT PROGRAM**



**WATER UTILITY  
SYSTEM**

**DETAIL OF PROJECTS**

# Water Capital Program

## 2020-2024 Proposed Capital Improvement Program

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

#### **Fowler Pump Station Replacement**

<b>CSA</b>	Environmental and Utility Services	<b>Initial Start Date</b>	3rd Qtr. 2017
<b>CSA Outcome</b>	Safe, Reliable, and Sufficient Water Supply; Reliable Utility Infrastructure	<b>Initial End Date</b>	2nd Qtr. 2019
<b>Department</b>	Environmental Services	<b>Revised Start Date</b>	
<b>Location</b>	Fowler Road	<b>Revised End Date</b>	2nd Qtr. 2020
<b>Council Districts</b>	8	<b>Initial Project Budget</b>	\$1,560,000
<b>Appropriation</b>	A402N	<b>FY Initiated</b>	2017-2018

**Description** This project consists of the replacement and upgrade of the Fowler Pump Station, which will have reached the end of its useful life.

**Justification** To ensure the efficient operation of the water system and to maintain reliable utility infrastructure, pump stations must be replaced at the end of their useful life. In addition, the redesign of the pump station will increase the operating efficiency and improve system operations.

**Notes**

**Major Cost Changes** 2019-2023 CIP - Increase of \$600,000 due to an updated construction cost estimate.  
2020-2024 CIP - Increase of \$647,000 due to an updated construction cost estimate.

	PRIOR YEARS	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
<b>Expenditure Schedule (000s)</b>										
Design	12	45								57
Construction		2,500	250					250		2,750
<b>Total</b>	<b>12</b>	<b>2,545</b>	<b>250</b>					<b>250</b>		<b>2,807</b>

<b>Funding Source Schedule (000s)</b>										
Water Utility Capital Fund (500)	12	2,545	250					250		2,807
<b>Total</b>	<b>12</b>	<b>2,545</b>	<b>250</b>					<b>250</b>		<b>2,807</b>

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

# Water Capital Program

## 2020-2024 Proposed Capital Improvement Program

### Detail of One-Time Construction Projects

#### North San José Reliability Well #6 Construction

<b>CSA</b>	Environmental and Utility Services	<b>Initial Start Date</b>	3rd Qtr. 2018
<b>CSA Outcome</b>	Reliable Utility Infrastructure	<b>Initial End Date</b>	2nd Qtr. 2021
<b>Department</b>	Environmental Services	<b>Revised Start Date</b>	3rd Qtr. 2019
<b>Location</b>	Trimble Road	<b>Revised End Date</b>	2nd Qtr. 2022
<b>Council Districts</b>	4	<b>Initial Project Budget</b>	\$1,460,000
<b>Appropriation</b>	TEMP_152	<b>FY Initiated</b>	2019-2020

**Description** This project constructs a groundwater well in the North San José service area to provide water supply reliability to existing customers.

**Justification** An existing backup well has begun to reach end of useful life and exceed secondary maximum contaminant limit health standards. This project will replace the existing reliability well.

**Notes**

**Major Cost Changes**

	PRIOR YEARS	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
<b>Expenditure Schedule (000s)</b>										
Design			360					360		360
Construction				950				950		950
Post Construction					150			150		150
<b>Total</b>			<b>360</b>	<b>950</b>	<b>150</b>			<b>1,460</b>		<b>1,460</b>

<b>Funding Source Schedule (000s)</b>										
Water Utility Capital Fund (500)			360	950	150			1,460		1,460
<b>Total</b>			<b>360</b>	<b>950</b>	<b>150</b>			<b>1,460</b>		<b>1,460</b>

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

# Water Capital Program

## 2020-2024 Proposed Capital Improvement Program

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

#### **Annual Water Main Replacement**

<b>CSA</b>	Environmental and Utility Services	<b>Initial Start Date</b>	Ongoing
<b>CSA Outcome</b>	Safe, Reliable, and Sufficient Water Supply; Reliable Water System	<b>Initial End Date</b>	Ongoing
<b>Department</b>	Environmental Services	<b>Revised Start Date</b>	
<b>Location</b>	System-wide	<b>Revised End Date</b>	
<b>Council Districts</b>	City-wide	<b>Initial Project Budget</b>	
<b>Appropriation</b>	A410Q		

**Description** This project is part of a continuing program to maintain and upgrade the City's Municipal Water distribution system. Most water pipes have a design life of roughly 50 years, depending upon when it was manufactured and the soil conditions where it is installed. The program has prioritized water mains for replacement throughout the service areas of Muni Water System by rating pipe segments based on age, adequacy of size and flow, the number of leaks or failures that have occurred, and the difficulty to repair the pipe if it failed considering location and traffic conditions.

**Justification** To ensure the efficient operation of the water system and to maintain reliable utility infrastructure.

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

**Major Cost Changes**

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Design	50	60	80	80			220
Construction	1,250	1,840	1,220	1,720	2,400	1,900	9,080
<b>Total</b>	<b>1,300</b>	<b>1,900</b>	<b>1,300</b>	<b>1,800</b>	<b>2,400</b>	<b>1,900</b>	<b>9,300</b>

<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	1,300	1,900	1,300	1,800	2,400	1,900	9,300
<b>Total</b>	<b>1,300</b>	<b>1,900</b>	<b>1,300</b>	<b>1,800</b>	<b>2,400</b>	<b>1,900</b>	<b>9,300</b>

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

# Water Capital Program

## 2020-2024 Proposed Capital Improvement Program

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

#### **Infrastructure Improvements**

<b>CSA</b>	Environmental and Utility Services	<b>Initial Start Date</b>	Ongoing
<b>CSA Outcome</b>	Reliable Utility Infrastructure	<b>Initial End Date</b>	Ongoing
<b>Department</b>	Environmental Services	<b>Revised Start Date</b>	
<b>Location</b>	System-wide	<b>Revised End Date</b>	
<b>Council Districts</b>	2, 4, 7, 8	<b>Initial Project Budget</b>	
<b>Appropriation</b>	A5366		

**Description** This allocation provides funding to replace and/or refurbish pumps, motors, valves, electrical control mechanisms, generators, and water mains that are nearing the end of their useful lives. The selection and scope of the projects selected in any particular year will be based on the previous year's maintenance needs.

**Justification** Mechanical and electrical equipment requires replacement at the end of its service life to ensure ongoing operation.

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

**Major Cost Changes**

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Design	146						
Construction	889	810	820	830	840	850	4,150
<b>Total</b>	<b>1,035</b>	<b>810</b>	<b>820</b>	<b>830</b>	<b>840</b>	<b>850</b>	<b>4,150</b>

<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	1,035	810	820	830	840	850	4,150
<b>Total</b>	<b>1,035</b>	<b>810</b>	<b>820</b>	<b>830</b>	<b>840</b>	<b>850</b>	<b>4,150</b>

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

# Water Capital Program

## 2020-2024 Proposed Capital Improvement Program

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

#### **Meter Installations**

<b>CSA</b>	Environmental and Utility Services	<b>Initial Start Date</b>	Ongoing
<b>CSA Outcome</b>	Reliable Utility Infrastructure	<b>Initial End Date</b>	Ongoing
<b>Department</b>	Environmental Services	<b>Revised Start Date</b>	
<b>Location</b>	System-wide	<b>Revised End Date</b>	
<b>Council Districts</b>	2, 4, 7, 8	<b>Initial Project Budget</b>	
<b>Appropriation</b>	A4347		

**Description** This allocation provides funding to purchase, test, and install water meters for new developments and customers, the cost of which is offset by the meter installation fees paid by developers and property owners.

**Justification** New meters are needed to provide water to new utility customers.

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

**Major Cost Changes**

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Construction	176	50	50	50	50	50	250
<b>Total</b>	<b>176</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>

<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	176	50	50	50	50	50	250
<b>Total</b>	<b>176</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>

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

# Water Capital Program

## 2020-2024 Proposed Capital Improvement Program

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

#### **Safety and Security Improvements**

<b>CSA</b>	Environmental and Utility Services	<b>Initial Start Date</b>	Ongoing
<b>CSA Outcome</b>	Reliable Utility Infrastructure	<b>Initial End Date</b>	Ongoing
<b>Department</b>	Environmental Services	<b>Revised Start Date</b>	
<b>Location</b>	System-wide	<b>Revised End Date</b>	
<b>Council Districts</b>	2, 4, 7, 8	<b>Initial Project Budget</b>	
<b>Appropriation</b>	A4095		

**Description** This project includes the repair and installation of additional safety and security improvements at various system facilities. Examples of improvements include new and repaired fencing at reservoirs, construction of concrete block walls around wells, and the installation of safety railing at various sites.

**Justification** This project will maintain reliable utility infrastructure, ensure water supplies remain secured, and provide a safe working environment for staff performing operations and maintenance.

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

**Major Cost Changes**

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
Expenditure Schedule (000s)							
Construction	319	100	100	100	100	100	500
<b>Total</b>	<b>319</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>500</b>

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
Funding Source Schedule (000s)							
Water Utility Capital Fund (500)	319	100	100	100	100	100	500
<b>Total</b>	<b>319</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>500</b>

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



# Water Capital Program

## 2020-2024 Proposed Capital Improvement Program

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

#### **Service Installations**

<b>CSA</b>	Environmental and Utility Services	<b>Initial Start Date</b>	Ongoing
<b>CSA Outcome</b>	Reliable Utility Infrastructure	<b>Initial End Date</b>	Ongoing
<b>Department</b>	Environmental Services	<b>Revised Start Date</b>	
<b>Location</b>	System-wide	<b>Revised End Date</b>	
<b>Council Districts</b>	2, 4, 7, 8	<b>Initial Project Budget</b>	
<b>Appropriation</b>	A4348		

**Description** This allocation provides funding for the installation of connections between water mains and meters and the extension of existing water mains. A portion of this work related to new development is paid for by developer fees. The remainder of the work, which is not tied to developer fees, entails connections to water, service laterals, sampling stations, meter boxes, air release valves, and main extensions in existing service areas to increase the operability of the system.

**Justification** As development proceeds in the City, connections between water mains and meters are required to service new customers. Additional minor connections and appurtenances are periodically needed to reliably operate the system and ensure a safe drinking water supply.

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

**Major Cost Changes**

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Construction	287	200	200	200	200	200	1,000
<b>Total</b>	<b>287</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>1,000</b>

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	287	200	200	200	200	200	1,000
<b>Total</b>	<b>287</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>1,000</b>

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

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program  
**Detail of Ongoing Non-Construction Projects**

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**Advance System Design**

**CSA** Environmental and Utility Services  
**CSA Outcome** Reliable Utility Infrastructure  
**Department** Environmental Services  
**Council Districts** 2, 4, 7, 8  
**Appropriation** A4346

**Description** This allocation funds the design, engineering, and inspection for the connection of new developments to the Water Utility System. Project costs are offset by developer fees.

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

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Design	200	200	200	200	200	200	1,000
<b>Total</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>1,000</b>

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	200	200	200	200	200	200	1,000
<b>Total</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>1,000</b>

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program  
**Detail of Ongoing Non-Construction Projects**

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**GIS Support**

**CSA** Environmental and Utility Services  
**CSA Outcome** Reliable Utility Infrastructure  
**Department** Environmental Services  
**Council Districts** City-wide  
**Appropriation** A7365

**Description** This allocation funds Geographic Information System (GIS) related updates, improvements, support services, and other associated needs.

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

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Design	65	65	65	65	65	65	325
Maintenance, Repairs, Other	11						
<b>Total</b>	<b>76</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>325</b>

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	76	65	65	65	65	65	325
<b>Total</b>	<b>76</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>325</b>

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program  
**Detail of Ongoing Non-Construction Projects**

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**Major Facilities Fee Administration**

**CSA** Environmental and Utility Services  
**CSA Outcome** Reliable Utility Infrastructure  
**Department** Environmental Services  
**Council Districts** 2, 4, 7, 8  
**Appropriation** A5369

**Description** This allocation provides funding to administer the Major Facilities Fees. The Major Facilities Fund receives fees associated with the connection and operation of major water facilities constructed in the North San José, Evergreen, Alviso, Edenvale, and Coyote Valley areas.

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

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
General Administration	15	15	15	15	15	15	75
<b>Total</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>75</b>

<b>Funding Source Schedule (000s)</b>							
Major Facilities Fund (502)	15	15	15	15	15	15	75
<b>Total</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>75</b>

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program  
**Detail of Ongoing Non-Construction Projects**

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**Master Plan Engineering**

**CSA** Environmental and Utility Services  
**CSA Outcome** Reliable Utility Infrastructure  
**Department** Environmental Services  
**Council Districts** 2, 4, 7, 8  
**Appropriation** A4349

**Description** This allocation is used to update the Water System Master Plan based on anticipated development and customer consumption.

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

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Project Feasibility Development	155	160	165	170	175	180	850
Design	10						
<b>Total</b>	<b>165</b>	<b>160</b>	<b>165</b>	<b>170</b>	<b>175</b>	<b>180</b>	<b>850</b>

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	165	160	165	170	175	180	850
<b>Total</b>	<b>165</b>	<b>160</b>	<b>165</b>	<b>170</b>	<b>175</b>	<b>180</b>	<b>850</b>

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program  
**Detail of Ongoing Non-Construction Projects**

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**Network System Flow Improvements**

**CSA** Environmental and Utility Services  
**CSA Outcome** Reliable Utility Infrastructure  
**Department** Environmental Services  
**Council Districts** 2, 4, 7, 8  
**Appropriation** A4350

**Description** This allocation is used to perform computer analysis of the water distribution system, including modeling of the system's reservoirs, pump stations, and distribution facilities, in order to prioritize replacement of existing facilities and development of new facilities.

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

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Design	6	6	6	6	6	6	30
<b>Total</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>30</b>

<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	6	6	6	6	6	6	30
<b>Total</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>30</b>

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program  
**Detail of Ongoing Non-Construction Projects**

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**Preliminary Engineering - Water**

**CSA** Environmental and Utility Services  
**CSA Outcome** Reliable Utility Infrastructure  
**Department** Environmental Services  
**Council Districts** 2, 4, 7, 8  
**Appropriation** A4952

**Description** This allocation provides funding for project development in the early stages of planning.

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

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Design	140	145	150	155	160	165	775
Maintenance, Repairs, Other	20						
<b>Total</b>	<b>160</b>	<b>145</b>	<b>150</b>	<b>155</b>	<b>160</b>	<b>165</b>	<b>775</b>

<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	160	145	150	155	160	165	775
<b>Total</b>	<b>160</b>	<b>145</b>	<b>150</b>	<b>155</b>	<b>160</b>	<b>165</b>	<b>775</b>

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program  
**Detail of Ongoing Non-Construction Projects**

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**System Maintenance/Repairs**

**CSA** Environmental and Utility Services  
**CSA Outcome** Reliable Utility Infrastructure  
**Department** Environmental Services  
**Council Districts** 2, 4, 7, 8  
**Appropriation** A5876

**Description** This allocation funds emergency and miscellaneous repairs in the distribution system.

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

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Expenditure Schedule (000s)</b>							
Design	72						
Equipment, Materials and Supplies	1,149	740	760	760	780	780	3,820
<b>Total</b>	<b>1,221</b>	<b>740</b>	<b>760</b>	<b>760</b>	<b>780</b>	<b>780</b>	<b>3,820</b>

	FY19 EST	FY20	FY21	FY22	FY23	FY24	5 YEAR TOTAL
<b>Funding Source Schedule (000s)</b>							
Water Utility Capital Fund (500)	1,221	740	760	760	780	780	3,820
<b>Total</b>	<b>1,221</b>	<b>740</b>	<b>760</b>	<b>760</b>	<b>780</b>	<b>780</b>	<b>3,820</b>





**2019-2020 CAPITAL BUDGET**

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**2020-2024 CAPITAL  
IMPROVEMENT PROGRAM**



**WATER UTILITY  
SYSTEM**

**SUMMARY OF RESERVES**

**Water Capital Program**  
 2020-2024 Proposed Capital Improvement Program

**Summary of Reserves**

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<b>Project Name</b>	North Coyote Valley Water System Reserve	<b>Initial Start Date</b>	N/A
<b>5-Yr CIP Budget</b>	\$ 168,000	<b>Initial End Date</b>	N/A
<b>Total Budget</b>	\$ 168,000	<b>Revised Start Date</b>	
<b>Council Districts</b>	2	<b>Revised End Date</b>	
<b>Description</b>	This reserve sets aside funds in the Water Utility Capital Fund for outstanding North Coyote Valley Water System project close-out activities, to be completed by the contractor relating to final project documentation. There are outstanding project close-out issues that continue to remain unresolved. The Department periodically attempts to coordinate with the land owner and their attorney to obtain the last necessary project documentation.		

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<b>Project Name</b>	System Growth Related Projects Reserve	<b>Initial Start Date</b>	N/A
<b>5-Yr CIP Budget</b>	\$ 1,600,000	<b>Initial End Date</b>	N/A
<b>Total Budget</b>	\$ 1,600,000	<b>Revised Start Date</b>	
<b>Council Districts</b>	2	<b>Revised End Date</b>	
<b>Description</b>	This reserve sets aside funds in the Major Facilities Fund for acquisition of property and the construction of facilities to accommodate future system growth and development.		

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<b>Project Name</b>	System Rehabilitation/Replacement Reserve	<b>Initial Start Date</b>	N/A
<b>5-Yr CIP Budget</b>	\$ 4,338,000	<b>Initial End Date</b>	N/A
<b>Total Budget</b>	\$ 4,338,000	<b>Revised Start Date</b>	
<b>Council Districts</b>	2	<b>Revised End Date</b>	
<b>Description</b>	This reserve sets aside funds in the Water Utility Capital Fund for rehabilitation and/or replacement of existing facilities. Ordinance No. 26903, which was approved by the City Council on May 27, 2003, requires that this reserve total 7% of annual operating revenues. This reserve is estimated to total \$4.3 million by the end of the 2020-2024 CIP based on current operating revenue projections through 2023-2024.		

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