

APPENDIX R

**City of Chula Vista Improvement Program -
Sewer Projects**

Wastewater Management System (WMS)

The current Chula Vista Wastewater Master Plan (WMP) identifies a conservative planning level sewer generation rate of 230 gallons per EDU. The WMP estimates the City's ultimate sewer treatment capacity required for the currently planned build out condition will be 29.89 MGD. However, the treatment capacity requirement could be as low as 18.4 MGD using a generation rate based on current metered flow data. The reduction in flow can be attributed, in part, to lowered use due to the increase in the cost of water combined with on-going water conservation efforts. The City's buildout capacity needs are projected to be between the WMP and the current metered flow estimate. The Wastewater Engineering Section will continue to track water usage trends, changes in land use and population projections to validate current generation rates and project the ultimate need for the City.

The City continues to focus on its Annual Sewer Rehabilitation Program, which expends approximately \$1,000,000 to \$2,000,000 annually for the replacement and rehabilitation of sewer pipes, manholes, lift stations, access roads, and other sewer system components. The City utilizes standardized evaluation and ranking criteria to inspect and evaluate the condition of the entire system to prioritize sewer infrastructure for replacement or rehabilitation.

Through the years, the funds collected from the City's rate payers have been sufficient to maintain and operate the City's wastewater collection system as well as to pay for the treatment of the wastewater. In order to ensure the future adequacy of the sewer funds and determine if current revenue levels are sufficient to cover projected expenses, staff will re-evaluate the sewer rate cost of service study. One significant expense for the City is the cost to treat wastewater at the City of San Diego's Point Loma Treatment Plant (PLTP). The PLTP operates at an advanced primary treatment level under a waiver granted by a modification to the Clean Water Act pursuant to sections 301(h) and 301(j)(5) initiated in 1994 and referred to as the Ocean Pollution Reduction Act (OPRA). This waiver is renewed every five years at the same time as the National Pollutant Discharge Elimination System (NPDES) permit. In negotiations to secure the waiver, the City of San Diego proposed the Pure Water Program. This program is the creation of 83 MGD of purified (potable reuse) water. As the Pure Water Program progresses and as this next sewer rate cost of service study is performed, staff will be able to determine the financial impact to Chula Vista residents.

Proposed Projects

The appropriation for Wastewater Management System (WMS) is \$2.65 million, which represents 12.11% of the proposed CIP budget.

Sewer Projects

Funding of \$1.3 million is programmed to complete the J Street Sewer Junction Structure Improvements at Bay Boulevard.

A total of \$500,000 is planned for upgrades to the Agua Vista Pump Station.

Sewer access roads at various locations will be rehabilitated at a cost of \$350,000.

A total of \$300,000 is programmed to complete sewer pipe rehabilitation at various locations throughout the city.

Funding of \$200,000 is planned for ongoing sewer manhole rehabilitation efforts citywide.



City of Chula Vista
FY 2020/21-FY 2024/25 Capital Improvement Program

Project Description Report

Project Name: Agua Vista Pump Station Upgrades
Project No: SWR0286

Project Location:	Corner of Proctor Valley Road and Agua Vista Road.		
Department Responsible:	Engineering		
Project Intents:	Capacity		
Project Description:	Rehabilitation of an existing pump station including replacing two pumps, adding a second set of pumps and controls, and constructing a building to house the pumps.		
Location Description	Project is needed to enhance the operability for the pump station		
Justification:	This project supports the Strong and Secure Neighborhoods strategic goal, which includes preserving and restoring City Infrastructure through the Asset Management Program. Replacing the pumps and adding two more pumps can double the life expectancy of the facility and reduces the likelihood of a catastrophic failure causing a sewage spill.		
Total Estimated Cost:	\$950,000		
Estimated Operation and Maintenance Cost:	\$0	Project Type:	Sewer



Source Of Funding								
Fund No	Fund Name	Previous	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Future
428768	Sewer Facility Replacement	\$450,000	\$500,000	\$0	\$0	\$0	\$0	\$0

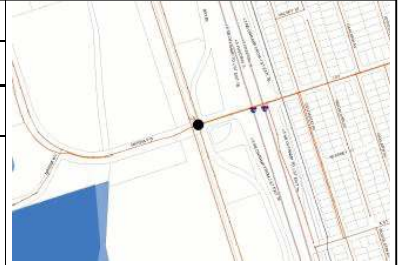


City of Chula Vista
FY 2020/21-FY 2024/25 Capital Improvement Program

Project Description Report

Project Name: J Street Sewer Junction Structure Improvement
Project No: SWR0291

Project Location:	"J" Street and Bay Boulevard		
Department Responsible:	Public Works		
Project Intents:	Capacity		
Project Description:	Capacity and hydraulic improvements to two existing sewer lines (12-inch and 24-inch) entering the existing Sewer Junction Box at the intersection of J Street and Bay Boulevard. Project will coat the junction box interior to further protect the concrete from deterioration. This junction box currently serves sewer flows from the north, south, east, and west before discharging into the MWS meter station (CV2). Project may require coordination with Railroad Authority, SANDAG (Bayshore Bikeway) and CalTrans.		
Location Description	The juncture structure is located in the intersection of "J" Street and Bay Boulevard.		
Justification:	This project seeks to promote Strong and Secure Neighborhoods Strategic Goal through the preservation and restoration of City infrastructure (initiative 4.1.1). Study will identify capacity constraints in vicinity of "J" Street and Bay Boulevard structure and define future improvements required.		
Total Estimated Cost:	\$1,900,000		
Estimated Operation and Maintenance Cost:	\$0	Project Type:	Sewer




Source Of Funding								
Fund No	Fund Name	Previous	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Future
428768	Sewer Facility Replacement	\$500,000	\$1,300,000	\$0	\$0	\$0	\$0	\$0
413759	Trunk Sewer Capital Reserve	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0



City of Chula Vista
FY 2020/21-FY 2024/25 Capital Improvement Program

Project Description Report

Project Name: Sewer Rehab & Upsize - Telegraph Canyon Basin (Industrial Blvd)
Project No: SWR0312

Project Location:	Industrial Blvd between Moss St and K St with a portion along K St.			
Department Responsible:	Engineering			
Project Intents:	Asset Failure			
Project Description:	Replace approximately 3,000 LF of 15-in diameter sewer pipe with 18-in diameter in the Telegraph Canyon Sewer Basin along Industrial Blvd. The project is identified as P10 in the 2014 Wastewater Master Plan.			
Location Description				
Justification:	This project supports the Strong & Secure Neighborhoods Strategic Goal, which includes preserving and restoring City Infrastructure through the Asset Management Program. The upsizing and rehabilitation of existing infrastructure helps maintain a functioning sewer system. The construction estimate is based on \$500/LF x 3,000 LF = \$1.5M Plus 15% for Design Totals: \$1.725M			
Total Estimated Cost:	\$1,725,000			
Estimated Operation and Maintenance Cost:	\$0	Project Type:	Sewer	

Source Of Funding								
Fund No	Fund Name	Previous	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Future
428768	Sewer Facility Replacement	\$1,725,000	\$0	\$0	\$0	\$0	\$0	\$0



City of Chula Vista
FY 2020/21-FY 2024/25 Capital Improvement Program
Project Description Report

Project Name: Sewer Pipe Rehabilitation FY2020/21
Project No: SWR0318

Project Location:	Citywide	
Department Responsible:	Engineering	
Project Intents:	Revitalization	
Project Description:	Repair, renew and replace sewer pipe within the collection system.	


Location Description			
Justification:	<p>Assets within the sewer system are nearing their design service life. The improvements are necessary because failure of any sewer pipe would result in significant loss of function of the collection system, result in regulatory violations, deteriorate water quality, and impact public health and safety. This project meets the City's Strategic Plan Initiative 4.1 Ensure a sustainable and well-maintained infrastructure to provide safe and appealing communities to live, work, and play.</p>		
Total Estimated Cost:	\$1,500,000		
Estimated Operation and Maintenance Cost:	\$0	Project Type:	Sewer

Source Of Funding								
Fund No	Fund Name	Previous	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Future
428768	Sewer Facility Replacement	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$0



City of Chula Vista
FY 2020/21-FY 2024/25 Capital Improvement Program
Project Description Report

Project Name: Sewer Access Road Rehabilitation Program FY2020/21
Project No: SWR0319

Project Location:	Citywide	
Department Responsible:	Engineering	
Project Intents:	Asset Failure	
Project Description:	This project includes the installation of sewer access roads and in turn ensures City Staff maintain access to the sewer system.	

Location Description	Citywide		
Justification:	This project supports the strong and secure neighborhood strategic goal of preserving and restoring City Infrastructure through the Asset Management Program. The rehabilitation of the sewer access roads allows the City crews to access sewer infrastructure in order to provide required maintenance. This project meets the City's Strategic Plan Initiative 4.1 Ensure a sustainable and well-maintained infrastructure to provide safe and appealing communities to live, work, and play.		
Total Estimated Cost:	\$1,750,000		
Estimated Operation and Maintenance Cost:	\$0	Project Type:	

Source Of Funding								
Fund No	Fund Name	Previous	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Future
428768	Sewer Facility Replacement	\$0	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$0



City of Chula Vista
FY 2020/21-FY 2024/25 Capital Improvement Program
Project Description Report

Project Name:	Sewer Manhole Rehabilitation FY2020/21
Project No:	SWR0320

Project Location:	Citywide		
Department Responsible:	Engineering		
Project Intents:	Asset Failure		
Project Description:	The project consists of repair, renewal and replacement of deteriorating manholes within the collection system.		
Location Description			
Justification:	These improvements are necessary because manholes are critical infrastructure in the sewer system and failure would significantly reduce the functionality of the overall system. A proper functioning sewer system is required to protect water quality and public health and safety.		
Total Estimated Cost:	\$1,000,000		
Estimated Operation and Maintenance Cost:	\$0	Project Type:	Sewer



Source Of Funding								
Fund No	Fund Name	Previous	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Future
428768	Sewer Facility Replacement	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$0