APPENDIX R City of Chula Vista Improvement Program - Sewer Projects

Wastewater Management System (WMS)

The current Chula Vista Wastewater Master Plan (WWMP) identifies a conservative planning level sewer generation rate of 230 gallons per EDU. The WWMP 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. 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 sewer capacity needs are projected to be between the WWMP 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. An update to the WWMP is happening this fiscal year and includes an evaluation of the projected build out sewer needs.

The City continues to focus on its Annual Sewer Rehabilitation Program, which ranges annually from $200,000 to $2,000,000 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 revenues 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. To ensure the future adequacy of the sewer funds and determine if current revenue levels are sufficient to cover projected expenses, an updated sewer rate cost of service study was completed in 2021 followed by a Public Hearing in April 2022 to increase rates to ensure revenues and expenses are balanced. The most significant sewer expense for the City is the cost to treat wastewater at the City of San Diego's Point Loma Wastewater Treatment Plant (PLWTP) accounting for about one third of the City's sewer expenses.

Proposed Projects

The appropriation for Wastewater Management System (WMS) is $450,000, which represents 0.67% of the proposed CIP budget.

Sewer Projects

A total of $250,000 is being added to update the Wastewater Master Plan to ensure appropriate capacity within the collection system and wastewater generation rates are represented.

Funding of $150,000 is programmed to provide sewer collection system monitoring to help prevent sanitary sewer spills.

A compliment to the Wastewater Master Plan is the Wastewater Asset Management Plan (WAMP) focusing on existing infrastructure. The WAMP utilizes condition assessments already completed or underway to establish a priority level for rehabilitations/replacements to ensure reliability of facilities. Project cost is $50,000.

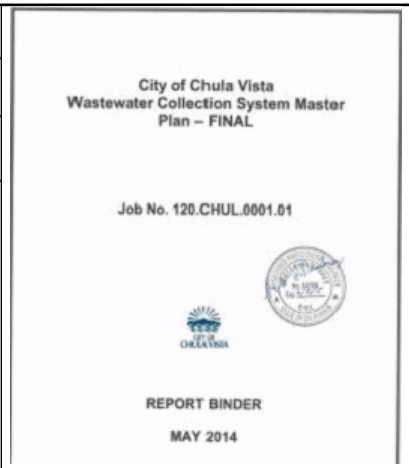
City of Chula Vista

FY 2023/24-FY 2027/28 Capital Improvement Program

Project Description Report

Project Name: Wastewater Master Plan Update FY22
Project No: SWR0324

Project Location:	Citywide
Department Responsible:	Engineering
Project Intents:	Capacity
Project Description:	The last Wastewater Master Plan was completed in 2014. Current flow monitoring completed for Poggi Canyon and Salt Creek DIF Updates indicate that sewage generation rates have decreased. A citywide evaluation is needed which would include flow monitoring followed by a hydraulic modeling to evaluate capacity triggered upgrades and assist in planning evaluations for zoning and density changes. Additionally, the capacity fee needs to be evaluated to ensure it is set based on current information.



Justification:	The Wastewater Master Plan requires an update to ensure appropriate wastewater generation rates are represented and in turn whether CIP projects are needed if the flows are lower. This project meets the City's Strategic Plan Initiative 4.1 to ensure a sustainable and well-maintained infrastructure to provide safe and appealing communities to live, work, and play.		
Total Estimated Cost:	$450,000 *(includes 5-year plan allocations)*	Project Type:	Sewer
Estimated Operation and Maintenance Cost:	$0	Note: No Construction. Project consists of design, special studies, planning or asset inventories, etc.	

Source Of Funding

Fund No	Fund Name	Previous	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Future
428768	Sewer Facility Replacement	$200,000	$250,000	$0	$0	$0	$0	$0

City of Chula Vista

FY 2023/24-FY 2027/28 Capital Improvement Program

Project Description Report

Project Name: Sewer Collection System Monitoring
Project No: SWR0327

Project Location:	Citywide	
Department Responsible:	Engineering	
Project Intents:	Level of Service	
Project Description:	This includes the installation of semi-permanent monitoring devices throughout the collection system in critical areas of the collection system (limited capacity, environmentally sensitive, remote, high consequence of failure, etc.).	
Justification:	Monitoring in the sewer collection system is necessary for providing an early warning system of problems and prevention of sanitary sewer spills. This project Supports the Strong and Secure Neighborhoods Strategic Goal.	
Total Estimated Cost:	$150,000 *(includes 5-year plan allocations)*	Project Type: Sewer
Estimated Operation and Maintenance Cost:	$0	Note: Upon completion of the project, the improvements will require routine sewer maintenance.

Source Of Funding

Fund No	Fund Name	Previous	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Future
29410	Sewer Service Revenue	$0	$150,000	$0	$0	$0	$0	$0

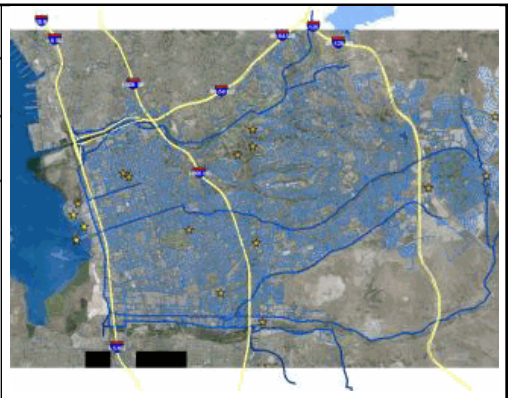
City of Chula Vista

FY 2023/24-FY 2027/28 Capital Improvement Program

Project Description Report

Project Name: Wastewater Asset Management Plan
Project No: SWR0328

Project Location:	Citywide
Department Responsible:	Engineering
Project Intents:	Asset Failure
Project Description:	The Asset Management Plan will include an evaluation of the current wastewater asset inspections (e.g. pipeline CCTV, maintenance hole video, pump station condition assessments and access roads) and assignment of risk scoring (probability and consequence of failure) to develop a planned costs for rehabilitations and replacements (R&R).



Justification:	A Wastewater Asset Management Plan is required to meet the City's Strategic Plan No 4.1.1. "Preserve and restore City Infrastructure through Asset Management Program."		
Total Estimated Cost:	$50,000 *(includes 5-year plan allocations)*	Project Type:	Sewer
Estimated Operation and Maintenance Cost:	$0	Note: Upon completion of the project, the improvements will require routine sewer maintenance.	

Source Of Funding

Fund No	Fund Name	Previous	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Future
29410	Sewer Service Revenue	$0	$50,000	$0	$0	$0	$0	$0