

Capital Improvement Plan

2024 *thru* 2026

City of Corpus Christi, Texas

Project # 20084A
Project Name Oso WRP Process Upgrade & BPC Facility Decommission



Type Improvement/Additions **Department** Wastewater
Useful Life 35 years **Contact** Director of Water Utilities
Category Wastewater **Priority** Critical- Condition/longevity
Council District 4

Status Active

Description

Construction of new headworks and lift station at Oso Water Reclamation Plant (WRP) started in FY18. The next phase of work involves secondary treatment improvements and a process conversion to Biological Nutrient Removal (BNR). This will allow the City to decommission current breakpoint chlorination (BPC) system which is currently achieving ammonia removal by chemical addition and will allow plant to maintain permit compliance by removing ammonia more efficiently and safely through biological processes. In addition, equipment associated with secondary treatment units have exceeded original design life and have become maintenance intensive and a hindrance to operations. Scope of improvements include constructing a new 6 MGD train, retrofitting existing aeration basins with fine bubble aeration equipment, construction of new blower building, replacement or rehabilitation of existing scum and sludge removal components on secondary clarifiers, improvements to chlorine contact chambers to address short circuiting, demolition/decommissioning of breakpoint chlorination system, upgrades in the existing belt press building, and other miscellaneous enhancements associated with administrative building, digesters and access roads.

Justification

This project is needed to meet operational and regulatory requirements.

Expenditures	Prior Years	2024	2025	2026	Total
Construction/Rehab		14,200,000	29,230,000	29,230,000	72,660,000
Inspection		150,000	280,000	280,000	710,000
Design	5,500,000	1,000,000			6,500,000
Eng, Admin Reimbursements	277,500	100,000	250,000	250,000	877,500
Total	5,777,500	15,450,000	29,760,000	29,760,000	80,747,500

Funding Sources	Prior Years	2024	2025	2026	Total
Revenue Bonds	5,777,500	15,450,000	29,760,000	29,760,000	80,747,500
Total	5,777,500	15,450,000	29,760,000	29,760,000	80,747,500

Budget Impact/Other

This project will enable the Oso WRP to run in a more economical and efficient manner. Operational impact is adversely affected when plant is not working at optimal levels. An assessment will be done upon completion of project to determine maintenance costs.

WASTEWATER FISCAL YEAR 2024 CIP PROGRAM LONG-RANGE

WASTEWATER LONG-RANGE CIP		Funding Needed for FY 2027	Funding Needed for FY 2028	Funding Needed for FY 2029	Funding Needed for FY 2030	Funding Needed for FY 2031	Funding Needed for FY 2032	Funding Needed for FY 2033	Long-Range FY 2027-2033
SEQ	Project Name	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	TOTALS

WASTEWATER TREATMENT PLANTS

LR 1	Allison WWTP Lift Station Upgrade and Process Improvements <small>Continuation of short range project E10043</small>					1,000,000	2,000,000	2,000,000	5,000,000
LR 2	Greenwood WWTP Flood Mitigation <small>Continuation of short range project 18070</small>	4,500,000							4,500,000
LR 3	Greenwood WWTP Expansion <small>Continuation of short range project 25016</small>	8,000,000	3,000,000	12,500,000	20,000,000	20,000,000			63,500,000
LR 4	Oso WRP Process Upgrade & BPC Facility Decommission <small>Continuation of short range project 20084A</small>	29,760,000	8,300,000						38,060,000
LR 5	Laguna Madre WWTP Rehab <small>Continuation of short range project 18086</small>					1,000,000	2,000,000	2,000,000	5,000,000
LR 6	Wastewater FOG Treatment Facility <small>This project is to provide a Fats, Oil and Grease (FOG) separation facility to serve the City of Corpus Christi and owned/operated by the City.</small>			200,000	2,000,000	2,000,000			4,200,000
LR 7	Whitecap WWTP Improvements <small>Continuation of short range project 18087</small>					1,000,000	2,000,000	2,000,000	5,000,000
WASTEWATER TREATMENT PLANTS LONG-RANGE CIP TOTAL:		42,260,000	11,300,000	12,700,000	22,000,000	25,000,000	6,000,000	6,000,000	125,260,000

WASTEWATER LIFT STATIONS

LR 8	Allison Basin New Lift Station and Force Main <small>Continuation of short range project 22009</small>	3,500,000	6,500,000	5,000,000					15,000,000
LR 9	City-Wide Lift Station Repair <small>Continuation of short range project. This project provides for implementation of a strategic lifecycle program for future lift station projects with funding requirements and cost benefit analysis for the City's 103 Lift Stations.</small>	3,000,000	2,000,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	12,500,000
WASTEWATER LIFT STATIONS LONG-RANGE CIP TOTAL:		6,500,000	8,500,000	6,500,000	1,500,000	1,500,000	1,500,000	1,500,000	27,500,000

WASTEWATER SYSTEM MAINTENANCE

LR 10	Allison Basin Trunk Main Replacement <small>This project will replace the trunk main at Allison basin that reached its useful life.</small>	1,000,000	10,000,000						11,000,000
LR 11	Capacity Improvement and Collection System Upgrade Group 1 <small>This project will provide city-wide capacity improvements and collection system upgrades</small>		10,000,000	15,000,000	20,000,000				45,000,000
LR 12	Capacity Improvement and Collection System Upgrade Group 2 <small>This project will provide city-wide capacity improvements and collection system upgrades</small>			10,000,000	15,000,000	20,000,000			45,000,000
LR 13	Capacity Improvement and Collection System Upgrade Group 3 <small>This project will provide city-wide capacity improvements and collection system upgrades</small>				15,000,000	20,000,000	20,000,000		55,000,000
LR 14	City-Wide Collection Capacity Remediation <small>Continuation of short range project 22125</small>	5,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	101,000,000
LR 15	City-Wide Wastewater IDIQ <small>Continuation of short range project 22110</small>	15,000,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	135,000,000
LR 16	Hewitt / Santa Fe Street WW Line Upsizing <small>Continuation of short range project 23007</small>	5,000,000		5,000,000		5,000,000			15,000,000