

Environmental Services



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Environmental Services

The Environmental Services Department (ESD) ensures City residents are provided with a clean and safe environment. The Department pursues waste management strategies that emphasize waste reduction and recycling, and environmentally sound landfill management.

2020 CIP Accomplishments

The Department continues to dedicate capital improvement resources towards its mission of providing reliable solid waste management, resource conservation, and environmental protection to preserve public health and ensure sustainable communities. The following are ESD's accomplishments for Fiscal Year 2020:

- Completed construction of two out of three planned storm water improvement projects to capture and control storm water at the Miramar Landfill
- Initiated design of the third storm water improvement project at the Miramar Landfill
- Initiated planning for relocation and expansion of the Miramar Greenery and Composting Facility
- Completed design and construction of an aerated static pile system for composting at the Miramar Greenery
- Completed landfill gas system infrastructure improvements at Miramar Landfill
- Completed construction of a consolidated blower system at the Miramar Landfill

2021 CIP Goals

The Department will continue to promote sustainability and public health through its effective delivery of capital improvement projects. The following are ESD's goals for Fiscal Year 2021:

- Construct landfill gas system improvements at the Miramar Landfill to provide increased collection efficiency
- Complete procurement and replacement of in-place scales at the entrance to the Miramar Landfill
- Complete procurement and installation of modular office buildings at the Miramar Landfill to replace existing buildings that have exceeded their service life
- Construct and install additional landfill gas wells and piping to improve the landfill gas collection system at the Miramar Landfills
- Prepare and solicit an RFP to relocate and enhance the Miramar Greenery to comply with new regulations pertaining to compost operations, within the existing MCAS Miramar leasehold
- Initiate construction of the third of three planned projects to improve storm water quality at the Miramar Landfill



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Environmental Services: Capital Improvement Projects

Project	Prior Fiscal Years	FY 2021 Adopted	Future Fiscal Years	Project Total
CNG Fueling Station for Refuse & Recycling / S15000	\$ 5,550,000	\$ -	\$ -	\$ 5,550,000
Covered Aerated Static Pile System / S16053	5,000,000	-	-	5,000,000
Landfill Improvements / AFA00001	2,034,975	-	800,000	2,834,975
Miramar Landfill Facility Improvements / L17000	25,412,024	-	-	25,412,024
Miramar Landfill Gas Recovery Improvemen / S16052	9,650,000	-	-	9,650,000
Miramar Landfill Storm Water Improvements / L18002	20,300,000	-	-	20,300,000
South Chollas Landfill Improvements / S00684	15,743,904	-	-	15,743,904
Total	\$ 83,690,903	\$ -	\$ 800,000	\$ 84,490,903



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CNG Fueling Station for Refuse & Recycling / S15000

Landfills - Supporting Fac / Struct

Council District:	1	Priority Score:	55
Community Planning:	University	Priority Category:	Low
Project Status:	Warranty	Contact Information:	Fergusson, Craig
Duration:	2015 - 2021		858-627-3311
Improvement Type:	New		cfergusson@sanidiego.gov

Description: This project provides for the design and construction of a compressed natural gas (CNG) fueling station at the Environmental Services Operations Station located at 8353 Miramar Place. In conjunction with the completion of the fueling station, the division plans to put into service refuse and recycling vehicles that run on CNG, eventually replacing the entire fleet of low sulfur diesel refuse and recycling packers. The construction of CNG fueling infrastructure and the replacement of vehicles will be implemented in a phased approach.

Justification: This project provides for the necessary infrastructure to convert Environmental Services fleet refuse and recycling vehicles from low sulfur diesel to compressed natural gas. This CIP helps to implement the City's Climate Act Plan.

Operating Budget Impact: Provides for a positive operating budget impact by saving fuel costs to the General Fund and Recycling Enterprise Fund.

Relationship to General and Community Plans: This project is in conformance with the Conservation Element of the City's General Plan.

Schedule: Phase I of construction was completed in Fiscal Year 2017, providing capacity for fueling 50 refuse and recycling packers. Phase II of construction was completed in Fiscal Year 2019. Phase III of construction was completed in Fiscal Year 2020. Warranty administration and project closeout will occur in Fiscal Year 2021.

Summary of Project Changes: No significant project changes for Fiscal Year 2021.

Expenditure by Funding Source

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2021	FY 2021 Anticipated	FY 2022	FY 2023	FY 2024	FY 2025	Future FY	Unidentified Funding	Project Total
CIP Contributions from General Fund	400265	\$ 2,957,844	\$ 42,155	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000,000
Grant Fund - State	600001	250,000	-	-	-	-	-	-	-	-	-	250,000
Infrastructure Fund	100012	180,000	-	-	-	-	-	-	-	-	-	180,000
Recycling Fund CIP Fund	700049	2,110,898	9,102	-	-	-	-	-	-	-	-	2,120,000
Total		\$ 5,498,742	\$ 51,257	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,550,000

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Covered Aerated Static Pile System / S16053

Landfills

Council District:	6	Priority Score:	93
Community Planning:		Priority Category:	High
Project Status:	Warranty	Contact Information:	Campos, Luis
Duration:	2017 - 2021		858-492-5035
Improvement Type:	New		lcampos@sanidiego.gov

Description: This project provides for design and construction of a covered aerated static pile system for processing organics at the Miramar Landfill's Greenery. This system will enhance the production and throughput of compost from clean source separated food scraps and yard waste.

Justification: AB-1826 and the City's Zero Waste Plan dictate significant increases in organic recycling. Stricter air emission and run-off water standards necessitate covered compost piles.

Operating Budget Impact: None.

Relationship to General and Community Plans: The Miramar Landfill is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

Schedule: The project was completed in Fiscal Year 2020. Warranty administration and project closeout are anticipated in Fiscal Year 2021.

Summary of Project Changes: The project schedule has been updated for Fiscal Year 2021.

Expenditure by Funding Source

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2021	FY 2021 Anticipated	FY 2022	FY 2023	FY 2024	FY 2025	Future FY	Unidentified Funding	Project Total
Grant Fund - State	600001	\$ 2,295,447	\$ -	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,895,447
Refuse Disposal CIP Fund	700040	1,357,008	1,347,545	-	(600,000)	-	-	-	-	-	-	2,104,553
Total		\$ 3,652,455	\$ 1,347,544	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000

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Landfill Improvements / AFA00001

Landfills

Council District:	Citywide	Priority Score:	Annual
Community Planning:	Citywide	Priority Category:	Annual
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2010 - 2040		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

Description: This annual allocation provides for improvements to existing sanitary landfills to comply with operating permits and regulatory requirements. Such improvements may include fencing, access roads, drains, small structures, and environmental protection projects. This project also provides for improvements to existing landfill gas systems, including gas migration and groundwater monitoring networks at all landfills managed by the City. Improvements include upgrades to existing or additional facilities as well as engineering reports and/or design plans and specifications necessary to mitigate landfill gas and groundwater issues or to modify monitoring programs.

Justification: This project provides the flexibility for timely initiation of improvements and construction needed to meet operational and solid waste regulatory mandates such as drainage, grading, landfill gas collection, and groundwater monitoring programs.

Operating Budget Impact: None.

Relationship to General and Community Plans: This project is consistent with applicable community plans and is in conformance with the City's General Plan.

Schedule: Projects are scheduled on a priority basis to meet regulatory requirements.

Summary of Project Changes: The project name changed from Minor Improvements to Landfills to Landfill Improvements, to more accurately reflect the scope of improvements. \$2.0 million was transferred to L17000 during the Fiscal Year 2020 Mid-Year CIP action. The Project Schedule has been updated for Fiscal Year 2021.

Expenditure by Funding Source

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2021	FY 2021 Anticipated	FY 2022	FY 2023	FY 2024	FY 2025	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 57,655	\$ 1,977,319	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ -	\$ 2,834,975
Total		\$ 57,655	\$ 1,977,319	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ -	\$ 2,834,975

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Miramar Landfill Facility Improvements / L17000

Landfills

Council District:	6	Priority Score:	77
Community Planning:	University; Kearny Mesa; Clairemont Mesa	Priority Category:	Low
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2017 - 2025		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

Description: This project provides for the construction of infrastructure improvements at the Miramar Landfill. Phase I will provide for the development of a Resource Recovery Facility (RRF) to increase waste diversion from self-haul customers. Phase II will provide for the relocation of the Miramar Greenery as required to comply with conditions of a State-mandated Waste Discharge Requirement for Composting Operations. Phase III will provide for surface improvements to haul roads. Phase IV will provide for the acquisition of landfill gas collection and processing infrastructure currently in place as part of a transfer of gas rights. Phase V will provide for a backup power system for landfill gas collection and processing infrastructure. Phase VI will provide for the replacement of modular office, restroom, and locker trailers that have exceeded their service life.

Justification: The Environmental Services Department (ESD) is responsible for managing operations, maintenance and compliance of the West Miramar Landfill. This CIP will allow for the most efficient execution of future facility improvement projects and helps to implement the City's Climate Action Plan.

Operating Budget Impact: None.

Relationship to General and Community Plans: This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

Schedule: Phase I delivery has been placed on temporary hold to prioritize regulatory compliance activities in Phase II. Phase II design will begin in Fiscal Year 2021, with construction anticipated to begin in Fiscal Year 2023 and anticipated completion in Fiscal Year 2025. Phase III design was completed in Fiscal Year 2018, construction began in Fiscal Year 2019 and was completed in Fiscal Year 2020. Phase IV acquisition was completed in Fiscal Year 2019. Phase V was discontinued in Fiscal Year 2020. Phase VI procurement began in Fiscal Year 2020 with installations anticipated to begin in Fiscal Year 2021 and anticipated to be completed by Fiscal Year 2023.

Summary of Project Changes: \$2.0 million was transferred from AFA00001 during the Fiscal Year 2020 Mid-Year CIP action. The project schedule has been updated for Fiscal Year 2021.

Expenditure by Funding Source

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2021	FY 2021 Anticipated	FY 2022	FY 2023	FY 2024	FY 2025	Future FY	Unidentified Funding	Project Total
Recycling Fund CIP Fund	700049	\$ -	\$ 16,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,000,000
Refuse Disposal CIP Fund	700040	\$ 3,301,733	\$ 6,110,291	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,412,024
Total		\$ 3,301,732	\$ 22,110,291	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,412,024

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Miramar Landfill Gas Recovery Improvemen / S16052

Landfills

Council District:	6	Priority Score:	88
Community Planning:		Priority Category:	Medium
Project Status:	Warranty	Contact Information:	Campos, Luis
Duration:	2017 - 2021		858-492-5035
Improvement Type:	New		lcampos@sanidiego.gov

Description: This project provides for construction of a consolidated blower system and well field improvements to provide for increased landfill gas collection at the Miramar Landfill.

Justification: This project is needed to ensure the landfill will meet regulatory requirements concerning gas emissions and greenhouse gas reduction measures.

Operating Budget Impact: None.

Relationship to General and Community Plans: This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan and helps to implement the City's Climate Action Plan.

Schedule: Construction began in Fiscal Year 2018 and was completed in Fiscal Year 2020. Warranty administration and project closeout will occur in Fiscal Year 2021.

Summary of Project Changes: The project schedule has been updated for Fiscal Year 2021.

Expenditure by Funding Source

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2021	FY 2021 Anticipated	FY 2022	FY 2023	FY 2024	FY 2025	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 9,121,100	\$ 528,899	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,650,000
Total		\$ 9,121,100	\$ 528,899	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,650,000

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Miramar Landfill Storm Water Improvements / L18002

Landfills

Council District:	6	Priority Score:	88
Community Planning:		Priority Category:	Medium
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2018 - 2025		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

Description: The project provides for the construction of storm water infrastructure improvements at the Miramar Landfill to maintain regulatory compliance with the Storm Water Industrial General Permit. The project will be implemented in three phases: Phase I includes paving of haul roads, drainage improvements in the Greenery, stabilization of roadway shoulders and drainage channels, and hydroseeding of inactive fill areas; Phase II includes stabilization and/or hydroseeding of secondary roads, sediment traps, storm drain improvements, and basin expansion; Phase III includes improvements to existing basins and development of new basins where feasible.

Justification: The storm water basins and associated Best Management Practice (BMP) engineered structures at the Miramar Landfill must be properly designed and constructed to ensure compliance with National Pollutant Discharge Elimination System (NPDES) requirements and to avoid regulatory violations.

Operating Budget Impact: None

Relationship to General and Community Plans: This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

Schedule: This project will be implemented in three phases. Construction of Phase I was completed in Fiscal Year 2020. Construction of Phase II was completed in Fiscal Year 2020. Design of Phase III was initiated in Fiscal Year 2020 with construction expected to be completed in Fiscal Year 2022.

Summary of Project Changes: The project schedule has been updated for Fiscal Year 2021.

Expenditure by Funding Source

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2021	FY 2021 Anticipated	FY 2022	FY 2023	FY 2024	FY 2025	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 5,837,703	\$ 14,462,296	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,300,000
Total		\$ 5,837,703	\$ 14,462,296	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,300,000

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South Chollas Landfill Improvements / S00684

Landfills - Supporting Fac / Struct

Council District:	4	Priority Score:	85
Community Planning:	Mid-City: Eastern Area	Priority Category:	Medium
Project Status:	Warranty	Contact Information:	Fergusson, Craig
Duration:	2000 - 2021		858-627-3311
Improvement Type:	Replacement		cfergusson@sandiego.gov

Description: This project provides for cover material, grading, drainage, and site improvements at the inactive South Chollas Landfill. The project will also result in improvements to the Chollas Operations Yard required by the Regional Water Quality Control Board in order to bring the site into compliance. A Corrective Action Plan has been developed to identify the corrective measures and timelines to mitigate the groundwater issues.

Justification: This project is required to maintain compliance with various State and Federal regulatory requirements and to avoid regulatory violations.

Operating Budget Impact: None.

Relationship to General and Community Plans: This project is consistent with the Mid-City: Eastern Area Community Plan and it is in conformance with the City's General Plan.

Schedule: Construction was completed in Fiscal Year 2017. However, it has been determined that additional permanent storm water Best Management Practice (BMP) controls will be needed. Efforts are currently being implemented to initiate the design of these required BMPs with construction anticipated to be completed by Fiscal Year 2021.

Summary of Project Changes: The project schedule has been updated for Fiscal Year 2021.

Expenditure by Funding Source

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2021	FY 2021 Anticipated	FY 2022	FY 2023	FY 2024	FY 2025	Future FY	Unidentified Funding	Project Total
CIP Contributions from General Fund	400265	\$ 4,429,318	\$ 619,961	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,049,279
Fleet Services CIP Fund	400676	1,414,386	239,642	-	-	-	-	-	-	-	-	1,654,028
Refuse Disposal CIP Fund	700040	6,186,722	124,980	-	-	-	-	-	-	-	-	6,311,702
Water Utility - CIP Funding Source	700010	1,972,950	755,944	-	-	-	-	-	-	-	-	2,728,894
Total		\$ 14,003,376	\$ 1,740,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,743,903