

COMPLIANCE



ANCE

STORM WATER AWARENESS WEEK



Stormwater Solutions with Compost-Based Products: A City of San Diego Perspective

Environmental Services Department
The Miramar Greenery
September 22, 2025

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The Miramar Greenery Compost Facility

The City of San Diego operates the largest municipal compost facility in Southern California.



The Greenery provides high-quality, low-cost compost, mulch and woodchips.



Miramar Greenery

Products

- [Compost](#)
- [Mulch](#)
- [Wood Chips](#)
- [Products & Pricing](#)
- [Green Waste Recycling](#)

Location

Located at the entrance of Miramar Landfill
5180 Convoy St.
San Diego, CA 92111

Hours

Monday - Saturday: 7 a.m. - 4 p.m.
LANDFILL: Self-dumping vehicles accepted until 4:30 p.m.
GREENERY: City personnel tractor loading "only" until 4:30 p.m. (fees apply)



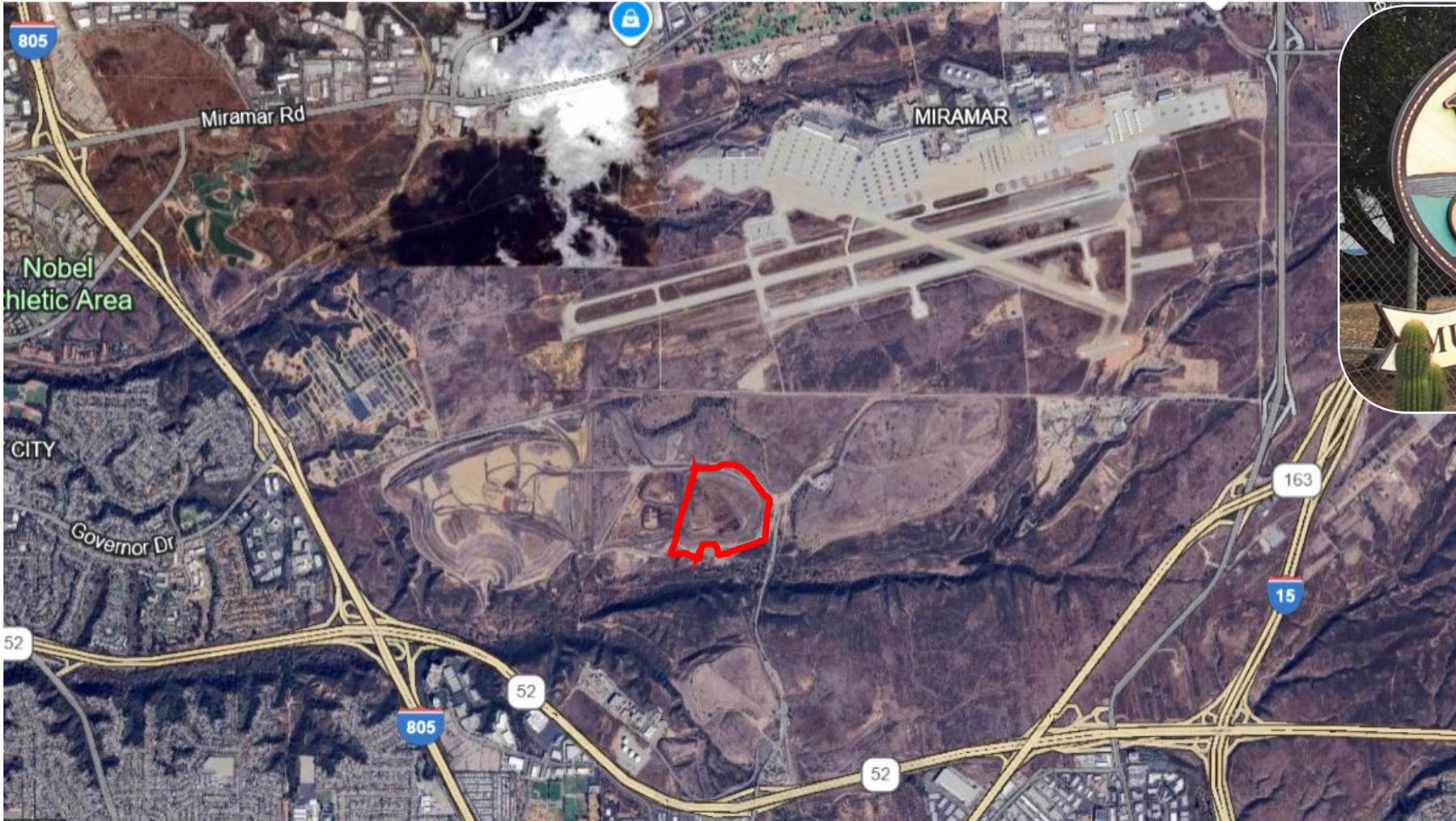
Miramar Landfill

- [Miramar Landfill & Greenery Home](#)
- [Construction and Demolition \(C&D\) Recycling](#)
- [Household Hazardous Waste Transfer Facility](#)
- [Miramar Greenery](#)
- [Paint Recycling and Disposal](#)
- [Refuse Disposal Fees](#)



<https://www.sandiego.gov/environmental-services/miramar/greenery>

The Miramar Greenery Compost Facility



**75 Acres
within the
Landfill**



Nature Based Solutions

Compost is a product of the natural decomposition of organic waste and serves as a valuable **nature-based solution** with numerous applications.

It improves soil health, reduces reliance on chemical fertilizers and pesticides, enhances water retention, and can even be used to restore degraded lands.

Compost also helps in reducing greenhouse gas emissions by sequestering carbon in the soil, contributing to climate change mitigation goals.

Compost: How it's made

At the Miramar Greenery, compost is made from yard trimmings and food scraps that have been ground, placed in windrows, turned and watered for 70 days. During this time, microorganisms digest the carbon and nitrogen rich mixture, causing the windrow to sustain temperatures of 140-165 F. This process eliminates most weed seeds and pathogens while breaking down the organic material into beneficial soil nutrients. Finished compost is screened to a particle size of one-half inch or less which also removes film plastic from the final product.



Yard Trimmings



Food Scraps



Windrows



Windrow Turner



Heats to 140-165F



Final Product

The Miramar Greenery offers the following Landscape and BMP products



**STA Certified™
COMPOST**
A program of the US Composting Council

Mulch



Natural
Wood
Chips

Compost



Colored
Wood
Chips

These are our core products.

Climate Action Plan

The 2022 CAP establishes a community-wide goal of net zero by 2035, committing San Diego to an accelerated trajectory for greenhouse gas reductions. Achieving net-zero emissions will improve the air we breathe, the communities we live in, and our overall quality of life.



https://www.sandiego.gov/sites/default/files/san_diegos_2022_climate_action_plan_0.pdf

Climate Action Implementation Plan



4.1 Changes to the Waste Stream

4.2 Municipal Waste Reduction

4.3 Local Food Systems and Food Recovery

ACTIONS

FOUNDATIONAL

- ▶ Approve and implement Polystyrene Foam and Single Use Plastics Ordinance. 4.1a

NEXT

- Expand Polystyrene Foam and Single Use Plastics Ordinance to phase out Single-Use materials and prioritize reuse over disposal. 4.1b

FOUNDATIONAL

- ▶ Update the City's administrative regulations to include purchasing requirements for sustainable products and food, including specific carbon and water footprint requirements for beef, pork, chicken, turkey and dairy and specific requirements for local, healthy, sustainable foods. 4.2b

NEXT

- ▶ Include procurement targets for purchasing compost through the Miramar Greenergy or other local composting facilities to expand demand and production of high quality compost. 4.2c

FOUNDATIONAL

- Create food council or advisory board with stakeholders. 4.3a
- ▶ Establish subject matter expert team across City departments to work with community to expand urban agricultural programs and develop policies to encourage community-based farms. 4.3d
- ▶ Invest in local food sourcing, aggregation, distribution and processing infrastructure network, particularly in low-income communities. 4.3 SA-5
- ▶ Invest in food waste prevention network expansion; expand edible food recovery infrastructure and partnerships. 4.3b

NEXT

- ▶ Regulate or activate programs for food businesses to minimize food related carbon emissions, including requiring food waste prevention, donation and recycling plans; provide technical assistance and resources and include checklist and outreach in business licensing process. 4.3 SA-6

OTHER

- ▶ Require food waste prevention, donation and recycling plans for City food service operations and large events on City managed, leased or owned lands. 4.3c
- ▶ Work with County and Farm Bureau to support investments in climate-smart agriculture and local food supply chain. 4.3 SA-1
- Incentivize incorporation of urban agriculture features including indoor agriculture, edible forestry, and community gardens. 4.3 SA-2

- ▶ Increase community participation with the Urban Agriculture Incentive Zone program. 4.3 SA-3
- ▶ Partner with County government to increase community access to Federal meal programs and incentivize use of these programs for local food access. 4.3 SA-4
- ▶ Incorporate food security and resilient food systems into climate resilience and emergency planning. 4.3 SA-7

OTHER

None.

OTHER

- ▶ Capture landfill methane gas emissions. 4.2a

MEASURING SUCCESS

- ▶ Percentage of Citywide waste diverted from landfill disposal
- ▶ Percentage of methane gas captured at City landfills
- ▶ Tons of organic waste diverted from landfill disposal
- ▶ Amount (pounds, tons) of edible food recovered
- ▶ Volume of solid waste disposal in landfills

Senate Bill 1383 California's Organic Waste Reduction

State law that sets statewide goals to reduce short-lived climate pollutants, primarily from organic waste in landfills.

The facility primarily processes materials collected from San Diego residents' green bins, as well as yard waste dropped off by both residents and businesses.



[SWIS Facility/Site Search](#)





STATE REQUIREMENTS

Recovered Organic Waste Products (ROWP) Procurement Target

- Procurement target is equal to .08 tons per capita as specified by the California Department of Finance.
- **The full procurement target = 112,883 tons.**
- Future penalties if target is not met.

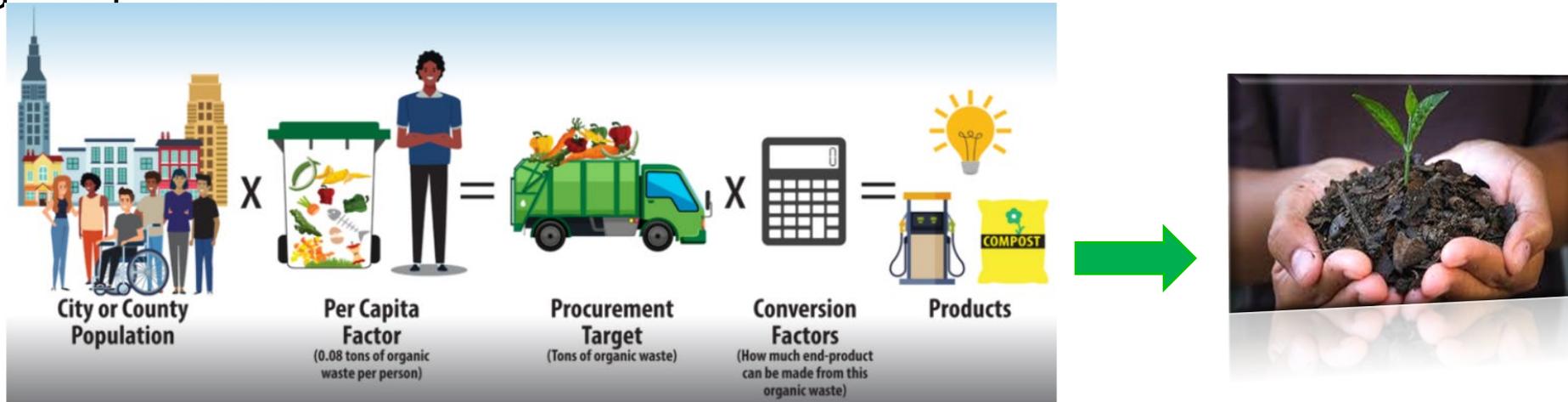
Year	% of total	Target (tons)
2023	30%	33,865 Not meet our target
2024	65%	73,374
2025	100%	112,883

SB1383 Procurement

A jurisdiction shall comply by one or both of the following:

- Directly procuring for use or giveaway
- Requiring, through a written contract or agreement, that a direct service provider procures the products on the City's behalf.

• Jurisdiction shall identify additional procurement opportunities for expanding use of recovered organic products



AB 2346 Organic waste reduction regulations: procurement of recovered organic waste products.

- Procurement targets too high
- Limited products available
- Did not prioritize circularity through local use
- 1383 Requirements do not account for progress that had been made by early adopters
- Did not reward investments to build sustained demand

Benefits:

- Credit for investments in market development up to 10% of total target
- Infrastructure, equipment credits
- Additional products may count, including:
 - More types of compost
 - Mulch from jurisdiction tree trimmings (up to 10%)

Benefits of AB 2346

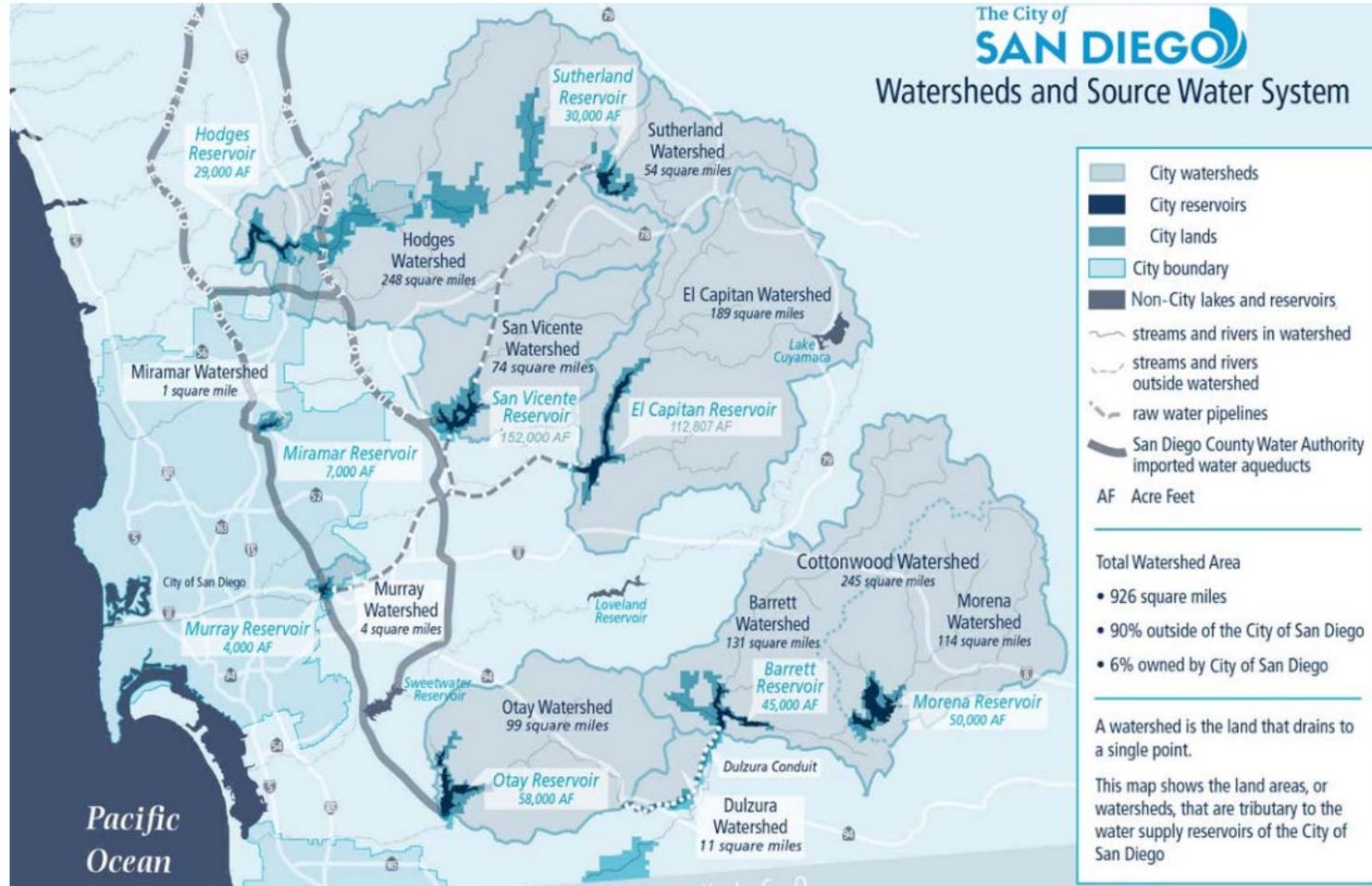
The City of San Diego is about to purchase a couple of pieces of equipment to support product application, including equipment that will allow us to prepare compost socks and apply compost blankets.



San Diego Stormwater Challenges

In San Diego, stormwater management is shaped by local challenges such as seasonal flooding, coastal and canyon erosion, and concerns over water quality in urban runoff. These issues are compounded by climate impacts, where prolonged drought conditions followed by intense storms can accelerate soil loss and infrastructure damage. In addition, post-wildfire remediation is an ongoing need, as burned hillsides and degraded soils increase the risk of sedimentation and flooding downstream. Addressing these conditions requires innovative approaches that stabilize soils, support revegetation, and protect waterways across the region.





Importance of effective stormwater controls to protect infrastructure and beaches.

Regular BMPs

Examples of conventional BMPs: silt fences, straw wattles, synthetic erosion blankets, hydroseed mulching

Limitations: short lifespan, synthetic waste, limited environmental benefit.



Compost-Based BMPs – Low Impact Development

For Erosion/Sediment Control

Compost Socks, Compost Strips.

For Stormwater Management

Compost Stormwater Blanket, Compost Vegetated Cover, Bioretention Ponds.

For Restoration/Remediation

Compost Stormwater Blanket, Compost Engineered Soil.

Compost-Based BMPs – A Natural Alternative

- **Compost Filter Socks** for sediment and pollution (heavy metals, nitrates -non-visible pollutants) control associated with watershed and inlet protection.
- **Compost Erosion Control Blankets** for slope stabilization and erosion control.
- **Compost-Amended Soils** for infiltration and pollutant removal.
- **Mulch Covers** for landscaped areas (conserve water, suppress weeds).
- Educational takeaway: Compost-based BMPs **control runoff and build healthy soils.**

<https://www.epa.gov/system/files/documents/2021-11/bmp-compost-filter-socks.pdf>



Landscape and BMP products

Compost-Based Best Management Practices



Compost mix + hydroseed



Restoration projects

Compost and its derived products are also widely used in environmental mitigation and restoration projects to rebuild soil health, support native vegetation, and restore habitats.

Areas seeded with compost mulch can experience up to **50% to 150% improvement** in vegetation establishment and growth compared to areas seeded without compost.

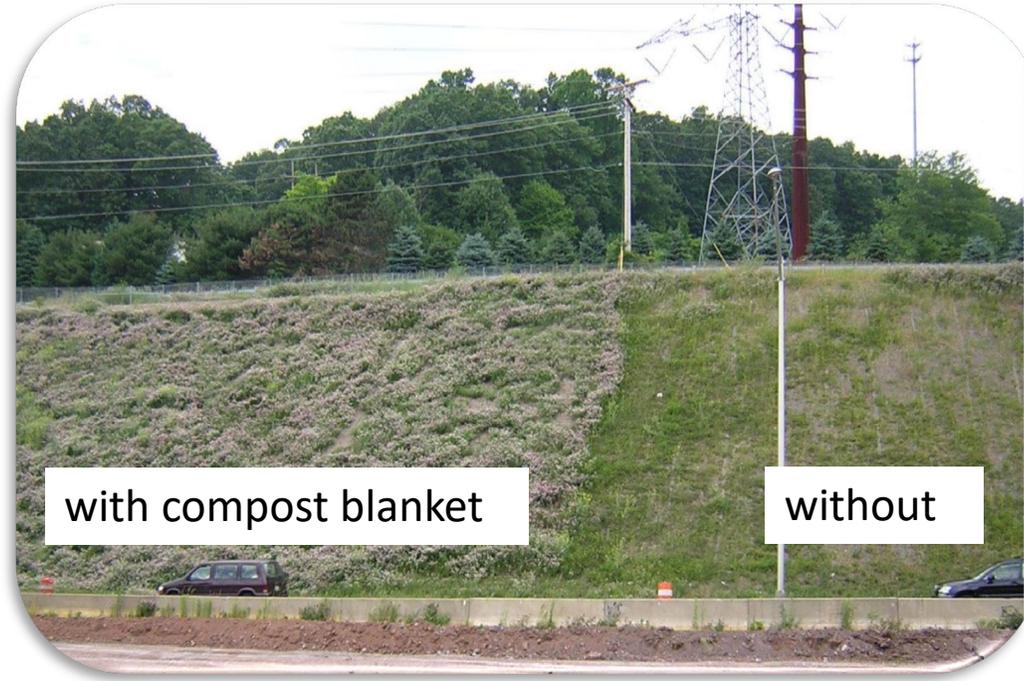


Compost adds organic matter to the soil, improving its structure, porosity, and water-holding capacity.

Improved vegetation establishment and growth



Before



After

Compost blankets are applied as a uniform 1 to 2-inch layer over the soil surface using a blower or a spreader. Due to their high water-holding capacity, fibrous texture, and ability to bind to the soil, they resist being washed away even on slopes.

Compost Erosion Control Blankets - Advantages

- Close-to-ground placement ensures nearly 100% soil contact, preventing the bunching or puckering seen with other blankets.
- Direct soil contact reduces sediment loss.
- Water infiltration improves, leading to higher seed germination rates.
- Water runoff from slopes decreases, reducing the risk of sediment loss (Iowa State Study 2003).
- The addition of organic matter enhances the slope's ability to revegetate and establish a long-term erosion control system.

Land scape and BMP products



Compost Socks



VS



Silt Fence / Straw Wattles

Compost socks can be installed in any downslope areas where erosion and sediment control are needed. Compost socks outperform straw wattles and silt fences by allowing water infiltration, filtering pollutants, and integrating naturally into the landscape without removal.



Compost socks are an effective solution for water diversion, perimeter control and inlet protection. By utilizing natural processes, they manage stormwater runoff while filtering out sediment and pollutants.

Sediment Storage Capacity

Sediment Control Barrier	Design Height (in)	Sediment Stored within + behind barrier (in ³)	Total Sediment Storage Capacity (in ³)
Silt Fence	24	0 + 254	254
Silt Fence	36	0 + 600	600
Silt Fence wire-backed	36 reinforced	0 + 794	794
Compost Sock	8	111 + 63	174
Compost Sock	12	261 + 135	396
Compost Sock	18	542 + 315	857
Compost Sock	24	1089 + 542	1631

¹Sediment control barrier is installed with constant head at steady state flow and runoff sediment concentration at 10,000 mg/L

²Sediment Control Barriers require maintenance once sediment reaches ½ its effective height;

³Based on porosity/air space results from Soil Control Lab, Watsonville, CA



Soil Remediation at fire sites



Compost socks are used in post-fire remediation sites to filter runoff and capture contaminants; they should be removed once they have fulfilled their function, typically within 6 to 12 months.

Uses for the landscape at Parks, Golf Courses and Open Space



A layer of compost/mulch can be applied to the soil surface, which helps suppress weeds, retain moisture, and protect plants.

(Best Management Practices vs Sustainable Mgmt. Practices)

Compost-based SMP's represent the most sustainable option currently available to Landscape Contractors for managing watersheds and, when designed, implemented and maintained appropriately, will:

Reduce storm water volume, peak flow and localized flooding through natural site hydrologic restoration

Decrease pollutant transport and improve water quality through storm water reduction, filtration and vegetation establishment

Potential use on CIP Projects

CIP projects in stormwater, transportation, and parks often specify BMPs for erosion control, water quality, and landscaping. Compost-based products can be considered as alternatives or enhancements in:

- **Erosion Control & Slopes**
- **Sediment Control**
- **Bioretention & Bioswales**
- **Landscaping and Slope Revegetation**

SD Capital Improvements Program

HOME ABOUT BID & CONTRACTING OPPORTUNITIES CIP PROJECT INFORMATION INDUSTRY MEETINGS REPORTS

CIP Project Information

As part of the City's commitment to transparency, project information is readily accessible online in a user-friendly, dynamic format. You can monitor the progress of active City Capital Improvements Program (CIP) projects using the project search tools below.

CIP Project Look Up
This dashboard provides detailed information about all projects currently in the City's CIP database. Find a project using Project ID or Project Name or search projects by asset type, project phase, and/or Council District.

CIP Map Viewer
Locate CIPs near a specific address through an interactive web mapping interface.

Street Overlay Tracker
This tool offers comprehensive street resurfacing information for the current fiscal year. The dashboard feature displays completed miles as well as projections, and the map feature shows you where the City's resurfacing projects are located.

[CIP Project Information | City of San Diego Official Website](https://www.sandiego.gov/cip-project-information)



Engineering & Capital Projects

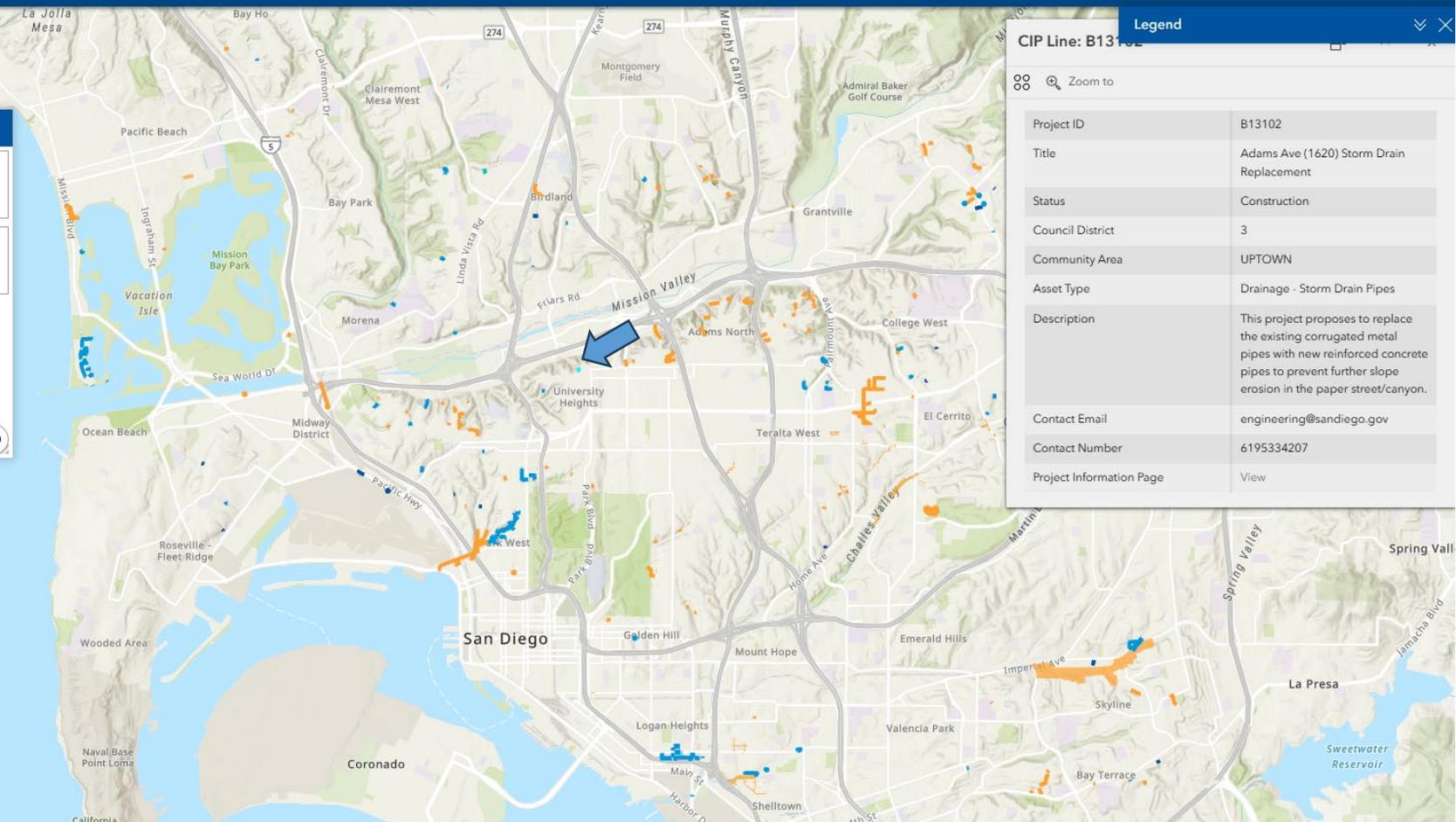
CIP Map Viewer




Project Filters

Project Status: - All -

Asset Type: Stormwater



Legend

CIP Line: B13102

Zoom to

Project ID	B13102
Title	Adams Ave (1620) Storm Drain Replacement
Status	Construction
Council District	3
Community Area	UPTOWN
Asset Type	Drainage - Storm Drain Pipes
Description	This project proposes to replace the existing corrugated metal pipes with new reinforced concrete pipes to prevent further slope erosion in the paper street/canyon.
Contact Email	engineering@sandiego.gov
Contact Number	6195334207
Project Information Page	View

Esri, NASA, NGA, USGS, FEMA | SanGIS, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS Powered by Esri

CIP Map Viewer

Engineering & Capital Projects

CIP Project Look Up
Updated As Of: 9/1/2025

CIP Project Look Up

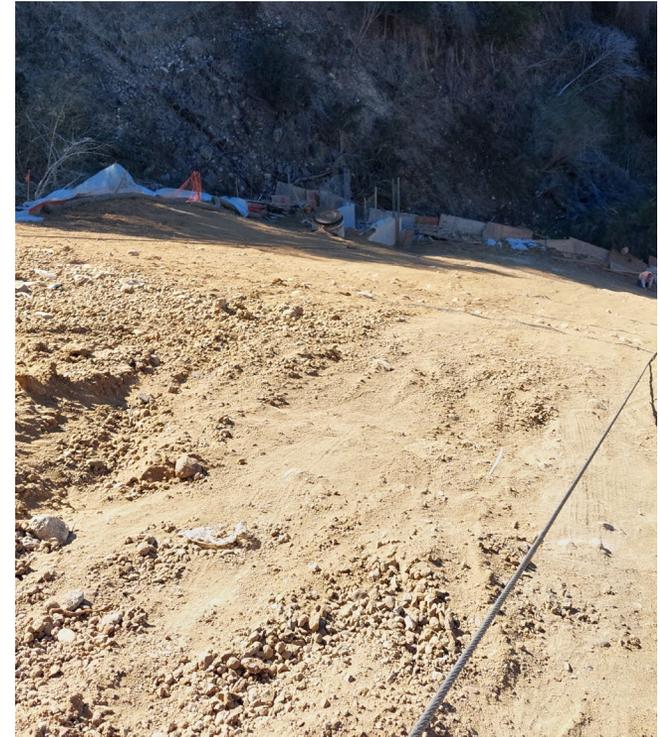
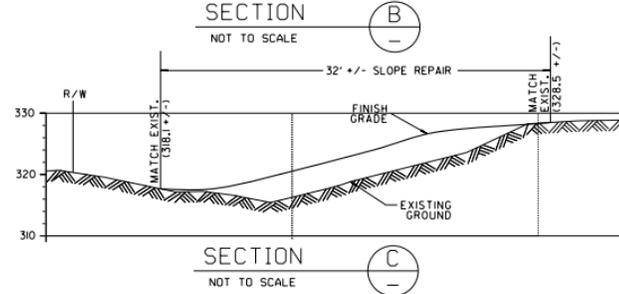
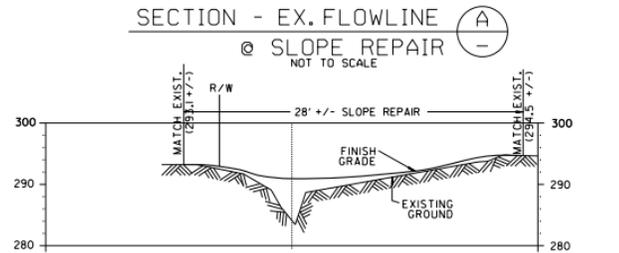
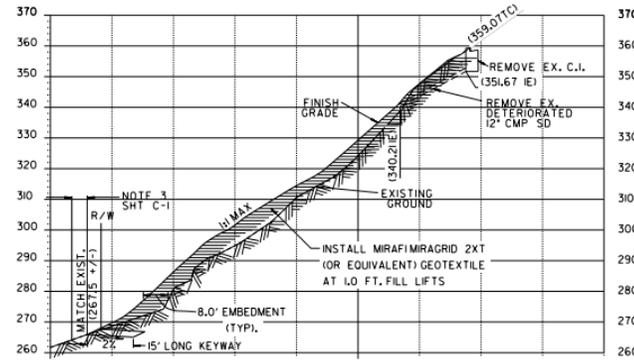
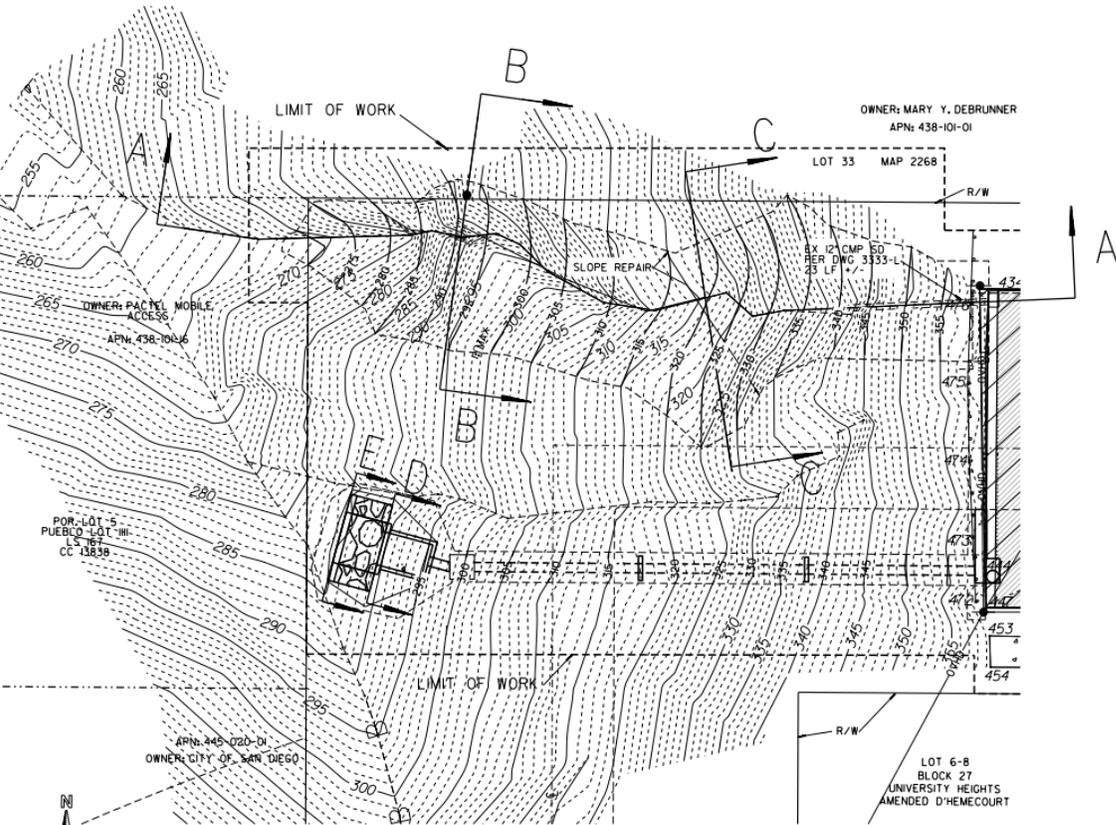
[Click Here for Council District - CIP Project Information](#)

General Information				Project Location	
<p style="text-align: center;">Adams Ave (1620) Storm Drain Replacement ● Active</p> <p>This project proposes to replace the existing corrugated metal pipes with new reinforced concrete pipes to prevent further slope erosion in the paper street/canyon.</p> <p style="text-align: center;">Additional Remarks</p>				<p style="text-align: center; font-size: small; color: blue;">Click Here for CIP Map Viewer</p>	
Project ID Number B13102	Project Phase Construction	Project Asset Category Storm Water Drainage	Bundled Projects		
Contact Person Straughn, Jayna		Contractor New Century Construction		Not Bundled	
Construction Contract Type Design Bid Build		Estimated Construction Duration (months) 24.5			
Estimated Project Financials					
Total Project Cost \$2.28M		Construction Contract Value 952.07K		Funding Status Fully Funded	
Estimated Project Timeline					
Preliminary Engineering Start <small>Q1 2013</small>	Design End <small>Q3 2021</small>	Construction Start <small>Q2 2022</small>	Construction Completion <small>Q1 2024</small>	Construction Close Out <small>Q3 2024</small>	Project Close Out <small>Q4 2026</small>

Project Management Office (PMO) Division

CIP Project Information | City of San Diego Official Website

Storm Drain Project



Storm Drain Project



Storm Drain Project



To determine which BMPs in a CIP project would be good candidates for replacement or supplementation with compost-based products, it would be advisable to:

Review the specific project plans to identify where temporary blankets, mulch, sediment barriers, soil coverings, or revegetation efforts are being used.

Verify whether locally available organic products meet quality standards (composition, contaminants, particle size, certifications) relevant to their use in BMPs.

Conduct pilot tests – for example, use compost filter socks in a section of a sediment control project and compare cost, performance, and maintenance.

Adjust technical specifications (in construction documents) to allow the use of compost/mulch products as an acceptable option or “performance-based alternative.”

Opportunities for San Diego

- The City continues to invest in **stormwater management, green infrastructure and pollution control projects.**
- These projects create opportunities to begin **specifying compost-based BMPs** in the future. (Partnering with a third-party service provider for the application of compost) To deliver more ecosystem services to the City.
- Compost products can be integrated into **landscape areas, slope protection, bioretention media, and temporary/permanent erosion controls.**
- By planning ahead, we can **align project needs with SB 1383 procurement goals.**
- This creates a strong **triple benefit:** compliance, environmental resilience, and circular economy.

City Department Engagement

Miramar Greenery Offering **Compost and Mulch** to City Departments

We are interested in identifying which projects will benefit most on applying compost-based product from restoration or protection
Identify high priority sites

Take advantage of our **special pricing** on **high-quality compost**, mulch, and related products exclusively for City Departments. We'll beat any existing quote!

Let's move composting forward, together!

We encourage the implementation of **supportive regulations** that promote and guide the use of compost across City Departments.



For municipalities, it is important to strengthen ties with other departments and communicate that this is an integrated effort to truly close the loop. Building connections with businesses and the community is also essential

Announcements

Wed, Sep 24 at 3:00 pm

The Challenge of Compost BMP Applications - "The Last Mile"

This workshop will share details that must be considered when deciding to deploy a "compost-based" BMP, the pre-planning that must occur for a successful installation and the associated costs and different application equipment available for getting the job done.

Fri, Sep 26 at 2:00 pm

Compost Use in Fire Remediation and Stormwater Management
the opportunities and challenges of compost use, as well the scientific background and practical strategies for integrating compost into land management, environmental compliance, and community planning.

“Every yard of compost applied is not just meeting a mandate—it’s protecting our watersheds and building healthier soils for San Diego.”

Thank You

Carmen Romo Diego

Recycling Program Manager

Environmental Services Department

The Miramar Greenery

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(858) 315-2292

Additional Resources

<https://calrecycle.ca.gov/organics/compostmulch/toolbox/>

<https://filtrexx.com/en/resources/bmp-comparison>

<https://www.epa.gov/system/files/documents/2021-11/bmp-compost-filter-socks.pdf>