

Neighborhood Council Day LASAN at your Service

February 20, 2016



Agenda

9:15am-9:45am	Opening Remarks – Enrique Zaldivar
9:45am-10:15am	Q & A – Enrique Zaldivar
10:15am-10:30am	Watershed Protection through Low Impact Development – Adel Hagekhalil
10:30am-10:45am	Recycled Water – Traci Minamide
10:45am-11am	Customer Care Center – Alex Helou
11am-11:15am	Clean Streets LA – Leo Martinez
11:15am-12pm	Comments/Questions/Suggestions
12pm-1:30pm	Box Lunches and Closing Remarks (upstairs)



Los Angeles as a Sustainable City



CLEAN WATER • HEALTHY NEIGHBORHOODS • SUSTAINABLE CITY



LOS ANGELES SANITATION

OUR MISSION:



Solid resources collection, recycling, conversion and disposal



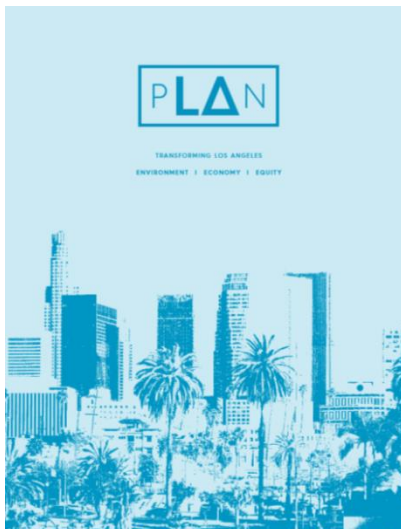
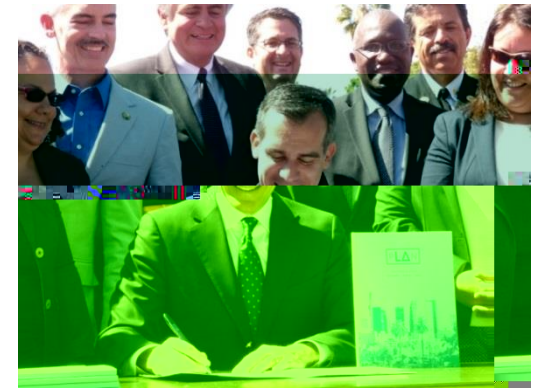
Wastewater collection, conveyance, treatment, discharge and reuse



Receiving water pollution prevention

Mayors Executive Directives For Sustainability

- Executive Directive No. 1: Great Streets Initiative (Oct 2013)
- Executive Directive No. 5: Emergency Drought Response - Creating a Water Wise City (Oct 2014)
- Executive Directive No. 7: Sustainable City pLAN (April 2015)
- Executive Directive No. 8: Clean Streets Initiative (April 2015)



Zero Waste



Reduce Water Supply – Increased Stormwater Capture



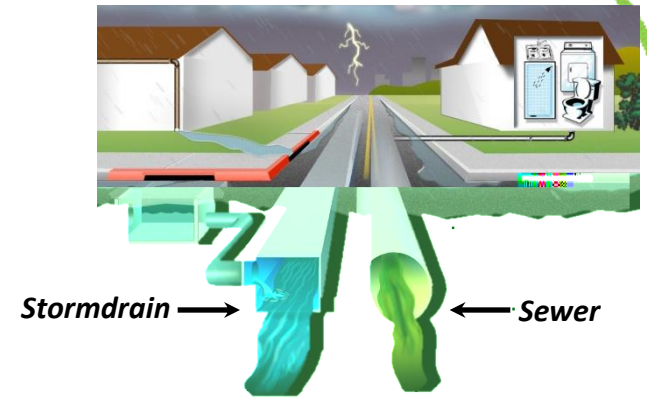
Overview

Watershed Protection Program (Stormwater)

- Program Overview
- Flood Protection / El Nino Preparation
- Enforcement & Clean ups
- Low Impact Development (Private Development)
- Enhanced Watershed Management Plans (EWMP's)
- Blue Green Strategy

Watershed Protection Program

- Separate storm drain system - storm drains flow directly to the ocean.
- City's storm drain system
 - 1,200 miles of pipes
 - 100 miles of open channels
 - 136 debris basins
 - 39,451 catch basins
 - 18 stormwater pump plants
- Managed by City, County, USACE & Caltrans
- City Contributes:
 - 63% to LA River
 - 23 % to Ballona Creek
 - 9% to Santa Monica Bay
 - 5% to Dominguez Channel



City of Los Angeles

Watershed Protection Program

- Improve water quality
- Capture rainwater for use and groundwater recharge
- Reduce flooding
- Provide open space for habitat and recreation

Public
Use



Habitat
Restoration



Flood
Protection



Water
Quality



Sources of untapped water...

Stormwater :

💧 ***Average 15-in of rainfall annually***

💧 ***Wet Weather: > 3 BG/day; 🐟 Dry Weather: 100 MG/day***

Wastewater: 300 MG/day goes to the ocean

Groundwater: BG of water (contaminated)

Flood Protection – El Nino Preparation

- Catch Basin Cleaning
 - 40,000 catch basins cleaned annually.
 - Additional catch basin cleaning in areas historically prone to flooding.
 - Crews on site in high potential areas of flooding.
 - 24 hour hotline: 1-800-773-2489

- Cleaned 500 catch basins a day:
 - As of Feb 5th, 2016: 68,000 catch basins have been cleaned.

El Nino Los Angeles

<http://www.elnino-la.com>

Sign up for alerts from the City of Los Angeles - Emergency Management4agemen



Environmental Enforcement & Clean up

Responsible for the enforcement of applicable provisions of law related to the control of discharges and the contribution of pollutants that could potentially affect the storm drain system, the environment, and public health and safety.

- Environmental Crimes Investigations
 - Illegal dumping of pollutants, hazardous materials and waste
 - Illicit discharges and connections
- Emergency Response
 - Emergency Response to spills and clean ups
- Report Dumping / Spills
 - 3-1-1
 - 1-800-974-9794
 - MyLA311 (app)



Operation Healthy Streets

May 2012 – LA County Department of Public Health notified the City of health hazard concerns within the skid row area.

- Coordination with multi agencies to conduct routine cleaning.
 - Monthly spot cleanings on 2nd Wednesday of Month
 - Quarterly Comprehensive Cleanings



Unclaimed property taken to temporary storage



5th St Before



5th St After

Low Impact Development (LID)

LID Ordinance Adopted: Nov 11, 2011

LID Ordinance Effective: May 12, 2012

Requirements:

- Expanded on the existing Standard Urban Mitigation Plan (SUSMP) requirements of capturing the first $\frac{3}{4}$ - inch storm event by incorporating LID Practices and standards on private development.

Residential (4 units or less):

- Projects must chose from prescriptive list of BMPs

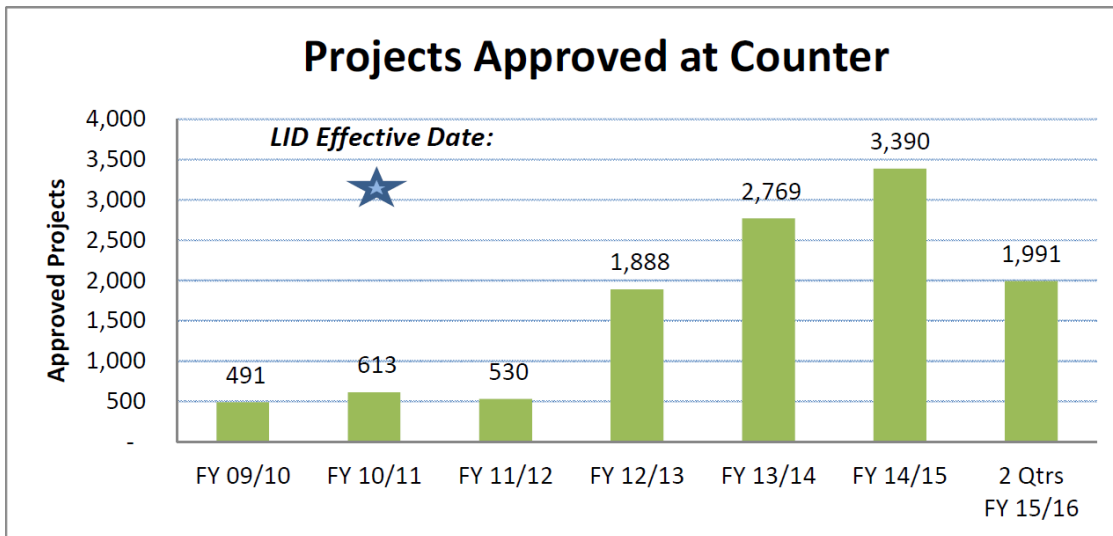
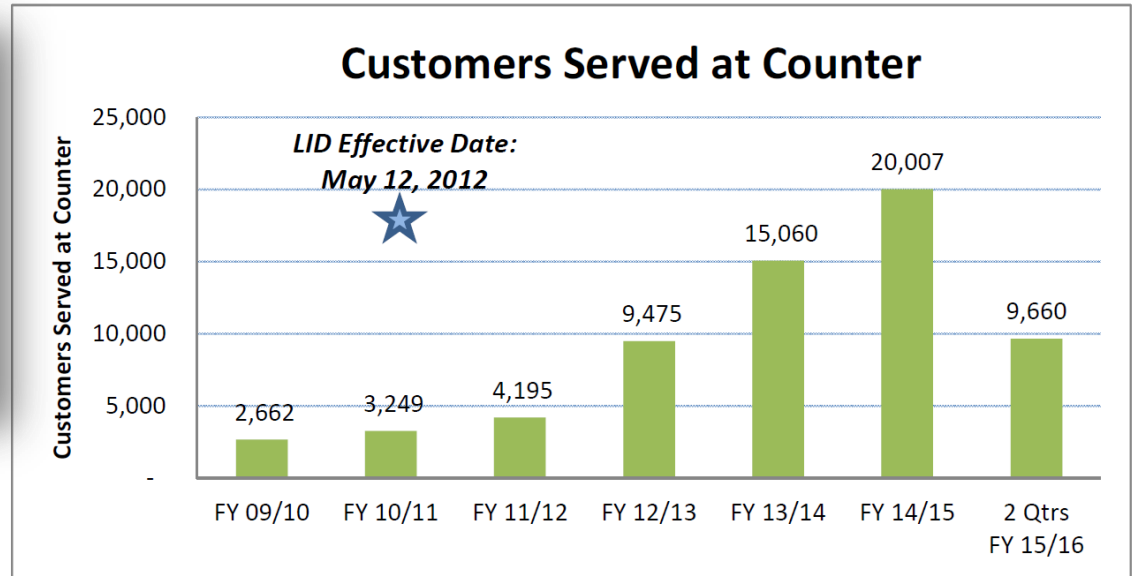
All other developments (commercial, industrial, etc.):

- Similar to SUSMP Requirements
- Majority of projects implementing SUSMP would satisfy LID requirements



LASAN Plan Check Public Counter at Building and Safety

Low Impact Development (LID)



Low Impact Development (LID)

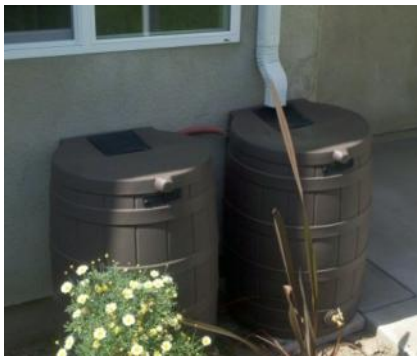
Residential Development (less than 4 units)

- Prescriptive Methods
 - Sizing based on development size



Roof Area Tributary to Planter Boxes(sq.ft.)	Total Surface Area of Planter(s) (sq.ft.)
500 – 1,000	32
1,001 – 1,500	52
1,501 – 2,000	108
2,001 – 2,500*	168

* Projects adding roof or impervious areas in excess of 2,500 sq. ft. shall add 20 sq. ft. of planter box surface area per every 500 sq. ft. of additional area.



Rain Barrels and Rain Tanks



Permeable Paving (w/ 1' – 2' sub base)



Flow thru Planters



Dry Wells & Infiltration Trenches



Rain Gardens

Low Impact Development (LID)

All Other Developments (commercial, industrial, etc.)

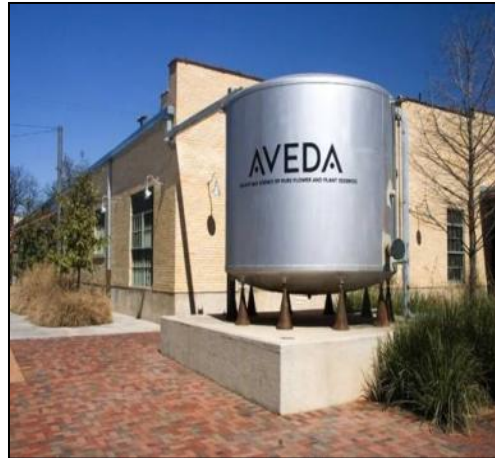
- Must mitigate volume generated from 85th percentile storm event
- Maximize each option in priority order.

Road To Compliance ...



Infiltration

- Infiltration Trenches
- Infiltration Basins
- Dry Wells
- Permeable Pavement
- Underground Detention Chambers



Capture and Use

- Cisterns
- Rain Tanks



High Efficiency Bio-filtration

- Biofiltration (Flow thru Planters)
- Bioinfiltration
- Vegetated Swales

Enhanced Watershed Management Plans (EWMPs)

Compliance pathway in the MS4 Permit to leverage and facilitate a robust, comprehensive approach to stormwater management while addressing the priority water quality conditions.

Municipalities, non-governmental organizations and community stakeholders throughout the County of Los Angeles are working collaboratively:

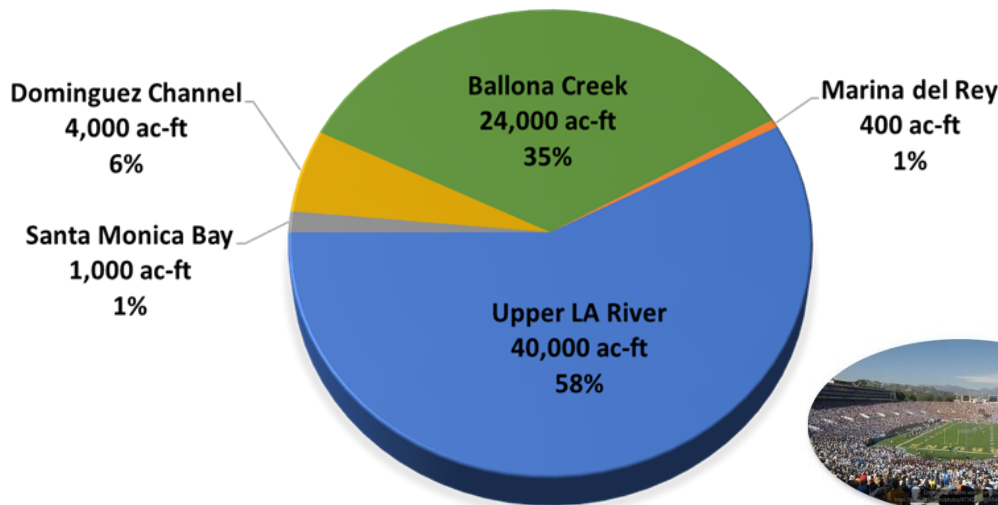
- Upper LA River
- Ballona Creek
- Santa Monica Bay
- Dominguez Channel
- Marina Del Rey



Enhanced Watershed Management Plans (EWMPs)

Average stormwater capture: ~70,000 ac-ft per year

- Equivalent to annual potable water use by 625,000 people*



Rose Bowl Stadium

Seating Capacity:	Volume:
92,542 fans	259 acre-feet

Ballona Creek EWMP

1,889 acre-feet capacity (metals)



The volume of 7.3 stadiums!

Upper Los Angeles River EWMP

4,067 acre-feet capacity (metals)



The volume of 15.7 stadiums!

All EWMPs

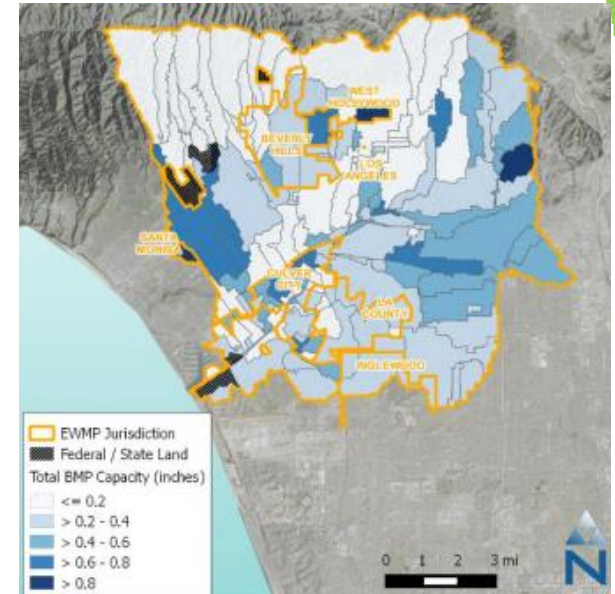
<http://www.lastormwater.org/green-la/enhanced-watershed-management-program/>

*assuming residential use of 100 gal per person per day

Enhanced Watershed Management Plans

Road to Compliance → **(EWMPs)**
“Green Blue Strategy”

- Regional Projects
 - Large upstream areas
- Distributed Projects
 - Green Streets
 - Parcel level (via LID Ordinance)
- Institutional Measures
 - Public Outreach / Street Sweeping



Regional Projects
Edward Vincent Jr. Park



Distributed Projects
Green Streets and on site BMPs



Institutional Measures
(Public outreach & good house keeping activities)

Regional Stormwater Capture

Rory M. Shaw Wetlands Park

Project



Before



After

Penmar Water Quality Improvement



Construction



After

Regional Stormwater Capture



Construction



After

Argo Drain Sub-basin Facility Project (LAX)



Project location



Green Streets, Alleys & Greenways

Avalon Green Alley Project



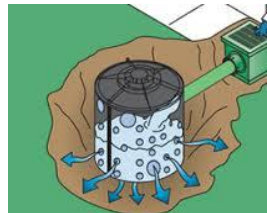
Broadway Neighborhood Greenway



Construction



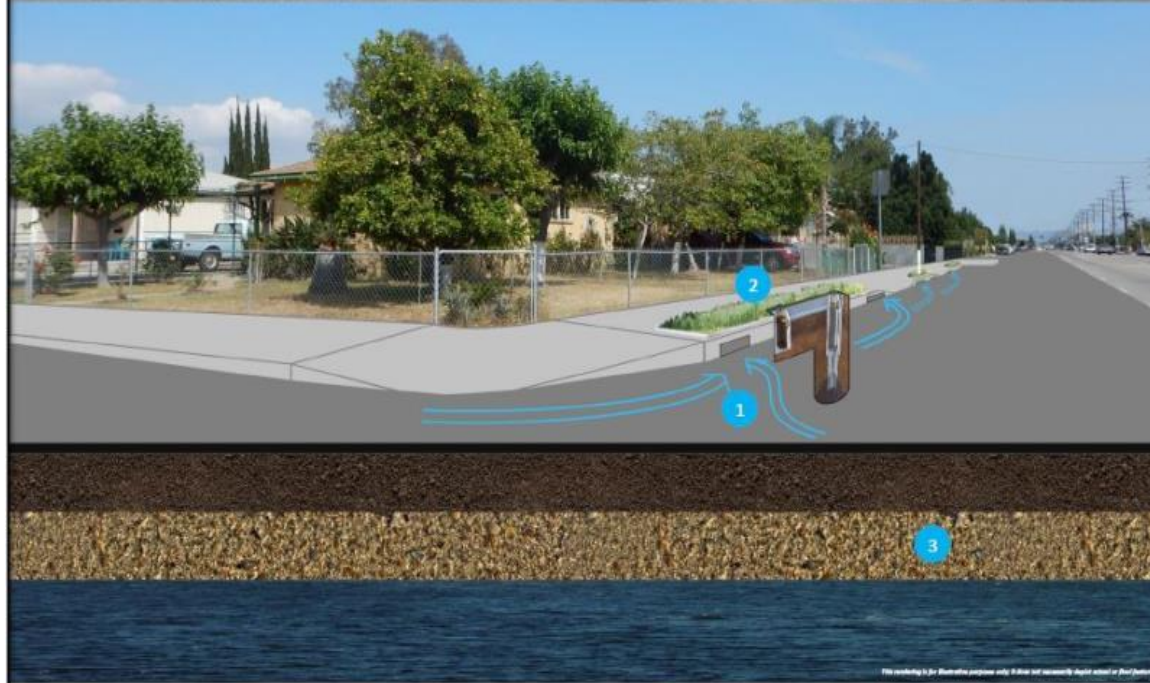
Rain garden



Laurel Canyon Boulevard Green Street Project



Laurel Canyon Boulevard Green Street Project



Laurel Canyon Boulevard Green Street Project

1 During rain events, stormwater flows through streets and along sidewalks picking up trash, oil spills, bacteria and other contaminants.

2 After the project is completed, runoff will enter a series of infiltration swales through curbside openings allowing a portion of water to enter a "dry-well" system within the street. As shown in the image below, water enters a drain into a filter chamber (left), undergoes filtering and then travels into another chamber (right) for infiltration.



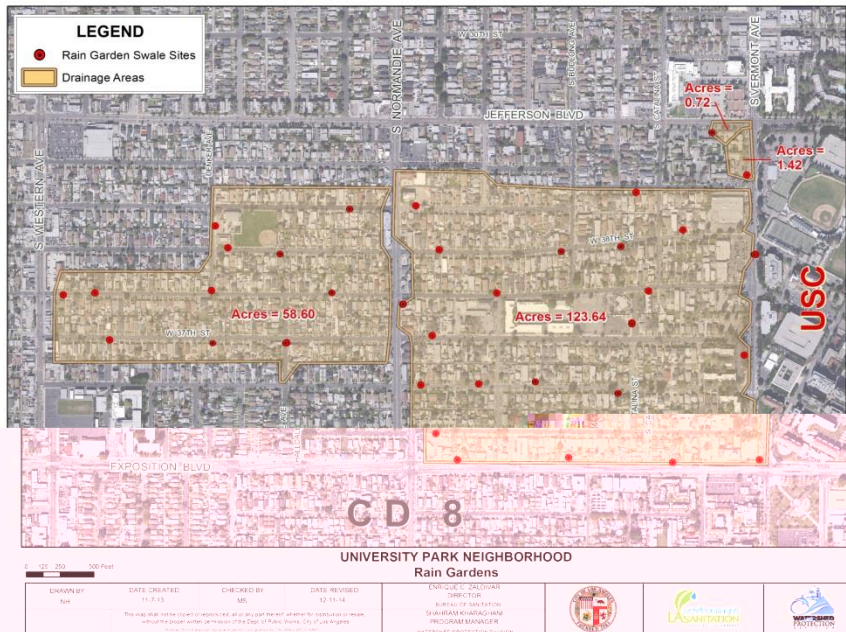
Courtesy of Torment Resources © 2015

3 Water continues to travel through the soil for hundreds of feet, until it reaches the groundwater basin, or aquifer. Once in the aquifer, it can be pumped for further treatment and distributed through the potable water supply system.



University Park Neighborhood Rain Gardens

- 35 Rain Gardens (4' width by 50' long by 3' depth)
- One unit of Rain Gardens at \$10,000
- Cost estimated at \$600,000
(in-kind services \$90,000 and Prop 84 Grant Funding \$510,000)
- Project schedule will be approximately 2 years





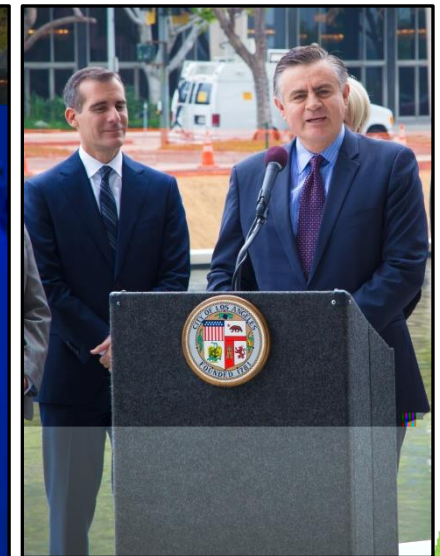
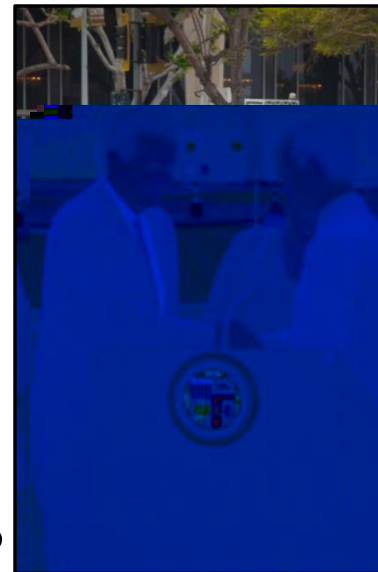
LASAN

Recycled Water Program

Developing Our Local Water Resources

April 2014

Mayor's Executive Directive #5
Emergency Drought Response
Creating a Water Wise City



Goal: reduce purchased water by 50% by 2025
Goal: 50% of water demand locally sourced by
2035

Background

Wastewater Collection System

- Hyperion Service Area
 - Tillman WRP
 - Los Angeles-Glendale WRP
- Terminal Island Service Area

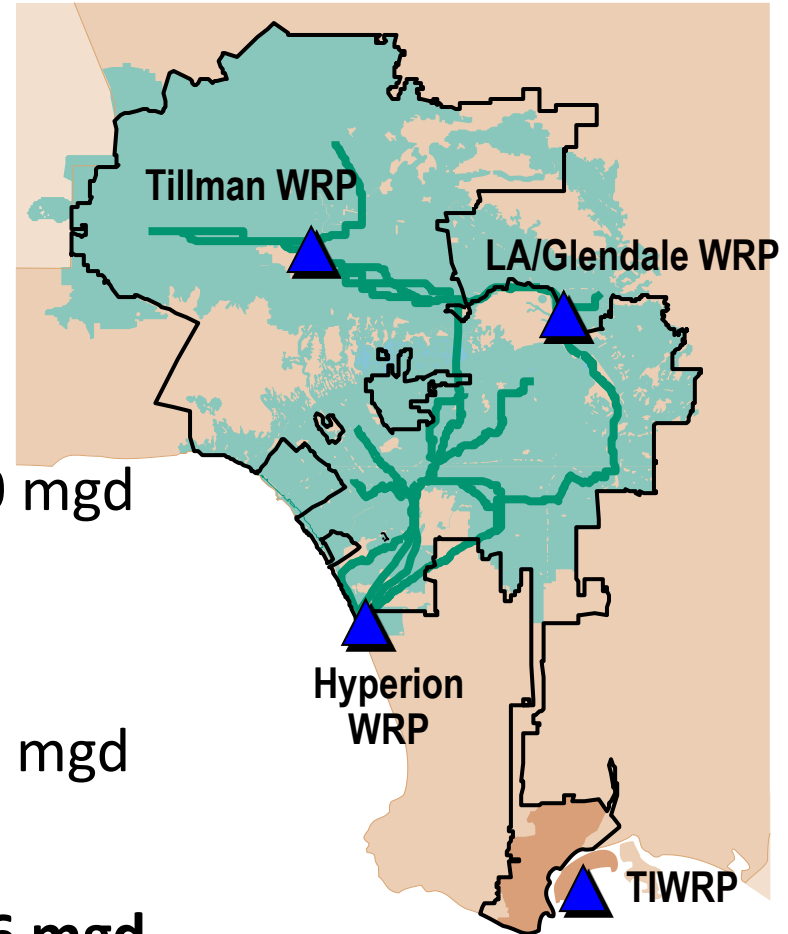
310 mgd

16 mgd

TOTAL WW Treated (FY 14/15)

326 mgd

(inclgd 50 mgd from contract agencies)



...A resource not a waste!

Current Recycled Water Production

Plant	Quantity Beneficially Used (mgd)	Beneficial Uses
Tillman WRP	34	In-plant use, landscape irrigation, industrial uses, recreational lakes, LA River
Los Angeles-Glendale WRP	14	In-plant use, landscape irrigation, industrial uses, LA River
Terminal Island WRP	6	In-plant use, sea water intrusion barrier
Hyperion WRP	45	In-plant use, feedwater for recycling
TOTAL	98	

30% of the wastewater treated is recycled and beneficially used

Recycled Water Uses



Balboa Golf Course



Hansen Spreading Grounds



Balboa Lake



Machado Lake



Los Angeles River



Sepulveda Basin Wildlife Lake



Japanese Garden

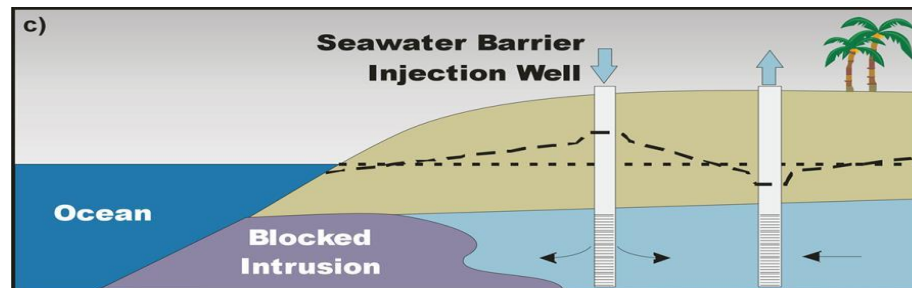
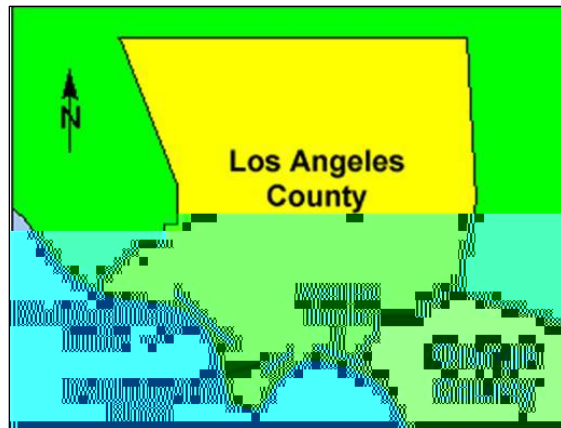
Planned Recycled Water Production

Plant	Additional Planned (mgd)	Water Quality	Beneficial Uses
Tillman WRP	35	Advanced	Groundwater Recharge at Hansen and Pacoima Spreading Grounds
Los Angeles-Glendale WRP	2	Tertiary	In-plant use, landscape irrigation, industrial uses, LA River
Terminal Island WRP	6	Advanced	Dominguez Gap, Machado Lake, industrial uses
Hyperion WRP	50	Tertiary and Advanced	LAWA, neighboring cities, industrial use, feedwater for recycling
TOTAL	93		98 current + 93 planned = 191 mgd

Under current plans, 70% of the wastewater treated will be recycled and beneficially used

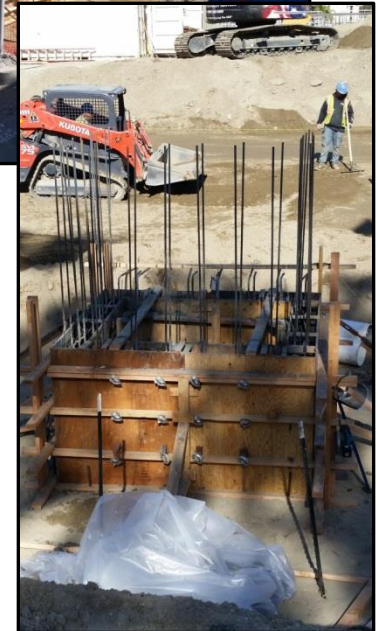
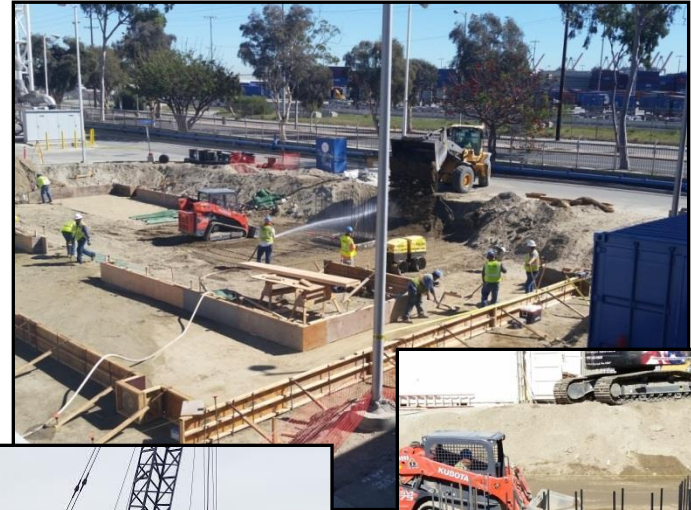
Terminal Island AWWPF

- Current capacity 6 mgd advanced treated water
- Injected as sea water intrusion barrier into Dominguez Gap



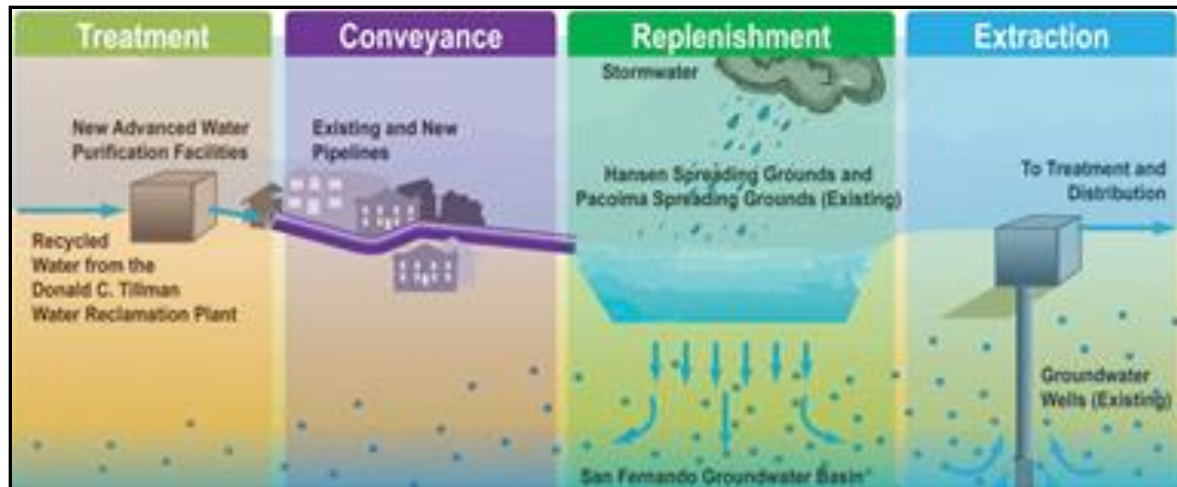
Terminal Island AWWPF Expansion

- Expansion adds another 6 mgd of advanced treatment
- Total 12 mgd - all influent flow
- Equivalent of water needed to serve San Pedro and Wilmington areas
- Scheduled completion end of 2016
- Users include
 - Dominquez Gap
 - Machado Lake
 - Refineries
 - Other industries (Praxair, etc.)



Tillman AWWPF Groundwater Recharge Project

- 35 mgd advanced water purification facility
- Extension of existing treatment at TWRP
- Groundwater recharge at Hansen and Pacoima Spreading Grounds
- Online 2022



DCT AWPf Pilot Project

D.C. TILLMAN ADVANCED
WATER PURIFICATION PILOT PROJECT

GOALS

Diversify

Develop a local drought resistant water source through potable reuse to maintain a **reliable and resilient water supply** in Los Angeles.

Protect

Design a potable reuse treatment train that optimizes costs and enhances reliability while meeting all regulatory requirements to **protect public health and safety**.

innovate

Evaluate alternative technologies and treatment approaches to **increase overall water recovery, validate performance, reduce costs, and plan for the future.**

Accelerate

Accelerate the full-scale project schedule to **urgently, but deliberately, replenish the water supply** and address future uncertainties related to climate change.



DCT AWPf Pilot Project

- Pilot objectives: determine treatment methods that will meet all groundwater recharge regulations while optimizing project cost



DCT AWWPF Pilot Project

- Pilot up and running February 2016
- Tours soon to be available



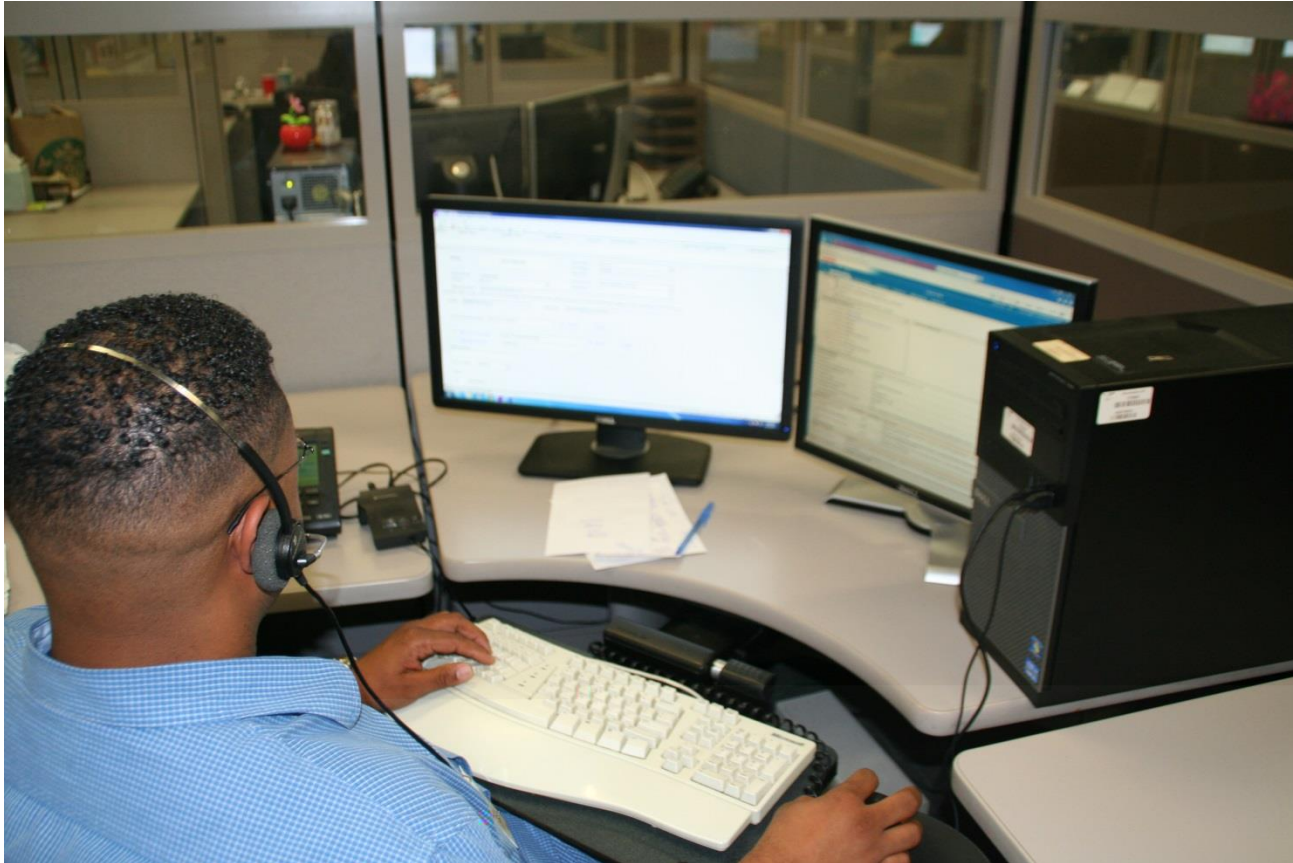
Hyperion Water Reclamation Plant

- Recycled water plans for LA Airport and neighboring cities
- Analysis of treatment technologies for higher level water quality
- Pilot/demonstration plant plans
- Hyperion regional reuse study





Customer Care Center



Which of these are serviced by LA Sanitation?

#1



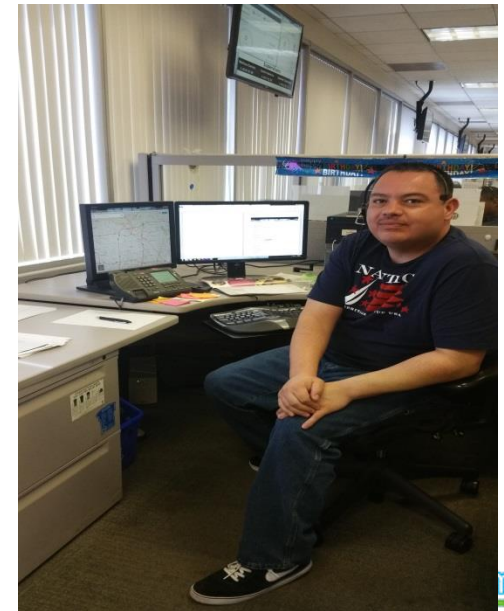
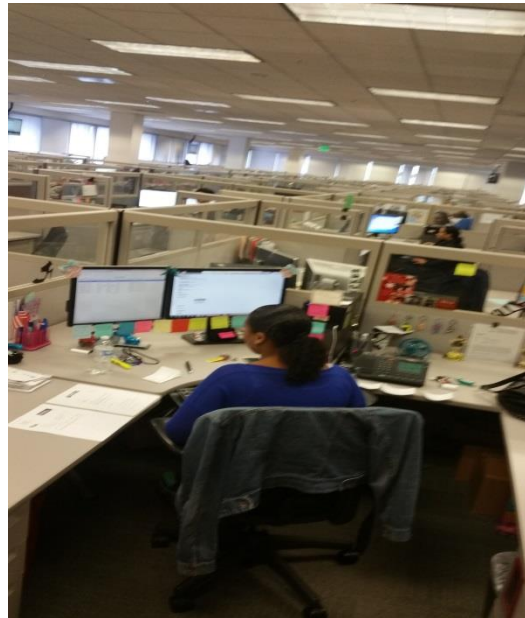
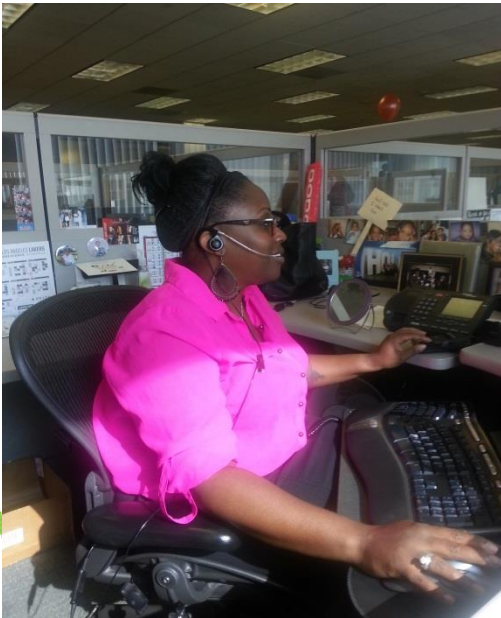
#2 Griffith Park Observatory



#3 LAX

Customer Care Center

- A centralized communication center for LA Sanitation
- One stop request and information hub
- Provides billing explanation
- Provides general information regarding other City of Los Angeles services



Open 24 hours a day, 7 days a week to take service requests

We assist residents with

- Refuse, and Recycling Collection and missed Pick-up
- Bulky Item Pick Up
- Illegal Dumping
- Container Services- Trash Bin Repairs/ Replacements
- Brush Collection
- Dead Animal Collection
- Sewer Service Charge
- Flooding Calls during storms

How Service Requests are Taken

- Dial [1-800-773-2489](tel:1-800-773-2489)
- Use our online form at www.lacitysan.org
- Download the MyLA 311 app

What is considered a “bulky-item” for collection?

- Household items that do not fit into city supplied collection carts.
- Bulky-items are classified as:
 - white goods - household appliances including water heater.
 - furniture - couches, chairs, tables, mattresses, box springs, etc.
 - wood - fences, tables, chairs, doors, etc.
 - miscellaneous wood – pieces of lumber
 - plastics - strollers, toys, fans, etc.
 - metals - bed frames, metal furniture, etc.
 - miscellaneous - carpet, rugs, textile, etc.

-Bulky items are collected by LASAN staff upon receiving requests from apartment owners or tenants.

-This service helps to reduce bulky items on the City streets, alleys, or parkways.



• **Before**



• **After**

Customer Care Center Facts

- Over 800,000 service requests annually
- Current average wait time less than 1 min
- Most requested services are bulky items collection

Free Mulch Material

Available free at 11 locations around the City!



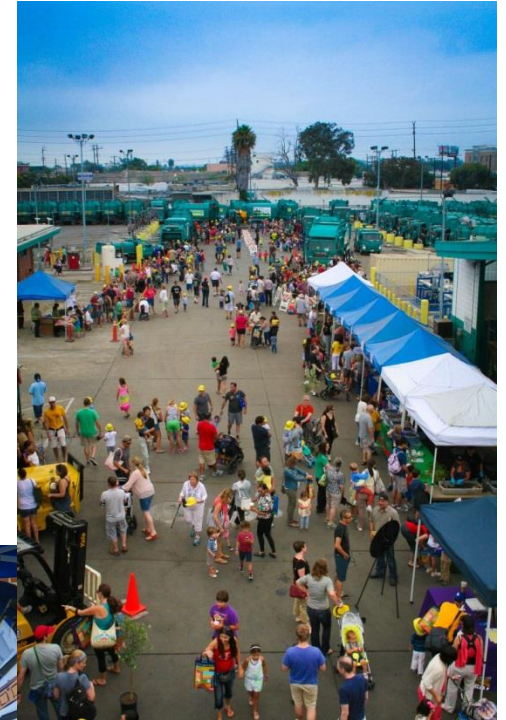
Free Used Oil and HHW Collection Events



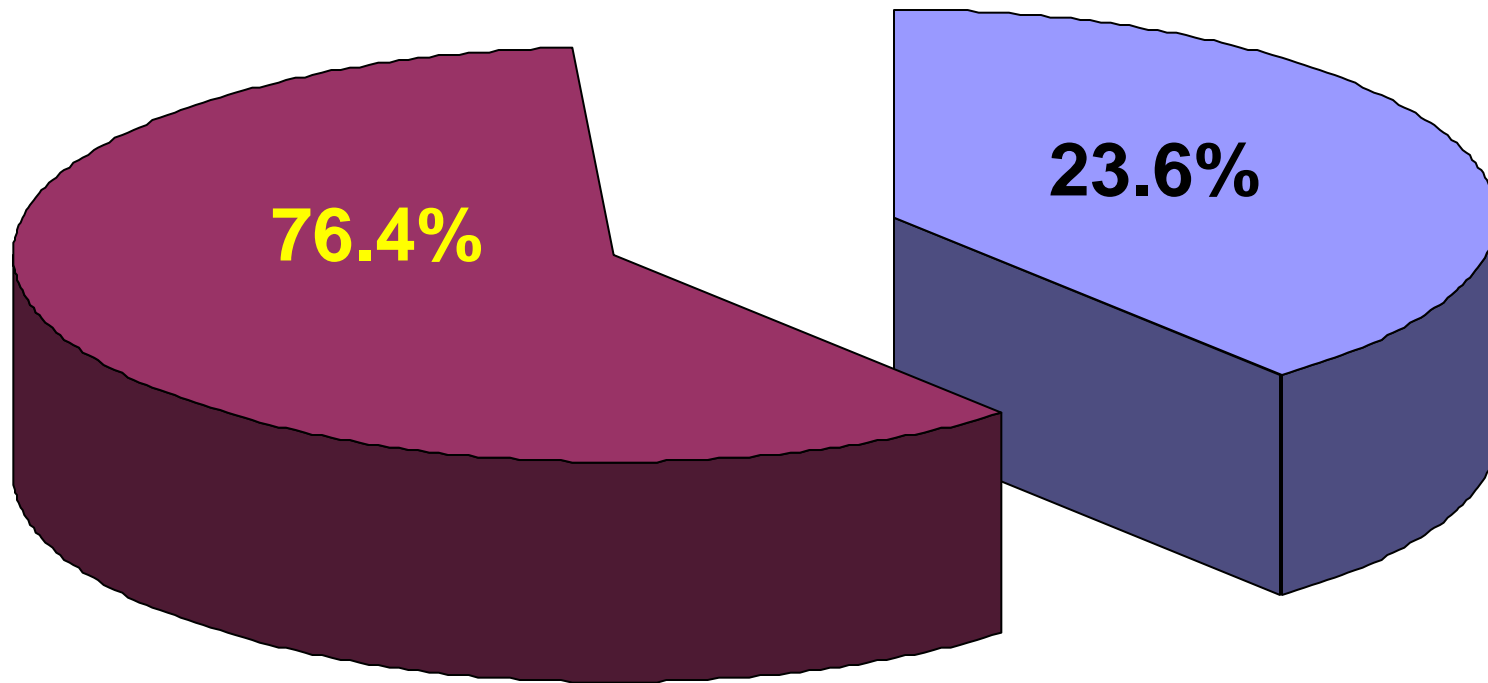
Seven Permanent HHW Centers



6 Annual Open House Events



Municipal Solid Waste Management



■ Landfill
■ Diversion

Clean Fuel





Clean Streets LA

“Everyone who lives, works, and visits here in LA should enjoy clean streets that are free from litter and debris. Our quality of life, our economic prosperity, and our health are all tied to the cleanliness of our streets, sidewalks, alleys, and other public spaces.”

~ Mayor Eric Garcetti
April 23, 2015

Executive Directive No. 8

LA Sanitation is the lead agency responsible for implementation

Key Objectives:

- **Recruit, train, and deploy a 3rd strike team to target highly impacted areas**
- **Develop a street-by-street cleanliness assessment system**
- **Annually deploy 1250 city-owned trash receptacles maintained by LASAN over the next several years until we reach 5000**
- **Identify all public trash receptacles (including those not serviced by the City) and devise a plan to service all of them regularly**

Street Indexing

- **Methodically analyze the City and conduct a street-by-street cleanliness assessment, with a rating system**
- **Identify necessary resources to address and prioritize areas of need and service plan**
- ***Program currently in development***

Litter



Homeless Encampments



Illegal Dumping



Bulky Items



A few numbers...

- On average, we receive nearly 1,900 daily requests for bulky item collection.
- Our Customer Care Center answered nearly 57,000 calls for service in the last month.
- 620 locations will be cleaned by April 30, 2016, not including current requests coming in daily. 85% are homeless encampments.
- 253 of these 620 locations were reported to LASAN in the last 30 days.
- In January 2016, strike teams collected 821 tons of waste (85% of this was illegal dumping).

3 Strike Teams

Highly-coordinated team of skilled LA Sanitation workers tasked with highly intensive cleanings outside of normal daily service.

Focus is homeless encampments, alley cleanings, large illegal dumpings and abandoned waste.



Clean-up schedules are prioritized in conjunction with Council Offices and LAPD

Trash Receptacles

LA Sanitation - 1,440

Adopt A Basket - 725

JC/ Deceaux - 1,846

Martin Outdoor Media - 2,097

Business Improvement Districts - 875

Total- 6,983

- Receptacles geocoded & databased
- Developing plan to take over servicing of all
- Identifying deployment for 5000 new receptacles



*When complete, LA will have 12,000
public trash receptacles!*

What can Neighborhood Councils do?

Proactive

- Schedule bulky item collection free of charge
- Coordinate community clean-ups
- Educate friends & neighbors about available free services
- Share our hotline and app on social media and websites

Reactive

- Take photos, upload to MyLA311 app
- Call Customer Care Center 24/7 to report all cleanliness issues





THANK YOU!

24-hour Customer Care Center

1-800-773-2489

Or dial 3-1-1



Follow us!



@lacitysan

www.lacitysan.org