

# ENGINEER DAY 2020

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# WELCOME!

The program will begin soon

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# ENGINEER DAY 2020



## NETWORKING BREAKOUTS

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We'll put you into breakout rooms where you'll have 30 seconds to share your name, school, graduation day, engineering day, and career hopes!

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## WELCOME AND INTRODUCTIONS

Ani Abassian, Program Administrator

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## Solid Resources Program

Thania Flores, E.I.T.

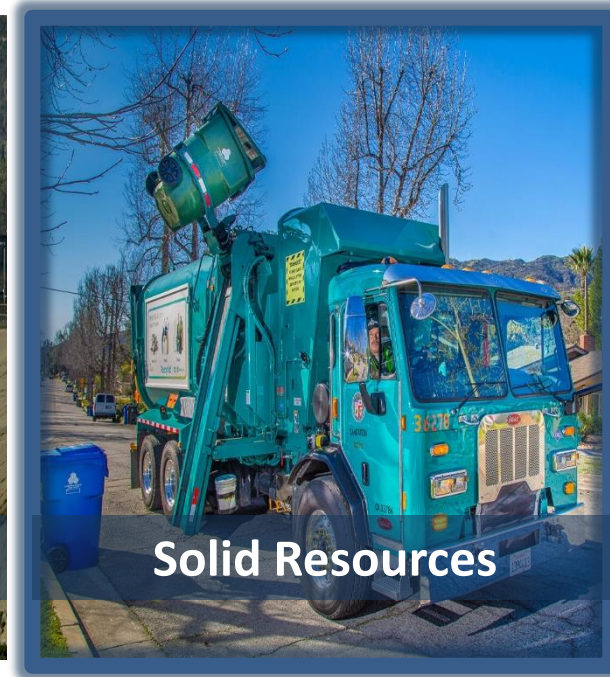
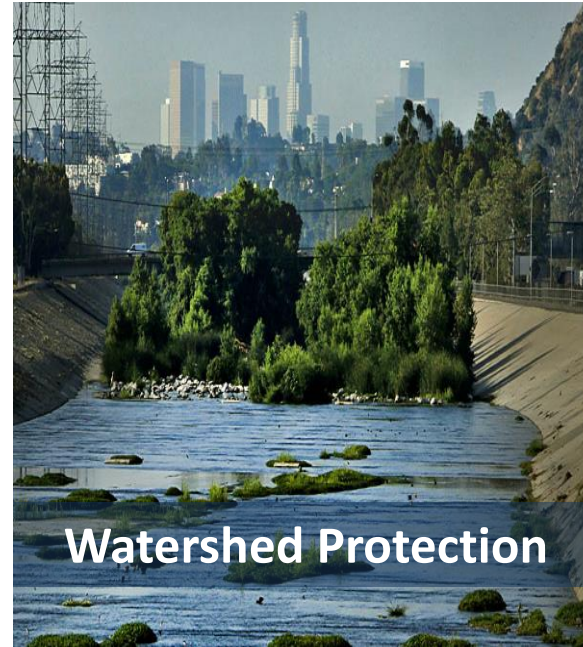
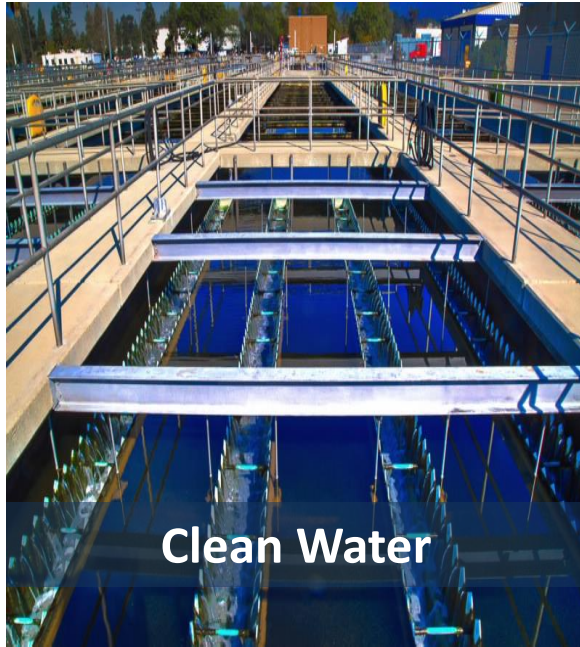
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# LASAN 3 MAIN PROGRAMS



## SPECIALTY PROGRAMS:

Brownfields | Biodiversity | Climate Change | Healthy Soils | Environmental Justice

# WHAT ARE SOLID RESOURCES?

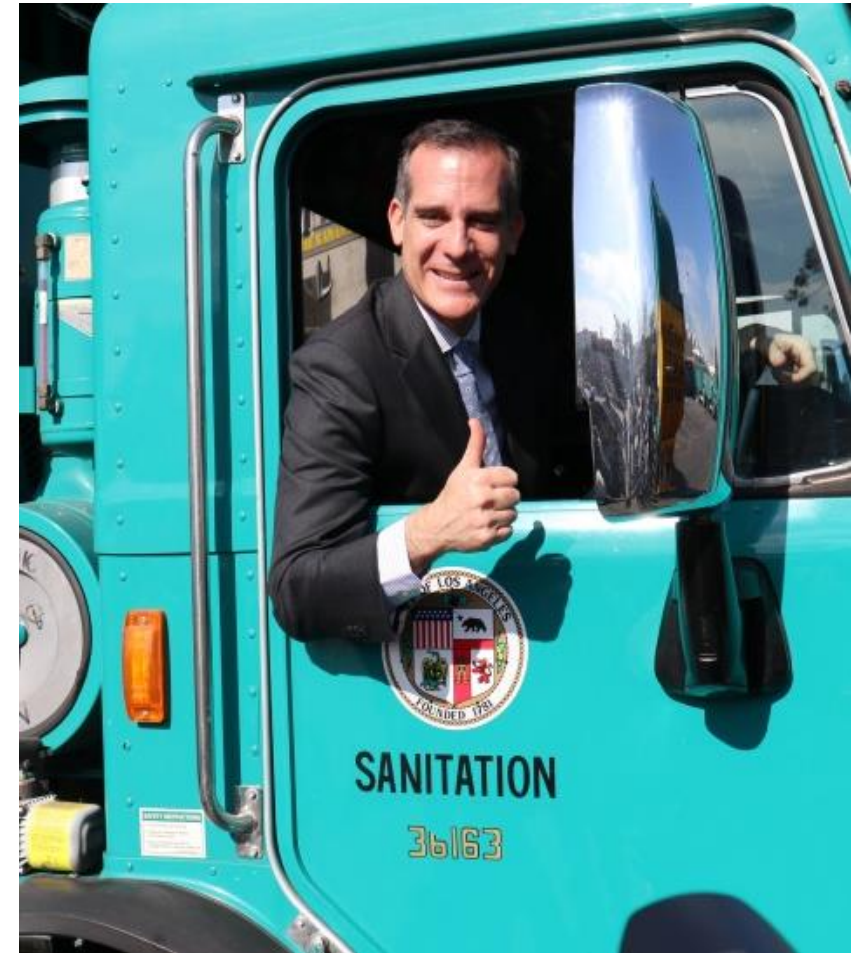


# SOLID RESOURCES PROGRAM

Manage 10M+ tons of solid waste—residential, commercial, & industrial—with 76.4% being recycled and diverted from landfills.

**Goal** is to become the cleanest, greenest large city in the US by reusing resources and developing alternative energy sources in order to meet the Mayor's goal of **Zero Waste**:

- 90% diversion from landfills by 2025
- 95% diversion from landfills by 2035
- 100% diversion from landfills by 2050



# MY DIVISION

## SRPCD

### Solids Resources Processing and Construction Division

- Central Los Angeles Recycling and Transfer Station (CLARTS)
- Maintenance of five (5) closed landfills
- Compost and chipping operations
- Urban gardening & compost community workshops
- Community beautification and capital improvement projects

# MY RESPONSIBILITIES

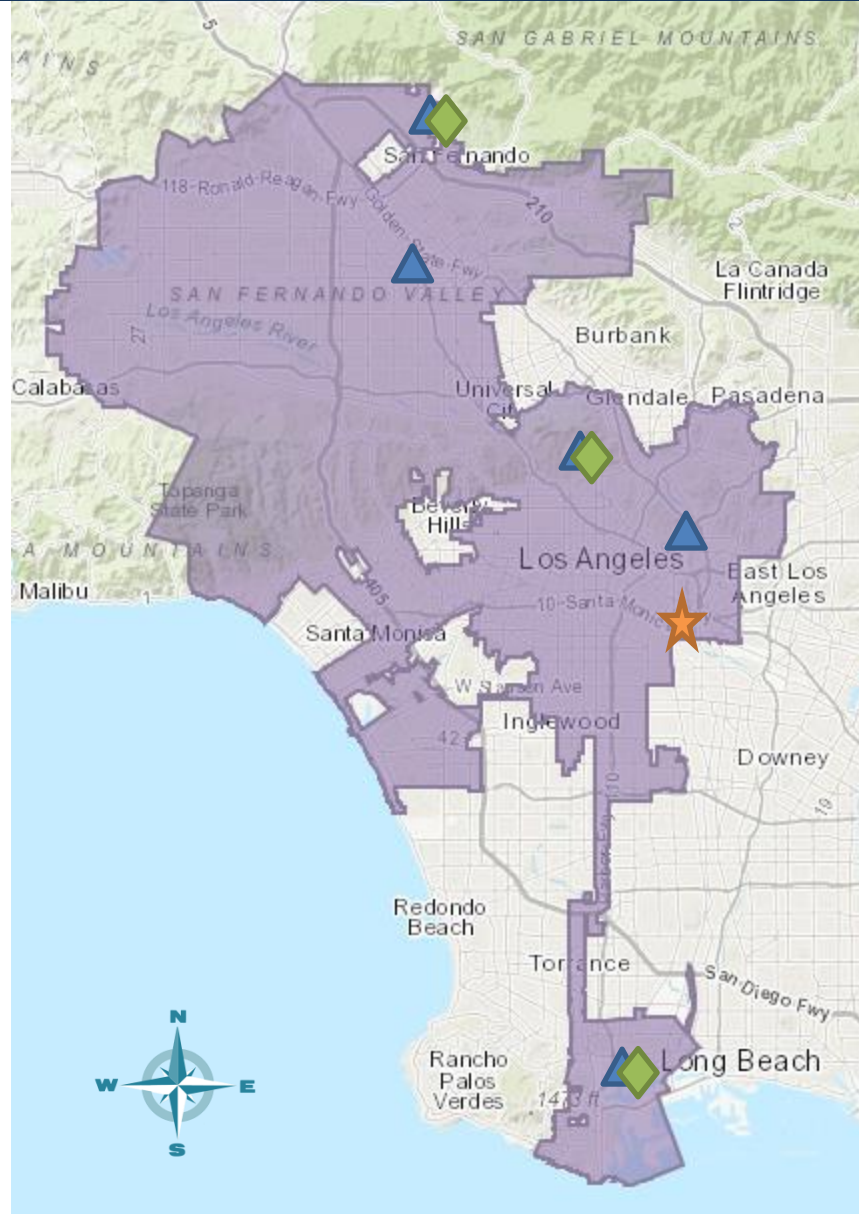
- Data collection and analysis
- Regulatory Reports
  - SCAQMD, SWRCB, EPA, etc.
- Facility & equipment permits
- Contract Management
- Project Management
  - Planning & Construction
- Briefings & presentations to the Board of Public Works



# Facilities Map

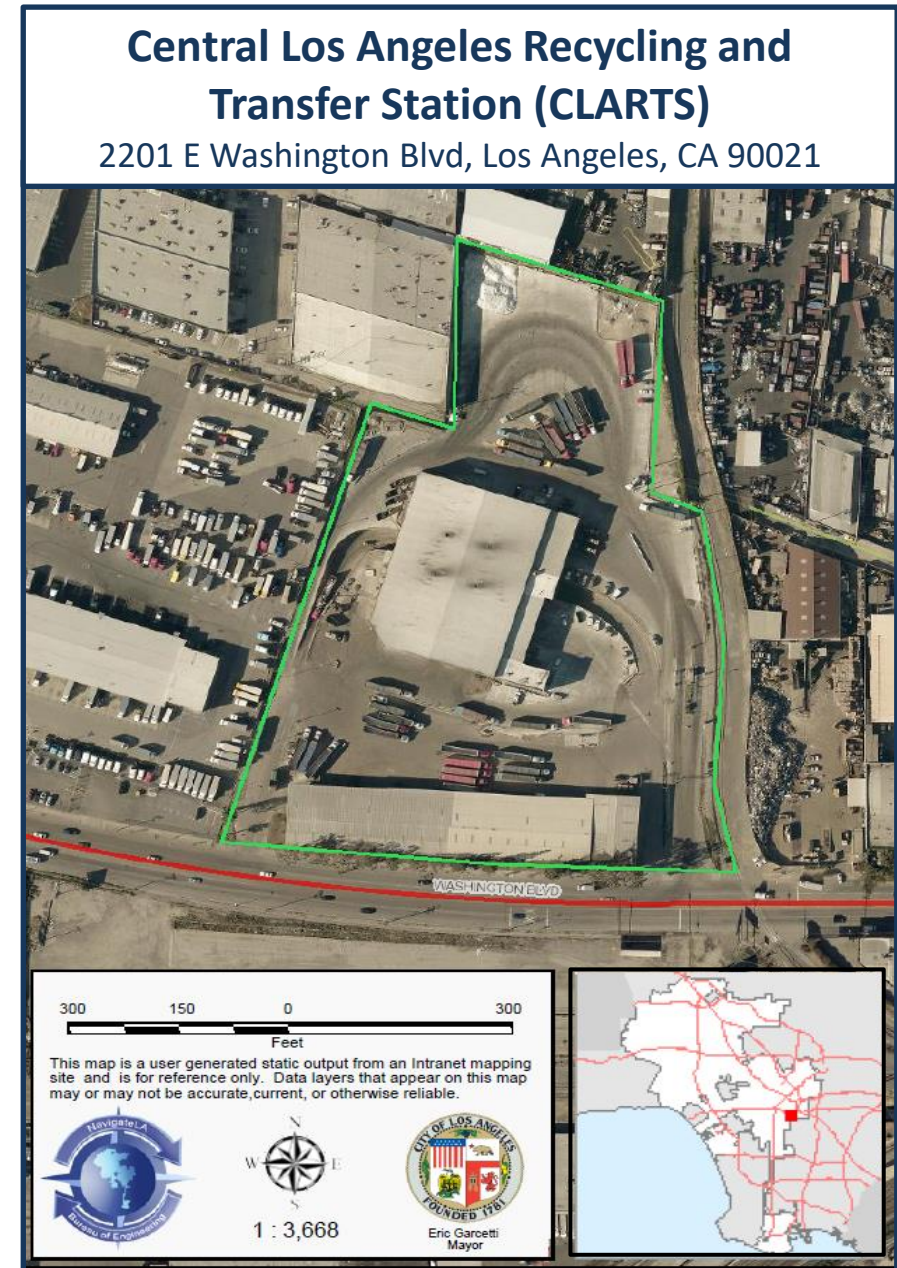
## Legend

-  City Boundary
-  Closed Landfill
  - Lopez Canyon
  - Bishop Canyon
  - Toyon Canyon
  - Sheldon-Arleta
  - Gaffey Street
-  Compost Facility
  - Lopez Environmental Center
  - Griffith Park
  - Harbor Yard Trimmings Facility
-  Transfer Station
  - Central Los Angeles Recycling and Transfer Station (CLARTS)



# CLARTS FACILITY

- Transfer of solid waste
  - Municipal Solid Waste (MSW)
  - Green Waste (GW)
- Processes  $\sim\frac{1}{3}$  of the City's residential MSW
- Non-stop, essential operation



# CLARTS TIPPING FLOOR



# ORGANICS PROCESSING FACILITY (OPF) AT CLARTS

## Policies

- Assembly Bill (AB) 1826
- Senate Bill (SB)1383
- Mayor Garcetti's Sustainability Plan /LA's Green New Deal

## Goal

- 100% diversion of organic waste from landfills by 2028

## Project Objective

- Request for Proposals (RFP) for Design-Build-Finance-Operate-Maintain (DBFOM)
- Pre-processing 300 tons per day
- Organic slurry to be anaerobically digested at Hyperion Water Reclamation Plant (HWRP)



# LASAN COMPOST & MULCH



# COMPOSTING FOOD WASTE STUDIES

Lopez Canyon Environmental Center



Griffith Park Composting Facility



LOPEZ CANYON ENVIRONMENTAL CENTER ORGANIC COMPOST FEASIBILITY STUDY FOR SB-1383 COMPLIANCE



# OTHER PROJECTS & SERVICES IN LASAN-SOLIDS PROGRAM

recycLA

Make  
waste  
history

## Services

- RecycLA
- Construction & Demolition Recycling
- S.A.F.E. Centers
- Tire Recycling
- Livability Services (CARE)
- Citywide Recycling

## Pilot Programs

- In-Sink Pilot Program
- Curb Your Food Waste LA

Learn more → [lacitysan.org](http://lacitysan.org)



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Thania Flores, E.I.T.



THANK YOU!  
Questions?

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## PANEL 1A: PUBLIC VS. PRIVATE SECTOR

Christine Heinrich-Josties | Manik Mohandas

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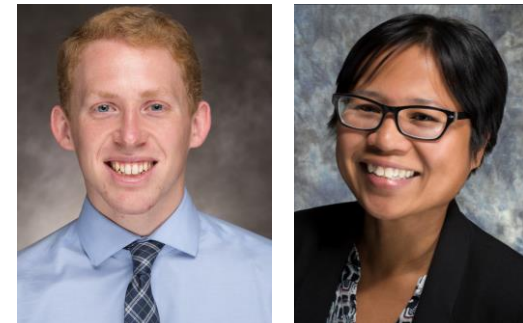
## PANEL 1B: PROJECTS AND CHALLENGES

Brett Perry | Rowena Romano

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# BREAK

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Back at 10:30am

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## Clean Water Program

Amanda Lujan, EEA | Emilio Lopez, EEA | Stephanie Osorio, EEA

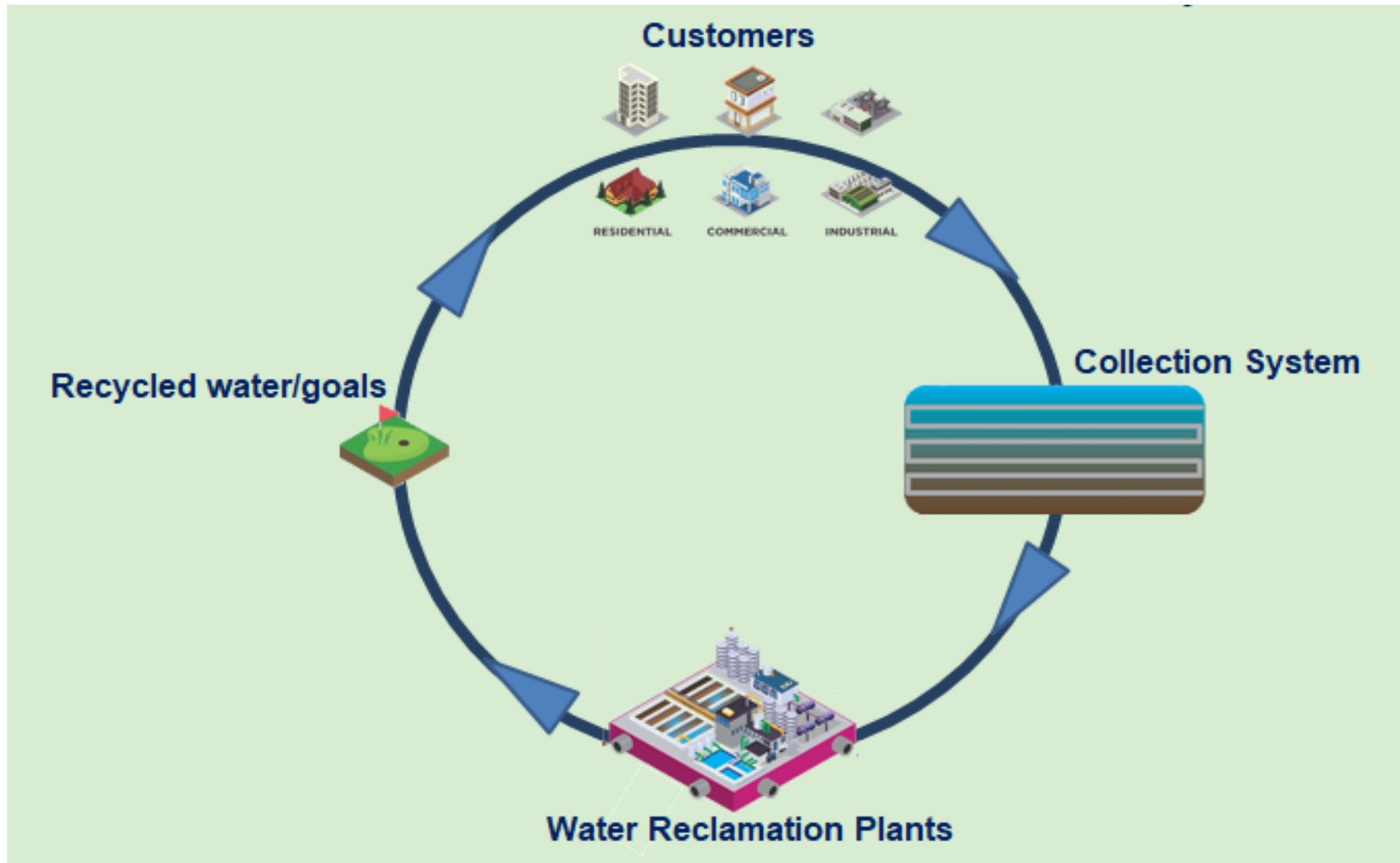


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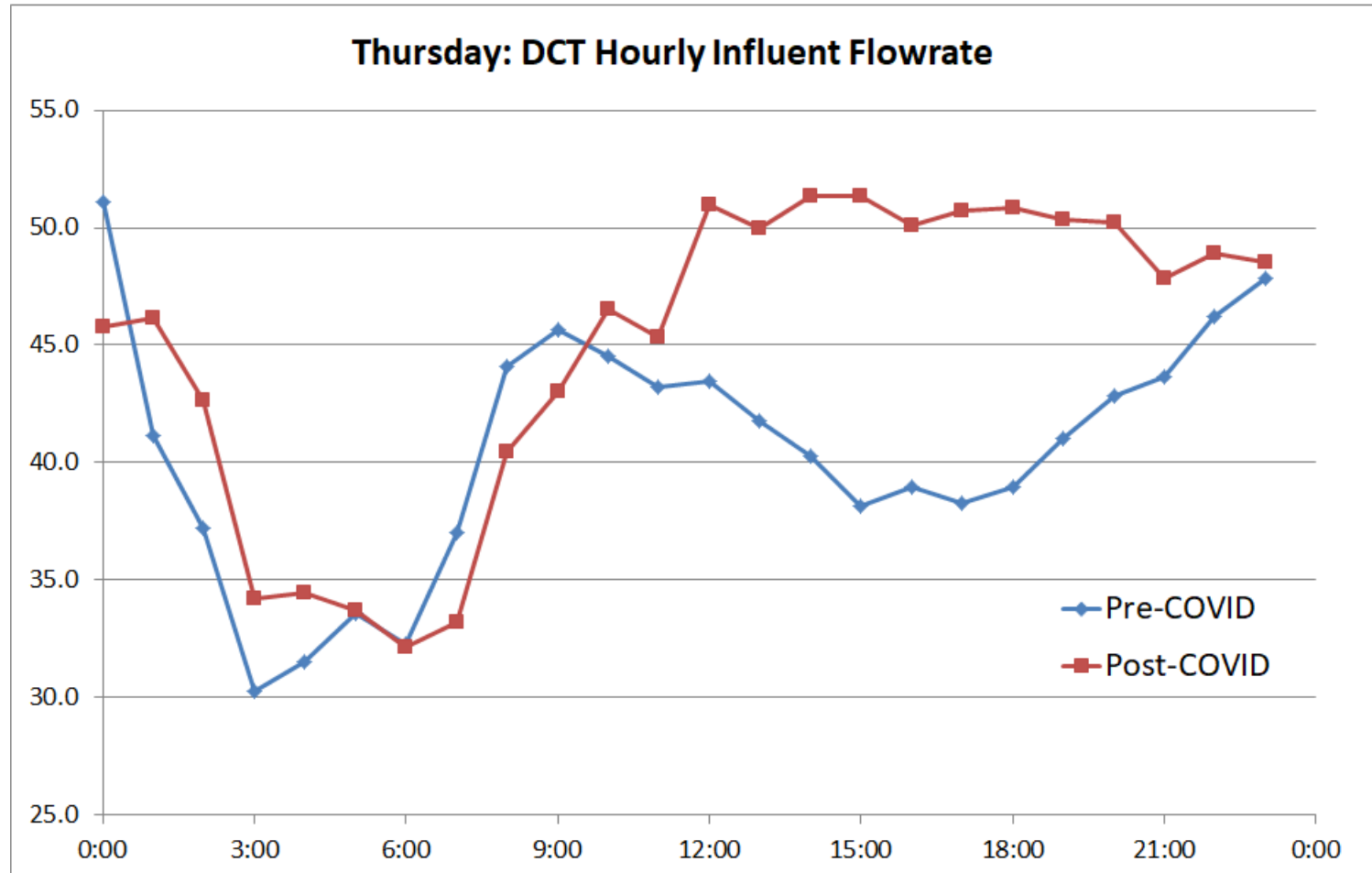


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# Overview: Reclaimed Water Cycle



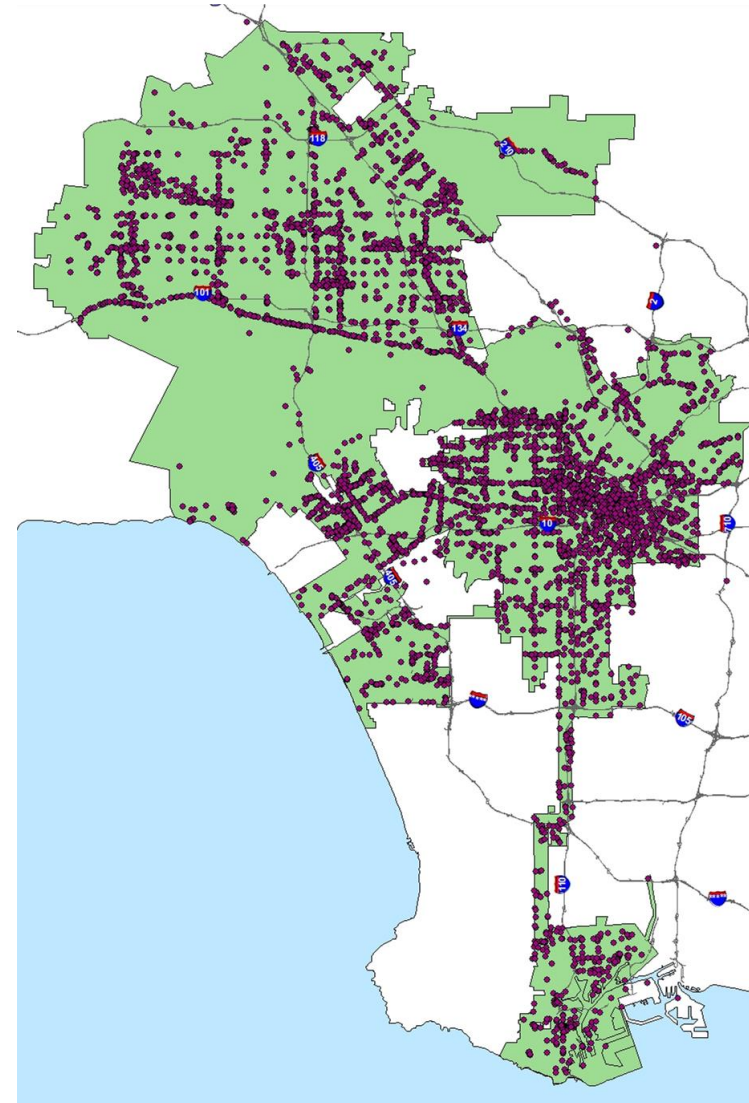
# The Customers



# INDUSTRIAL WASTE

## 16,000+ industries permitted

- Significant Industrial Users
- Local Industrial Users
- Fats, Oils and Grease (FOG)
- Dental
- Cannabis Facilities



# LA INDUSTRY

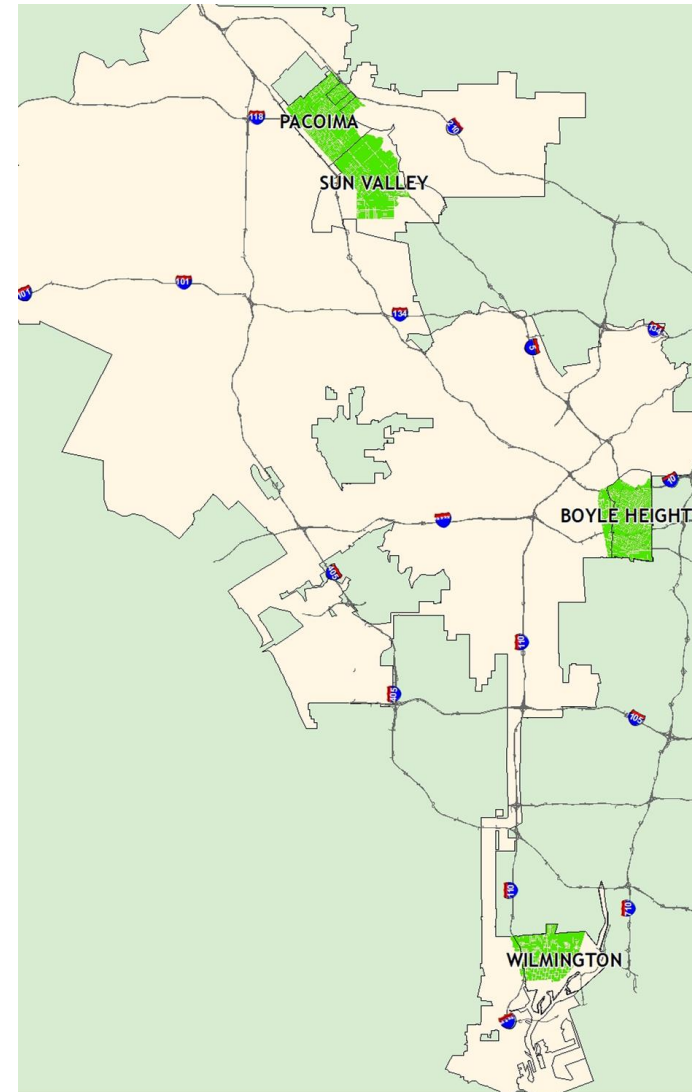
Provide resources and collaborative networks to sustain and grow businesses in the City of Los Angeles

[www.lacitysan.org/laindustry](http://www.lacitysan.org/laindustry)



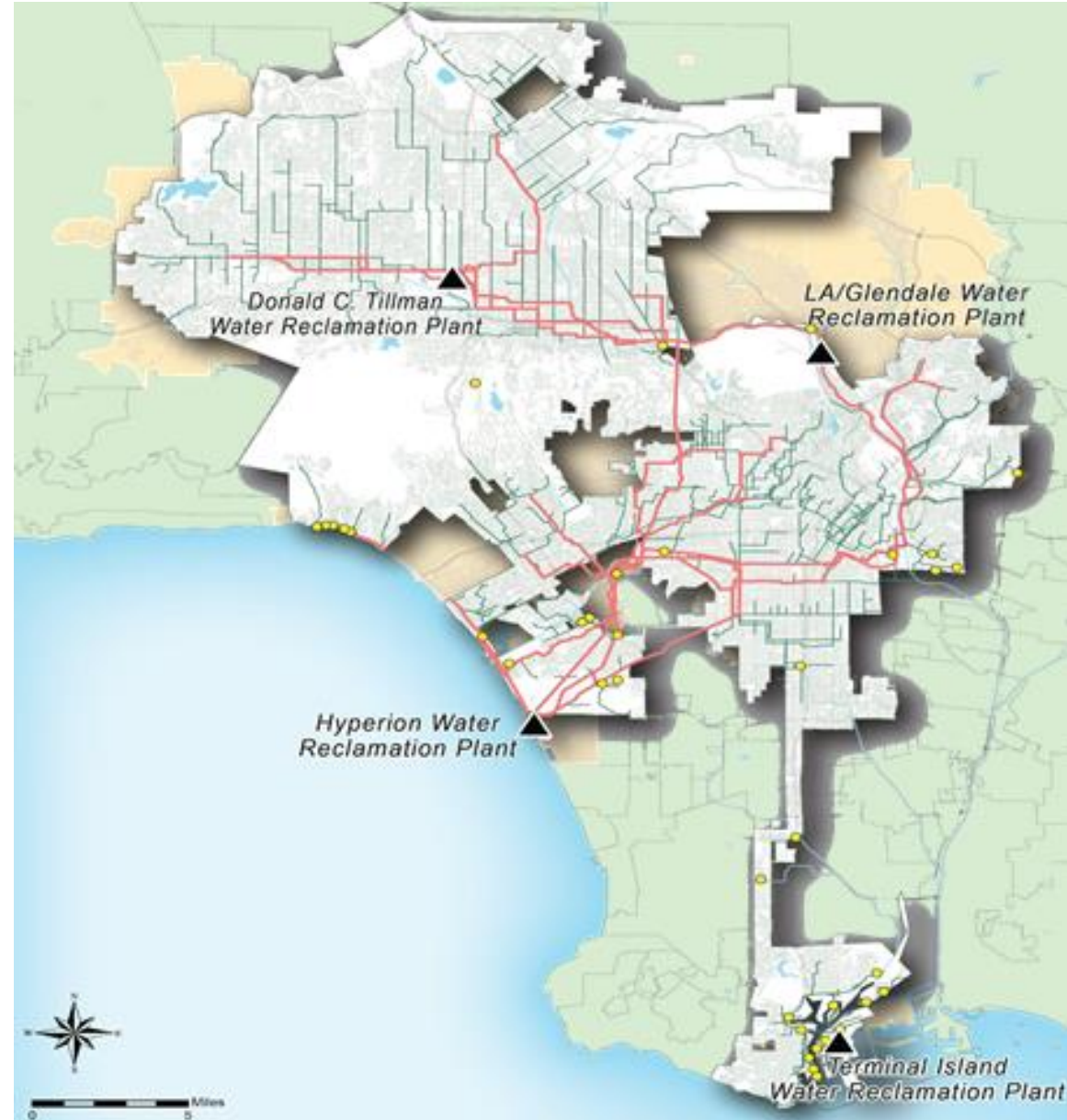
# CUGU (CLEAN UP GREEN UP)

Low income minority communities have higher exposure rates to climate change impacts



# COLLECTION SYSTEM

- 4 water reclamation plants
- 6,700+ miles of sewer pipe
- 43 pumping plants
- Serving a population of over 4 million



# PREVENTATIVE & PROACTIVE MAINTENANCE

- CCTV
  - 400 miles of pipe  
CCTV'd per year
- Sewer Cleaning
  - 6,700+ miles of pipe  
cleaned per year
- Root Control
  - 400+ miles of pipe  
treated per year



# ROLE AS AN ENGINEER



- Reports
  - Structural
  - Hydraulic
  - Scope
  - Schedule
  - Budget
- Technology
- Contracts



- Review Drawings
- Council Briefings
- Project Management



- Manage Change Orders
- Constructability Review
- Coordinating with other agencies.

Post Construction

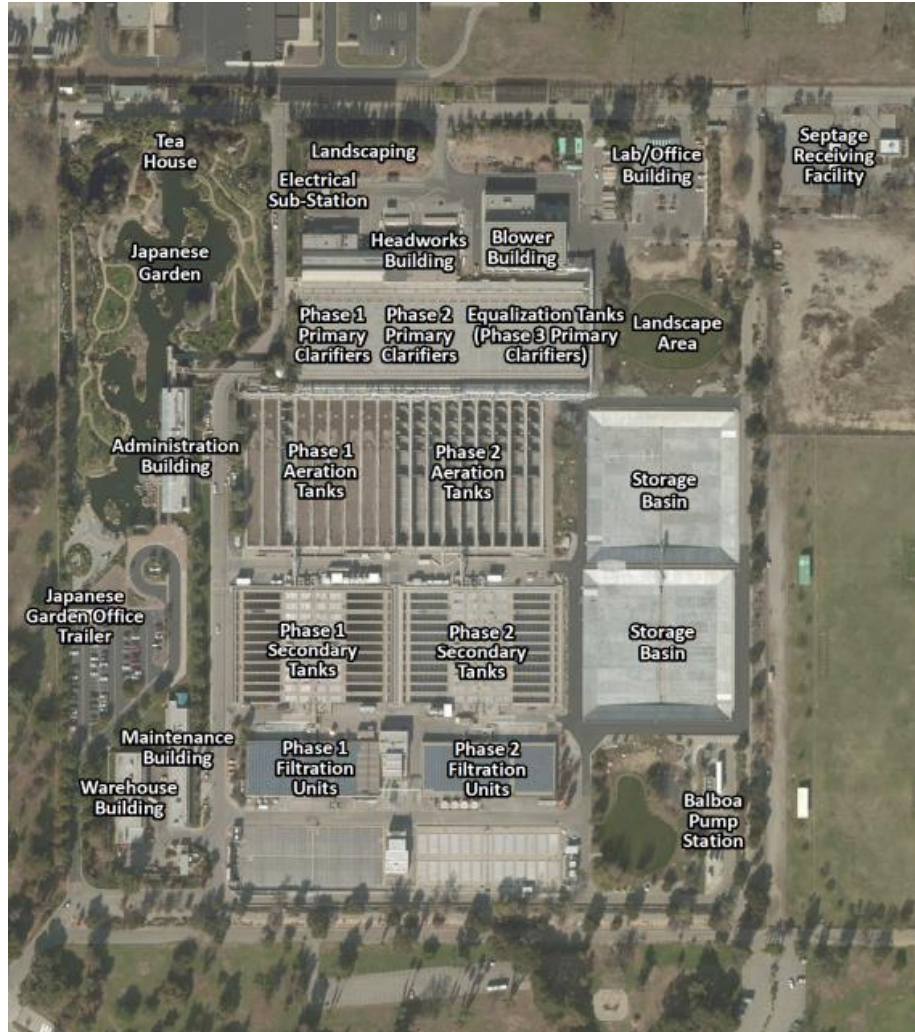
- Lessons Learned
- Data management



# SEWER CONSTRUCTION



# The Water Reclamation Plants!

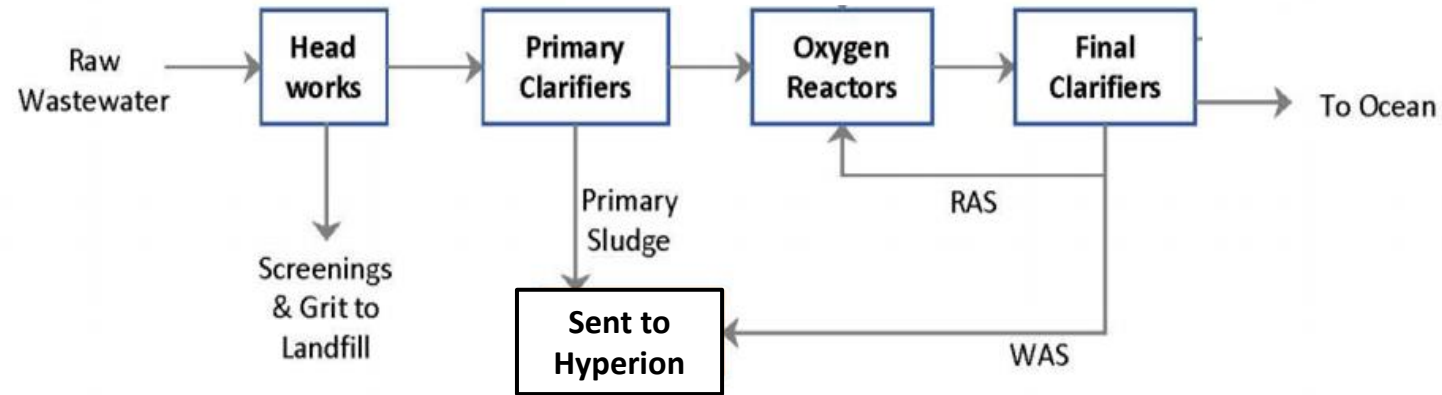


Donald C. Tillman



Los Angeles-Glendale

# Conventional Wastewater Treatment



# Wastewater Combating Climate Change?



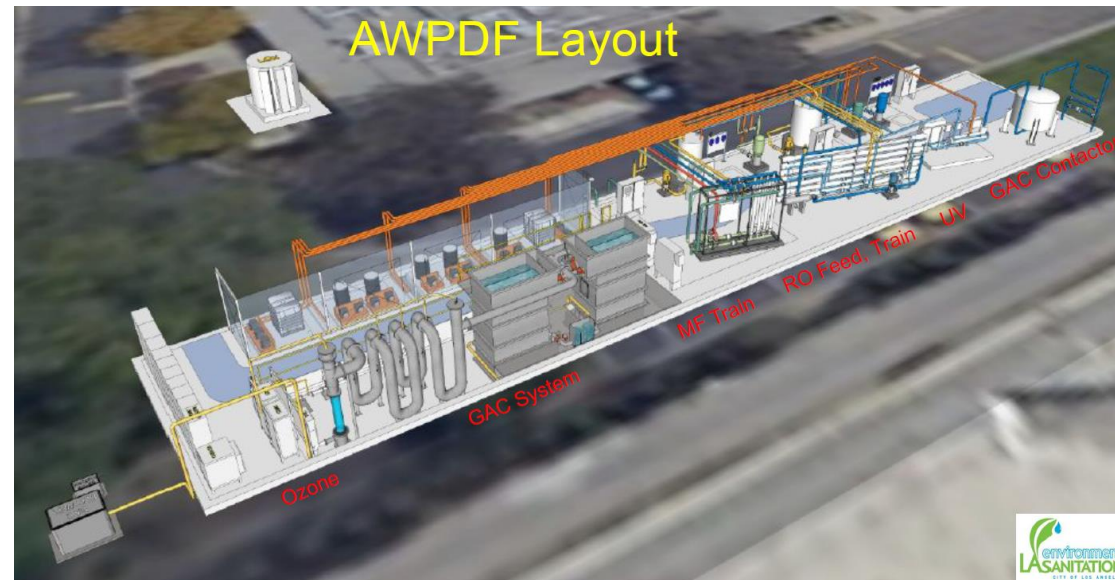
# ADVANCED WATER PURIFICATION FACILITY (AWPF) AT DCT

- Located at Donald C. Tillman WRP
- Microfiltration, reverse osmosis and advanced oxidation
- Would produce up to 35 MGD to replenish the San Fernando Groundwater Basin



# ADVANCED WATER PURIFICATION DEMONSTRATION FACILITY (AWPDF)

- Located at the Los Angeles-Glendale WRP
- Would produce up to 125 GPM of high quality recycled water
- Treated water will be used in interactive water features for public education



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Amanda Lujan, EEA  
Emilio Lopez, EEA  
Stephanie Osorio, EEA



# THANK YOU! Questions?

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## PANEL 2A: MISSION & CULTURE

Doug Walters | Christine Heinrich-Josties

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## PANEL 2B: CLIMATE ACTION

Jeremy Pathmanabhan | Laura McAlister

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## Watershed Protection Program

James Aldrich



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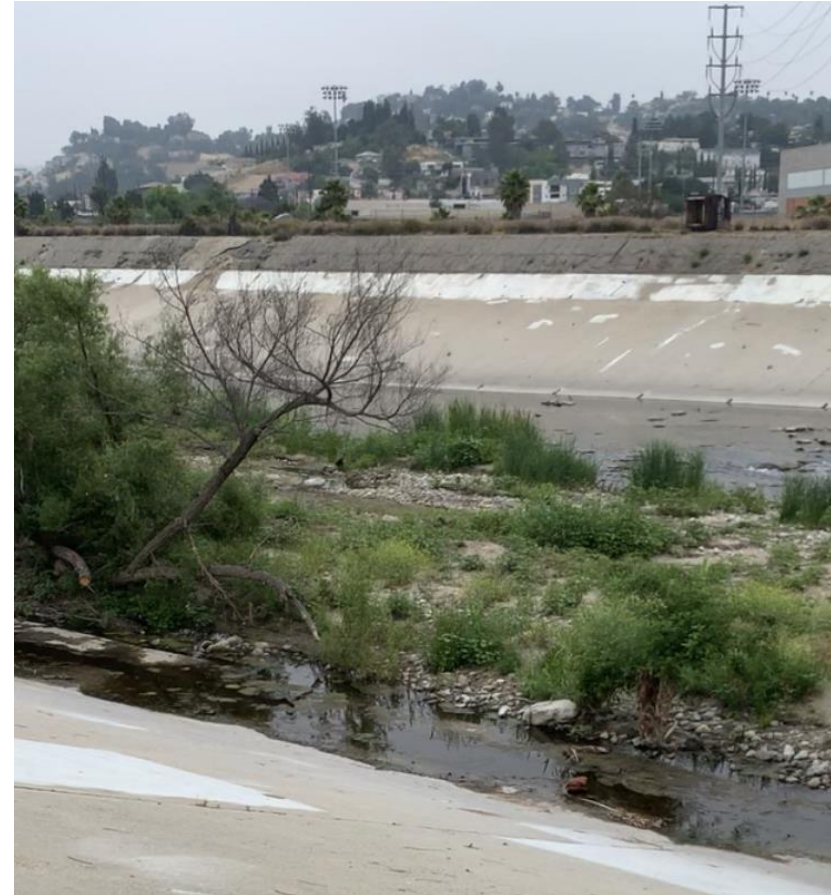
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# WHAT IS A WATERSHED?

All the water that falls across an area that ends up in one end point.

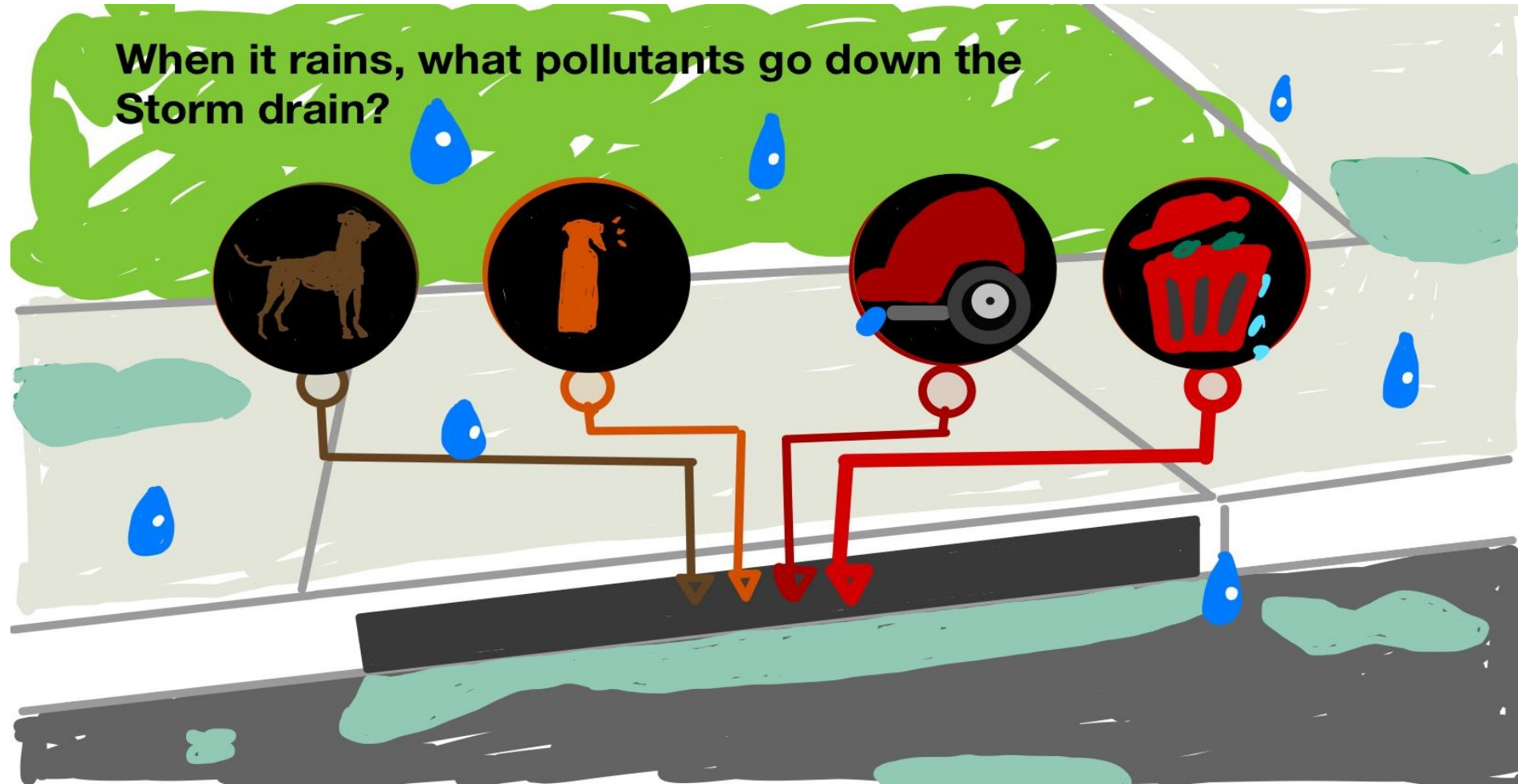
Includes:

- Surface Water
- Groundwater



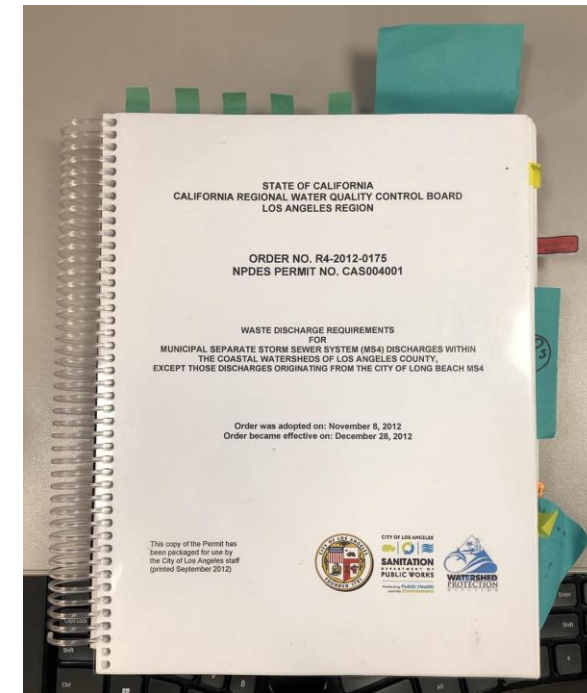
LA River

# WATERSHED QUALITY

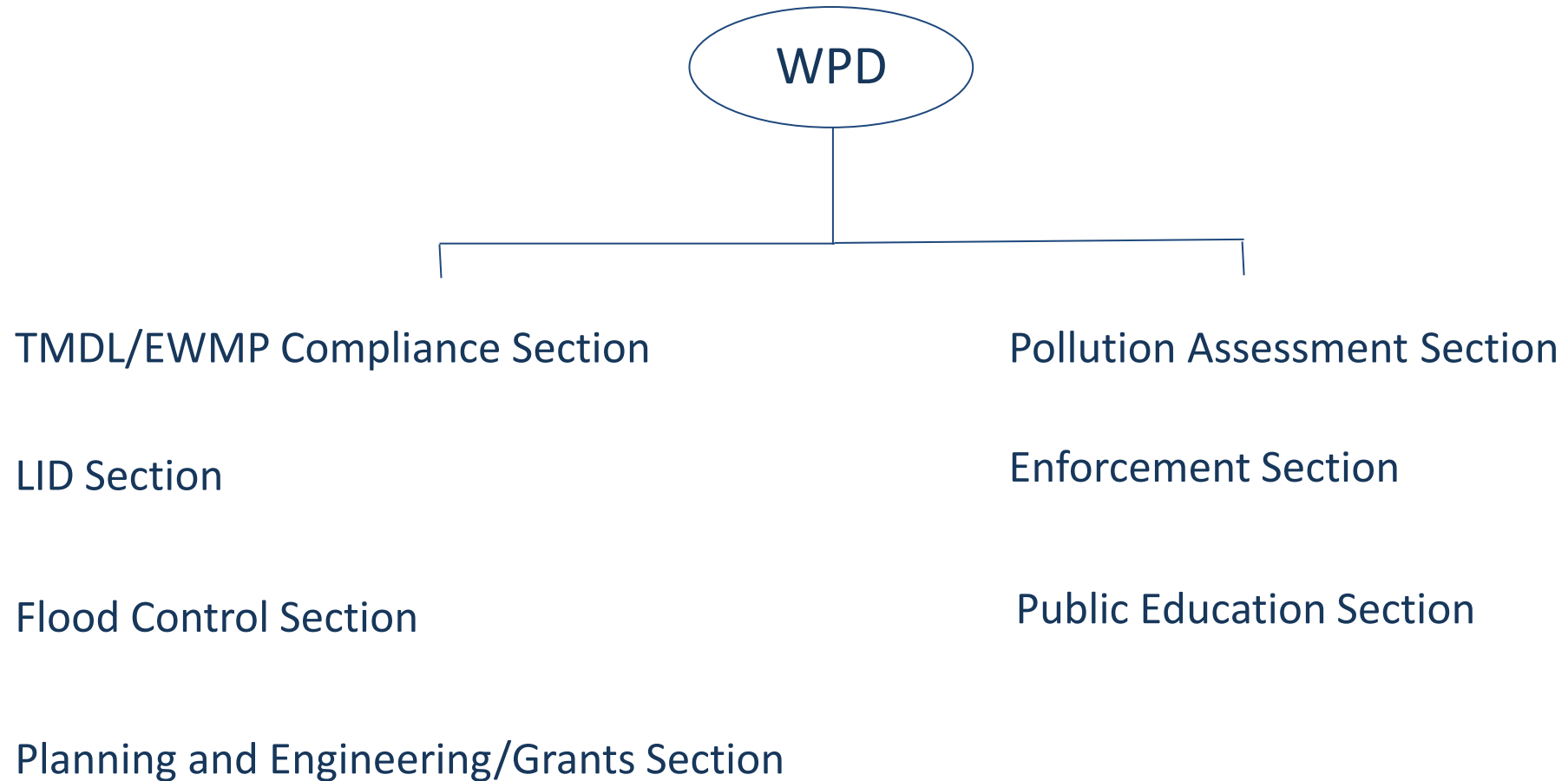


# CLEAN WATER ACT

- To be in compliance of the Clean Water Act, the City has to abide the National Pollutant Discharge Elimination System (NPDES) permit
- Requirements in permit are addressed by Watershed Protection Division



# DIVISION BREAKDOWN



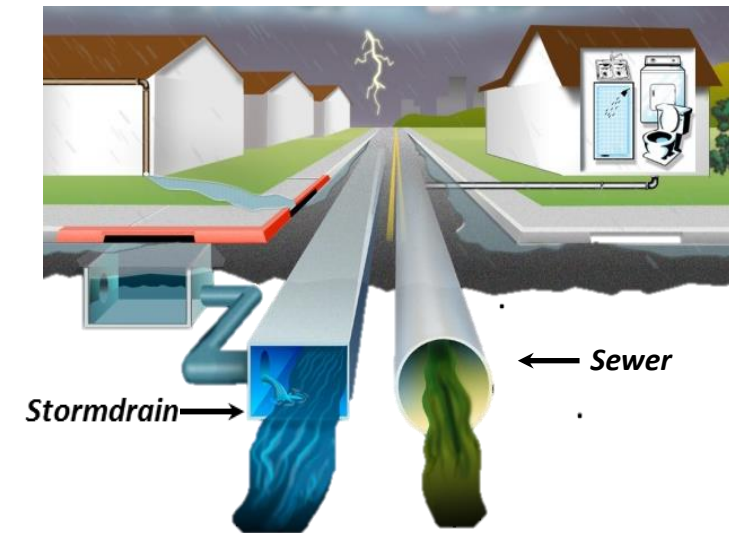
# SUPPORT GROUPS

- Pollution Assessment
  - Monitor all four watersheds and their water bodies to evaluate the impact of stormwater pollution
- Enforcement
  - Enforce local, state, and federal laws, investigate environmental crimes
- Public Education



# FLOOD CONTROL SECTION

- In charge of monitoring and addressing degraded storm drain system infrastructure
- City's storm drain system
  - 1,200 Miles of Pipes
  - 100 miles of open channel
  - 136 debris basins
  - 39,451 catch basins
  - 18 stormwater pump plants
  - Managed by City, County, USACE & Caltrans



# TMDL/EWMP COMPLIANCE SECTION

TMDL (Total Maximum Daily Load)

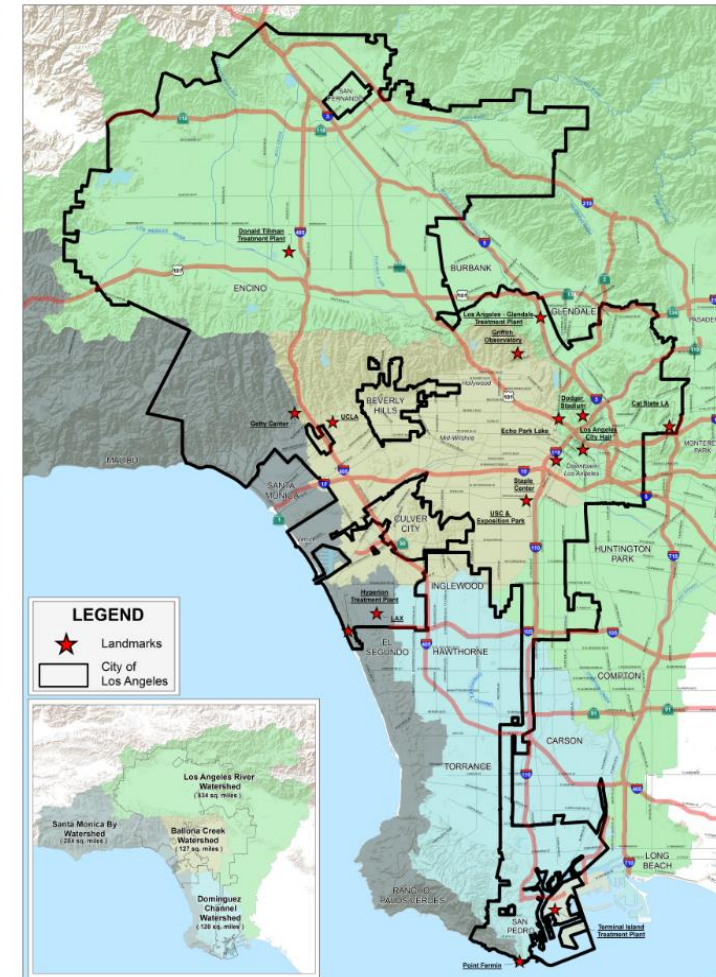
- The maximum amount of pollutant that is allowed to enter the receiving waters

Category	Constituent	Water Body/ Location					
		Ballona Estuary	Ballona Creek Reach 1	Ballona Creek Reach 2	Centinela Creek	Sepulveda Channel	Benedict Canyon Channel
Fecal Indicator Bacteria	<i>E. coli</i>	○	≡	≡	≡	≡	≡
	Enterococcus	≡	○	○	○	○	○
	Total Coliform	≡	○	○	○	○	○
Metals	Cadmium (Total)	○	≡	≡	≡	○	○
	Cadmium (Dissolved)	○	≡	+	≡	○	○
	Copper (Total)	≡	≡	×	×	≡	○
	Copper (Dissolved)	≡	≡	×	≡	≡	○
	Lead (Total)	○	≡	×	×	×	○
	Lead (Dissolved)	○	≡	≡	≡	≡	○
	Mercury (Total)	≡	≡	+	○	○	○
	Selenium (Total)	○	○	+	≡	+	○
	Silver (Total)	≡	≡	≡	≡	○	○
	Silver (Dissolved)	+	+	+	+	○	○
	Zinc (Total)	≡	×	×	≡	≡	○
	Zinc (Dissolved)	≡	×	×	≡	≡	○
Chlorinated Pesticides	4,4'-DDE	○	○	≡	≡	○	○
	4,4'-DDT	○	○	○	+	○	○
	A-Chlordane	○	○	+	○	○	○
	G-Chlordane	○	○	+	○	○	○
Semi-volatile Organic Compounds	Chrysene	○	○	○	+	○	○
	Indeno(1,2,3-cd)pyrene	○	○	≡	≡	○	○
	Benzo(a)anthracene	○	○	○	+	○	○
	Benzo(k)fluoranthene	○	○	○	+	○	○



# TMDL/EWMP COMPLIANCE SECTION

- TMDL (Total Maximum Daily Load)
  - The maximum amount of pollutant that is allowed to enter the receiving waters
- LA Watersheds
  - Ballona Creek
  - Dominguez Channel
  - Los Angeles River
  - Santa Monica Bay





# LOW IMPACT DEVELOPMENT SECTION



# LOW IMPACT DEVELOPMENT SECTION

## EXAMPLES



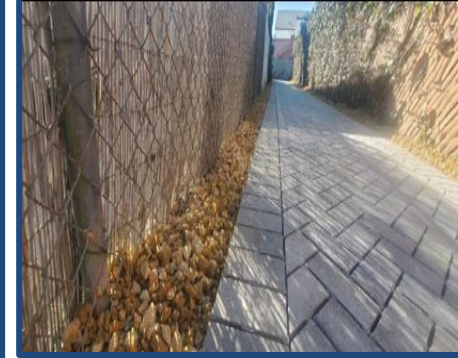
Rain Barrels/Tanks



Flow thru Planters



Dry Wells



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



Infiltration Basins & Trenches



Rain Gardens



Bio-swale

# PLANNING & ENGINEERING GRANTS SECTION

## Day-to-day tasks:

- Create concept reports (scope, tasks, utility investigations, hydrology calculations, schedules, cost estimates)
- Find/apply for funding
- Coordinate bid/award process with eligible firms
- Negotiate and award projects
- Oversee design, construction, optimization, maintenance



# A DAY IN THE LIFE

## Slauson Green Alley



Before Construction



During



After

# WHAT I LOVE ABOUT LASAN

- Competitive Salary (\$80K+)
- Working From Home
- Benefiting the Community / Doing Outreach
- Becoming Part of A Family



LASAN's Dream Team 🧐 - Public Works Building, DTLA

# IT'S A GREAT TIME TO WORK IN ENVIRONMENT

- Measure W (Safe Clean Water Act) Passed in 2018
  - Tax revenue is on its way to LASAN \$\$\$
  - 3 Goals:
    - increase water supply
    - improve water quality
    - provide community enhancements in LA County
- Estimated Annual Funding for Los Angeles: \$37,000,000



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James Aldrich



THANK YOU!  
Questions?

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## NETWORKING LUNCH BREAK

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Join us for networking breakouts  
or be back at 1:00pm

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## PANEL 3A: NAVIGATING A PROFESSIONAL ENVIRONMENT

James Roska | Christina Becerra-Jones

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## PANEL 3B: IN THE FIELD

Karina Gonzalez | Orval Hernandez-Marcial

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## Legislation and Financial Management

Jeremy Pathmanabhan | Kayla Ross



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# REGULATORY AFFAIRS OVERVIEW

- Supports Bureau-wide and City-wide activities
- Regulatory Support (Water & Air)
- PFAS Regulations
- Legislative Review
- CEQA & Engineering Support Services
- Climate Change & Sustainability

# CEQA & ENGINEERING SUPPORT SERVICES

- CEQA and environmental review support
  - Straws on request ordinance (2019)
  - Digester Gas Utilization Project
- Engineering report development
  - Hyperion Advanced Water Purification Facility (2018)



# MY RAD EXPERIENCE

- Education
  - B.S. Chemical Engineering from USC (2016)
- Tuition Reimbursement
  - M.S. Environmental Engineering, UCI (2018)
- License
  - PE, Chemical Engineering
- Lead the Climate Action Program



# CLIMATE ACTION PROGRAM



## CLIMATE ACTION TODAY FOR TOMORROW'S FUTURE

**What is Climate Change?**

The greenhouse effect is a natural atmospheric phenomenon that creates habitable conditions for life on Earth by trapping heat in the atmosphere. When we burn fossil fuels, we release greenhouse gases (GHGs), which are not a part of the natural carbon cycle. These additional GHGs amplify the greenhouse effect and contribute to the rapid warming of our planet. This process, the warming of our climate and its collective impacts, is referred to as climate change.

**How Does Climate Change Affect Us?**

Los Angeles is expected to experience the following climate-related conditions, among others, some of which have already been seen over the past few years:

- Increased Temperatures:** Increased heat and smog create a health hazard, especially for infants, children, and the elderly.
- Sea Level Rise:** Sea level rise could cause significant flooding and erosion of hundreds of miles of coastline, greatly impacting homes, agricultural lands, and low-lying cities.
- Increased Wildfires:** More wildfires mean worsened air quality, increased property damage and human safety risk, and destruction of our forests.

**What Can We Do About Climate Change?**

Combating climate change requires collaboration between an array of government agencies, private organizations, and individuals. There are three key areas where we, the City and its residents, can focus our efforts to make significant progress in reducing emissions and addressing climate change.

ENERGY	TRANSPORTATION	WASTE
<p><b>WHAT IS THE CITY DOING?</b> Continuing to invest in energy-efficient infrastructure, implement energy-related building codes, and grow its renewable energy portfolio.</p> <p><b>WHAT CAN YOU DO?</b> Reduce your energy use by remembering to unplug devices and turn off lights when no longer in use. Investing in solar panels is also a good way to reduce energy-related GHG emissions.</p>	<p><b>WHAT IS THE CITY DOING?</b> Transitioning its fleet of transit buses to be 100% electric, and looking to rapidly increase the procurement of light-duty electric vehicles for the rest of its fleet.</p> <p><b>WHAT CAN YOU DO?</b> Reduce your transportation-related emissions by carpooling with others, taking public transit, and investing in zero- or low-emissions vehicles.</p>	<p><b>WHAT IS THE CITY DOING?</b> Implementing programs such as recycLA, which will ensure that all commercial and industrial businesses, institutions, and large multifamily buildings within the City have recycling services available to them.</p> <p><b>WHAT CAN YOU DO?</b> Reduce, Reuse, and Recycle. Reduce your waste by being mindful of your purchases and needs. Invest in items that can be reused, such as reusable bags. Recycle all plastic, cardboard, and paper items, while being mindful of contaminated material.</p>

For more information, contact us:  
[son.climateaction@lacity.org](mailto:son.climateaction@lacity.org) | (213) 485-3840 | [lacityson.org/climateaction](http://lacityson.org/climateaction) | [Facebook](https://www.facebook.com/lacityson) | [Instagram](https://www.instagram.com/lacityson) | [Twitter](https://www.twitter.com/lacityson) | [YouTube](https://www.youtube.com/lacityson)

All covered entities under Title 2 of the Americans with Disabilities Act. The City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services, and activities.

# CLIMATE CHANGE PROJECT EXAMPLES

- Annual reports on City-wide greenhouse gas emissions
- Special studies on water-energy nexus and organic waste diversion
- Asset vulnerability & climate change adaptation

# DAY-TO-DAY EXPERIENCE

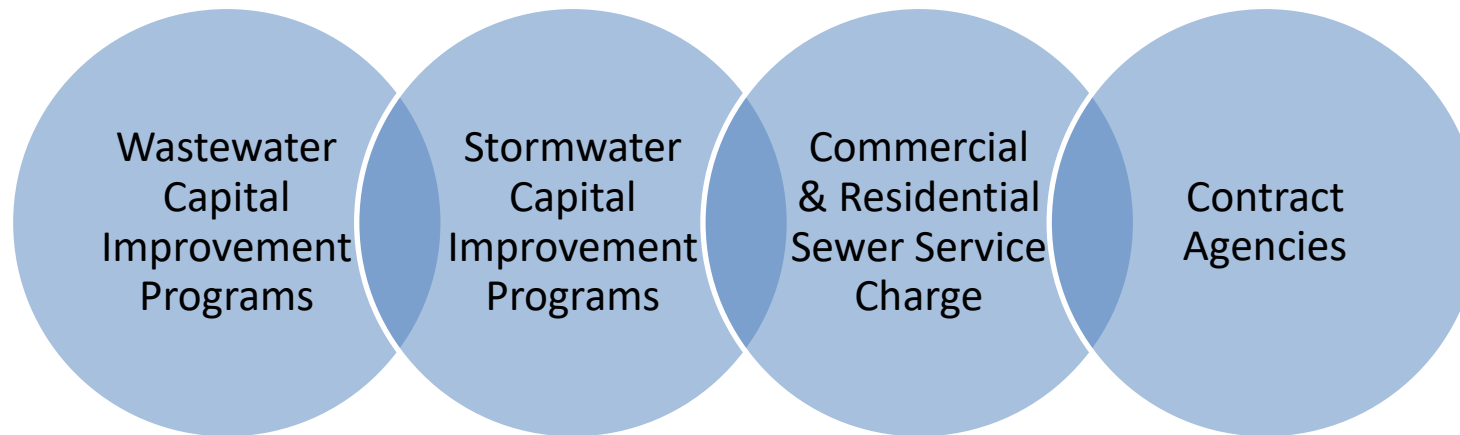
- Attend conferences & meetings with outside agencies
- Review data and conduct analysis
- Write reports & work with designers
- Prepare presentations

# FINANCIAL MANAGEMENT DIVISION (FMD)

## Mission

To safeguard public funds and ensure financial stability of the Bureau's environmental programs.

## Main Roles of Engineers:



# FUNDING SOURCES

- **Sewer Facility Charges**
  - Connecting a residential or commercial property to the LA city sewer line with a lateral.
- **LA City Residents/ Business Owners**
  - Charging customers for the water that goes down the sewer lines
- **Contract Agencies**
  - Charge customers for using our sewer pipes or sending their sewer water to LA City treatment plants

## **Solid Resources**

- Charge residential customers for solid waste pickup (blue, green, black bins)



# WHAT IS THE FUNDING USED FOR?

## Projects

- Rehabilitation projects
- Pilot projects
- Collection systems
- Pumping Plants
- Treatment Plants
- Systemwide
- Stormwater
- Solid Resources

## Equipment purchases

- Example: pumps



Treatment Process



Sewer Maintenance

# PROJECT PRIORITIZATION CRITERIA



# CIP CUTLIST

Line No	Category	Project Title	PM Name	BOE Proj #	FMD rep	LASAN #	New Risk Score	CONS Sum	PRIOR YEAR 00PY CONS	2019-2020 00Y CONS	2020-2021 01Y CONS
276	TIWRP	TIWRP DIGESTER INSULATION REPL	Ibrahim Hafeez	5245	Than Win	1584	59.4000	15,620,000	0	0	0
277	CS	FIGUEROA PRIMARY SWR REHAB	Mary Thomas	C995	Abraham Tecle	1919	58.6000	5,700,000	0	0	634,461
278	CS	SSRP E14 LANKERSHIM BL & ERWIN	Vivian Lui	C985	Richard Lu	1902	58.6000	2,029,100	0	0	0
279	CS	SSRP E20 VENTURA & KESTER	Mary Thomas	C949	Richard Lu	1762	58.6000	9,574,986	0	2,643,255	6,389,325
280	CS	SSRP H10 MELROSE AV & SYCAMORE	Claudia Haskett	C986	Richard Lu	1904	58.6000	1,476,329	0	0	0
281	CS	SSRP Z28 ROSECRANS AND VERMONT	Richard Pedrozo	C957	Richard Lu	1825	58.6000	2,359,000	0	840,164	1,518,836
282	HWRP	HWRP EQUIPMENT STORAGE FAC	Amy So	2457	Kayla Ross	1608	58.0000	8,000,000	0	0	0
283	SW	ELLIPSE POST PROD IMP	Dan Seto		Than Win	1938	57.8000	1,615,491	550,000	1,065,491	0
284	TIWRP	TIWRP SERVICE MAINT WHSE FAC	Amy So	5198	Than Win	1015	57.2000	15,227,520	0	0	0
285	HWRP	HWRP BIOSOLIDS PS UPGRADES	Ibrahim Hafeez	2454	Kayla Ross	1578	56.4000	7,210,000	0	0	0
286	CS	SSRP A05 111TH ST & LA CIENEGA	Jin Wen	C952	Richard Lu	1786	55.6000	1,163,110	0	0	731,825
287	CS	SSRP P02 CESAR CHAVEZ & SOTO	Mary Thomas	C954	Richard Lu	1788	55.6000	3,993,300	0	0	1,550,568
288	HWRP	HWRP FOG RECEIVING STA NORTH	David Copp	2426	Kayla Ross	1289	55.4000	5,293,640	0	0	0
289	SW	SANTA MONICA MAPS VFD REPL	Dale Burgoyne		Than Win	1873	55.2000	1,031,522	1,031,522	0	0
290	TIWRP	TIWRP POWER/ENERGY MGMT	Lance Thibodeaux	3335	Than Win	268	54.8000	408,410	408,410	0	0
291	HWRP	HWRP O2 REACTOR IMPR MOD 1-4	Amy So	2456	Kayla Ross	1606	54.0000	7,000,000	0	0	0
292	HWRP	HWRP OXYGEN REACTOR IMP PH 2	Amy So	2478	Kayla Ross	1837	54.0000	8,480,000	0	0	0
293	HWRP	HWRP SOLID HNDL TRUCK LOAD FAC	Amy So	2343	Kayla Ross	329	51.8000	11,563,810	0	0	0
294	SW	ELC IMPROVEMENTS	Ibrahim Hafeez	2439	Than Win	1439	51.8000	400,000	0	0	0
295	CS	SECONDARY SWR RENEWAL PROG	Ali Poosti	C283	Augustine Nnuro	31	50.0000	151,000,000	0	0	0
296	DCT	DCT NIWA ROAD PARKING	Nadir Shah	8640	Rene Bagaygay	1471	47.4000	250,000	0	0	0
297	DCT	DCT MULTI-PURP & OFFICE FAC	Slavica Hammond	6192	Rene Bagaygay	1187	46.4000	24,511,152	0	0	0
298	SW	VIDEO CONFERENCING SYS UPG	Bounsom Sananikone		Augustine Nnuro	2016	44.8000	1,000,000	800,000	200,000	0
299	DCT	DCT CONS TRAILERS	Ibrahim Hafeez	8662	Rene Bagaygay	2069	37.6000	72,925	0	36,480	36,445
300	DCT	DCT NIWA RD SWR INST	Amy So	8638	Rene Bagaygay	1473	37.2000	301,790	0	0	0
301	TIWRP	TIWRP EDUCATIONAL EXHIBITS CEN	Amy So	5246	Than Win	1585	35.4000	3,500,000	0	0	0
302	TIWRP	TIWRP PRODUCT WATER LINE INS	Fernando Gonzalez		Than Win	2018	34.6000	90,000	90,000	0	0
303	DCT	DCT MULT-PURP & OFFICE FAC EXH	Amy So	6194	Rene Bagaygay	1337	31.8000	2,888,500	0	0	0
										301,909,773	
304	TIWRP	TIWRP DIG GAS UTILIZATION SYS	Ibrahim Hafeez	5243	Than Win	1582	0.0000	5,000,000	0	0	0
305	CS	COS REHAB VERNON TO RODEO	Hortensia Alonso	C869	Abraham Tecle	2015	0.0000	10,000,000	0	0	0
306	CS	LCIS U-4,5,6 REHAB OLY- ALT	Hortensia Alonso		Abraham Tecle	2001	0.0000	32,490,000	0	0	0
307	CS	NOS REHAB U-11B HUMBO & CARDIN	Vivian Lui		Abraham Tecle	2000	0.0000	5,245,200	0	0	0

# CAPITAL IMPROVEMENT PROGRAMS

- Financially evaluate and manage all LASAN Capital Improvement Projects (CIPs)
  - Wastewater Treatment Plants
  - Stormwater
  - Collection System
  - Systemwide
  - Solid Resources
  - Pumping Plants
- Coordinate monthly with LASAN and Bureau of Engineering executives
- Coordinate with Office of Accounting to evaluate annual capital assets

# SLAUSON-VAN NESS SEWER JUNCTION



Located in South LA  
where all of the largest  
and oldest sewers in the  
City meet



# HYPERION ADVANCED WATER PURIFICATION FACILITY

- Designed to deliver 1.5 million gallons per day (mgd) of recycled water to the Los Angeles World Airports (LAWA) by December 2021
- Will include the following treatment trains:
  - Fine Screens
  - Air-Membrane Bioreactor (MBR)
  - Reverse Osmosis (RO)
  - Disinfection using UV/Advanced Oxidation Processes (AOP)
- Implemented through Progressive Design-Build (PDB)
- Project Cost: \$80M



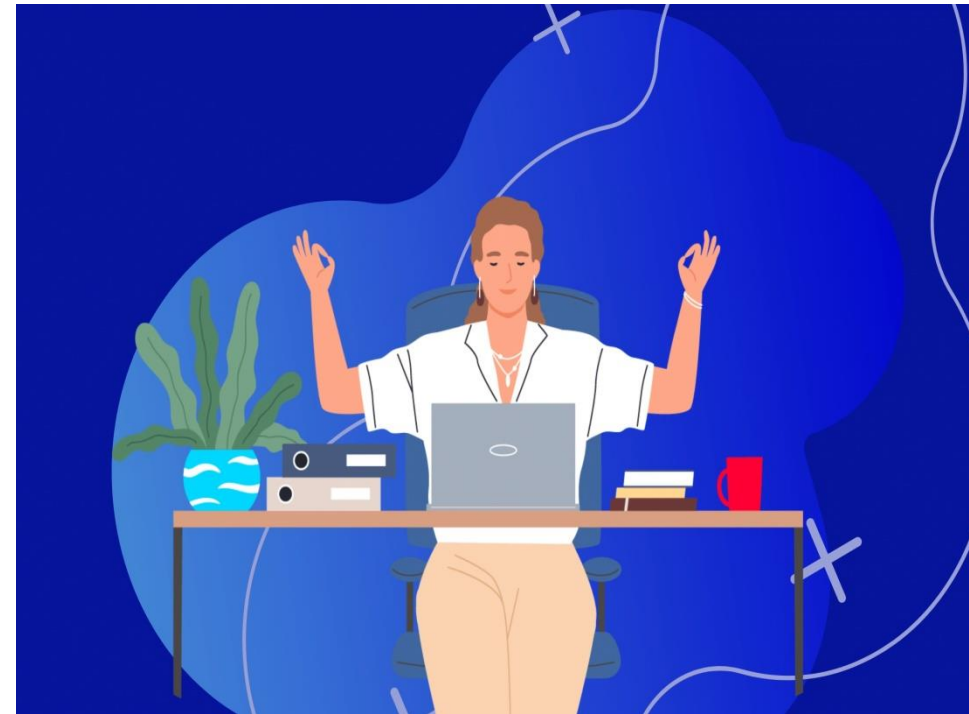
# GOOD TIMES OUTSIDE THE OFFICE



# WORKING FROM HOME

## Benefits:

- Reduced carbon footprint (no commute)
- Reduced impact on textile waste
- Save money
- Faster communication with coworkers
- More productive!



# DESIRED PERSONALITY TRAITS

- Gets along well with others
- Sharp/detail-oriented
- Eager to learn
- Interested in wastewater treatment plants
- Ability to understand complex projects with limited information

**JOIN THE FMD TEAM!**

# ENGINEER DAY 2020

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Jeremy Pathmanabhan  
Kayla Ross

THANK YOU!  
Questions?

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## Student Engineer Opportunities

Laura McAlister | Karina Gonzalez



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# STUDENT ENGINEER I-IV

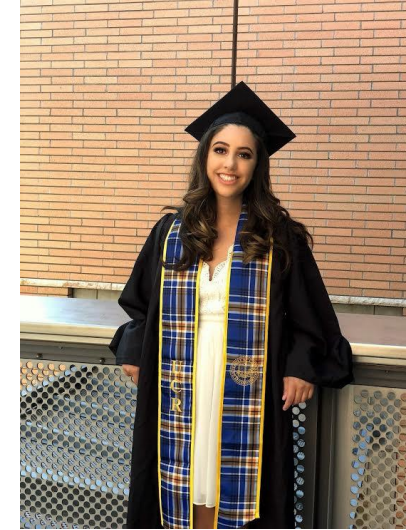
- Exempt Part-time position (950 hours maximum per year or ~ 20 hours/week)
- Compensation linked to grade level (\$20.77 - \$32.25 per hour)

# REQUIREMENTS

- Current enrollment as a full-time (civil, chemical, environmental) engineering student
- Must be at least 18 years of age
- Have proof of identity and legal right to work in the U.S.
- AutoCAD experience desired for some positions



# MY JOURNEY TO LASAN



# INTERN: WHAT DOES MY POSITION DO?



- Make sure restaurants were disposing their Fats, Oil and Grease (FOGS) properly
- When FOGS buildup in sewer lines, it causes blockages
- If a blockage happens it will cause sanitation sewer overflow (SSO) which can affect our waterways, homes, and surrounding environment.



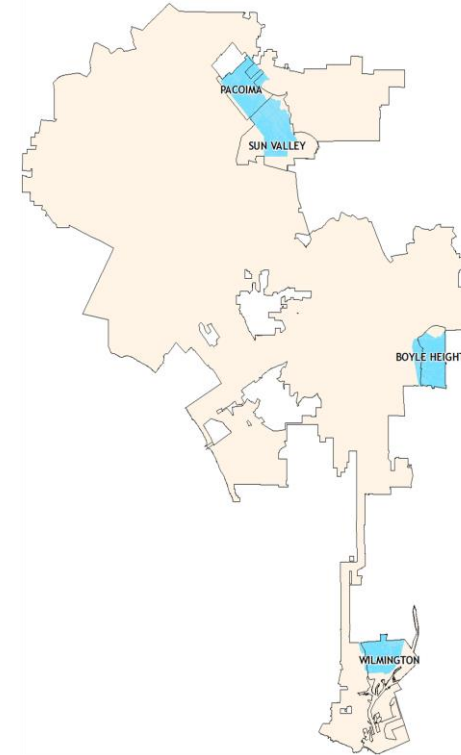
# EEA: WHAT DOES MY POSITION DO?

- LA Industry (same division as Student Engineer position)
- Making our 16,000 industrial users more sustainable
- LA Industry is working on:
  - Biomimicry
  - Materials Exchange
  - Business Symposia (food manufacturing, metal finishing, car washes, micro breweries)
  - Cultivating a business-friendly environment



# PASSION PROJECT: EDUCATING IMPACTED AREAS

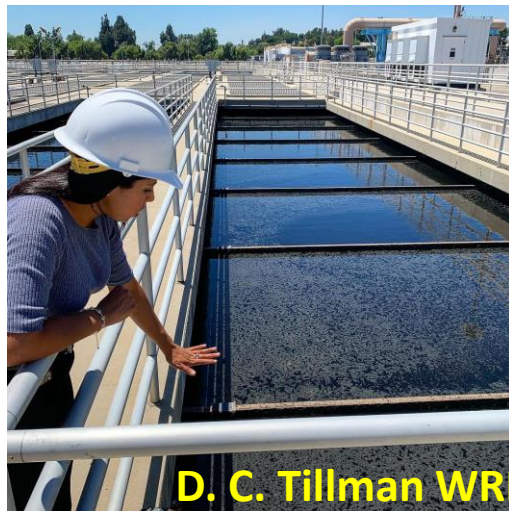
- California is home to the worst air in the united states
  - 90% of Californians live in areas affected by unhealthy air
  - LA City is #4 of US Cities with the worst air pollution
- Environmental Justice
  - Everyone deserves to live in a clean and healthy environment
- One Earth LA
  - education program that teaches and empowers youth to improve their communities and become environmental stewards



# MY JOURNEY TO LASAN



Engineering  
Brigades



# INTERN: WHAT DOES MY POSITION DO?



- Plant Project's Liaison
  - Meetings
  - Project coordination
  - Drawings
- Research
  - Sample collection
  - Data collection
  - Analyzing data
- Projects
  - Advanced Water Purification Facility (AWPF) Pilot
  - DCT Contractor Laydown Area

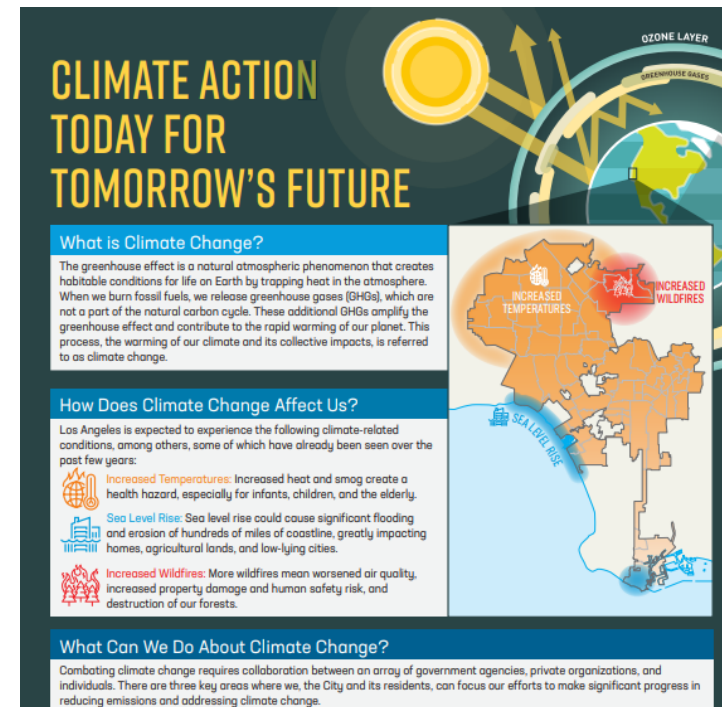
# EEA: WHAT DID MY FIRST POSITION DO?

- Water Reclamation Division
- Plant Projects Liaison
  - Meetings & Project Coordination
  - Review of Drawings
- Research
  - Data collection & analysis
  - Student engineer training
- Plant tours
  - Public education
  - Destigmatizing wastewater reuse
- Projects
  - Ozone Demonstration Project
  - Odor Control System



# EEA: WHAT DOES MY CURRENT POSITION DO?

- Regulatory Affairs Division:  
Climate Action Group
- Data Analysis & Reports
  - Data collection
  - Review of existing & new regulation & legislation that might affect analysis
- Projects
  - Municipal Greenhouse Gas Inventory
  - Climate Action and Adaptation Plan
  - Carbon Sequestration Research



# HOW DO I APPLY?

Interested candidates must submit a City application with a recent copy of unofficial school transcripts (no older than one semester/quarter) for consideration to:

SAN.PERSONNEL@LACITY.ORG

Download the application: <http://per.lacity.org/Application.pdf>

This position typically opens up twice a year.

# ENGINEER DAY 2020

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Laura McAlister  
Karina Gonzalez



THANK YOU!  
Questions?

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# BREAK

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Back at 2:45pm

# ENGINEER DAY 2020



## Marketing Yourself

Pamela Perez, MBA



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# TODAY WE'RE COVERING



## Digital

- Social media
- Resume/cover letter
- Email



## In Person

(before hiring)

- Interviewing
- Networking
- References



## In Person

(after hiring)

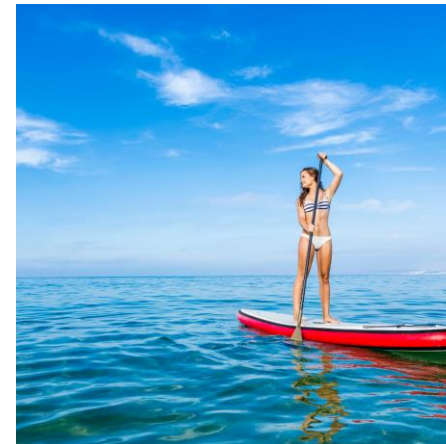
- Elevator speech
- More networking

# BARE BONES OF MARKETING



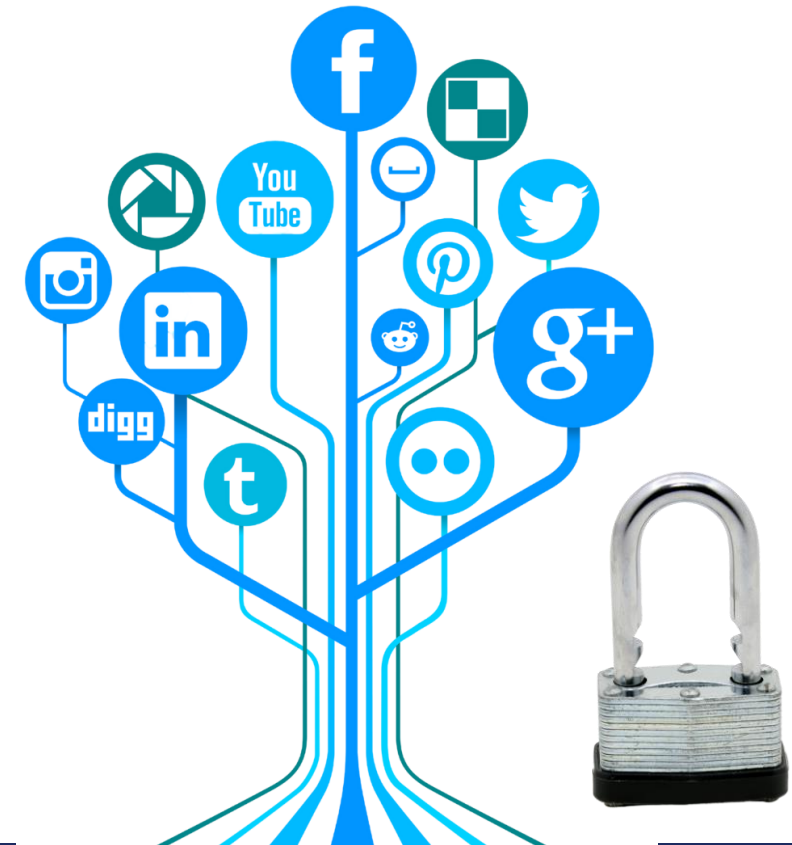
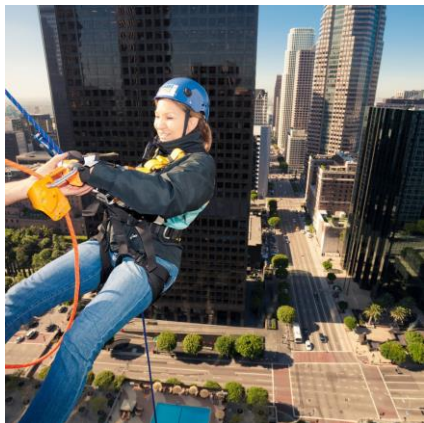
- Getting the right message
- to the right people
- at the right time

# YOUR LIFE IS ON DISPLAY ( AND YOU ARE BEING JUDGED )

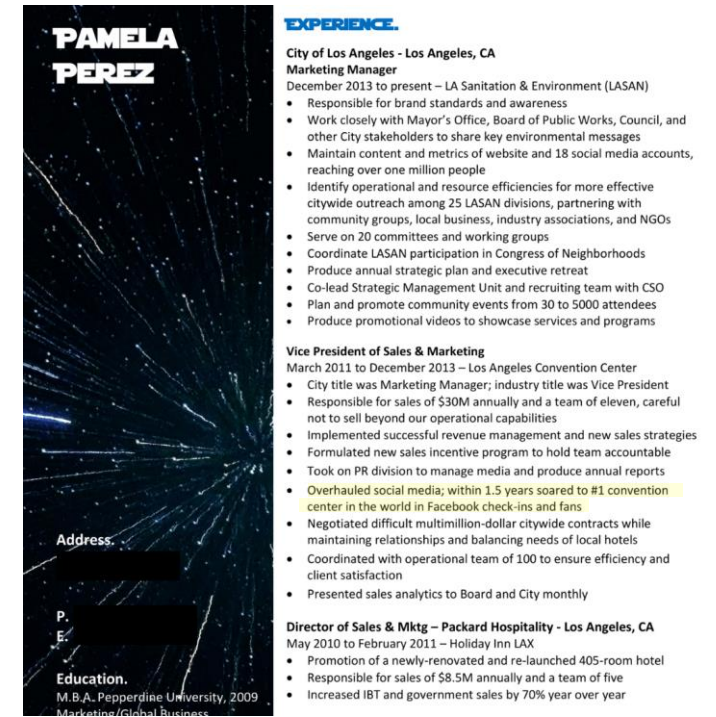
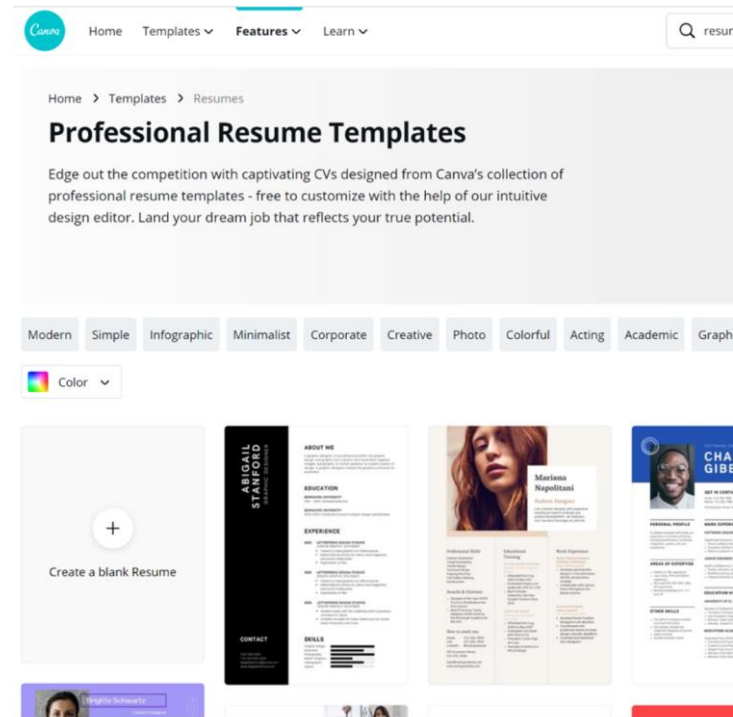
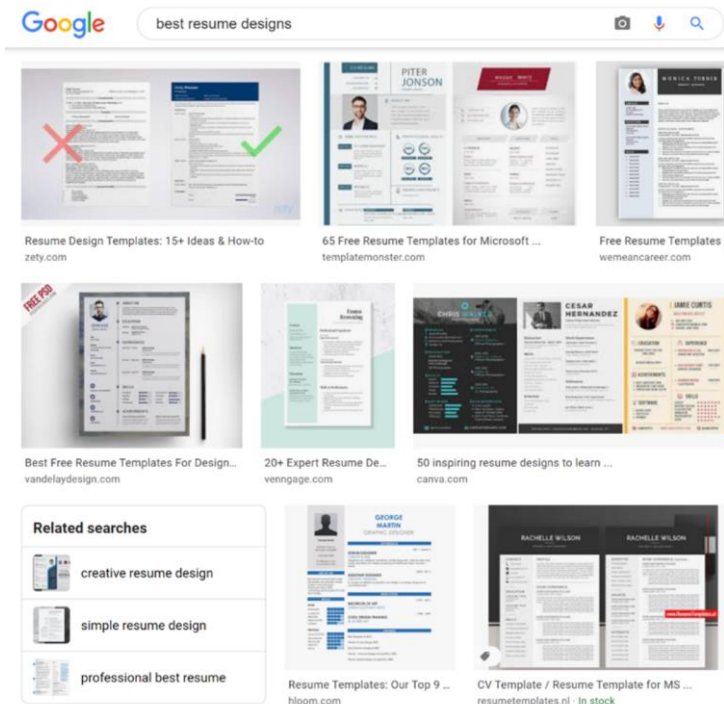


# JOBIFY YOUR SOCIAL MEDIA

(YOU CAN STILL BE YOURSELF)



# RESOURCES ARE ABUNDANT FOR GOOD TEMPLATES



\* Document name was "The force is strong with this one"

A matching resume and cover letter can really make an impact  
If/when you send references, that should match as well

# WHAT MAKES AN IMPACT?

A great cover letter that helps people get to know you

- ✓ What motivates you
- ✓ What accomplishments are you most proud of
- ✓ What are your goals?

A quantitative resume

- ✓ Led a team of x to accomplish x, y, z
- ✓ Earned a 3.90 GPA while working part-time and taking leadership roles in campus organizations
- ✓ Exceeded revenue goal of \$x while selling widgets at ABC Company over the summer

A professional headshot on your resume

An application thoughtfully completed

Creative “marketing” of non-related jobs

Buzzwords and authentic experiences

Changing just the top line to include company name and position



# IN WRITING

- Tone
  - Email address
  - Spelling
  - Punctuation
  - Formality
- 
- Mail > Email



# BUILD YOUR NETWORK

- LinkedIn is not Facebook; don't abuse it
- Ask people for advice but be specific
- Don't just take – you have to give a little, too!
- Start now, not a week before the interview
- Most people want to be helpful



**Connect**  
Find and reembrace with fellow graduates, see what they have been up to and stay in touch.

**Give back**  
Introduce, employ and offer to act as a mentor to our graduating students.

**Expand**  
Leverage your professional network to get introduced to people you should know.



# THE ELEVATOR SPEECH(ES)



30-60 seconds | your assets | your goals | positive | energetic | confident



**Hello!**  
**It's Me**

## WHO ARE YOU???

- Use your elevator speech
- Breathe & repeat
- Reference the job description
- Asking the right questions
- “the real you”

# WHAT DO PEOPLE THINK ABOUT YOU?

AND HOW DO THEY COME TO THOSE CONCLUSIONS?

- How your paperwork is completed
- How you're dressed
- How you arrived
- What others said

CONTROL WHAT YOU CAN





## ONCE YOU'RE "IN"

- Are you still networking?
- Do you speak up?
- Do you volunteer?
- What's your new elevator speech?
- Got friends?
- Clothes – perception is reality
- Keep learning
- Variety is the spice of life

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Pamela Perez, MBA



THANK YOU!  
Questions?

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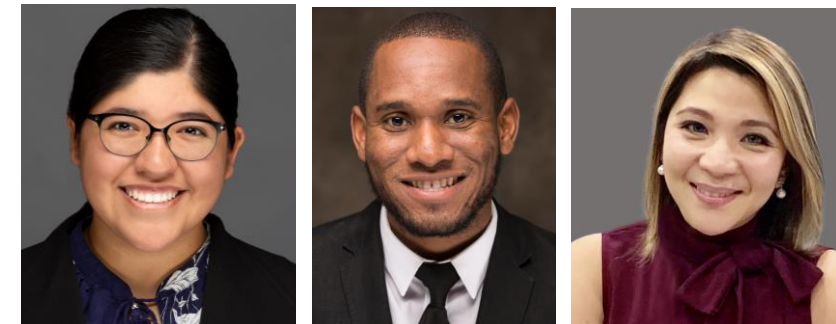
## PANEL 4A: INCLUSIVITY AND EQUITY

Stephanie Osorio | Troy Ezeh | Janet Valencia-Samala

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## PANEL 4B: PANDEMIC ADAPTATION

Christina Becerra-Jones | Doug Walters

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## Closing Q&A

Ani Abassian



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## HYPERION VIRTUAL TOUR

A brief video introduction to the  
Membrane Bioreactor (MBR) Pilot

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## Closing Thoughts

Doug Walters, P.E.



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