# LA SANITATION & ENVIRONMENT SPECIAL PROJECTS



### **Renewable Energy**

- The Hyperion Bioenergy Facility converts 7.5m cubic feet of methane produced during the digestion process to renewable energy that powers the Hyperion Water Reclamation Plant (HWRP). This combined cycle cogeneration facility produces electricity and steam power to meet power and thermal needs, improves energy generation reliability and efficiency, and utilizes digester gas for clean energy generation.
- Our Lopez Canyon Environmental Center is a closed landfill site with an active methane gas collection system consisting of 450 wells, gas header lines, and 7 landfill gas flares which generate 3400 cfm of landfill gas.



- Mayor Eric Garcetti announced as part of LA's Green New Deal that LA will recycle 100% of its wastewater and source 70% of our water locally by 2035.
- The Advanced Water Purification Facility (AWPF) at Terminal Island Water Reclamation Plant consists of microfiltration, reverse osmosis, and advance oxidation disinfection to produce up to 6 millon gallons per day (MGD) of highly cleansed recycled water, which is used to protect the groundwater reservoirs from intrusion of seawater by injection into the Dominguez Gap Barrier. The expansion project will double the amount.
- Hyperion Water Reclamation Plant, the largest west of the Mississippi, will construct a 1.5 MGD AWPF to serve LAX and HWRP by 2022, transforming HWRP to a water production facility to meet the City's water demands.

### Creating the US's First Zero Waste City

- LASAN has a multifaceted approach to divert waste from scarce landfills. We've implemented measure to separate the organic portion of residential and commercial waste so that it can be processed to create a green energy alternative with edible waste going to food rescue organizations to feed people who don't receive adequate nourishment. Similar to banning plastic bags, we are advocating to prohibit single use plastics that litter our streets and water bodies and look
- Staff participate in design, permitting, and construction of hazardous material disposal facilities while following changes in the recycling marketplace and researching innovative options.
- Teams handle waste characterization as well as disposal and recycling of organic waste from both businesses and residences.

### Using Technology to Reach 100 % Recycled Water

- The GIS team converted collection routes to digital form, then optimized routes to improve efficiencies. Future incorporation of GPS data can further enhance operations.
- Field data capture and internal analysis of both spatial and attribute data for recycling contamination, billing disputes, service fulfillments, service route generation, etc. helps us to streamline operations while saving money and accomplishing more with less. Reference maps help convey spatial information to City leadership and the public for better decision-making.













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## **Combating Climate Change Through Regulatory Affairs**

- LASAN calculates greenhouse gas emission inventories that drive innovation to electrify our massive fleets, convert landfill gas and biomass energy to electricity to power nearby homes and our largest water reclamation plant.
- Staff tracks new and changing federal, state, and local legislation and regulations that impact water, recycling, organics diversion, climate change, and more. They also provide feedback on the organization's behalf to support the City's policies that protect public health and the













#### **Influencing Businesses through Pollution Prevention**

- LASAN administers the Industrial Waste Source Control and Pretreatment Program to reduce pollutants in the urban water system, thereby protecting the City's water reclamation plants, public health, and the environment. This is achieved through the permitting of 16,000 businesses in the City of Los Angeles.
- LASAN's innovative Pretreatment Program is founded on a business-friendly approach of offering pollution prevention programs incorporating circular economy, biomimicry, and green chemistry principles aimed at demystifying environmental regulations, providing businessfriendly opportunities, and connecting businesses and industries to the resources needed to strive in the LA region.

## **Watershed Protection Program**

- Our Safe Clean Water program receives over \$50M every year via Measure W to fund our desire to capture, treat, and reuse stormwater and urban runoff while teaching businesses and homeowner how to be better environmental stewards to reduce flooding, improve water quality and environmental justice throughout all communities within LA who deserve more green alternatives and the infrastructure to support multi-benefit projects
- The Macahdo Lake project rehabilitated the lake and dam structure while installing pollutant treatment systems and replacing native vegetation to maintain TMDL compliance and enhance recreational park features. Highly treated recycled water from Terminal Island's Advanced Water Purification Facility will be used as makeup for lake evaporation, eliminating the use of potable water for this purpose.

#### WE'RE MAKING HISTORY!

If you're seeking a career at a place where you can roll up your sleeves and make a difference, this is the place for you!

Join us as we work together to make LA the cleanest, greenest big City in the nation.













