

One Water LA

One Water Planning in Action

Project at a Glance

Utility Overview

- Utilities: Los Angeles Sanitation & Environment and Los Angeles Department of Water & Power
- Location: City of Los Angeles
- Population served: 4 million
- Service area: 500 square miles

Challenges

- Combined sewer overflows
- Flooding
- Declining water supply reliability
- Climate change

Solution

- One Water LA 2040 Plan, a roadmap coordinating effective and sustainable long-term water planning solutions, including a distributed green infrastructure element aimed at improving stormwater management by offering flood protection, water quality improvements, and local water supply.

Benefits

 **A strategy to more sustainably and cost-effectively manage water resources**

 **Reduced stormwater runoff**

 **Greater local resilience and reduced reliance on imported water**

 **Greater inter-agency cooperation and collaboration**

BACKGROUND

Perpetually sunny, Los Angeles receives only about 15 inches of rain on average. The LA Department of Water and Power (LADWP), the largest municipal water and power utility in the nation, was established by city charter in 1925 and today provides water service to about 680,000 connections. Los Angeles Sanitation & Environment's (LASAN), part of the City's Department of Public Works, is the lead environmental department for the City and is also responsible for (among other services) wastewater and watershed protection. LADWP and LASAN have worked together to develop One Water LA 2040 Plan as a roadmap for coordination of effective and sustainable water planning solutions.

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CHALLENGE

Los Angeles faces several overlapping water management challenges. These challenges include severe drought, concern over state-mandated water use restrictions, combined sewer overflows, flooding, declining water supply reliability, and climate change.

SOLUTION

Los Angeles has embraced the One Water concept of integrating all of its water resource management early on. The City embarked on its first Integrated Resources Plan in 1999 which included LADWP and LASAN as key partners. 20 years on these partnerships are now baked in to the City's DNA and LA's One Water Program has grown into a full-fledged phenomenon complete with its own website. It seeks to fully integrate the City's wastewater, stormwater, watershed, and drinking water management by 2040 and achieve the following goals (among others):

- Reducing its purchase of imported water by 50% by 2025
- Drawing 50% of its water supply from local sources by 2035
- Achieve 98 GPCD for a total potable use reduction of 25% (from 2012 levels) by 2035
- Capture 150,000 acre-feet per year of stormwater.

In addition, Los Angeles Mayor Eric Garcetti established an aggressive sustainability agenda for water resource managers with his Sustainable pLAN 2019 that sets goals for reduced water imports by sourcing 70% of L.A.'s water locally, capturing 150,000 acre ft/yr of stormwater, and recycling 100% of all wastewater for beneficial reuse by 2035, and reducing potable water use per capita by 25% by 2035, among other objectives. The water efficiency targets incorporated into LADWP's Urban Water Management Plan that are also based on the Mayor's sustainability plan.



The Plan's Stormwater & Urban Runoff Facilities Plan summarizes LA's stormwater infrastructure as a starting point for identifying management needs over the next 25 years. The Plan identifies over 1,200 project opportunities to provide improved flood protection, water quality benefits, and/or water supply enhancements and help meet the Sustainability pLAN goals. The majority of these projects are decentralized in nature distributed across the community including mainly green streets opportunities. Specifically, the Plan identifies 445 Green Streets program opportunities and 176 additional distributed green infrastructure projects. The distributed green infrastructure projects represent 52% of all identified stormwater projects in the Plan.

A hallmark of the LA 2040 Plan is the extensive stakeholder engagement LASAN and LADWP undertook to inform its development. The engagement process was separated into two phases. The first focused on developing the Plan's Vision, Objectives, and Guiding Principles; while the second focused on gathering public input on planning tasks, studies, and recommendations. "By bringing together all parties in the planning stage, a collaborative process was developed that will continue through the Plan's implementation and beyond." In total, the City engaged over 500 stakeholders, held 15 workshops, and conducted another 15 plus discussions around special topics including stormwater management and decentralized-site treatment. The stormwater management special topic group was the most popular amongst stakeholders, and the group's recommendations included that the City offer incentives, rebates, and rewards such as stormwater fee discounts and subsidies for project development on private parcels, among other things.



RESULTS

Among many co-benefits, the LA anticipates that implementing the Plan will:

- Create nearly 7,000 new jobs
- Saving \$1.97 for every \$1 spent
- Improve public health
- Generate climate adaptation & resilience
- Restore habitat
- Improve quality of life through new open space.



While the City has identified a significant funding gap to meet the estimated costs of implementing and operating and maintaining the green infrastructure and other stormwater projects, the Plan includes recommendations on additional funding sources including grants, cost-sharing with intra-city agencies, voter-approved initiatives, leveraging water supply benefits of stormwater capture, and special taxes. Of these options, the Plan identified debt-financing as a key funding avenue because, in part, the City's "stormwater management program involves substantial investment in capital projects with a long useful life, generating benefits over long periods of time."

The One Water LA Plan represents an extraordinary effort that can serve as a model for other communities seeking to transition to a One Water Future. The key takeaways from LA's experience to date are the benefits of breaking down silos, investing in stakeholder engagement, focusing on the hard work of long-term planning, and the value of setting aggressive but achievable goals to guide action.



Sources

[One Water LA](#)
[pLAN: LA's New Green Deal](#)
[City of Los Angeles: LASAN](#)
[City of Los Angeles: Department of Water & Power](#)