



Irrigation system upgrades will save the Arboretum and Botanic Garden an estimated 35 million gallons per year.

IMPACT

Overall water usage reduced:

30%

10-year projected water savings:

350 million gallons



PROJECT DESCRIPTION

Los Angeles County Department of Parks and Recreation's Arboretum and Botanic Garden is a 127-acre botanical garden located in the San Gabriel Valley. The historical site can be traced back to the indigenous inhabitants who built a community around the plentiful Baldwin Lake.

Water has always been fundamental to the operations and health of the Arboretum grounds. It has one of the largest collections of plant life in the county and is always looking to improve its irrigation practices and technologies.

The Arboretum was able to modernize a significant portion of its irrigation system with help from the Metropolitan Water District's Water Savings Incentive Program. The incentives enabled them to upgrade their aging irrigation system with smart irrigation controllers, water efficient sprinklers and flow sensors.

The water smart actions adopted by the Arboretum have helped maintain the diverse Mediterranean native collections and gardens. It's an exemplary resource for Southern California to learn about and adopt sustainable and climate appropriate landscape practices.

PROJECT BENEFITS

- Helps Southern California create more climate-appropriate landscapes
- Healthier plant life and more efficient day-to-day operations
- Water and cost savings
- Smart and efficient irrigation technologies



Smart Controller



Sage





With a water capture and reuse truck, the city of Huntington Beach will save more than 18 million gallons per year.

IMPACT

10-year projected water savings:

182
million gallons



No-DES Truck



City Signage



PROJECT DESCRIPTION

The city of Huntington Beach owns and operates its local water utility and takes pride in the efficiency of its water system operations. The city collaborated with the Metropolitan Water District of Southern California and the Municipal Water District of Orange County to find innovative solutions for local and regional water issues.

Huntington Beach identified an opportunity to save water by applying a new alternative to conventional water main flushing. The Neutral Output Discharge Elimination System truck flushed hydrant lines by pumping water through truck-mounted filters and returning the water directly to the pipelines. The city was able to significantly cut water losses during standard operations which, over the next 10 years, is projected to save more than 182 million gallons of water. Signage on the truck increases conservation awareness for residents.

Metropolitan's Water Savings Incentive Program helped fund the NO-DES truck and provided support and resources to streamline the adoption of the technology.

PROJECT BENEFITS

- Substantial city-wide water savings
- Improved water-use performance and conservation awareness
- Role model for other cities and utility departments



A suite of water-saving strategies is projected to save Rice Canyon Ranch more than 38 million gallons per year.

IMPACT

10-year projected water savings:

381
million gallons



Tree Grafting Process



Irrigation System Upgrades

PROJECT DESCRIPTION

Rice Canyon Ranch is a family owned avocado farm located in the agricultural hub of San Diego County. As California's water supplies were severely impaired during the 2014 drought, Rice Canyon began experiencing major disruptions in farm production and day-to-day operations. The owners' outside the box thinking helped to save their farm and keep up with the demands of their water-stressed groves.

The overall strategy at Rice Canyon was to switch to high-density spacing of the avocado trees: replanting 400 trees per acre versus the traditional 100 allows for increased water use efficiency. Intermediate actions included tree stumping, temporarily reducing irrigation needs and spurring increased production from the newer growth. Older trees are being replaced in phases with new trees grafted onto drought tolerant root stocks, yielding a higher quality production. Lastly, new irrigation equipment improved the farm's overall water efficiency and reduced water costs.

PROJECT BENEFITS

- Water and cost savings
- Efficient use of land and resources
- Better overall production rates
- Healthier trees
- Operational excellence
- WSIP incentives and device rebates reduced initial investment costs





The mobile water recirculating system saves Ventura County Fire Department up to 800 gallons of water per minute.

IMPACT

Up to

800

gallons of water saved per minute

100%

of water used in training goes through Pump Pods



PROJECT DESCRIPTION

The Ventura County Fire Department operates 43 facilities across Ventura County, employs over 580 people, and responds to over 45,000 incidents per year. Training is fundamental to the capacity and agility of its firefighters and directly impacts their ability to serve and protect the community and natural resources.

Firefighter training sessions without a system to recapture water use can waste up to 800 gallons of water per minute. As highly visible stewards of the community, the fire department saw a need to find an effective way to recapture the water during training. A company, Pump Pod USA, developed their Pump Pod DRAFTS (Direct Recirculating Apparatus Firefighting Training Sustainability) Unit, a mobile water-recirculating system that captures and recirculates training flows. The fire department leveraged funding from the Metropolitan Water District's Water Saving Incentive Program to procure several Pump Pod units and has integrated them into their training operations.

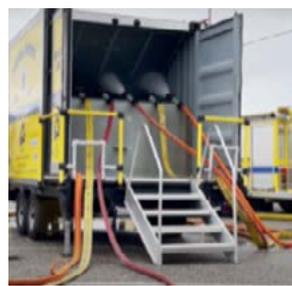
These mobile systems have quickly become an essential tool that allows firefighters and engineers to train and practice with real-world, life-saving scenarios with full-flowing water. The units recirculate 100 percent of the water used during exercises and are projected to save more than 47 million gallons per unit over the next ten years.

PROJECT BENEFITS

- Recaptured water from training exercises
- Increased flexibility to change training scenarios
- Increased community conservation awareness and education
- Increased agility to train and equip the fire department with the skills to best serve the community



Training Exercise



Pump Pods



CaseStudy

Victoria Village Homeowners Association



Water Savings Incentive Program

The installation of the soil moisture sensor system saves the Victoria Village Homeowners Association more than 5 million gallons of water per year.

IMPACT

10-year projected water savings:

58
million gallons

\$0
out of pocket costs



UgMo Sensor



Post UgMo Installation

PROJECT DESCRIPTION

Victoria Village is a 191-condominium community in the Inland Empire featuring large areas of trees and open space. The Homeowners Association proactively explored different technologies to improve its irrigation system's water efficiency and still maintain healthy landscapes for residential recreational activity.

With significant help from the Metropolitan Water District's Water Savings Incentive Program, the association upgraded its entire irrigation system with wireless soil moisture sensors.

This new data-driven technology offers many benefits: seamless installation of sensors by landscape technicians and connectivity to irrigation controllers; measured moisture at plant roots; and elimination of wasteful run off and overwatering. The HOA used this technology to precisely irrigate landscaping based on actual watering needs. These upgrades are projected to save over 58 million gallons of water over its lifespan

PROJECT BENEFITS

- Overall water-use reduction
- Healthier turf and trees
- Simplified and automated irrigation system with leak detection capabilities
- Minimal capital investment to install



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA



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