

Going

One California city uses indigenous plants—and saves water—in three small parks.



To save water and educate residents, developers, and businesses, San Juan Capistrano has created three public gardens using native plants and recycled materials. Left to right: El Camino Real Park; recycled tire mulch at city hall; and a bridge made from recycled plastic, also at city hall.

By David Contreras

In California, water shortages mean water conservation campaigns—both in the state capital and in individual cities. One municipality that has risen to the occasion is historic San Juan Capistrano, located in southern Orange County.

Because of its age, San Juan Capistrano (pop. 33,826) is unique in Orange County and a rarity in California. More than two hundred years after the founding of a Spanish mission—the ruins of which still stand today—the community is still evolving.

In line with its rich history of rural village charm, the city this year has built three demonstration gardens designed to increase awareness about using plants suited to the climate and to provide affordable and practical ways to conserve water

Native

All photos by David Contreras

resources. The city's effort, which includes using plants native to California plus Mediterranean species that thrive there, is based on guidelines from the Metropolitan Water District of Southern California's California Friendly landscaping and water conservation program.

The demonstration gardens come at just the right time. In June, Gov. Arnold Schwarzenegger declared that the state was officially experiencing a drought. San Juan Capistrano is also under a regional water supply alert from MWD—the last stage before mandatory water restrictions go into effect. In the event water rationing is imposed next year, the city will be ready—it recently adopted a water conservation ordinance to address year-round water waste and establish stages of restrictions.

The demonstration projects use landscape materials available locally throughout the year. In all three parks, a water-efficient bubbler and stream system has replaced a more conventional irrigation system, and locally grown native grasses have replaced conventional turf. Both steps conserve water, and the new climate-appropriate plant palette completely eliminates the need for fertilizers and pesticides, reducing the harmful runoff that would typically wind up in local creeks that drain directly into the Pacific Ocean.

Educate me

Representatives of at least 10 nearby cities and water agencies—including planners—have visited since the first garden opened in August. In addition, San Juan Capistrano's water conservation coordinator, Francie Kennedy, has held two community design workshops for residents and home owner associations interested in implementing water conservation designs and irrigation systems on their own properties.

"Residents are starting to notice the efforts that the city is undertaking and have a great time learning about landscaping—while also studying the seriousness of this water supply issue," Kennedy says.

The El Camino Real Park project cost about \$9,700, with \$4,900 of that coming from donations from area businesses. The city hall project received about \$100,000 from local business donors that support the city's water conservation efforts. For the city hall garden, design help came from HRP Studio of Santa Ana, California, and Nuvis, of Costa Mesa.

After just a few months, the demonstration gardens are starting to show results. At city hall, two water meters—one an indoor-only meter and the other a dedicated landscape meter—keep track of water use. Final figures on water savings will be part of the educational aspect of these

In Calle Jardin Park, turf grass was replaced with a much less thirsty sedge and yellow lantana (in foreground above).



projects, but early numbers show a 40 percent savings in water, along with concurrent cost savings in chemicals and maintenance. When compared to all-turf areas, water savings at some of the sites may reach 70 percent.

El Camino Real Park

This park project site is at the southwest corner of Camino Capistrano and La Zanja Street, just a block north of the historic Mission San Juan Capistrano. It marks the northern gateway into the city's historic downtown area. This particular spot—just under half an acre in size—was a park that had been neglected over the years. The park was revitalized with California native plants, pedestrian walkways, equestrian fencing, a Valencia orange grove, California sycamores, and a decorative monument to commemorate the project.

The planting was installed by community volunteers, children from the neighborhood, Orange County master gardeners, and city staff from the community services and public works departments. Plant material was both purchased and donated by local nurseries that specialize in California native trees and plants.

Calle Jardin Park

The Calle Jardin project is an excellent example of how to take a dusty vacant lot and develop

it with native plant materials and soft surfaces that complement the open space.

The new park area—at a little over a third of an acre—adjoins an existing park in the neighboring city of Dana Point. In this project, native plants with showy flowers and bright berries were planted and the turf grass was replaced with *Carex pansa*, a sedge that requires less water and much less maintenance and chemicals than conventional turf. The garden is popular with neighborhood residents from both cities.

City Hall

Project number three—on the 2.5-acre grounds of city hall—is the centerpiece of the campaign. The redesigned space contains many educational and design elements that highlight the city's water- and energy-saving goals. The next step is to install signs to educate visitors about those features and identify the individual plants.

The turf along the perimeter of the building was replaced with native and Mediterranean plants and an irrigation system that monitors rainfall and adjusts watering accordingly. The garden also features rubber pavers that look like brick but are actually made from recycled tires, decomposed granite in lieu of concrete, artificial turf alongside natural turf to demonstrate the similarities in look and texture, and a dry creek designed to redirect rainwater runoff from the

parking lot, allowing it to percolate into the soil before reaching the storm drain system.

A focal point at the center of a small courtyard garden is a solar-powered fountain surrounded by colorful water-conserving plants that are dressed in mulch made of recycled tires. The benches, chairs, and tables in the garden are made of durable recycled plastic, as is the "lumber" used on the pedestrian bridge that crosses over the dry creek.

This project will serve as the prime example of what the city expects for future projects. In fact, the applied concepts are included in the city's landscape water conservation ordinance. The planning staff works closely with environmental division manager, Ziad Mazbouidi, and Kennedy, the water conservation coordinator, to ensure the inclusion of water conservation techniques and concepts on city and private projects.

Group effort

The three garden projects were designed by city staff with input from the planning commission and city council and were completed in just six months. Besides Kennedy, the project team included public works and planning department staff experienced in working with native plants and water conserving irrigation systems. City engineers and public works field staff provided valuable expertise in site grading, irrigation design, and stormwater management. The unofficial motto of the public works manager, Jack Galaviz, was "You design it and we will build it."

The public works department has since expanded its criteria for future public open space projects to include native plants, water-saving irrigation systems, and zero runoff. "We are dedicated to saving water and educating the public about courtesy to the environment," says public works supervisor David Hubler.

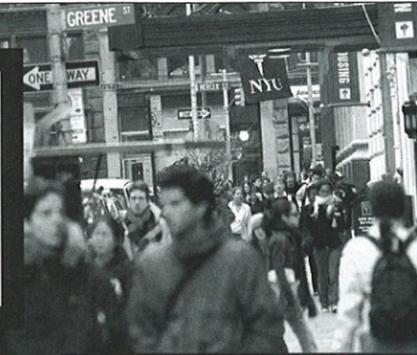
Next up: The city will revamp a five-acre park in the historic Los Rios District, adding native plants and water conservation measures. San Juan Capistrano's long-term goal is to expand the educational outreach of these projects to other agencies and inspire the public to prepare for future water conservation mandates.

David Contreras is a senior planner for San Juan Capistrano, and was involved in designing the city's three new gardens.

Resources

Online. For more on the projects, go to www.sanjuancapistrano.org/Index.aspx?page=638. California Friendly landscaping program: www.bewaterwise.com.

PERSONAL VELOCITY, SOCIAL IMPACT



NYUWagner

LEARNING IN ACTION

Master of Urban Planning

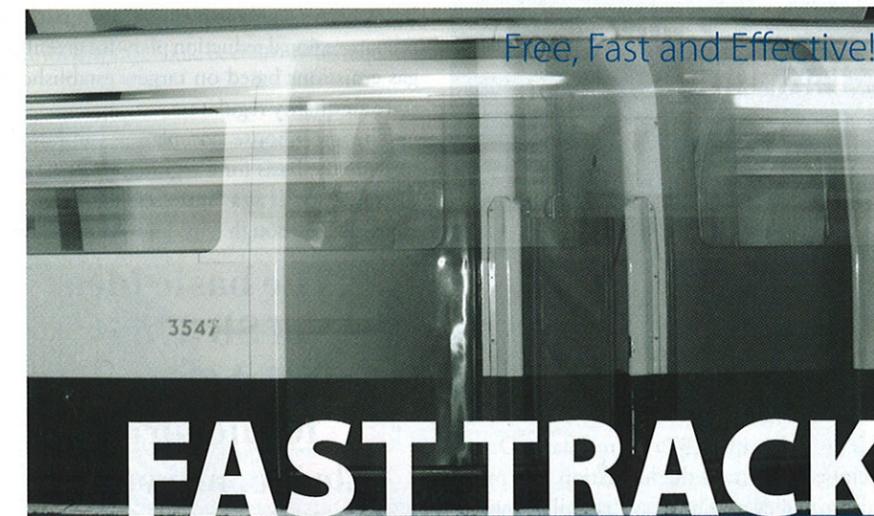
Doctoral Studies in Public Policy, Finance, and Management

wagner.nyu.edu/plan

Part-time and certificate programs available.



New York University is an affirmative action/equal opportunity institution.



FAST TRACK

Post your RFP or RFQ on APA's website and put your project on the fast track. We'll instantly notify consulting firms that are ready to meet your needs. Why wait?

Post your RFP or RFQ today at www.planning.org/rfp-rfq.



American Planning Association
Making Great Communities Happen