

# Carlsbad Beach Access

Carlsbad, California

## Stormwater Treatment

### Owner:

City of Carlsbad California

### Engineer:

Psomas

### Contractor:

Blue Pacific Engineering

### Installation:

2019



The City of Carlsbad California has some of the most iconic and historic cliff-to-beach access points. The city embarked on a project to revitalize five heavily used but narrow pathways for long-term stability, traffic, and beauty. The project would incorporate new stairways and landings, lushly landscaped tiers, and drainage systems from the top of the access to the bottom, where toes meet the sand.

The remediation of the pathways triggered local stormwater regulatory permits and had to find solutions that would cooperate with limited space and steep slopes while still contributing to an aesthetically pleasing solution that blended with the environment. The situation created a multifunctional design and high-profile upgrade that could have the City of Carlsbad setting the standard for the future of California's iconic coastal projects.

Stormwater runoff from nearby streets and parking lots above the beach would collect pollutants such as trash, sediment, nutrients, and hydrocarbons that had to be treated before those flows could meet the Pacific Ocean, merely a few feet away.

The Modular Wetlands Linear (MWL) is widely used to meet regulatory and site constraint challenges in San Diego county, and it has become one of the country's most successful stormwater biofiltration systems. What's unique about the MWL is its small footprint. It is the only biofiltration system with horizontal flow technology that provides customization benefits that are invaluable to projects in challenging terrain or areas with high-value real estate. The City of Carlsbad was under pressure to meet water quality standards and the MWL provides superior and proven treatment within a smaller footprint or adjustable height well within their budget. The ability to place these systems in a large pathway or narrow walkway within a quarter-block from the beach provided the perfect solution for compliance.

### Technical Description:

Modular Wetlands® Linear  
Bioretention System



# Carlsbad Beach Access

Carlsbad, California

---