## Habitat Assessment and Restoration Planning Andree Clark Bird Refuge Santa Barbara, CA

## **Clients:**

City of Santa Barbara, Creeks Division P.O. Box 1990 Santa Barbara, California 93102 Cameron Benson, Creeks Division Manager, 805.897.2508

Anchor QEA 27201 Puerta Real, Suite 350 Mission Viejo, California 92691 Jack Malone, Managing Scientist, 949.347.2780

## Project Staff:

Eric Zahn Karina Johnston

**Focus:** Coastal Wetlands Habitat Restoration Implementation; Coastal Resiliency

## **Project Overview:**

This once thriving coastal wetland ecosystem fell into degradation after years of being hydrologically altered. In its pre-restoration state, the wetland had no tidal flow, suffered from anoxia, and had challenges with invasive vegetation. The City of Santa Barbara contracted Anchor QEA to develop a Restoration Design Alternative Evaluation Report for the 42-acre, mixed-use, open-space park. Tidal Influence was hired as the ecological subconsultant for this design project and performed a comprehensive biological assessment of the project site that included review of all existing literature and several days of wildlife (including fish, birds, and reptiles), vegetation community, and special status species field surveys. This field work resulted in the production of species lists and GIS mapping of existing habitats.

Tidal Influence also produced a restoration vision plan in GIS that proposed a variety of improvements to the site. We worked with Anchor QEA hydrologists and regulatory staff to analyze the potential restoration alternatives proposed by City of Santa Barbara staff. Tidal Influence also inventoried all existing public use amenities and provided a vision



for improving public access to the facility. Lastly, we helped determine the potential permitting process and provided input on potential funding sources for the project. The final report provided the City of Santa Barbara staff with unbiased data to inform their decision for how to properly restore and improve this complex urban wetland.

This project then advanced to the restoration design phase, with Tidal Influence as the lead restoration ecologist. We collaborated with a team of engineers and landscape architects to develop planting plans and construction drawings to represent the proposed habitats that would be established as part of the alteration in the site's hydrology. Specifically, we designed an expansion of the existing beach lagoon to better support the populations of tidewater goby, and a 5-acre dune habitat restoration.

During construction Tidal Influence provided the City with construction support services and oversaw the landscaping. We directed the landscape contractor on how to implement the planting and seeding plans, provided scientific advising services, and leading the plant staging for the wetland and dune habitats. We continued to support the City's efforts to implement the project through advising on irrigation and maintenance strategies.

Our involvement in this project is indicative of Tidal Influence's ability to perform a detailed analysis of relatively large habitat areas, communicate with landowners, and support a project through to successful implementation. The restoration area is now thriving with improved hydrology and a diverse community of native plants.