Salt Marsh Bird's Beak Monitoring and Outplanting

Huntington Beach Wetlands
Huntington Beach, CA

Clients:
U.S. Fish & Wildlife Service
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Project Type: Salt marsh habitat restoration and monitoring; Bird's Beak Conservation

Project Staff:
Eric Zahn - Principal Restoration Ecologist
Raiven Greenberg – Project Manager
Kaelin McAtee - Ecologist
Jayde Bahrami - Field Technician
Mark Hannaford – GIS Technician

Contract Period: September 2013 – Dec. 2018
Project Budget: $67,000
Contracted Amount: $54,000

Project Overview:
In 2013, US Fish and Wildlife Service contracted Tidal Influence to locate a potential location to establish the 8th population of the federal and state endangered Salt Marsh Birds Beak (SMBB). We partnered with Rancho Santa Ana Botanic Garden to collect 4,800 SMBB seeds from a population located in Upper Newport Bay. Half of the seeds were banked at the Botanic Garden and the rest were outplanted at Magnolia Marsh in the Huntington Beach Wetland's.

Tidal Influence designed the outplanting plan which was approved by USFWS. The outplanting plan was designed to test several variables for establishment of this annual plant. Seeds were dispersed into 12 clusters composed of 4-meter squared patches. Each patch received 100 seeds with half the clusters seeded in November 2015 and the rest in March 2016. In 2017, nearly 200 individuals germinated the Huntington Beach Wetlands and Tidal Influence performed the monitoring of the population. Monitoring included visiting the site monthly to count individuals, determine phenology, and count flowers.

The land owner, Huntington Beach Wetlands Conservancy (HBWC), was so impressed by the success of the project that they partnered with Tidal Influence to acquire funding to continue the project after USFWS funding expired. We successfully collaborated on obtaining $89,000 in additional funding to monitor this population, as well as to enhance the upper marsh community in Magnolia Marsh, and to conduct additional outplantings of SMBB in other areas of the Huntington Beach Wetlands.

Tidal Influence has performed a comprehensive biological assessment of the project site that included native and non-native vegetation coverage surveys, soil analysis, and the production of a restoration work plan. Tidal Influence also planned and hosted community events to improve the upper marsh community, installing over 500 container plants, and removing several hundred pounds of non-native vegetation. The final report provided to the Huntington Beach Wetlands Conservancy staff will help inform their understanding of the biological details of the site and inform their decision for how to properly care for the salt marsh bird's beak populations as well as further restore and improve this complex urban wetland.

Our involvement in this project is indicative of Tidal Influence's ability to work closely and mindfully with endangered species, as well as to create and conduct detailed ecological monitoring programs. It also demonstrates our ability to work with various partners to design and implement a restoration project and inform management decisions.

*Tidal Influence grants express permission for the District to contact any identified previous client to request information regarding Tidal Influence's performance.

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