Progress Report – Arundo Control – February 2018

Cooperator: Sacramento-San Joaquin Delta Conservancy

Principal Investigator: Aaron N.K. Haiman, Environmental Scientist, 916-376-4023 aaron.haiman@deltaconservancy.ca.gov

Collaborating DRAAWP Agencies:

- 1. USDA-ARS
- 2. California Department of Parks and Recreation

Progress Report: In September 2015 to December 2017, the Sacramento-San Joaquin Delta Conservancy (Delta Conservancy) continued work on their Arundo Control and Restoration Program for the Delta. As part of the Conservancy's grant agreement between USDA, the Conservancy made the following progress towards the two objectives below.

Objective 1. To select sites for biological control of Arundo (*Arundo donax*) through mapping of Arundo populations throughout the Delta, and prioritization of sites based on site characteristics, use of other control methods, and landowner objectives.

Objective 2. To facilitate releases of biological control agents on Arundo and follow-up monitoring by providing contacts with landowners and, by coordinating biocontrol releases with other control projects.

To accomplish these objectives, the Delta Conservancy and Sonoma Ecology Center mapped Arundo and prioritized Arundo infested sites throughout the Delta. This was completed with additional support from Department of Water Resources (Figure 1).

The Delta Conservancy also coordinated with the California Department of Fish and Wildlife (CDFW) and the California Department of Parks and Recreation about potential biocontrol on their lands. The Delta Conservancy participated in joint visits to potential Arundo treatment sites on Lower Sherman and Brannan Islands with a follow up visit in May 2017. The Delta Conservancy participated in joint visits to potential Arundo treatment of Steries on Sacramento Municipal Utility District (SMUD)'s Phase 3 properties.

The Delta Conservancy prepared, finalized, and executed an agreement with Sonoma Ecology Center to conduct herbicide control of Arundo at Brannan Island State Recreational Area that is coordinated with the proposed biological control agent releases. The Delta Conservancy secured a research permit to conduct the Arundo control work at Brannan Island State Recreational area. The Delta Conservancy obtained a Temporary Entry Permit for the nearby CDFW fishing access sites.

In preparation for the 2017 treatment season, rare plant surveys were conducted by H.T. Harvey & Associates under contract for the Delta Conservancy and nesting bird surveys were conducted by Delta Conservancy staff. Chemical treatment applications were conducted by Sonoma Ecology Center staff on all selected Brannan Island Arundo sites in September 2017. Post treatment monitoring will occur in fall of 2018 to assess effectiveness of chemical treatments.

The Delta Conservancy with support from Sonoma Ecology Center and Solano Resource Conservation District is working on herbicide treatment of Arundo and native plant revegetation at Ulatis Creek through a DWR grant (Figure 2). Baseline monitoring was conducted and provided. The adjacent restoration installation work began in May 2017 and is scheduled to be complete by summer of 2018. A summary of other chemical/mechanical control efforts through the DWR grant has been provided.

The Delta Conservancy also participated in the DRAAWP Technical and Stakeholder meetings.

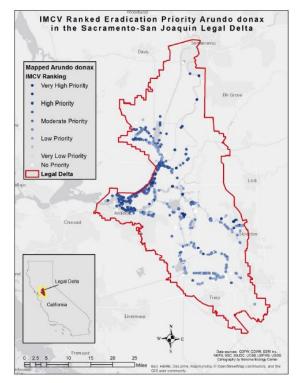


Figure 1. Map of Arundo within the legal Delta showing prioritization of sites for control and habitat restoration.



Figure 2. Students from Winters High School helping to install the irrigation system at the Ulatis Creek Arundo Control and Habitat Restoration site.