

Alligatorweed in the Delta; and early detection rapid response story

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OVERVIEW

- ▶ Background of Boating and Waterways Aquatic Invasive Plant Control Program
- ▶ Alligatorweed in the Delta

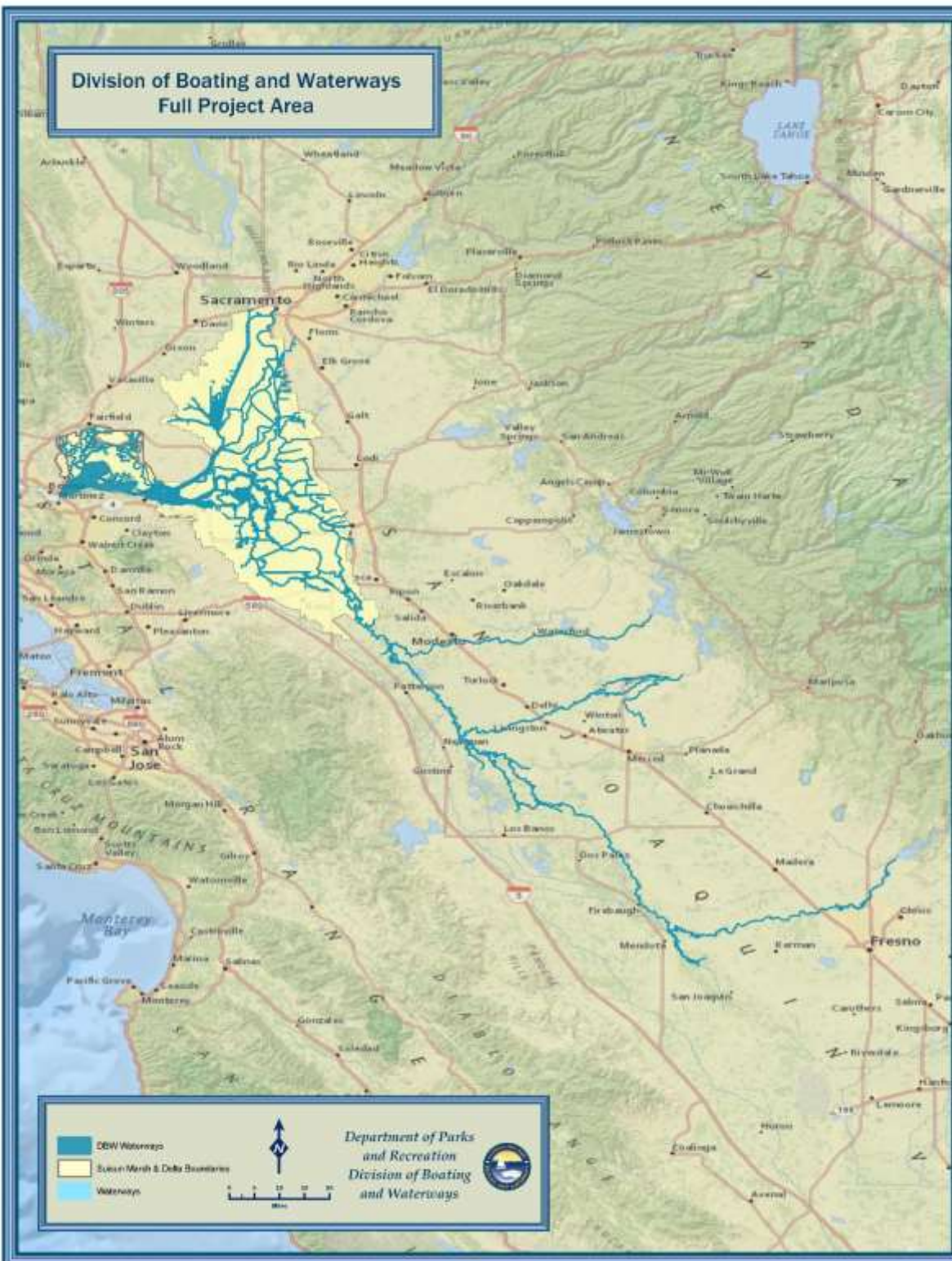


AQUATIC INVASIVE PLANT CONTROL PROGRAM

- ▶ CA State Parks, Division of Boating and Waterways
- ▶ Lead agency for control of aquatic invasive plant species in the Delta and Suisun Marsh per Harbors and Navigation Code
- ▶ 24 field staff, based out of Stockton and Oakley
- ▶ 14 scientists/compliance and other staff in Sacramento



**Division of Boating and Waterways
Full Project Area**



- DBW Waterways
- Shasta-Marsh & Delta Boundaries
- Waterways



Department of Parks
and Recreation
Division of Boating
and Waterways





ENVIRONMENTAL REGULATORY REQUIREMENTS

- ▶ Programmatic EIR (CEQA)
- ▶ Biological Opinion (Section 7 of ESA), USFWS, extended from 2017
- ▶ Biological Opinion from National Marine Fisheries Service (NOAA-NMFS)-current
- ▶ NPDES Permit issued by SWRCB
- ▶ Streambed Alteration Agreement (CDFW)
- ▶ Restricted Materials/Notification (CAC)
- ▶ Risk assessment (CDFW)



INTEGRATED CONTROL STRATEGY



Alligatorweed

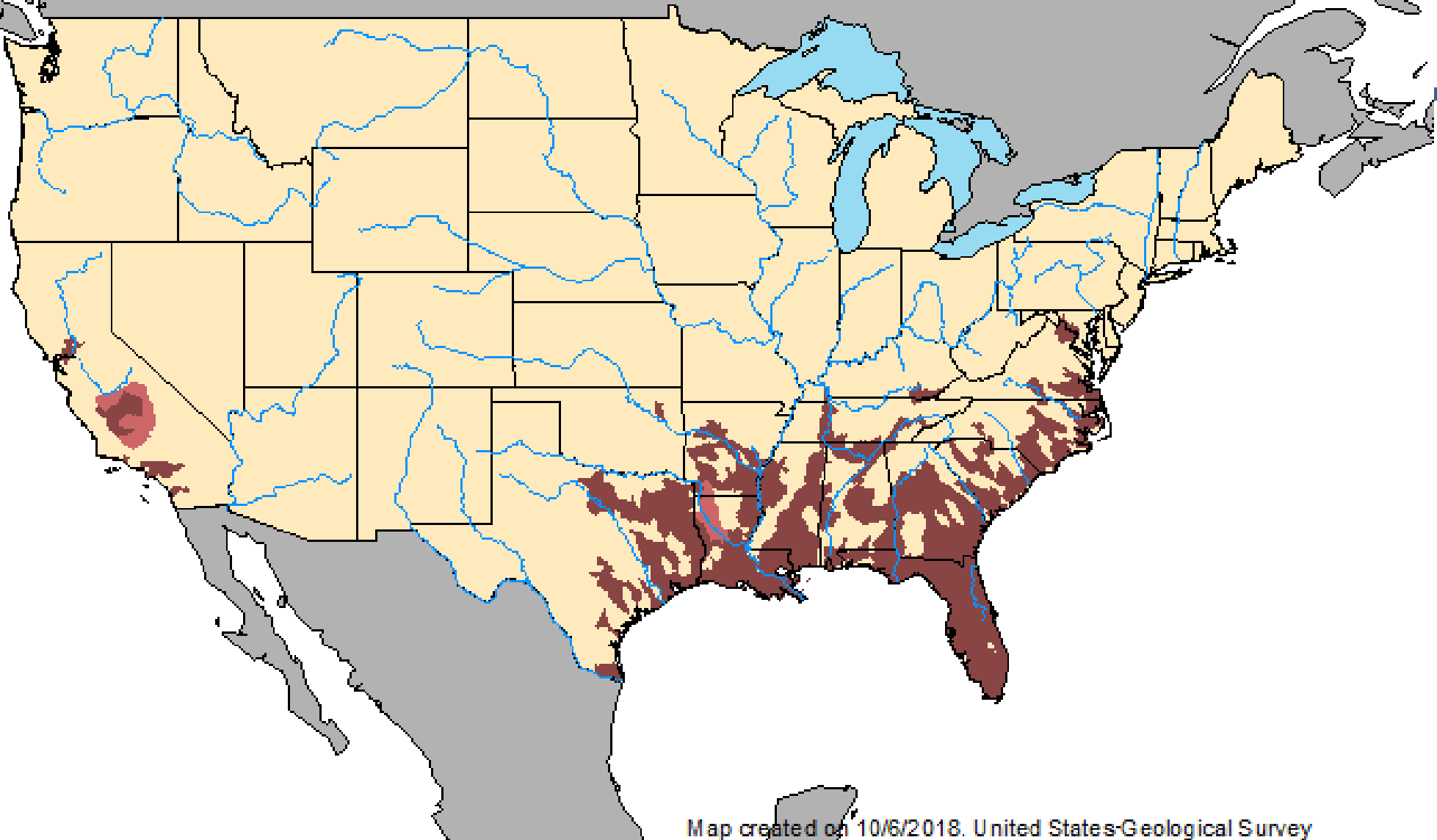


ALLIGATORWEED

- ▶ Native to Parana River, South America
- ▶ First observed in Alabama and Florida in 1890s (USGS NAS)
- ▶ First observed in Los Angeles in 1946 (USGS NAS)
- ▶ CDFA Noxious Weed List, A-rated; Cal IPC Statewide Rating of 'High'



Alternanthera philoxeroides



Map created on 10/6/2018. United States-Geological Survey



ABOUT ALLIGATORWEED

- ▶ Aquatic and terrestrial perennial
- ▶ Aquatic form generally rooted in sediment, but can spread into open, deeper water as part of dense mats
- ▶ Mats are reported to be dense enough to hold weight of a person
- ▶ Generally does not reproduce from seeds, instead propagules break off of mats to recolonize new areas
- ▶ Tolerates cold weather but not prolonged freezing



ALLIGATORWEED IDENTIFICATION

- ▶ Opposite, generally sessile leaves
- ▶ Leaves generally waxy and smooth
- ▶ Aquatic form with hollow stems
- ▶ Small white flowers, generally June to October







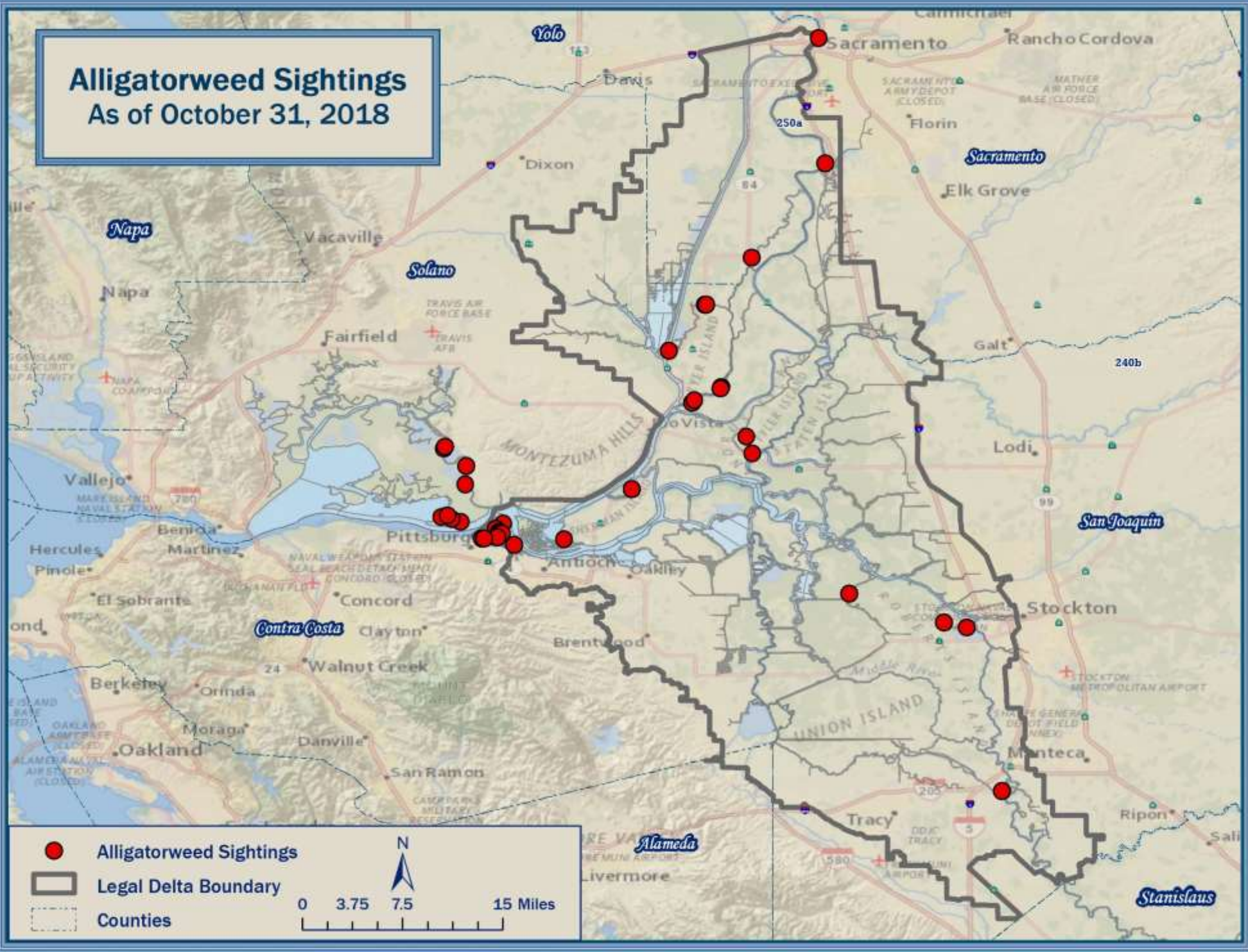


ALLIGATORWEED IN THE DELTA

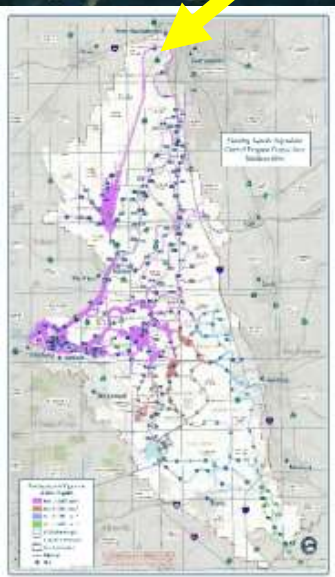
- ▶ September 2017: identified in Montezuma Slough by Dr. Brenda Grewell, USDA-ARS
- ▶ November 5, 2017: DBW submitted official risk assessment to CDFW
- ▶ February 13, 2018: DBW given federal permission to control the plant
- ▶ March 1, 2018: designated invasive species of concern by Ca Dept of Fish and Wildlife
- ▶ Spring 2018 to present: DBW actively treating alligatorweed in all known locations

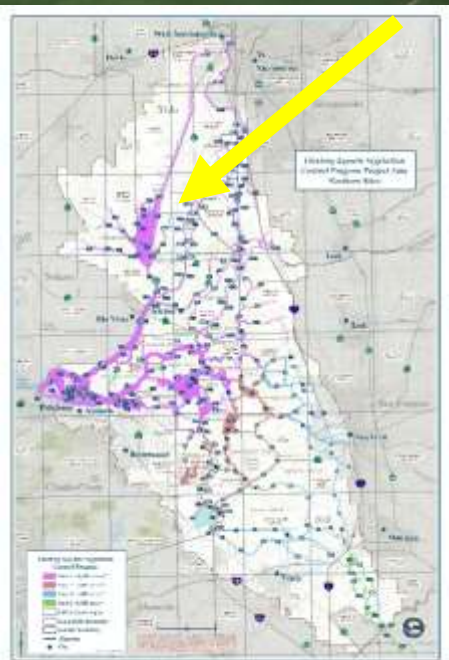


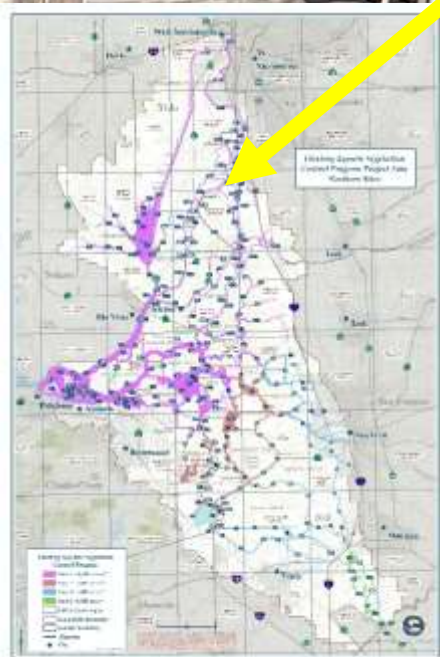
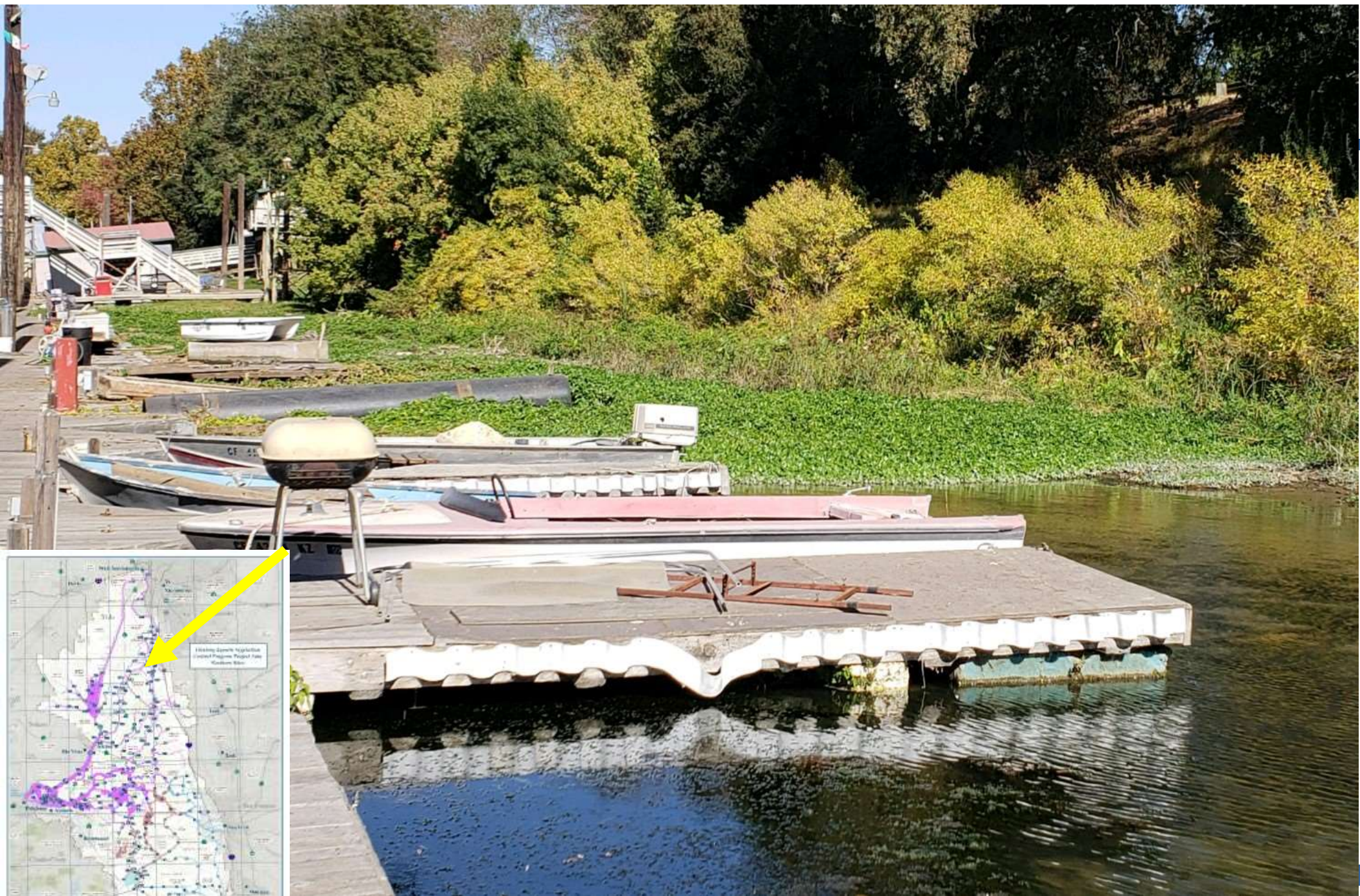
Alligatorweed Sightings
As of October 31, 2018

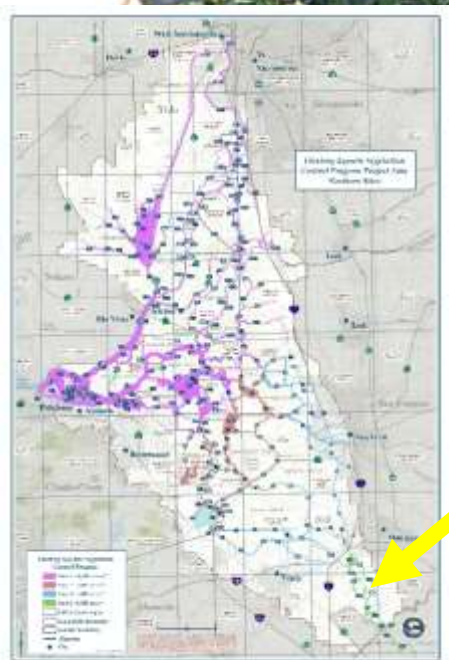








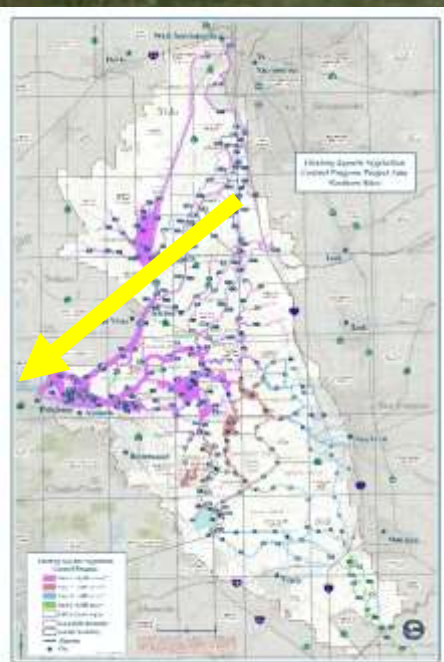




ONGOING WORK

- ▶ Revisit all alligatorweed sites and retreat, if needed
- ▶ Survey Delta to find additional populations
- ▶ Work with USDA-ARS to create a Weed Alert?
- ▶ Continue to treat alligatorweed sites as we become aware of them
- ▶ Report sightings to USGS NAS
- ▶ Share alligatorweed sightings with other agencies and partners
- ▶ Communicate with other agencies and partners regarding the problem and the program
- ▶ Find out where source populations are located





QUESTIONS AND COMMENTS



- ▶ Report alligatorweed sightings to:
 - ▶ DBW Aquatic Invasive Species Program
 - ▶ AIS@parks.ca.gov

- ▶ Jon O'Brien
- ▶ Jon.O'Brien@parks.ca.gov
- ▶ 916-327-1859

