

# Twitchell Island East End Habitat Restoration Project

## Project Goals:

1. Restore 740 acres of emergent wetlands on a 1600-acre property on Twitchell Island.
2. Determine the rates/amounts of carbon sequestered for project.
3. Determine the air and water quality impacts of project.
4. Provide recommendations for Delta-wide implementation.

## Project Description:

The Twitchell Island East End Habitat Restoration Project will restore approximately 740 acres of palustrine emergent wetlands on a nearly 1600-acre property on Twitchell Island that is owned by the Department of Water Resources. The property was previously managed for flood irrigated corn and alfalfa.

Approximately 530,000 cubic yards of material was transported within the site and used to sculpt the swales and create berms for this wetland habitat area. Water levels in each unit will be managed independently to restore the desired emergent wetland conditions throughout the site. Water is proposed to be maintained in the project area year-round, effectively creating a permanent wetland.

Construction began in May 2013, and was completed by November 1, 2013. The ultimate outcome of the restoration project will be hundreds of additional acres of freshwater emergent wetlands. Each wetland unit will be a mosaic of open water channels and emergent vegetation comprised predominantly of California bulrush and narrow leaved cattails. Other native plant restoration components will include installation of native trees and shrub compatible with their respective hydrologic regime as well as a substantial amount of upland transitional area, all of which will provide great diversity of habitat opportunity.

## Schedule and Milestones:

Spring-Summer 2012 – Initial topographic surveys, restoration design

September 2012 – Issue MND, Environmental Permitting

Spring-Summer 2013 – Project Construction and restoration

Fall 2013 – Project implementation: flooding and monitoring

2013-2017 – Carbon measurements, water quality sampling, surveys



*Twitchell Island East End Restoration (in green and blue).*



*Previously, the East End of Twitchell was used as a corn and alfalfa farm*



*The project plans to restore approximately 740 acres of palustrine emergent wetlands, and has the potential to look similar to the Mayberry Farms project on Sherman Island*

For more information contact:  
**Bryan Brock**, Senior WR Engineer  
[bpbrock@water.ca.gov](mailto:bpbrock@water.ca.gov)

(916) 651-0836

Department of Water Resources  
PO Box 942836; Sacramento, CA 94236