

# Wetland Restoration Tour Site Information

# **BAHIA ACQUISITION AND RESTORATION**

Status: Acquisition and Restoration Complete; Monitoring and Phase 3 in Progress | Project Area: 625 acres

The Bahia property was acquired by the Marin Audubon Society in 2003 for tidal marsh restoration and to protect adjacent upland oak woodlands. Tidal marsh restoration and seasonal pond enhancement and reestablishment of natural hydrology were completed on 423.5 acres in 2009 with the goals of creating productive estuarine emergent tidal wetland habitat, including associated upland transition zone, enhance existing ponds and possibly seasonal wetlands. Additional levee breaches in 2013 restored an additional 200 acres that included enhancement and management of adjacent transition zones and seasonal wetland habitats. Phase 3 of Bahia Restoration includes enhancement, monitoring, and management of 400 acres of new marsh plain, seasonal wetland, and 35-40 acres of transition zone and upland habitat. As of 2017, ongoing work includes monitoring and management of 400 acres of new marsh plain, seasonal wetland, and 35-40 acre transition zone and upland habitat.

### NOVATO BAYLANDS AND NOVATO CREEK

Status: Planning; Some Small Projects Completed | Project Area: L Novato Creek, San Jose Creek

The Novato Baylands encompasses almost 9,000 acres from Stafford Lake to the Bay, including the Hamilton Wetlands Restoration Project, the Bel Marin Keys Unit V expansion of the Hamilton Wetlands, and Marin County properties. Studies have identified flood control actions to alleviate flooding, restore riparian and wetland habitat, and expand public access.

In 1997, 8 acres of riparian habitat were restored as mitigation for the Novato Creek Flood Control Project.

Through the Flood Control 2.0 project a team of regional experts developed a long-term landscape vision for lower Novato Creek that incorporates habitat restoration actions into flood risk management. The vision highlights opportunities for restoring and sustaining vital tidal wetland habitats around lower Novato Creek while supporting a high level of flood protection under rising San Francisco Bay water levels. It provides Marin County Flood Control & Water Conservation District and other local partners with several "nature-based" adaptation options that can benefit people and habitats.



# SONOMA BAYLANDS RESTORATION PROJECT

Status: Completed | Project Area: 304.6 acres

Acquisition of the property was completed in 1990 and restoration planning, construction and monitoring was a project of the State Coastal Conservancy, the US Army Corps of Engineers and Sonoma Land Trust. Implementation excavation of the marsh and construction of the levee and peninsulas were completed in 1994. Dredged material from the Port of Oakland were transported to the site in 1995. After the dredged materials settled for a period of several months, the outboard levee protecting the site from tidal inundation, breached. Construction of the project was completed in 1995 with the exception of a public trail. A 1.5 mile trail was constructed on the top of the levee spine and directional and interpretive signs posted in 2007. Access to the trail is from the Port Sonoma Access Road, parking and access to the trail is clearly signed. From WT: Habitat Plan -Estuarine wetlands, restored, 350 acres. Historical habitats, estuarine wetlands 343 acres.

**SEARS POINT WETLANDS RESTORATION** 

Status: Construction Completed | Project Area: 1,116 acres

The Sears Point Preliminary Restoration Plan, published late February 2007 marked the completion of a 3-year planning process. It included five major project elements: 1) restore 960 acres of tidal marsh; 2) enhance up to 40 acres of seasonal wetlands across 400 acres of farmland and pasture; 3) enhance 15.5 acres of CA red-legged frog habitat by constructing breeding ponds, restoring riparian habitat and managing grazing; 4) enhance over 900 acres of upland grasslands, vernal pools, and riparian drainages through cattle management and exclusionary fencing; and 5) constructing 2.5 miles of the Bay Trail and up to 3.5 miles of additional trails. The additional trails link the Bay Trail to the San Pablo Bay National Wildlife Refuge Headquarters and the Sonoma Land Trust's Baylands Center.

In October 2015 the levee was breached in 2 locations, returning about 1000 acres of diked farmlands to tidal action. Concurrently, the Sonoma Land Trust transferred ownership of the lands south of Highway 37 to the US Fish and Wildlife Service's San Pablo Bay National Wildlife Refuge. The project was a partnership between Sonoma Land Trust and Ducks Unlimited in which both organizations worked to guide the project forward and find the funds to make it happen. As of May 2017, additional funds are being sought to develop additional public access connections from the Bay Trail to adjacent protected properties.

#### **CULLINAN RANCH**

Status: In-progress | Project Area: 2,758 acres

This wetland restoration project will restore diked baylands to tidal marsh. Implementation of this project was delayed because of the need to increase protection for Highway 37. Construction of the setback levee at Cullinan Ranch began in early October, 2011. Project managers received an encroachment permit from Caltrans in mid-December 2011 to tie the setback levee into the Highway 37 embankment. This phase of construction was completed by December, 2011 and was largely funded by NOAA American Recovery and Reinvestment Act funds. A prior restoration project at the site created interim seasonal wetland habitat during the planning, design, and development of the tidal restoration project, and created 1,264 acres of seasonal freshwater marsh on the site. Construction was completed by January 2014 when the levee on the major portion of the wetlands was breached, allowing tidal flow from the Napa River to restore much of the site to tidal wetlands over a projected timeframe of up to 50 years.



Thee remaining 290 acres is being restored to tidal marsh through upland and/or beneficially reused dredged sediments to create wetland and associated habitats for wildlife like salt marsh harvest mice. An offloading facility in Napa River is now importing dredged sediments from Vallejo to the site. The permit allows for importing some upland material from a separate Vallejo Sanitation District project for near term habitat creation, and improving the elevation and habitat slope of Pond 1 levee as well as constructing the public access features along it. There will also be monitoring and adaptive management of the entire 1,549-acre site.

# NAPA SONOMA MARSHES STATE WILDLIFE AREA

Status: Completed | Project Area: 1,734 acres, under construction

Enhancement of Ponds 1, 1A, and 2 via levee repairs and repair or replacement of water control structures. Ponds 1, 1A, and 2 were enhanced to better facilitate management of water depths and salinities to maximize habitat for migratory and breeding water birds.

The restoration in Ponds 6, 6A, 7, 7A, and 8 focuses on reducing elevated salinity levels and improving the ponds for migratory water birds. In 2001 Pond 8 was converted from a hypersaline pond into a productive foraging pond. Ponds 6 and 6A are island ponds surrounded by sloughs, and as part of the overall adaptive management strategy for the project, may be converted to tidal wetlands in 10 to 20 years. In June 2012, the California Department of Fish and Wildlife and U.S. Army Corps of Engineers signed the Project Partnership Agreement (PPA) to complete the final phase of the Napa River Salt Marsh Restoration Project, now under construction, comprising approximately 770 hectares. This phase of the project utilizes recycled water to reduce salinity levels in the former Cargill crystalizer ponds. ond 6A is managed by CDFW to control salinity levels and to optimize wildlife habitat. It is surrounded by Napa Slough to the north and west, Pond 6 to the south, and Devil's Slough to the east with a private duck club in the northeastern corner of the pond. Pond 8 is a muted tidal pond and is bordered by Milton Road Sanitation Yard to the north, residents along Milton Road to the east, and tidal marsh to the west and south.

SKAGGS ISLAND AND HAIRE RANCH RESTORATION

Status: Planning | Project Area: 4,228 acres

Skaggs Island acquisition involved transfer of the US Naval Reserve site to the USFWS for inclusion in the San Pablo Bay National Wildlife Refuge for wetland restoration to benefit endangered species and other wildlife. Issues with the transfer involved demolition and remediation of 60-acre campus structure and the requirement of the property owner to protect the adjacent Haire Ranch from flooding. The subsequent purchase of the 1092-acre in 2013 Haire Ranch was facilitated by the Sonoma Land Trust, mostly funded by the Natural Resource Conservation Service, which is also providing partial restoration funding for the Haire Ranch unit. Trail construction (6.5 miles of SF Bay Trail) is part of the tidal wetland restoration. Planning for restoration at both Skaggs and Haire Ranch are currently in process, with permits in process for partial restoration on the Haire Ranch unit.

More information about restoration sites can be found: <a href="https://www.ecoatlas.org/regions/ecoregion/bay-delta">https://www.ecoatlas.org/regions/ecoregion/bay-delta</a>



