

# ACTION 3

## Protect, restore, and enhance tidal marsh and tidal flat habitat

Restore tidal marsh and tidal flat habitats within the Estuary for multiple ecosystem benefits including recovery of threatened and endangered species. Consider connections between habitats. Strive to protect and restore complete tidal wetland systems.

### TASK 3-1 Restore tidal habitat in the Estuary.

**BY 2021** Restore 15,000 acres of tidal habitat in SF Bay.

**BY 2021** Restore 8,000 acres of tidal habitat in the Delta.

### TASK 3-2 Protect land to support preservation and enhancement of tidal habitats.

**BY 2021** Acquire and protect 500 acres through various mechanisms including transfer of fee title, donation, or easement.

### BACKGROUND

Tidal marshes offer diverse ecosystem services to the San Francisco Estuary. They provide habitat for wildlife, support aquatic food webs, and preserve biodiversity. They also stabilize shorelines, protect them from storm damage, absorb floodwaters, and store carbon. Finally, these tidal transitions between urban and rural landscapes and Estuary waters offer unique opportunities for scientific study, education, recreation, and aesthetic appreciation.

For the Bay, the 1999 *Baylands Ecosystem Habitat Goals Report* set a long-term goal of 100,000 acres of tidal marsh, approximately half the acreage that existed in the Bay at the beginning of the 19th century. The 2015 *State of the Estuary Report* calculates there is currently approximately 51,300 acres of tidal marsh in the Bay today. This CCMP action supports an effort to increase tidal marsh area by 15,000 acres, as described in Task 3-1. This milestone derives from the list of active projects in the San Francisco Bay Joint Venture's Project Tracker, an ambitious but achievable outcome.

For the Delta, there is no quantitative, long-term restoration goal equivalent to that set in the *Baylands Goals*. Historically, approximately 360,000 acres of tidal marsh occurred in the Delta. The 2015 *State of the Estuary Report* calculates approximately 8,000 acres remain today.

Beyond restoration goals, the tasks and milestones in this action also reflect federal and state opinions and recovery plans concerning critical habitat for sensitive species.

This CCMP action, for example, supports California EcoRestore, a California Natural Resources Agency initiative to help coordinate and advance critical habitat restoration in the Sacramento-San

Joaquin River Delta over the next four years. Cal EcoRestore's initial goal includes restoration of 9,000 acres of tidal and subtidal habitat. This CCMP action more specifically references, however, the creation or restoration of 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh required by the U.S. Fish and Wildlife Service Delta Smelt Biological Opinion and cited in the National Marine Fisheries Service Salmonid Biological Opinion (Operations Criteria and Plans for coordination of the Central Valley Project and State Water Project, dated 12/15/08 for smelt, and 4/4/09 for salmon).

In terms of critical habitat in the Bay, this CCMP action supports projects identified in the 2013 *Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California* maps as "near-term tidal restoration" and those meeting San Francisco Bay Joint Venture goals.

As described in Task 3-2, achieving restoration goals may also involve obtaining additional land within the approved acquisition boundary of the San Francisco Bay National Wildlife Refuge Complex. Additional areas may be acquired by the East Bay Regional Park District or by other conservation organizations and agencies.

On a broader ecosystem level, this CCMP action supports the restoration of tidal wetlands as part of a dynamic continuum of habitats connected by physical and biological processes. This continuum extends from the open waters of the Bay and Delta through intertidal mudflats, tidal marshes and sloughs, and up into adjacent terrestrial areas. Although CCMP Actions 3-5 include specific milestones for individual habitat types, these and other actions also recognize the importance of connecting the full gradient of ecological functions and ecosystem services in complete tidal wetland systems. For wildlife, Section V, p. 63, provides more detail on specific threatened and endangered species and links CCMP actions to critical management issues for listed species.

### OWNERS

SF Bay Joint Venture (Tasks 3-1, 3-2)

### COLLABORATING PARTNERS

Restoration community and other interested public, private, and non-profit entities.

### NEXUS

Actions 1-8, 11, 15-18, 28

Goals 1, 2

Objectives: a, d, e

