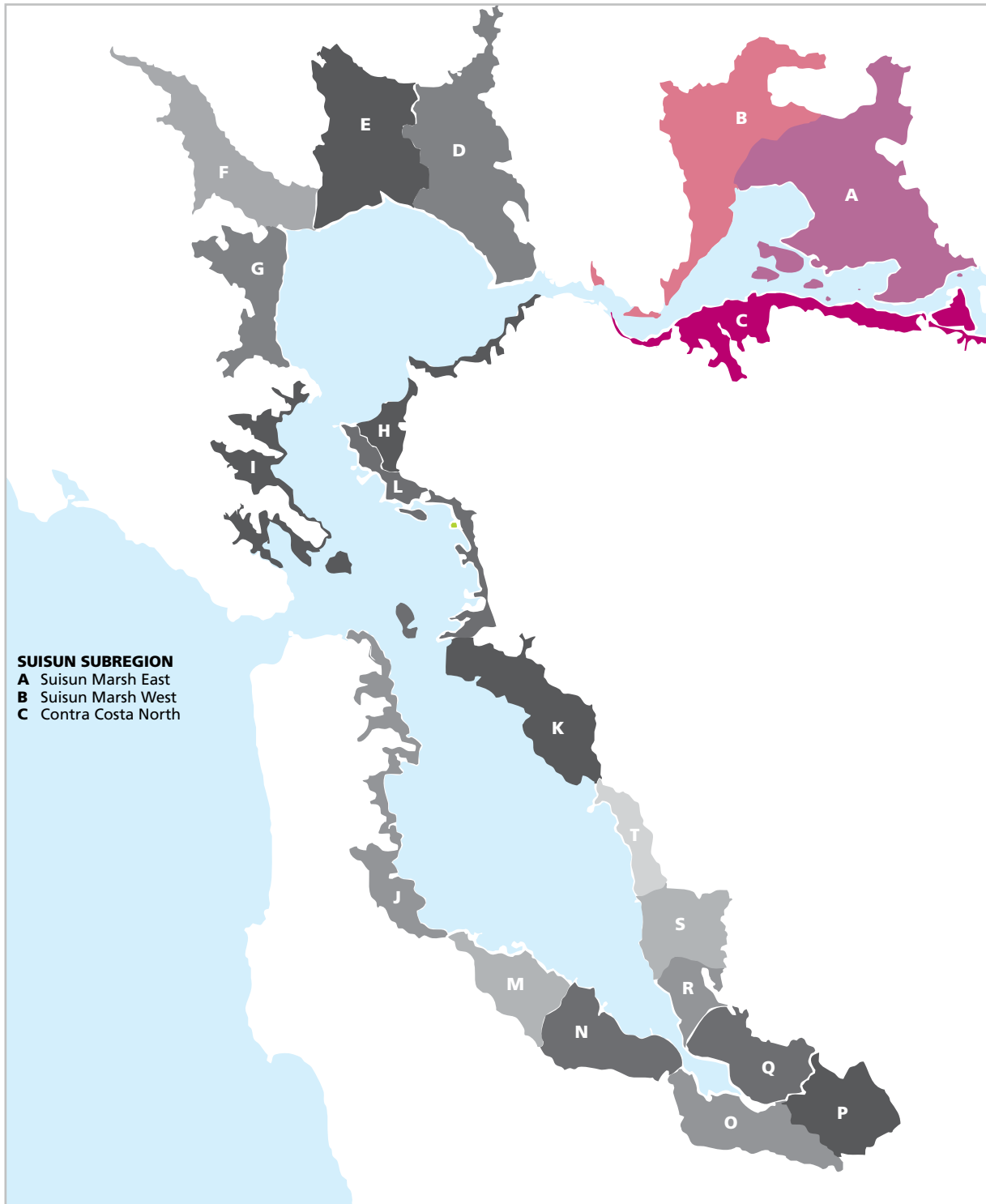


# Suisun Subregion



## Suisun Subregion

### LANDSCAPE VISION

The Suisun subregion provides abundant opportunities to restore large patches of tidal marsh that adjoin broad transition zone areas while maintaining large tracts of diked marsh for intensive waterfowl management. The goal for the Suisun subregion is to restore large connected areas of tidal habitat in Suisun Marsh and along the Contra Costa shore; to conserve and enhance adjacent terrestrial areas and associated seasonal wetlands; and to enhance the remaining managed marsh habitat. Tidal marsh restoration should be prioritized adjacent to terrestrial areas with space for landward marsh migration.

#### Recommended Actions

- ◆ In Suisun Marsh, restore a functionally connected band of tidal marsh along the transition zone, providing space for landward marsh migration from the easternmost to the westernmost extent of the marsh. Blend the restored tidal marsh gradually with the adjacent grasslands to maximize plant diversity in the transition zone. Conserve low-intensity agricultural lands adjacent to tidal areas for future marsh and transition zone migration. Prioritize the areas near Nurse Slough, Hill Slough, and the head of Cordelia Slough that have naturally gentle slopes ideal for landward marsh migration. Restore tidal marsh in Suisun Marsh west of the railroad in conjunction with enlarging the small openings beneath the railroad tracks to accommodate current water flows and future sea-level rise.
- ◆ On the periphery of Suisun Marsh, enhance grasslands with vernal pools and enhance riparian vegetation along the tributary streams. These habitats should be protected and maintained with hydrological and ecological connectivity to the baylands.
- ◆ Along the southern edge of Suisun Marsh, restore a broad band of tidal marsh and open water habitat, in part to improve fish habitat and productivity. Restore a continuous tidal marsh corridor along Suisun Slough, providing connected marsh from Grizzly Bay to the slough's upstream extent and Hill Slough.
- ◆ Enhance diked unrestored areas of Suisun Marsh to tidal marsh by using best management practices to increase waterfowl diversity and carrying capacity, manage mosquitoes, reduce subsidence, and improve water quality. Best management practices may include increasing water-management capabilities, encouraging the diversification of seasonal wetland vegetation growth, and, where appropriate, promoting the accumulation of belowground carbon by enhancing plant productivity while maintaining anaerobic soil conditions to inhibit decomposition.
- ◆ On the Contra Costa shoreline, restore full tidal action to muted and diked marshes to create a tidal marsh corridor along the shore, including broad transition zones with diverse plant communities. Create terrestrial buffers along this corridor to protect baylands habitats and wildlife from disturbance. Restore riparian vegetation along as many stream corridors as possible.



Suisun Bay

#### RECENT RESTORATION

Since 1999, only one tidal restoration project of approximately 70 acres has been completed in Suisun Marsh; one large tidal restoration project, the 2,200-acre Montezuma Project, is under construction; several other tidal restoration projects are being actively planned; and several unplanned partial breaches have occurred. The recently completed Suisun Marsh Plan (SMP) of November 2011 set a target of 5,000 to 7,000 acres of tidal restoration to be accomplished within the next 30 years. Additionally, the Fish Restoration Program Agreement (FRPA) requires the completion of 8,000 acres of intertidal and associated subtidal habitat, including a minimum of 800 acres within the Suisun subregion. The impacts of salinity changes due to tidal restoration

in Suisun Marsh and the western delta should be assessed, as there are water-quality regulations (e.g., SWRCB D-1641) that must be met or reassessed in both areas.

#### CHALLENGES

Achieving the Suisun vision is subject to significant infrastructure constraints (including those posed by Highway 680, Highway 12, railroads, natural gas production infrastructure and pipelines, and petroleum pipelines); the arrival of invasive species (mainly clams, pepperweed, and certain submerged aquatic plants, such as *Egeria*); and subsidence in potential tidal marsh restoration areas. Private landowners and public entities will need to be willing to convert some duck clubs to tidal marsh in Suisun Marsh, to restore marshes to full tidal action on the Contra Costa shoreline, and to retrofit infrastructure in keeping with ecosystem health.

The Suisun subregion consists of segments A, B, and C.