

## The Restoration Gauntlet: Will Your Project Survive?

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The Fish Restoration Program (FRP) will restore 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh for the benefit of native fish species; however, we must overcome many challenges in order to reach that goal. Restoration projects can face hurdles associated with construction feasibility, funding limitations, constrained timelines, permit requirements, neighboring land uses, or land management, and may require the alteration of ecologically beneficial designs. These challenges and constraints can compromise the effectiveness of restoration projects. While the resulting projects will create suitable habitat, they may not be the ecologically optimal design for the project site.

FRP invites you to discuss our current design alternatives for the Winter Island Tidal Habitat Restoration Project, propose ideas of your own for this project, and discuss with us the various hurdles you would face as a planner implementing your project design.

Winter Island is located near the confluence of the Sacramento and San Joaquin Rivers in the western Delta. As a former duck club, the 589 acre island contains internal channels and wetland habitat, but tidal exchange between the island and surrounding waters is limited to a breach on the eastern levee and two water control structures at the north and south. The project specific objectives of this project will be to (1) enhance rearing habitat for salmonids and Delta Smelt, (2) enhance local productivity, and (3) provide connectivity to the existing wetland habitat. Can you create ecologically beneficial habitat and overcome the challenges of project implementation?

**Keywords:** Wetland, Restoration, Planning, Design, Outreach

**Poster Topic** Habitat Restoration - Public Education, Outreach, and Access

## California EcoRestore Initiative

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As largest estuary on the west coast, the Sacramento-San Joaquin Delta is both a rich and productive habitat for wildlife, and the hub of California's water distribution system. The Delta is a highly changed and engineered environment supporting threatened and endangered species, the state's agricultural industry, and water supply for millions. Both the federal and state government have a stake in achieving habitat and ecosystem restoration in the Delta. A key aspect of the Governor's Water Action Plan is aggressive ecosystem restoration to benefit fish and wildlife species recovery. Building on the goals set in California's Water Action Plan, the California EcoRestore initiative will coordinate and advance at least 30,000 acres of critical habitat restoration in the Delta over the next four years. The initiative aims to address the Delta's legacy impacts, as well as effects from the ongoing operation of the state and federal water projects. Driven by world-class science, and guided by adaptive management, this initiative will pursue habitat restoration projects with clearly defined goals, measurable objectives, and financial resources to help ensure success. California EcoRestore's initial goal is to advance Delta habitat restoration associated with existing mandates, pursuant to federal biological opinions, as well as additional habitat enhancements. A broad range of habitat restoration projects will be pursued, including projects to address aquatic, sub-tidal, tidal, riparian, flood plain, and upland ecosystem needs, as well as fish passage improvement in the Yolo Bypass and other key locations.

**Keywords:** Habitat, Restoration, Conservancy, Ecosystem, Adaptive Management, Native

**Poster Topic** Habitat Restoration - Public Education, Outreach, and Access

## Blue Greenway Re-Vegetation Guide

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The Blue Greenway is a multi-agency vision to create an interconnected system of trails, wildlife habitat, public parks, and open spaces along San Francisco’s historically industrialized, in multiple areas, contaminated, southeastern waterfront. Once complete, the Blue Greenway would be 13 miles long, extending from AT&T Park to Candlestick Point, including portions of such sites as Yosemite Slough, Hunter’s Point, India Basin, Islais Creek, and Agua Vista Park. The City and County of San Francisco, Department of the Environment, is conducting a Brownfields assessment to support the planning and development of the Blue Greenway with funding support from United States Environmental Protection Agency. As part of this assessment, AECOM, along with stakeholders, developed a re-vegetation guidebook to support the restoration planning of Yosemite Slough and the Blue Greenway. The guide provides re-vegetation guidelines for shoreline habitats, urban parks, and developed corridors focused around the objectives to: 1) Improve Habitat and Habitat Connectivity; 2) Remediate Contaminated Lands; 3) Foster Community Stewardship; 4) Create a Climate Resilient Landscape; 5) Improve Public Access Experience; 6) Protect Water Quality; and 7) Stabilize Shoreline. Included in the guide is a plant list, primarily of native species, that function to meet these objectives. Re-vegetation of the Blue Greenway would reconnect fragmented natural habitats thereby increasing the biological connectivity of the corridor. The guide provides developers with an integrated approach to improving habitat and creating a climate-ready landscape in southeast San Francisco.

**Keywords:** Re-Vegetation, Climate Resiliency, Shoreline Stability, Habitat Connectivity, Water Quality, Remediation

**Poster Topic** Habitat Restoration - Public Education, Outreach, and Access