Castro Cove Trustee Council









BACKGROUND

From the early 1900s until 1987, the Chevron Refinery in Richmond, California, released wastewater into Castro Cove, part of the San Francisco Bay Estuary. Years later some of the sediments in the Cove still had high levels of contamination. In 1999, the California Regional Water Quality Control Board identified the Cove as a regional toxic hot spot. Chevron removed the contaminated sediments under a Water Board order in 2010. Meanwhile the Castro Cove Natural Resource Trustees worked with Chevron to conduct a natural resource damage assessment (NRDA) to determine appropriate restoration to compensate for injuries to Castro Cove's habitat, fish, and wildlife. In 2010, Chevron agreed to a legal settlement with the Trustees. The settlement included \$2.65 million to fund habitat restoration projects that would improve ecological function of tidal marsh habitats that are similar to the injured habitat in Castro Cove. Two restoration projects in San Pablo Bay, Dotson Family Marsh (formerly Breuner Marsh) and Cullinan Ranch, were selected by the Trustees with input from the public. This Update reports on the significant success achieved by both projects.



Southern Castro Cove and Chevron Richmond Refinery (Credit: California Department of Fish and Game)

Cullinan Ranch Restoration

Cullinan Ranch, located on 1,575 acres near the northern shore of San Pablo Bay in Solano and Napa counties, is being restored to tidal wetlands. The restoration will provide habitat for many species, including the endangered Ridgway's rail, salt marsh harvest mouse, and migratory salmonids. In the 1880s, levees were built around the tidal wetlands in order to drain the land for hay and oat farming. Plans for development of the property were halted in the 1980s. Purchased by the U.S. Fish and Wildlife Service (USFWS) in 1991, Cullinan Ranch is now managed as part of the San Pablo Bay National Wildlife Refuge. The Castro Cove Trustees contributed \$1.70 million to help restore the site to tidal habitat. Most of the funds were used to build a long flood control levee to both enhance habitat and protect Highway 37 from tidal fluctuation. The California Wildlife Conservation Board, NOAA, USFWS, Ducks Unlimited and others also provided funding. Tidal waters returned to Cullinan Ranch in January 2015 when several portions of the old levees were breached. The 15-year monitoring period began in 2015. Tidal wetland vegetation is slowly colonizing the lowered levees. Many fish species as well as birds, such as herons, egrets, shorebirds, dabbling ducks and diving ducks are using the breached areas.



Salt marsh harvest mouse (Credit: U.S Fish and Wildlife Service)



Endangered Ridgway's rail (Credit: Courtesy of East Bay Regional Park District)



Breaching levee at Cullian Ranch (Credit: U.S Fish and Wildlife Service)

Dotson Family Marsh Restoration

The Dotson Family Marsh project, in the City of Richmond, is restoring coastal tidal wetland and upland habitats and improving public access in a 150-acre parcel adjacent to San Francisco Bay. The project design anticipated rising sea levels to create a self-sustaining wetland, connected to the Bay. The Trustees provided \$1 million in settlement funds toward the design and permitting of the project and restoration of approximately 33 acres of tidal marsh. The funds from the Chevron settlement helped to leverage the remaining funds for the \$8.5 million project. The East Bay Regional Park District, numerous federal and state agencies and local bond Measures CC and WW provided remaining funds. Construction began in 2013.

The project removed debris, excavated fill material and created new tidal sloughs. In late 2014, levee removals allowed the tide waters to return to the marsh. Restoration is providing increased habitat for tidal marsh species, benefiting wildlife including the Ridgway's rail and the salt marsh harvest mouse. A new pedestrian and bike path closed a 1.5 mile gap in the San Francisco Bay Trail. Public parking, restrooms, trails, picnic facilities, and interpretive exhibits also were constructed. Dotson Family Marsh formally opened to the public in the spring of 2017. Tidal marsh vegetation has been increasing each year. The tidal marsh restoration met its 5-year performance monitoring standards. East Bay Regional Park District will continue monitoring the tidal marsh through 2025. With sea level rise, it is anticipated that additional acres will return to tidal marsh.



Dotson Family Marsh restoration site (Credit: Photo Courtesy of Easy Bay Regional Park District, Oakland, California).

NRDA Restoration Budget

Amount Received	\$ 2,850,427.88
Allocations	
Cullinan Ranch	\$ 1,650,000.00
Breuner Marsh	\$ 1,000,000.00
Agency Oversight	\$ 160,000.00
Cullinan Ranch Levee Repair	\$ 50,000.00
Total Allocated (including earned interest)	\$ 2,860,000.00

For More Information Please Visit:

- · California Department of Fish and Wildlife Website
- National Oceanic and Atmospheric Administration's Damage Assessment Remediation, and Restoration Program Website
- Department of the Interior Damage Assessment and Restoration Tracking System

