



Examples of projects anticipated to be eligible for Restoration Authority grants.

Last updated September 19, 2017

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
<i>Peninsula and South Bay</i>								
Peninsula and South Bay	Candlestick Point - Yosemite Slough Wetland Restoration	San Francisco	Phase 2 of the Yosemite Slough Restoration & Development Project will green and open a 21-acre section of waterfront parkland in San Francisco's Candlestick Point State Recreation Area that has remained closed to the public since the park's inception in 1977, add 21 acres of restored waterfront parklands and recreational space in a disadvantaged community, improve air and water quality, reduce and clean stormwater runoff, provide wildlife habitat, and improve the ability of the park's natural systems to buffer the impacts of climate change. The project will also provide valuable public access amenities including a new 1,100 sq. ft. zero net energy Education Center, 1.1 miles of new waterfront biking and pedestrian trails (including a section of the San Francisco Bay Trail), and ADA-accessible park viewing and picnic/BBQ areas.	California Department of Parks and Recreation (State Parks), California State Parks Foundation; San Francisco Bay Trail	Planning and Design: 2016-2018	Construction: 2018-2019	\$1,300,000	\$6,400,000
Peninsula and South Bay	Crissy Field Educational Programs	San Francisco	Environmental education programs for students of all ages at the Crissy Field Center related to restoration projects. The Center offers place-based exploration that focuses on the interaction between humans and nature and makes use of the natural and cultural resources of the restored Crissy Field wetland and the Tennessee Hollow watershed.	Golden Gate National Parks Conservancy, National Park Service, Presidio Trust	-	-	-	-

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
Peninsula and South Bay	Fort Baker Waterfront Rehabilitation Project	San Francisco	The project would plan and implement the remaining projects required for the conversion of the former military post at Fort Baker to its National Park future, including shoreline restoration and eelgrass bed protection, climate change adaptation design, revegetation, trail improvements, visitor amenities, and stormwater management. Water Trail: provide ADA launch at Fort Baker near yacht club or existing ramp, establish vendor to provide rentals and community programs.	National Park Service; San Francisco Bay Water Trail	Planning, Permitting, and Design: 2019-2021	Construction: 2021-2023	\$2,014,500	\$15,997,500
Peninsula and South Bay	Heron's Head Park	San Francisco	Design and construction of a living, natural shoreline to protect Heron's Head park from erosion and sea level rise, create habitat enhancements and protect public access; expansion of the Port's existing habitat education and outreach program for K-12 graders on Bay habitat and natural history; and removal of a creosote-pile pier in the waters to the north side of Heron's Head Park, to improve wildlife habitat.	Port of San Francisco	Planning and Conceptual Design: 2017-2018; Engineering Design and Permitting: 2018-2019	Construction: 2020	\$400,000	-
Peninsula and South Bay	Islais Creek	San Francisco	Design and construction of shoreline improvements to support habitat creation, protect against erosion and remove creosote piles. Water Trail: ADA path to beach launch, restrooms, secure equipment/boat storage facility.	Port of San Francisco; San Francisco Bay Water Trail	Planning, Permitting and Design: underway	Construction: TBD	\$50,000	\$500,000
Peninsula and South Bay	Pier 64 - Subtidal Debris Removal & Remediation	San Francisco	Design and construction of a new soft shoreline to create habitat, improve public access, and protect the park from sea level rise.	Port of San Francisco	Planning and Conceptual Design: 2018-2019	Engineering Design and Permitting: 2019-2021	\$250,000	-
Peninsula and South Bay	Pier 70 - Crane Cove Park	San Francisco	Design and construction of Phase 2 of a future 9-acre park (4-acre Phase 1 funded). Improvements include shoreline restoration, habitat creation, bay fill removal and public access. Bay Trail extension (0.12 mile) needed as part of habitat restoration and shoreline enhancements at new park.	Port of San Francisco; San Francisco Bay Trail	Conceptual Design: complete; additional Planning, Permitting and Design: on hold due to lack of funds.	Planning, Permitting and Design: 3 years; Construction: 1 year	-	\$4,000,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
Peninsula and South Bay	Pier 94 – Wetlands Enhancement - Terrestrial and Wetland Vegetation Management Project	San Francisco	Establish expanded native vegetation in the wetland, transition zone, and upland flats of Pier 94, improving native plant diversity and wildlife habitat within the constraints of the local fill substrate and the southeastern San Francisco shoreline setting. The habitat stewardship at Pier 94 will maintain and improve the dynamic native plant community diversity, wildlife habitat and facilitate the recovery of rehabilitated natural ecosystem processes. Activities include steering dynamic vegetation changes and resetting upland native vegetation succession, reversing weed dominance until native vegetation can become established. Onsite open bed native plant nursey, in-marsh propagation and transplanting are proposed. Native oysters are considered for this project.	Golden Gate Audubon Society	Planning, Permitting, and Design: 2018	Construction; Operations, Monitoring, and Maintenance: 2018-2022	-	\$245,950
Peninsula and South Bay	Tennessee Hollow	San Francisco	Restoration of a vibrant, contiguous, and diverse mosaic of native plant communities (freshwater marsh, freshwater meadow, and riparian) and wildlife habitat at the edge of the Bay in the Presidio, just upstream from Crissy Field; creation of hiking trails; and education, public engagement, and community stewardship opportunities at the edge of a major urban center.	Presidio Trust, National Park Service, Golden Gate National Parks Conservancy	-	-	-	-
Peninsula and South Bay	Warm Water Cove Park	San Francisco	Design and construction of a 2-acre expanded park, including new wildlife habitat, public access, and shoreline protection. Bay Trail (0.10 mile) spur to waterfront.	Port of San Francisco; San Francisco Bay Trail	Planning, Permitting and Design: 3 years	Construction: 1 year	\$50,000	\$5,000,000
Peninsula and South Bay	Bair Island	San Mateo	Enhancement, management, and monitoring of tidal wetlands on Inner, Middle, and Outer Bair Island in Redwood City, and provision of public access. Construction of two miles of levees was completed. Two miles of ecostone slope habitat left to plant. Potential Extension of Bay Trail (0.84 miles) as part of Bair Island restoration.	San Francisco Bay National Wildlife Refuge, Ducks Unlimited, Peninsula Open Space Trust; San Francisco Bay Trail; Save the Bay; SF Bay Bird Observatory	Construction (Vegetation establishment) and Monitoring: 2017 - ?	-	\$3,000,000	-

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
Peninsula and South Bay	Coyote Point Eastern Promenade	San Mateo	The Eastern Promenade Project at Coyote Point involves a perched beach, along a new crenulate-shaped bay, a 13' wide paved trail from the Western Promenade to the Bluff trail on the Coyote Point knoll, and visitor amenities, including a new restroom with a changing area and shower towers, benches, seating walls and picnic areas. In the lower parking area by the restroom, there are nine ADA car and van parking spaces. The parking area is flush with the Promenade Trail, there are two ADA-adapted paved ramps and three beach mats to provide universal access to the beach and bay. The project is designed for future sea level rise as well as the high winds and constant wave action along the shoreline. The perched beach will also retain the sand from being washed away.	County of San Mateo	Design complete; construction is Sept. 2018 - Aug. 2019.	-	\$3,500,000	\$5,550,000
Peninsula and South Bay	East Palo Alto Shoreline	San Mateo	Restoration and maintenance of shoreline habitat and construction, management, and operation of public access facilities. Community based restoration and stewardship activities in the Palo Alto Baylands.	Midpeninsula Regional Open Space District, City of East Palo Alto, Save the Bay	-	-	-	-
Peninsula and South Bay	South Bay Salt Ponds: Ravenswood Complex - Ponds R3, R4, R5, S5	San Mateo	The South San Francisco Bay Salt Pond Restoration Project is the largest wetland restoration project on the west coast of the United States, working to restore 15,100 acres of former industrial salt ponds. Upcoming project elements at Ravenswood include: restoration of almost 280 acres of tidal wetlands and 15 acres of ecotone, enhancement of 70 acres of pond habitat for waterbirds, flood protection for adjacent communities, and new trail connections and interpretive features. Additional elements include adaptive management applied studies and monitoring as well as project support and outreach.	Don Edwards San Francisco Bay National Wildlife Refuge	Planning and Permitting: 2017	Construction: 2019-2020	n/a	\$15,000,000
Peninsula and South Bay	Don Edwards San Francisco Bay National Wildlife Refuge	San Mateo, Santa Clara	Operation and maintenance of critical levees and associated water control structures on the pond system in the southern reach of San Francisco Bay in order to provide wildlife habitat and public recreation and protect low-lying communities from flooding due to levee failures, storm events, and sea level rise.	San Francisco Bay National Wildlife Refuge	-	-	\$3,500,000	-

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
Peninsula and South Bay	San Francisquito Creek Flood Protection, Ecosystem Restoration and Recreation Project, S.F. Bay to Highway 101	San Mateo, Santa Clara	Along San Francisquito Creek between San Francisco Bay and Highway 101, protect previously flooded parts of East Palo Alto and Palo Alto against a 100-year creek flow after three feet of future sea level rise, and create approximately 15 acres of new marsh habitat for endangered and other species and new trail connections. It is anticipated that Restoration Authority funding will be sought to provide for the maintenance and monitoring of the project's marsh restoration actions.	San Francisquito Creek Joint Powers Authority	Construction: current - 2018	Operations, Maintenance, and Monitoring: 2024	\$41,400,000	\$43,700,000
Peninsula and South Bay	SAFER Bay (Strategy to Advance Flood Protection, Ecosystems, and Recreation along the Bay)	San Mateo, Santa Clara	Restore several hundred acres of marsh wetlands, protect against a 100-year tide with two feet of freeboard and after three feet of future sea level rise, and enhance recreational opportunities along approximately eleven miles of Bay shoreline in Palo Alto, East Palo Alto and Menlo Park. The current 100-year tidal floodplain includes thousands of homes, businesses, and major infrastructure, including highways and a regional water treatment plant and airport, and large areas of potential marsh cannot be restored until the adjacent developed areas are protected. It is anticipated that Restoration Authority funding will be sought to provide for project design and construction.	San Francisquito Creek Joint Powers Authority	Planning, Permitting, and Design: 2018	-	\$3,500,000 - \$4,000,000	-
Peninsula and South Bay	South Bay Salt Pond Restoration Project: Alviso - Island Ponds	Santa Clara	The South San Francisco Bay Salt Pond Restoration Project is the largest wetland restoration project on the west coast of the United States, working to restore 15,100 acres of former industrial salt ponds. Upcoming project elements in the Alviso Pond Complex include levee breaches and lowering to achieve: restoration of around 700 acres of tidal wetlands and 20 acres of ecotone to improve fish habitat and water quality, enhancements of the Island Ponds, and new trails and interpretive features. Additional elements include adaptive management applied studies and monitoring as well as project support and outreach.	Don Edwards San Francisco Bay National Wildlife Refuge,	Planning and Permitting: 2017	Construction: 2018-2020	-	\$1-2,000,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
Peninsula and South Bay	South Bay Salt Pond Restoration Project: Alviso - Mountain View Ponds (A1, A2W, Charleston Slough)	Santa Clara	The South San Francisco Bay Salt Pond Restoration Project is the largest wetland restoration project on the west coast of the United States, working to restore 15,100 acres of former industrial salt ponds. Upcoming project elements in the Alviso Pond Complex include levee breaches and lowering to achieve: restoration of around 700 acres of tidal wetlands and 20 acres of ecotone to improve fish habitat and water quality, enhancements of the Island Ponds, and new trails and interpretive features. Additional elements include adaptive management applied studies and monitoring as well as project support and outreach.	Don Edwards San Francisco Bay National Wildlife Refuge,	Planning and Permitting: 2017	Construction: 2018-2020	-	\$15,000,000
South Bay	South San Francisco Bay Shoreline Project	Santa Clara	Construction of a 3.8-mile tidal flood protection levee to protect the community of Alviso and the San Jose-Santa Clara Regional Wastewater Facility, which services 1.4 million residents and businesses in Silicon Valley; restoration, enhancement and monitoring of 2,800 acres of wetlands; and improvement of public access, including completion of the Bay Trail spine. Future feasibility studies will assess other at-risk areas in Santa Clara County, namely Palo Alto, Mountain View, and Sunnyvale.	U.S. Army Corps of Engineers; Santa Clara Valley Water District; State Coastal Conservancy	Planning, Permitting, and Design	Construction: 2022-2025; Operations, Maintenance and Monitoring: n/a	\$57,600,000	\$173,000,000
East Bay								
East Bay	Alameda Creek Fisheries	Alameda	Restoration and enhancement of creek mouth habitats for birds, fish, water quality, and flood protection in this regionally significant watershed.	Alameda County Flood Control and Water Conservation District; Alameda Creek Alliance	-	-	\$12,000,000	-
East Bay	Alameda Point - Encinal Beach	Alameda	Dune Restoration, Shoreline Clean-up and Public Access. Water Trail: improve the beach dunes and create a formalized kayak launch on Encinal Beach, improve boat ramp, new restrooms.	East Bay Regional Park District; San Francisco Bay Water Trail	Project Development: 2018	Construction (Vegetation establishment): 2019-2021	-	\$500,000 (plus \$10,000/year in maintenance)
East Bay	Alameda Point Restoration	Alameda	Manage endangered least tern colony, restore shoreline areas, including wetland, beach and dune, acquire lands to protect wildlife habitat, and extend trail to restored shoreline areas. Alameda Point Trail (6.0), a multi-use pathway around perimeter of Alameda Point as part of wetlands restoration.	East Bay Regional Park District; San Francisco Bay Trail	TBD 2020 (est)	-	-	\$8,000,000 (plus \$100,000/year in maintenance)

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Alameda Point Seaplane Lagoon	Alameda	Transformation of vast paved areas around Seaplane Lagoon into ecologically rich constructed habitats and wetlands with visitor amenities, including picnic and camping areas, a pedestrian and bicycle promenade, and water access points for boats. Sea level rise adaptation strategies are integrated into the design.	City of Alameda	-	-	-	-
East Bay	Coyote Hills Regional Park - Restoration and Public Access Project	Alameda	Restore marsh, seasonal wetlands and coastal prairie, improve water circulation and quality, enhance habitat for endangered Salt Marsh Harvest Mouse and California Clapper Rail, acquire lands to protect wildlife and develop public access to restored areas.	East Bay Regional Park District	Phase 1: 2017-2020	Phase 2: 2020-2022, Phase 3: 2022-2024	-	\$12,000,000 (plus \$200,000/year in maintenance)
East Bay	Crown Beach – Neptune Point	Alameda	Restore dune habitat, remove legacy structures and shoreline debris, and improve public access. Water Trail: Install firm surface beach crossing, ADA improvements near vendor.	East Bay Regional Park District; San Francisco Bay Water Trail	Development: 2022-2024	Construction (Vegetation establishment): 2024-2027	-	\$1,000,000 (plus \$25,000/year)
East Bay	Franks Tract	Alameda	Restoration of diked baylands to wetlands to benefit endangered species and other wildlife. Specifically, in the near-term, installation of rip-rap for the levee and repair of the access trail to the San Francisco Bay Trail in the near-term to repair the badly eroded northern levee.	Hayward Area Recreation and Park District	Planning: Current - +4 months	Construction; Maintenance and Monitoring: 5 years	\$100,000	\$525,000
East Bay	Hayward Regional Shoreline - Habitat Restoration	Alameda	Restore shoreline bird habitat, enhance endangered California Least Tern and Salt Marsh Harvest Mouse habitat, improve water quality and circulation, and restore failing levees. Horizontal Levee and marsh restoration.	East Bay Regional Park District, Hayward Area Recreation and Park District	Phase 1: 2017	Phase 2: 2019-2020; Construction (Vegetation establishment): 2020-2023	-	\$17,000,000 (and \$100,000/year in maintenance)
East Bay	Hayward Shoreline	Alameda	Improvements to the levees around the Oliver Salt Ponds just north of the San Mateo Bridge to reduce overtopping and flooding of western snowy plover habitat; improvements to the Bay Trail from the Hayward Shoreline Interpretive Center to Johnson’s Landing to provide year-round access; and improvements to the levees near Hayward Landing to protect Triangle Marsh and prevent flooding of the adjacent landfill.	Hayward Area Recreation and Park District	Phase 1: 2017-2020	Phase 2: 2019-2020; Construction (Vegetation establishment): 2020-2023	-	\$17,000,000 (and \$50,000/year in maintenance)
East Bay	Lower San Leandro Creek (mouth is in the MLK Shoreline)	Alameda	Restore habitat and fish passage to the approximately 1 mile intertidal reach of San Leandro Creek. Revegetate the banks with wetland and upland plants and tree cover. Design a sea level rise comprehensive partnership resilient plan. Install a public access bike/ped pathway and park areas per CalTrans funded Trail Master Plan. Maintain community engagement and education programs.	East Bay Regional Park District	Planning, Permitting, Design: 2017-2020	Construction: 2018 - 2020 (?)	\$550,000	\$8,500,000 - \$16,500,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Lower Sausal Creek	Alameda	Restoration and enhancement of tidal wetland habitat at the mouth of Sausal Creek and along the shoreline of the Alameda Channel at Fruitvale Bridge Park, including restoration of habitats for wildlife and water quality, improvements to public access and wildlife viewing opportunities, stabilization of eroding shoreline, public outreach and education, volunteer stewardship, and long-term monitoring and maintenance.	City of Oakland, Friends of Sausal Creek	-	-	\$741,500	-
East Bay	Martin Luther King Jr. Regional Shoreline	Alameda	Installation and maintenance of trash collection facilities near the mouths of East, Elmhurst and Damon Creeks to improve wildlife habitat and water quality and help with stormwater management. Trail (0.6) along Doolittle Drive as part of shoreline enhancement. Water Trail: Doolittle Drive Boat Launch - remove existing docks, renovate docks and ramp, reconfigure parking lot, upgrade restrooms. Community based restoration and stewardship activities.	East Bay Regional Park District, San Francisco Bay Trail, San Francisco Bay Water Trail, Save the Bay	Development TBD 2020 (est)	Perpetuity	n/a	\$3,000,000 (and \$100,000/year in maintenance)
East Bay	Berkeley North Basin Strip - McLaughlin Eastshore State Park	Alameda	Rehabilitate Berkeley North Basin Strip and daylight Schoolhouse Creek, stabilize eroding shoreline, remove weeds, plant natural turf and riparian vegetation, improve public access to restored area, and construct Bay Trail public access (0.22 miles)	East Bay Regional Park District, San Francisco Bay Trail	Development: 2020-2025	Construction (Vegetation establishment): 2025-2035	-	\$15,000,000 (and \$50,000/year in maintenance)
East Bay	Albany Beach Restoration and Public Access Project - McLaughlin Eastshore State Park	Alameda	Enhance Albany Beach by arresting beach erosion, expanding dune and wetlands, constructing wetland and rain garden features to improve water quality, complete a key segment of the SF Bay Trail, expand shoreline access area available to the public and construct visitor amenities. Improved public access adjacent to restored Albany mudflats (0.44 miles).	East Bay Regional Park District San Francisco Bay Trail	Development: 2016-2019	Construction (Vegetation establishment): 2019-2029	-	\$4,000,000 (and \$50,000/year in maintenance)
East Bay	McLaughlin Eastshore State Park – Emeryville Crescent	Alameda	Improvements to Eastshore State Park along Powell Street (the northern edge of the Emeryville Crescent), including a new bioswale to filter rain and runoff before it enters the Bay and improved opportunities for public access and wildlife viewing.	City of Emeryville, East Bay Regional Park District	-	-	-	-
East Bay	Berkeley Brickyard - McLaughlin Eastshore State Park	Alameda	Rehabilitate Berkeley Brickyard area by removing imported fill and soil contaminants, stabilize eroding shoreline, establish new coastal scrub and prairie, and provide shoreline access to restored areas.	East Bay Regional Park District	Development: 2017-2020	Construction (Vegetation establishment): 2019-2029	-	\$3,600,000 (and \$100,000/year in maintenance)

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Oakland Gateway Shoreline ("Gateway Park/The Link")	Alameda	Restore eroding shoreline, improve water quality, establish Bay-upland transitional areas, and develop public access via a bicycle/pedestrian link (1.0 miles) between Gateway park at base of Bay Bridge and 50+ miles of Bay Trail in SF, Alameda, and Contra Costa.	East Bay Regional Park District, San Francisco Bay Trail	-	-	-	\$12,000,000 (and \$200,000/year in maintenance)
East Bay	Oakport Project	Alameda	Creation of tidal wetlands and enhancement of the existing seasonal wetlands for wildlife.	City of Oakland	-	-	-	-
East Bay	Oro Loma Marsh Climate Adaptation	Alameda	Reconstruction of seasonal wetlands and adjoining uplands into a treatment wetland and upland ecotone for cleaning treated wastewater and demonstrating adaptation strategies related to sea level rise, water quality protection, and infrastructure sustainability.	Oro Loma Sanitary District, East Bay Dischargers Authority	-	-	-	-
East Bay	Oyster Bay Regional Shoreline - Tidal Slough Restoration	Alameda	Restore tidal marsh areas, prevent shoreline erosion, protect Bay water quality, and provide public access to restored areas.	East Bay Regional Park District	-	-	-	\$900,000 (and \$10,000/year in maintenance)
East Bay	Point Emery	Alameda	Protection of natural habitats and trail access at Point Emery using natural shoreline protection methods to reduce erosion and undercutting of the park and trail.	City of Emeryville	-	-	-	-
East Bay	Eden Landing - Southern Eden Landing (South Bay Salt Ponds)	Alameda	The South San Francisco Bay Salt Pond Restoration Project is the largest wetland restoration project on the west coast of the United States, working to restore 15,100 acres of former industrial salt ponds. Upcoming project elements at Eden Landing include: restoration of over 1,375 acres of tidal wetlands between Old Alameda Creek and the Alameda Creek Flood Control Channel, the possible addition of 400 acres of enhanced pond habitat, construction of innovative flood protection elements, and around 4 miles of new Bay Trail. Additional elements include adaptive management applied studies and monitoring as well as project support and outreach. New shoreline trail (3.5 miles) as part of the South Bay Salt Pond Restoration project, and completion of missing Bay Trail segments to line the Peninsula to the East Bay; specifically San Jose Bay Trail Reach 9B, a 540-foot bike-ped bridge, 1.1 mile trail, and undercrossing connection to the 9-mile Guadalupe River Trail.	Calif. Dept. of Fish and Wildlife, San Francisco Bay Trail	Planning (EIS/R): 2017	Permitting: 2018, Construction: 2019-2020	-	\$35,000,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Eden Landing Ecological reserve	Alameda	Operation and maintenance of critical levees and associated water control structures on the pond system on the Hayward shoreline south of the San Mateo Bridge in order to provide wildlife habitat and public recreation and protecting low-lying communities from flooding due to levee failures, storm events, and sea level rise. Community based restoration and stewardship activities.	Calif. Department of Fish and Wildlife, Save the Bay	-	-	-	-
East Bay	Triangle Marsh - Hayward	Alameda	The 25-acre project will improve tidal action, implement and modify water control structures, promote native vegetation and enhance habitat for the endangered Salt Marsh Harvest Mouse	Hayward Area Recreation and Park District	-	-	\$250,000	-
East Bay	Bay Point Regional Shoreline	Contra Costa	Create sea level rise resilient tidal marsh and transition zone to benefit and contribute towards the recovery of endangered and special status species, provide water quality benefits, improve shoreline public access to restored areas. Water Trail: install floating low freeboard dock, including path of travel to the J channel, and consider kayak accessible campground.	East Bay Regional Park District, San Francisco Bay Water Trail	Development: 2016-2019	Construction (Vegetation establishment): 2019-2027	-	\$4,000,000 (and \$50,000/year in maintenance)
East Bay	Big Break Regional Shoreline - Oakley	Contra Costa	Protect and enhance habitat for the threatened California Black Rail and Giant Garter Snake, restore wetlands and coastal prairie, and provide shoreline public access to restored areas.	Delta Science Center; East Bay Regional Park District	Development: 2022-2024	Construction (Vegetation establishment): 2024-2027	-	\$3,000,000 (and \$50,000/year in maintenance)
East Bay	Brooks Island Habitat Improvement Project	Contra Costa	Restore and expand Caspian Tern nesting area, install protective fencing, and develop viewing areas away from nesting sites.	East Bay Regional Park District	Development: 2019-2020	Construction (Vegetation establishment): 2020-2023	-	\$1,000,000 (and \$25,000/year in maintenance)
East Bay	Chelsea Wetlands	Contra Costa	Restoration of tidal marsh and floodplain habitat functions for wildlife and flood protection at the mouth of Pinole Creek in Hercules. Restoration of transition area between the tidal flood plain and the Pinole Creek riparian corridor.	Ducks Unlimited, Contra Costa County Flood Control and Water Conservation District	-	-	\$225,000	-

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Creosote Piling Removal and Restoration- City of Richmond Red Rocks Warehouse site	Contra Costa	Removal of 420 tons of debris, including 460 creosote pilings in fall 2016 San Francisco Bay which are leaching chemicals and negatively impacting fish and wildlife and replacement with native habitat for herring spawning. Restoration phase planned for 2017 or 2018. Post construction monitoring through Dec 2020.	State Coastal Conservancy, National Fish and Wildlife Foundation, City and Port of Richmond, NOAA Fisheries	1/1/14- 12/31/17	1/1/14- 12/31/20	\$1,750,000	\$2,250,000
East Bay	Creosote Piling Removal and Restoration- City of Richmond Terminal Four Site	Contra Costa	Removal of 2,500 creosote and concrete pilings, pier and a large warehouse at the terminal four site which are leaching chemicals and negatively impacting fish and wildlife and replacement with native habitat for herring spawning. 30% design planning completed in summer 2015. Next phase 60% design and CEQA and permitting to occur spring 2017 to spring 2018. Piling removal target for fall of 2019 or 2020. Post construction monitoring through Dec 2025.	State Coastal Conservancy, City and Port of Richmond, NOAA Fisheries, Water Emergency Transportation Authority (Ferries), Chevron	1/1/15- 12/31/20	1/1/15- 12/31/25	\$5,000,000	\$7,000,000
East Bay	Dutch Slough Tidal Marsh Restoration Project	Contra Costa	Restoration of tidal wetlands to benefit fish and wildlife at the edge of the Delta on the eastern Contra Costa shoreline, including construction of associated levees to provide flood protection, vegetation management, and construction of public trails.	Calif. Dept. of Water Resources, Calif. Dept. of Fish and Wildlife	Construction (earthmoving, levee improvement, and vegetation management): 2017-2019 (or 2020)	Revegetation - 2020-2022 (~\$5 million); Operations, Maintenance & Monitoring - 2020-2022+ (?)	\$25,000,000 (construction)	\$38,000,000 (~\$24,000,000 secured)
East Bay	East Antioch Creek Marsh Restoration	Contra Costa	Restoration, enhancement and monitoring of degraded wetlands at the mouth of East Antioch Creek. Includes Marina outlet channel, hazardous material abatement on the affected portion of the Hickmont Cannery site, and conveyance improvements under Wilbur Avenue.	Contra Costa County Flood Control and Water Conservation District, City of Antioch	Planning, Permitting, Design: present	Construction: 2025 - tbd	\$4,300,000	\$7,600,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	San Francisco Bay Living Shorelines Project: Giant Marsh	Contra Costa	Restoration of eelgrass and oyster beds, tidal marsh, and upland ecotone habitats in a multi habitat living shorelines approach to provide shoreline protection from waves and erosion while providing habitat for wildlife and improving water quality.	State Coastal Conservancy, The Nature Conservancy, San Francisco State University, ESA, USGS, Olofson Environmental, EBRPD, USFWS, U.C. Davis, other organizations	1/1/15 - 12/31/23	1/1/15-12/31/28	\$2,500,000	\$4,000,000
East Bay	Pinole Creek Restoration	Contra Costa	Enhancement of flood protection, restoration of riparian and fisheries habitat, improvement of water quality, and improvement of recreational opportunities at the mouth and along the lower reaches of Pinole Creek. This is Step 2 or the Pinole Creek Demonstration Project. Located nearby, but separate from, the Chelsea Wetlands project.	Contra Costa Resource Conservation District; City of Pinole, Contra Costa County Flood Control and Water Conservation District	Planning, Permitting, Design: present	Construction: 2025 - tbd	-	\$4,500,000
East Bay	Lower Walnut Creek Restoration	Contra Costa	Enhancement and restoration of wetlands and riparian habitat along four miles of Walnut Creek and Pacheco Creeks to restore and enhance habitat, provide sustainable flood protection, and allow opportunities for public access and recreation. Restore wetlands to improve ecological function and habitat quantity, quality and connectivity. Create sustainable benefits that consider environmental changes such as sea level rise and sedimentation. Project is located directly adjacent to the Pacheco Marsh Restoration, and will likely be combined for implementation.	Contra Costa County Flood Control and Water Conservation District	Planning, Permitting, and Design: 2017 -2019	Construction: 2020-2021	-	\$14,000,000
East Bay	Lower Wildcat Creek	Contra Costa	Restore degraded portions of Wildcat Creek channel, remove barriers to fish passage, and improve public access to restored areas.	East Bay Regional Park District, Contra Costa County Flood Control and Water Conservation District	Project development: 2020	Construction: 2020-2023	-	\$5,000,000 (and \$25,000/year in maintenance)

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Martinez Regional Shoreline - Marsh Restoration Phase III	Contra Costa	Complete Phase III marsh restoration, stabilize and restore the rapidly eroding "shark bite" marsh, and protect water quality. Enhanced public access (0.3 miles) as part of shoreline restoration.	East Bay Regional Park District, San Francisco Bay Trail	Project development: 2019-2023	Construction (Vegetation establishment): 2023-2033	-	\$5,000,000 (and \$50,000/year in maintenance)
East Bay	McNabney Marsh Enhancement Project	Contra Costa	Planning, design, environmental compliance, and construction to enhance habitat value of McNabney Marsh to improve water quality and marsh function to benefit shorebirds, waterfowl, fish, and other wildlife and to provide shoreline public access and interpretive signs to enhance habitat at McNabney Marsh in the Peyton Slough Marsh Complex	Mt. View Sanitary District, East Bay Regional Park District, and Calif. Dept. of Fish and Wildlife	Planning, Permitting, and Design: 2017-2018	Construction: 2018 - ?	\$600,000	\$5,900,000
East Bay	Miller-Knox Regional Shoreline - Lagoon and Marsh Restoration	Contra Costa	Enhance beach, restore tidal lagoon and drainage, stabilize eroding shoreline, acquire land to protect wildlife habitat, and improve access.	East Bay Regional Park District	-	-	-	\$3,000,000 (and \$25,000/year in maintenance)
East Bay	North Richmond Shoreline - San Pablo Marsh	Contra Costa	Preserve and enhance San Pablo Marsh, improve California Ridgway's Rail habitat, remove imported fill, stabilize eroding shoreline, establish upland-Bay transitional areas, acquire lands to protect wildlife habitat, and develop public access for wildlife viewing and education. Goodrick Avenue Trail connection (0.27 miles) to Dotson Family Marsh restoration along enhanced habitat area.	East Bay Regional Park District, Contra Costa County Flood Control and Water Conservation District, San Francisco Bay Trail	-	-	-	\$5,000,000 (and \$50,000/year in maintenance)
East Bay	Pacheco Marsh Restoration	Contra Costa	Restoration of tidal wetland areas, reestablishment of habitat for sensitive wildlife, and creation of public access and interpretation opportunities. Plan includes new tidal channels, levee breaches and removal, and grading of gentle upland transitions to facilitate habitat type adaptation to rising tides. Adjacent to Lower Walnut Creek Restoration, and at least part of Pacheco Marsh will likely be combined for implementation.	Contra Costa County Flood Control and Water Conservation District, John Muir Land Trust, East Bay Regional Park District	Planning, Design, and Permitting: 2018-2019	Construction: 2020-2021	-	\$10,100,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Point Isabel Regional Shoreline - Wetland Restoration and Public Access	Contra Costa	Protect Hoffman Marsh, stabilize eroding shorelines, remove contaminated fill, enhance upland/Bay transitional areas, protect Bay water quality, and provide public access to restored areas.	East Bay Regional Park District	-	-	-	\$4,000,000 (and \$50,000/year in maintenance)
East Bay	Point Molate Regional Shoreline Restoration and Public Access Project , Richmond	Contra Costa	Acquire and restore shoreline, enhance largest eelgrass population in San Francisco Bay, stabilize eroding shorelines, remove Bay fill, and develop public access to restored areas via a trail connection (4.0 miles) from RSR Bridge pathway along entire length of peninsula.	East Bay Regional Park District, San Francisco Bay Trail	-	-	-	\$4,000,000 (and \$100,000/year in maintenance)
East Bay	Point Pinole Regional Shoreline - Dotson Family Marsh Restoration and Public Access	Contra Costa	Stewardship, maintenance, and monitoring of restored wetlands and prairie at Dotson Family Marsh, protect endangered California Ridgway's Rail and Saltmarsh Harvest Mouse habitat, and enhance public access (1.4 miles) as part of shoreline restoration.	East Bay Regional Park District, San Francisco Bay Trail	Project Development: 2018-2026	Construction (Vegetation establishment): 2016-2026	-	\$800,000 (and \$100,000/year in maintenance)
East Bay	Point Pinole Regional Shoreline - Lower Rheem Creek	Contra Costa	Realign and restore about 1/2 mile of Rheem Creek, connect with restored Dotson Family marsh and acquire land to protect wildlife.	East Bay Regional Park District, Contra Costa County Flood Control and Water Conservation District	Construction: 2019	-	\$300,000	-
East Bay	Point Pinole Regional Shoreline - San Francisco Bay Interpretive Center	Contra Costa	Develop a San Francisco Bay Interpretive Center, provide interpretive exhibits and hands-on educational programs at the restored Dotson Family Marsh.	East Bay Regional Park District	Project Development: 2020	-	-	\$5,000,000 (and \$200,000/year in maintenance)
East Bay	San Pablo Bay, Lone Tree Point, Rodeo	Contra Costa	Stabilize eroding shoreline, clean up site, improve water quality, and improve public access. Water Trail: access to and across the sandy beach, restrooms and picnic facilities, parking area within 300 feet of beach access.	East Bay Regional Park District, San Francisco Bay Trail, San Francisco Bay Water Trail	Project development: 2019-2023	Construction (Vegetation establishment): 2020-2023	-	\$1,200,000 (and \$25,000/year in maintenance)

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
East Bay	Western Stege Marsh Restoration Program	Contra Costa	The project restored tidal salt marsh habitat for Ridgway's rail and other wildlife through restoration of adjacent coastal prairie grassland, removal of invasive species and native plant vegetation. Additional pollution removal activities needed. Potential for additional habitat enhancement work on 7.5 acres of tidal wetland and approximately 20 acres of coastal terrace prairie and meadow habitat. Additional potential for trash collection along Meeker Slough for Western Stege Marsh.	University of California, Berkeley, Office of Environment, Health and Safety	Planning, Permitting, Design; Construction; Monitoring and Maintenance: 2018 - 2020	n/a	Planning, Permitting, Design: \$900,000; Construction: \$2,150,000; Monitoring and Maintenance: \$450,000	\$3,500,000
North Bay								
North Bay	Benicia Shoreline	Solano	Restoration, management and monitoring of wetlands and beach habitats, protection of adjacent existing infrastructure, installation and management of public trails, and protection of wetlands and Bay from urban stormwater. Upgrades to existing path (0.2 miles) to new park.	City of Benicia, San Francisco Bay Trail	-	-	-	-
North Bay	Cullinan Ranch	Solano	Restoration of remaining 290 acres to tidal marsh through upland and/or beneficially reused dredged sediments to create wetland and associated habitats for salt marsh harvest mice; Monitoring and adaptive management of entire 1,549-acre site. STRAW program to involve volunteers in on-the-ground shovel-ready restoration projects. Creation of approx. 0.3 miles of ne public trail, interpretive signage, and a fishing and wildlife observation pier at the edge of Dutchman Slough, which will link to existing access from Mare Island via a foot bridge where visitors can walk or bike ride from the City of Vallejo.	San Pablo Bay National Wildlife Refuge, Ducks Unlimited, STRAW, the Friends of the San Pablo Bay National Wildlife Refuge, U.S. Fish and Wildlife Service	-	-	-	-
North Bay	Rush Ranch	Solano	Restoration, management and monitoring of wetlands and other shoreline habitat, including the mouth of Spring Branch Creek, and installation and management of public trails.	Solano Land Trust	-	-	\$1,000,000	-
North Bay	Suisun Creek Watershed Enhancement Program	Solano	Restoration and enhancement of tidal and managed marshes within Suisun Marsh to benefit federal and state listed terrestrial and aquatic species, waterfowl and shorebirds. Refer to the Suisun Marsh Programmatic Biological Opinion and Suisun Marsh Habitat Management, Restoration, and Preservation (i.e. the Suisun Marsh Plan) for details on the planning, permitting, project design, construction, maintenance, and monitoring.	Calif. Department of Fish and Wildlife, Suisun Resource Conservation District	-	-	-	-

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Strip Marsh Enhancement	Solano, Sonoma	Establishment of improved water circulation in the marshes to the south of Highway 37 along the north edge of San Pablo Bay between Port Sonoma at the Petaluma River to Mare Island in Vallejo, in order to improve habitat for wildlife, improve water quality, and reduce mosquito production.	San Pablo Bay National Wildlife Refuge	-	-	-	-
North Bay	Lower Napa River Wetlands	Napa, Solano	Enhancement of tidal marshes and managed wetlands on the east side of the lower Napa River, improvement of public access including new trails and interpretive elements, creation of bird islands, installation of water control structures, and monitoring and operation along the Lower Napa River, including Mare Island and Vallejo waterfront, American Canyon south to the Solano County line, and between Green Island Road and north along the tidal Napa River. Site is adjacent to airport, connects Napa Sanitation to Pond 9/10 trail. Water Trail: improve ramp or add floating dock, maintain facilities, including restroom.	Calif. Dept. of Fish and Wildlife, Napa County Regional Park and Open Space District, City of American Canyon, San Francisco Bay Trail, San Francisco Bay Water Trail	-	-	-	-
North Bay	Elderly Island and South Wetlands Opportunity Area	Napa	Development of a long-term management plan for the 45 acre Elderly Island wetland, monitoring and enhancement of the 2,000 acre South Wetland Opportunity Area, and implementation of the Napa County Youth Ecology Corps Program which aims to train young adults in natural resource management. Crews would work on invasive species management and habitat enhancement projects to enhance the resilience of tidal wetland habitat and buffer against sea level rise.	Napa County Flood Control and Water Conservation District	-	-	-	-
North Bay	Fly Bay, Huichica Creek Unit (Napa-Sonoma Marshes)	Napa	Fly Bay in the Huichica Creek Unit of the Napa-Sonoma Marshes Wildlife Area has significant scenic, natural, and aesthetic values which the State has committed to preserving. The proposed project is to replace two water control structures and repair their surrounding levee (approximately 0.10 mile) to ensure continued and improved water management capabilities and prevent flooding of adjacent private farmlands, homes, railroad tracks, sanitation facility, and county roads.	California Department of Fish and Wildlife	Planning, Permitting, and Design: n/a	-	-	\$350,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Napa-Sonoma Marshes	Napa	Stewardship, maintenance, and monitoring of restored and enhanced wetlands within the Napa-Sonoma Marshes on the west side of the lower Napa River to improve water quality and habitat values for endangered species, fish waterfowl, shorebirds, and other wildlife, including an infrastructure assessment and surveys to help identify and prioritize potential future projects and infrastructure needs to maintain the area's intended habitat values.	Calif. Department of Fish and Wildlife	-	-	\$250,000	-
North Bay	Southern Crossing Unit (Napa-Sonoma Marshes)	Napa	The Southern Crossing Unit is approximately 260 acres of seasonal wetland, diked historic tidelands, wetlands, and upland grasslands. Existing levee along the Napa River need to be reasonably maintained and repaired as needed to allow the wetlands to function properly as high quality wildlife habitat. Project components include maintaining and enhancing habitat for resident and migratory birds, mammal, amphibian, and reptile species, creating seasonal ponds, replacing existing and installing new water control structures, levee setbacks and improvements, and levee repairs to approximately 2 miles of existing levees for flood protection from the Napa River and constructing public access features.	California Department of Fish and Wildlife	Planning, Permitting, and Design	-	-	\$1,700,000
North Bay	Haire Ranch Restoration	Sonoma	Restoration of the 1,100 acre Haire Ranch to wetlands to benefit endangered species and other wildlife. Current project goal is to reverse subsidence at the site by planting cattails and tule, in addition to flooding the area with groundwater and adding sediment to raise the elevation. When the site is ready, the levee will be breached to restore tidal marsh habitat.	San Pablo Bay National Wildlife Refuge (UCFWS), Ducks Unlimited, National Resources Conservation Service, and a private Foundation	Construction: 2017 - ?	2017 - 2037+	\$500,000	\$2,500,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Hudeman Slough Enhancement Wetlands Tidal Restoration, and Education and Public Access Improvements	Sonoma	Assess and design a project to reconnect diked seasonal wetlands and pickleweed marsh to Hudeman Slough and San Pablo Bay to restore historic bayland, improve hydrology for diked pickleweed marsh, reconnect upland ecotone to marsh complex, assess feasibility of implementation of wetland restoration features and recycled water to protect existing recycled water storage ponds onsite, and incorporate measures to ensure existing public access supported by future project implementation. Water Trail: repair ADA dock, develop campground, improve restrooms. Update and expand existing wetland restoration and public access trail education components (signs, trails) at the Hudeman Slough Enhancement Wetlands, expand opportunities for environmental education programs for students and the public, including maintenance and installation of visitor amenities.	Sonoma Valley County Sanitation District, Sonoma County Water Agency, San Francisco Bay Water Trail	Planning, Permitting, and Design: 2018-2020	Construction: 2020-2022	\$450,000 (\$27,500 for education/ access)	(\$167,500/ \$5,000 for education/ access)
North Bay	Lower Petaluma River	Sonoma	Enhancement of the river and wetlands to improve water quality and provide habitat for fish and wildlife; completion of trail segments and provision of water access for non-motorized boats at the mouth of the Petaluma River.	Sonoma County Water Agency (Lead), Sonoma Resource Conservation District , Friends of the Petaluma River, City of Petaluma, Calif. Dept. of Fish and Wildlife	-	-	-	-
North Bay	Lower Sonoma Creek	Sonoma	Restoration of wetlands and creek habitat and upland transitional areas to improve water quality, provide habitat for wildlife, and manage sediments.	Sonoma County Water Agency - Lead, Sonoma Resource Conservation District (partner), Sonoma Land Trust and others	-	-	-	-
North Bay	Point Blue's STRAW Program - Sonoma Baylands	Sonoma	STRAW involves on-the ground, shovel-ready restoration projects, completed with volunteer labor, that create buffer areas adjacent to wetlands and improve the ecological health of SF Bay. Projects will increase the resilience of these ecosystems and engage students and community members.	Point Blue Conservation Science (STRAW); San Pablo Bay NWR (USFWS)	Construction: 2017-2022	Operations, Maintenance, & Monitoring: tbd	\$125,000 - \$600,000 (Construction); (\$37,000 - \$180,000 for O, M, & M)	\$162,000 - \$780,000 (Construction + O, M, & M)

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Pond 6A, Napa River Unit (Napa-Sonoma Marshes - Ponds 6, 6A, 7, 7A, and 8)	Sonoma	Pond 6A in the Napa River Unit is currently 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. Tidal action and wind/wave erosion due to prevailing winds are deteriorating the levee that separates the pond from the private duck club. The private duck club consists of seasonal marshland which is dry for most of the year, but is flooded in October, and remains flooded throughout duck-hunting season. The existing levee bordering the duck club needs to be reasonably maintained and repaired as needed to allow CDFW to manage the pond and protect the club's waterfowl habitat.	California Department of Fish and Wildlife	Planning, Permitting, and Design	-	-	\$1,000,000
North Bay	Pond 8, Huichica Creek Unit (Napa-Sonoma Marshes - Ponds 6, 6A, 7, 7A, and 8)	Sonoma	Pond 8 in the Huichica Creek Unit is approximately 102 acres and located on the northern boundary of the NSMWA near the Napa River. 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. The primary components of the proposed project include levee improvements/repairs to approximately 0.2 of a mile of existing levees for flood protection for Milton Road residents and maintain the habitat functionality of the Pond.	California Department of Fish and Wildlife	Planning, Permitting, and Design	-	-	\$500,000
North Bay	Ringstrom Bay Unit (Napa-Sonoma Marshes)	Sonoma	Ringstrom Bay Unit is approximately 396 acres and located on the northwestern corner of the NSMWA. It is bordered by vineyards on the north and northeast, seasonal wetlands or diked farmlands on the southeast and northwest, and the Wingo Unit on the southwest. The unit consists of diked saline seasonal wetlands, muted tidal, brackish marshes, moist grasslands, and seasonal marsh. Ringstrom Unit is managed with both reclaimed water and muted tidal flushing from Steamboat Slough through operation of a tide gate. The primary components of the proposed project include replacing an existing water control structure and levee improvements/repairs to approximately 1 mile of existing levees for flood protection from adjacent landowners and adjacent vineyards.	California Department of Fish and Wildlife	Planning, Permitting, and Design	-	-	\$1,000,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Sears Point Riparian Restoration	Sonoma	Sonoma Land Trust (SLT) recently completed restoration of nearly 1,000 acres of tidal wetlands at Sears Point. SLT plans to build upon this project by restoring denuded riparian habitats along several miles of upland seasonal streams that drain to the Bay and to the Petaluma River. The Sears Point uplands contain more than nine miles of drainages. SLT has prioritized just over two miles for immediate restoration and is working on preliminary designs	Sonoma Land Trust	Planning, Permitting, Design: 2017	Construction: 2018-2020	\$84,000 (\$34,000 funding and need \$60,00 for Final Design)	\$300,000
North Bay	Sears Point Wetland and Watershed Restoration Project	Sonoma	Completion of tidal marsh restoration project elements, including development of ecotone and high tide refugia. Stewardship, maintenance, monitoring, and adaptive management of newly restored wetlands to improve habitat quality for endangered species, fish, waterfowl, shorebirds, and other wildlife. Restoration of riparian habitat in 5 miles of drainages and enhancement of wetlands to provide wildlife habitat and improve watershed function. Plan and develop additional public access connections from the Bay Trail to adjacent protected properties. Development of a visitor center, with interpretive exhibits and educational programs at the San Pablo Bay National Wildlife Refuge. Connector Trail feasibility assessment currently funded by Bay Trail (0.6 miles) - connect existing Bay Trail between Sears Point and Tubbs Island. STRAW program to involve volunteers in on-the-ground shovel-ready projects.	Sonoma Land Trust, Ducks Unlimited, San Pablo Bay National Wildlife Refuge, Sonoma County Regional Park Department, San Francisco Bay Trail, STRAW	-	-	-	Funding needed for Bay Trail only
North Bay	Sears Point, San Pablo Bay National Wildlife Refuge Visitor Center	Sonoma	Development of a visitor center, with interpretive exhibits and educational programs at the San Pablo Bay National Wildlife Refuge.	San Pablo Bay National Wildlife Refuge, Sonoma Land Trust	-	-	-	-
North Bay	Skaggs Island	Sonoma	Restoration of the 3,300 acre Skaggs Island (a former military base) to wetlands to benefit endangered species and other wildlife; creation of recreational trails and public access for wildlife viewing. Trail construction (6.5 miles) as part of tidal wetland restoration.	San Pablo Bay National Wildlife Refuge, Ducks Unlimited, National Resources Conservation Service, San Francisco Bay Trail	Planning, Permitting, and Design: 2017-2018	Construction, Operations, Maintenance, and Monitoring: 2018 - ?	\$1,300,000	\$54,000,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Sonoma Creek "Big Break" Repair and Flood Alleviation	Sonoma	This project will restore sediment transport of Sonoma Creek, reduce barriers to fish migration, and protect existing agriculture and infrastructure by repairing numerous levee breaks and reinforcing 1.4 miles of existing levees along lower Sonoma Creek	Sonoma Resource Conservation District	Planning, Permitting, and Design: 2017-2018	2017-2022	\$177,400	\$1,104,211
North Bay	Sonoma Creek Tidal Marsh Enhancement to Improve Habitat and Water Quality	Sonoma	Project partners completed the first year of construction to enhance 400 acres of degraded and impounded tidal marsh habitat at the mouth of Sonoma Creek in the wetlands of northern San Pablo Bay. Year 1 post-construction data and field observations suggest a need for additional construction to address water entrapment in the marsh not reached in year one construction, continued enhancement of the channel drainage system through Sonoma Creek marsh, removal of the original relic berms which have been identified as priority mosquito breeding ground, complete 3 acres of marsh transition zone, and reshape and revegetate installed transition zone. STRAW program to involve volunteers in on-the-ground shovel-ready restoration projects.	Audubon California, San Pablo Bay National Wildlife Refuge, STRAW	Construction: 2017 - 2019	Operations, Maintenance and Monitoring: ongoing - 2025	\$1,120,000	\$1,390,000
North Bay	Tolay Creek Watershed Enhancement	Sonoma	Assess, design, and implement project to reconnect Tolay Creek watershed with its historic drainage to San Pablo Bay via Tolay Creek Slough. Benefits include: delivery of sediment to evolving Sears Point marsh, improved access for anadromous fish, alleviate flooding in lower Sonoma Creek, and potential trail connection.	Sonoma Land Trust	-	-	-	-
North Bay	Tolay Lagoon	Sonoma	Restoration of parcels adjacent to the California Department of Fish and Wildlife's Tolay Lagoon and State Highway 37.	Sonoma Land Trust	-	-	-	-

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Tubbs Island, Tolay Creek Unit (Napa-Sonoma Marshes; including Vallejo Sanitation District Levee)	Sonoma	The Southern portion of Tolay Creek Unit is located immediately south of SR 37 and is an intertidal lagoon. This subunit is bordered by private hay farms on the north, east, and southeast. It is bordered by Highway 37, Vallejo sanitation District property, USFWS lands and Tolay Creek. The proposed project will repair approximately 0.3 miles of access road with clean, fill material to bring the road and levee back to existing grade level and pre-existing conditions. This repair will help prevent further damage to the Unit and surrounding private property and maintain safe access for the public and adjacent landowners. The levee erosion is near a parking lot immediately off of Hwy 37 where there are regular visitors. This levee road provides access to surrounding neighbors including the Vallejo Sanitation District and US Fish and Wildlife Service. The adjacent property is substantially lower in elevation than the CDFW land and is protected by this levee. Levee top trail desired (2.7 miles)	California Department of Fish and Wildlife, San Francisco Bay Trail	Planning, Permitting, and Design	-	-	\$300,000
North Bay	Wingo Unit (Napa-Sonoma Marshes)	Sonoma	The Wingo Unit of the Napa Sonoma Marshes Wildlife Area was once open to tidal action before it was diked to create agricultural lands prior to CDFW owning the land. The Unit is surrounded by levees protecting the internal seasonal wetlands from brackish tidal waters/runoff from nearby sloughs and Sonoma Creek. The proposed project is to repair approximately 2 miles of an existing levee by raising and/or widening levee to ensure continued and improved water management capabilities and prevent flooding of adjacent private farmlands, homes, railroad tracks, and county roads.	California Department of Fish and Wildlife	Planning, Permitting, and Design: n/a	n/a:n/a	n/a	\$3,000,000
North Bay	Aramburu Island	Marin	Restoration of a native oyster reef along the shoreline at Aramburu Island, and improvements to the log groins, annual monitoring, beach nourishment, and non-native invasive species control.	Audubon California, Marin County Parks and Open Space	Operations, Maintenance, and Monitoring: present - 2021	-	\$50,000 for log groins and beach nourishment and \$85,000 for 2018 monitoring	\$1,390,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Bahia Wetlands	Marin	Monitoring and management of 400 acres of new marsh plain, seasonal wetland, and 35-40-acre transition zone and upland habitat. Additional funding for seasonal wetland and upland enhancement work. Currently in Phase 3, which includes enhancement and management of transition zones, upland and seasonal wetland habitats, and monitoring of the tidal marsh restoration, seasonal wetlands, and adjacent upland habitats.	Marin Audubon Society	Operations, Maintenance, and Monitoring: present - 2027	-	-	\$400,000
North Bay	Bel Marin Keys Wetlands	Marin	Design and implementation of tidal restoration in Novato, using dredged sediment to raise elevations prior to breaching, construction of a levee to protect neighboring communities from flooding, and completion of Bay Trail segments.	State Coastal Conservancy	-	-	\$25,000,000	\$115,000,000
North Bay	Bothin Marsh	Marin	Undertake planning and design related to sea level rise adaptation solutions to address the Mill Valley - Sausalito Trail, loss of marsh habitat, and educational outreach. Planning efforts include the creation of transitional high marsh along the back edge of Bothin Marsh by re-using dredged sediment from Coyote Creek to improve habitats and increase shoreline resiliency.	Marin County Flood Control District, Marin County Parks	Planning: Current - 2019	Construction of the Pilot Project and Design: 2019 - n/a	\$75,000	\$1,800,000
North Bay	Burdell Unit (of Petaluma Marsh)	Marin	The Burdell Unit of the Petaluma Marsh Wildlife Area has significant Wildlife Habitat Values and also acts as flood protection for the Burdell Mitigation Bank and Gness Field Airport. This proposed project will create a new offset engineered levee that will allow for the necessary flood protection of existing infrastructure and seasonal habitat and create additional tidal marsh habitat.	California Department of Fish and Wildlife	Planning, Permitting, Design: 2017-2018	Construction & Operations, Maintenance, and Monitoring: 2019-2021 & TBD	\$2,000,000	\$13,000,000
North Bay	Lower Corte Madera Creek	Marin	Enhancements to existing marshes along Corte Madera Creek and implementation of sea level rise adaptation measures by beneficially re-using dredged sediment from the lower reach of Corte Madera Creek.	Marin County Flood Control District	-	-	-	-
North Bay	Corte Madera Ecological Reserve Expansion and Restoration	Marin	Restoration of tidal marsh habitat and creation of transition zone habitat by removing fill and providing refuge for the California Ridgway's rail and provision of environmentally sensitive public access. Spur access to restored wetlands (0.2 miles). Also potential for coarse material placement along eroding shorelines to reduce erosion and feed sediment, and possible potential for vegetation enhancements for high tide refuge and shoreline protection.	Marin Audubon Society, San Francisco Bay Trail	Planning, Permitting, and Design: present - 2017	Construction: 2017-2018; Operations, Maintenance, and Monitoring: 2018-2028	-	\$850,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Day Island Unit (of Petaluma Marsh)	Marin	Historically, Day Island Unit of Petaluma Marsh Wildlife Area was two islands surrounded by salt marsh. Long ago the area was diked and filled to create a land bridge between the islands and the proposed Black Point subdivision. Today, Day Island supports muted tidal, open water habitat and upland transition habitat along the San Pablo Bay. Approximately 2 miles of subsided levee protect adjacent private landowners and homes. Improvements through raising and/or enforcing levees are needed to maintain the functionality of the unit and protect flooding of nearby land and homes.	California Department of Fish and Wildlife	Planning, Permitting, Design	-	-	\$500,000
North Bay	San Francisco Bay Living Shorelines Project: San Rafael and Hayward	Marin	Restoration of eelgrass and oyster beds on the San Rafael shoreline to provide shoreline protection from waves and erosion while providing habitat for wildlife and improving water quality.	State Coastal Conservancy, The Nature Conservancy, San Francisco State University, ESA, USGS, SFEP, EPA, U.C. Davis, CDFW, other organizations	1/1/11- 12/31/22	1/1/11 - 12/31/27	2,400,000	3,800,000
North Bay	Lower Gallinas Creek	Marin	Improvements to replace 2.0 miles of aging coastal levees and enhancements to wetland habitats to protect the Santa Venetia community from flooding, provide for sea level rise adaptation, beneficially re-use creek sediment, reduce impacts from flood control maintenance, and improve recreation including navigation.	Marin County Flood Control District	-	-	-	-
North Bay	McInnis Marsh Habitat Restoration	Marin	Reconnection of Gallinas and Miller Creek with restored wetlands to provide habitats for threatened and endangered species, improve flood protection capacity and sediment conveyance efficiencies, increase transitional estuarine habitats, and contribute to sea level rise adaptation. Bay Trail alignment at McInnis subject to change based on restoration plans.	Marin County Parks, Marin County Public Works, Las Gallinas Valley Sanitary District	Planning, Permitting, and Design: 2017-2020	Construction: 2020-2023	\$1,100,000	\$5,000,000 - \$10,000,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Marin Pond	Marin	To make flood protection improvements to the existing stormwater pond at the base of the Marin City watershed that provides critical flood protection to the only road into and out of Marin City (a disadvantaged community) as well as to Highway 101 which is the major infrastructure link between San Francisco and the North Bay. Both of these roadways have flooded in recent storm events (i.e. 2014) significantly impacting traffic and impeding the ability of emergency vehicles to access Marin City. Restoration of the pond for wildlife habitat and water quality will also be included as part of the final pond improvements. The pond system connects to San Francisco Bay through a culvert and is high vulnerable to the impacts of sea level rise.	Marin County Flood Control and Water Conservation District	Planning, Permitting, and Design	Final analysis and preferred alternatives: June 2017	\$270,000 (for final analysis)	\$2,000,000 - \$5,000,000
North Bay	Romberg-Tiburon: Nature-Based-Adaptation and Restoration of an Armored Shoreline	Marin	Pilot projects at the Romberg Tiburon center sites to test innovative, nature-based solutions to restoring, repairing, and renovating armored shorelines in the San Francisco Bay to adapt to sea level rise and protect critical public infrastructure, historic buildings, and public access to the Bay. The Romberg Tiburon center campus is a former US Navy base with almost 0.5 mile of filled and armored shoreline, including seawalls and rip-rap revetment, on which pilot projects can take place.	San Francisco State University Romberg Tiburon Center	Planning, Permitting, Design: 2 years	-	\$750,000	-
North Bay	Novato Baylands	Marin	Implementation of a natural flood protection approach to reduce flooding, increase sea level rise resiliency and increase tidal wetland and other wetland habitat along lower Novato Creek. Potential future restoration may include opportunities for new Bay trail alignment.	Marin County Flood Control District and Friends of Novato Creek Novato Sanitary District	-	-	\$5,000,000	-
North Bay	Richardson Bay	Marin	Demonstration of sand/gravel bay beach designs to combat wind-wave shoreline erosion as part of sea level rise adaptation efforts. Protection of one of the largest eelgrass beds in San Francisco Bay to provide food and shelter for fish and invertebrates and feeding grounds for migratory waterbirds.	Marin County Flood Control District, Marin County Parks, City of Mill Valley, Audubon California	-	-	-	-
North Bay	Sausalito Marine Eelgrass Preserve	Marin	Protection of important eelgrass habitat and shoreline in the City of Sausalito, restoration of tidal marsh along the shoreline and enhancement of the shoreline edge as habitat and public park.	Marin Audubon Society	-	-	-	-

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
North Bay	Simmons Slough	Marin	Enhancement of seasonal wetlands for birds and other wildlife and monitor progress of enhancement work.	Marin Audubon Society	Operations, Maintenance, and Monitoring: present - 2027	-	\$25,000	\$500,000
North Bay	Tiscornia Marsh Restoration Project	Marin	This project on a 20-acre site will restore tidal marsh to benefit endangered Ridgway's Rail and other species, increase flood protection, enhance transition zone habitat, and protect against sea level rise.	Marin Audubon Society	Planning, Permitting, and Design Part 1: 2017-2018	Planning, Permitting, and Design Part 2 (permits; time TBD); Construction (1 year); Operations, Maintenance, and Monitoring (10 years)	n/a	Planning, Permitting: \$60,000, and Design Part 2; Construction: \$2,000; Operations, Maintenance, and Monitoring \$750,000
North Bay	Petaluma Marsh Expansion and Restoration	Marin, Sonoma	Monitoring of existing and restored wetlands habitat in what is the largest historic wetlands in San Francisco Bay, and enhancement of upland refuge habitat to provide high tide refuge for wildlife and allow for adaptation to sea level rise. Completion of transition zone restoration.	Marin Audubon Society, Calif. Dept. of Fish and Wildlife	Operations, Maintenance, and Monitoring: present - 2027	-	-	\$150,000
North Bay	SR 37 Sea Level Rise and Flood Protection project	Napa, Sonoma, Solano, Marin	Environmental phase (CEQA/NEPA) for the SR 37 sea-level rise and flood protection project; Project would provide integrated flood protection and sea-level rise adaptation by elevating the current SR 37 infrastructure to withstand future sea-level rise and storm surges; The project limits are SR 37 from SR 80 to SR 101. Project would include elevation of the roadway and storm surge protections that would improve flood protection levees, berms, etc. and would protect vital wetland and marsh habitat. The project would also benefit wildlife, and accommodate shoreline public access by integrating 17 miles of bicycle/pedestrian infrastructure along a modified Highway 37 corridor between Vallejo and Novato.	North Bay CMAs: NVTA (Napa Valley Transportation Authority), SCTA, STA, TAM, and Bay Trail	Planning, Permitting, and Design: July 2018	-	\$30,000,000	-
North Bay	Invasive Sea Lavender Eradication & Restoration	Santa Clara, Alameda, San Mateo, Marin	Treating or removing invasive Limonium ramosissium and L.duriusculum in locations around the bay. Funding for treatment and removal were initiated at 13 top sites in 2016, which will also cover 2017 field work at these sites.	California Invasive Plant Council	Construction: 2018 - 2023	Construction: 2023 - 2033	\$400,000	\$400,000

Baywide / Multi-Region

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
Baywide / Multi-Region	Creosote Piling Removal and Restoration	Multiple	Removal of up to 30,000 creosote pilings in San Francisco Bay as part of future programmatic projects which will remove creosote pilings that leach chemicals and negatively impact fish and wildlife and replacement with native habitat for herring spawning.	NOAA Fisheries, State Coastal Conservancy, Ports, Cities	1/1/17-1/1/22	1/1/17-1/1/37	\$20,000,000 (for 10 projects)	\$100,000,000
Baywide / Multi-Region	San Francisco Estuary Invasive Spartina Project	Multiple	Coordinated effort to eradicate invasive cordgrass from San Francisco Bay (which impacts wildlife habitat and flood protection) and restore and enhance native wetland plants.	State Coastal Conservancy, U.S. Fish and Wildlife Service, Olofson Environmental and hundreds of landowners/ partners	1/1/2000-1/1/2020	1/1/2000-1/1/2035	\$37,000,000	\$50,000,000
Baywide / Multi-Region	Living Shorelines: Near-Shore Linkages for San Francisco Bay: Baywide	Multiple	Restoration of living shorelines to provide protection from waves and erosion while providing habitat for wildlife and improving water quality.	State Coastal Conservancy, San Francisco State University, U.C. Davis, SFEP, EPA, NOAA, others	1/1/17-1/1/22	1/1/17-1/1/37	\$10,000,000	\$40,000,000
Baywide / Multi-Region	San Francisco Bay Subtidal Habitat Restoration	Multiple	Restoration of subtidal habitats including eelgrass, oyster, seaweed beds, sand habitat and other submerged habitat areas to provide ecosystem function and resources for a variety of aquatic, avian and other wildlife species.	State Coastal Conservancy, SFEP, NOAA, CDFW, USFWS, others	1/1/17-1/1/22	1/1/17-1/1/37	\$5,000,000	\$50,000,000

PROJECT LOCATION	PROJECT	COUNTY	PROJECT DESCRIPTION	LEAD (AND PARTNER) ORGS	CURRENT PHASE SCHEDULE (Phase; dates or years)	TOTAL SCHEDULE (Phase; dates or years)	CURRENT PHASE COST	TOTAL COST
Baywide / Multi-Region	Vegetation Enhancements for High Tide Refuge and Shoreline Protection	Multiple	<p>This project focuses on building natural shoreline systems and internal marsh features that emulate and reinforce the processes that can sustain high marsh habitats during accelerated sea level rise and tidal marsh retreat. This Project will test new nature-based methods for establishing resilient and sustainable high marsh vegetation structure, and beachface nourishment along wave-eroded marsh edges to slow erosion and trigger natural high marsh building processes at Corte Madera Ecological Reserve and Blackie’s Pasture. The project will be the first to use reintroduction of a native endangered salt marsh plant as a tool to enhance habitat for endangered salt marsh wildlife species, California sea-blite (<i>Suaeda californica</i>), as well as a tool for recovery of the endangered plant itself. This project would also include arboring of both sea-blite and pickweed to raise their stature along shoreline edges or channels, as well as coarse material placement along eroding shorelines to reduce erosion and feed sediment to wave built berms. Specific sites could include Blackie’s Pasture, Giant Marsh, and Corte Madera Ecological Reserve.</p>	<p>San Francisco State University Romberg Tiburon Center, SFEL, Peter Baye, Marin County Flood Control, Town of Tiburon, CA Department of Fish and Wildlife, East Bay Regional Park District, Richardson Bay Audubon, State Coastal Conservancy</p>	<p>Construction (pilot): 2017-2018</p>	<p>Construction (larger): 2019; Operations, Maintenance, and Monitoring: 2020-2025</p>	<p>-</p>	<p>\$100,000 per site per year (for Construction & Monitoring)</p>