

Project Name	Project Description	Lead Agencies
Oro Loma Interim Levee	<p>This project is intended to protect the Oro Loma wastewater treatment plant and surrounding industrial district from flooding. It includes a flood protection levee designed with meet today's 1% annual chance flood with allowance for mid-range sea level rise, but with a foundation system that allows for the levee to be elevated in the future to accommodate a higher elevation with sea level rise.</p> <p>The project also includes a new Bay Trail spur extending inland from the shoreline and could provide a connection across the rail line to San Lorenzo Community Park.</p> <p>A new tide gate and pump station on Bockman Canal is also proposed, which would be planned in coordination with ACFCD pending the results of their stormwater study.</p>	ACFCD, HASPA, Bay Trail, Oro Loma WWTP, EBRPD
Line A Tide Gate Improvement	<p>This project is pending the results of the Alameda County Flood Control District's study of the combined impacts of sea level rise (up to 2 feet) and increased precipitation on water levels in the bay and inland waterways.</p> <p>This study will examine potential flood control infrastructure needs throughout the service area, including San Lorenzo Creek, Sulphur Creek, Bockman Canal, Line A, and Line F. Other improvements are proposed to be integrated into adjacent flood protection levee projects, but Line A should move forward independently. The Line A tide gate will be relocated to connect the high points of the two landfills. Potential strategies include tide gate improvements, raising of canal walls, or other features to protect the service area from flooding from stormwater, sea level rise, and storm surge.</p>	ACFCD, HASPA
Cogswell Marsh Pilot	<p>This pilot project includes sediment placement to augment the marsh and a gravel beach along the shoreline to reduce marsh erosion. This pilot is intended to test these strategies as a sustainable strategy for adapting the area marshes. The pilot will be monitored as part of the ecosystem adaptive management plan and inform mid and long term restoration projects.</p>	EBRPD, BCDC, USACE

Hayward Marsh Restoration	This project aligns with the current Hayward Marsh Restoration Plan currently underway with East Bay Regional Park District. It is intended to promote the health and resilience of Hayward Marsh and incorporate new restoration projects for shoreline resilience. The design and management of Hayward Marsh will be informed by the pilot monitoring and the Ecosystem Adaptive Management Plan. This project includes the Least Tern Colony relocation, a gravel beach, tidal habitat restoration, and includes the diked bay lands east of the SMHM Preserve.	EBRPD, BCDC, USACE, ADFW, HASPA
Salt Marsh Harvest Mouse Preserve Interim Levee	<p>This project is an interim levee designed to preserve important endangered species habitat, as well as some of the critical infrastructure inland of the site such as the Calpine / Russel City Energy Center and the Hayward Waste Pollution Control Facility. It is intended to protect against today's 1% annual chance flood and in the future will remain as a buffer from more frequent storm events while the long-term Hayward Line of Protection project located further inland will provide greater protection to inland critical infrastructure.</p> <p>The project includes levee raising west of the SMHM preserve from the Solar Fields to the SE corner of the SMHM Preserve. It is planned to run along the current levee alignments from the Hayward Interpretive Center through HARD Marsh. A new spur of the Bay Trail would be provided on top of the levee.</p>	EBRPD, HASPA, HARD, ACFC
Oliver Salt Ponds Restoration	The timing of this project is dependent on the pilot monitoring of adjacent sites and the Adaptive Management Plan. Oliver Salt Ponds is vulnerable to sea level rise and its restoration can facilitate long-term resilience. Tidal habitat restoration is paired with new salt pond habitat that will provide similar shorebird habitat further inland, where it is less vulnerable to inundation. This project includes the Oliver Salt Ponds gravel beach, sediment placement, and the Salinas habitat north of Hayward Marsh and near West Winton Landfill.	EBRPD, BCDC, USACE, CDFW, HASPA

Landfill Vulnerability Assessment	The purpose of this project is to assess the existing conditions and resiliency issues of Alameda County and West Winton landfills. Both sites were closed in the 1970s but were not designed to experience inundation or wave action. The conditions of the cap and the contents of the landfill are largely unknown, and more data investigation and analysis are needed to understand how they may be impacted by erosion, coastal flooding, sea level rise, and groundwater emergence. Once this investigation has been done, design solutions and phasing for how to address these issues can be developed.	COH, ACFCF
Groundwater Management Plan	<p>The purpose of this project is to study the feasibility of various approaches for managing rising groundwater tables due to sea level rise. As the sea level rise maps demonstrate, portions of the industrial district and residential areas are vulnerable to potential groundwater emergence with 2 feet of sea level rise and with 4 or 7 feet of sea level rise greater portions of surrounding neighborhoods are also impacted.</p> <p>Rising groundwater cannot be mitigated through the approaches that address inundation from tides or coastal surge. Seepage barriers below seawalls or levees can mitigate temporary groundwater rise due to a coastal storm but are not effective at preventing elevated groundwater tables due to gradual sea level rise.</p>	COH, Property Owners
Stormwater Management Study	This project has already begun.	ACFCF
EBDA Study	The purpose of this study will be to gather information to inform the design of horizontal levee within the project area.	EBDA
Ecosystem Adaptive Management Plan & Monitoring	The purpose of this project is to develop an ecosystem management plan for the mosaic of existing and proposed wetland complexes in the Hayward Shoreline. This management plan will focus on identifying in greater detail the potential impacts of sea level rise on tidal wetlands and muted marshes through the development of an ongoing monitoring program. This will include monitoring of tide levels and sediment accretion, as well as tracking of changes in vegetation to identify potential triggers for restoration and to inform future restoration plans. This program can include opportunities for community stewardship and volunteering.	HASPA

Hayward Shoreline Interpretive Center Renovation	This project includes overall improvements to address structural and programmatic needs of the interpretive center including ADA access improvements and energy retrofits.	HARD
Sediment Pipeline	This project is to create a pipeline from the Don Castro Reservoir to the bay to provide a sediment source for restoration and adaptation projects. The Don Castro reservoir has filled with sediment, reducing its flood control capacity. This sediment has the potential to be piped in a slurry to the Hayward shoreline for reuse. Alameda County Flood Control District has studied the pipeline as a cost-effective piece of infrastructure that would increase flood capacity. There is great potential to utilize the sediment slurry in new restoration or adaptation projects to create a multi-benefit piece of infrastructure that can be utilized over time.	ACFCD, EBRPD, BCDC