



# TECOLOTE CREEK WETLAND AND WATER QUALITY IMPROVEMENTS

## Preliminary Engineering Report (PER)

Tecolote Creek discharges stormwater into the southeastern corner of Mission Bay at its furthest reach from the Pacific Ocean. The Creek provides drainage for roughly 9.7 square miles of highly urbanized land and stretches 7.2 miles from its source. Its discharge area is roughly bounded by Tecolote Shores Park, East Mission Bay Drive, Fiesta Island Road and Fiesta Island. Except for narrow patches of marsh and mudflat around its edges, there is no existing coastal marsh at the mouth of Tecolote Creek.

This PER provides a preliminary plan to create 16.2 acres of new salt marsh habitat by filling in portions of open water with sediment removed from slopes at the mouth of Tecolote Creek. It modifies the Fiesta Island Causeway, adding an open channel to improve circulation and tidal flushing. The plan also replaces some beach areas with sand dune features and coastal strand vegetation.

## Project Goals

- Improve water quality with better tidal circulation and vegetation that filters runoff and removes pollutants
- Restore San Diego wetlands
- Enhance habitat for native plants and birds
- Increase the biodiversity of Tecolote Marsh
- Create diverse, self-sustaining habitats that will survive sea level rise
- Maintain compatible recreation for park visitors



# Opportunities for Improvement

Element	Purpose
Open Channel	<ul style="list-style-type: none"> <li>Improve water circulation and tidal flushing between the basins on either side of the Fiesta Island Causeway</li> <li>Allow clear passage of birds and other wildlife</li> </ul>
Salt Marsh Wetland	<ul style="list-style-type: none"> <li>Create subtidal, mudflat, low marsh, mid marsh, high marsh, and transitional areas</li> <li>Improve drainage, help plants survive storm sediment, provide habitat for native species, improve water quality through natural filtration, and store carbon to reduce greenhouse gas emissions</li> </ul>
Dune Features	<ul style="list-style-type: none"> <li>Create a visual screen between Fiesta Island Road and marsh</li> <li>Increase biodiversity by adding coastal strand habitat</li> </ul>
Upland Habitat	<ul style="list-style-type: none"> <li>Support increased biodiversity of native plants and animals at the northern and western edges of the restoration area</li> </ul>
Bridge	<ul style="list-style-type: none"> <li>Maintain access across the open channel for park visitors</li> </ul>

