

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT: Thomas Mumley  
MEETING DATE: July 14, 2021

**ITEM: 7**

**Nature-Based Wastewater Treatment: Learning from the Oro Loma Horizontal**

**Levee** – Presentation by Jacqueline Zipkin, East Bay Dischargers Authority, and Angela Stiegler, University of California, Berkeley – Information Item

**DISCUSSION:**

This item will provide an overview of the successful Oro Loma Horizontal Levee pilot project, near the Oro Loma Sanitary District wastewater treatment plant in San Lorenzo, and possibilities for new or expanded horizontal levee projects based on lessons learned.

Instead of a traditional vertical levee to protect against storm surges and sea level rise, a horizontal levee uses vegetation on a gentle slope to break waves. Treated wastewater is the water supply for the vegetation. In addition to flood protection, a horizontal levee can provide ecosystem functions, such as habitat, food, and upland refuge for plants and animals, and treatment wetland functions that further process that live on horizontal levees can thrive while helping to further process and improve the quality of treated wastewater. This nature-based approach that provides multiple benefits in addition to enhanced wastewater management has generated a lot of interest in the Region.