

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

**STAFF SUMMARY REPORT: Alyx Karpowicz
MEETING DATE: October 8, 2025**

ITEM: 7

**Long-Term Flood Protection Plans for Nearshore Landfills and Industrial
Facilities – Informational Item**

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DISCUSSION:

This item provides an update on the Long-Term Flood Protection Plans submitted for 27 nearshore landfills and industrial facilities to comply with general waste discharge requirements adopted by the Board in February 2024 (Order R2-2024-0002 or Order). The Board imposed similar requirements on 16 other Bayfront municipal solid waste landfills with the adoption of Order R2-2022-0031 in October 2022.

The Long-Term Flood Protection Plans include a climate change vulnerability assessment and adaptation plan, and identify strategies for protection from flooding and inundation due to sea level rise, groundwater rise, and extreme climate/weather events. The plans also describe how vulnerable features and infrastructure will be protected, and how building uses and public access will be protected prior to the projected timing of sea level rise, groundwater rise, and extreme storm event impacts.

The Order required that two different planning horizons (i.e., 2050 and 2100) and flooding scenarios (“medium-high” and “extreme” risk aversion sea level rise scenarios) be considered to provide protection from the estimated 100-year storm event as described in the Ocean Protection Council’s 2018 Sea Level Rise Guidance (the official California sea level rise guidance). At the time the Order was adopted, the 2018 Guidance was the most current guidance document available; however, in May 2024, the Guidance was updated and new sea level rise scenarios were projected. Staff provided responsible parties with notice that updated guidance was available and should be referenced, specifically, the “intermediate” and intermediate-high” risk aversion sea level rise scenarios for the years 2050 and 2100.

Most of the landfills and industrial facilities included in the Order are located directly on the shoreline, making greener adaptation measures more difficult. In those cases, infrastructure improvements such as building seawalls or increasing the height of a levee, berm, or rip rap wall are proposed to address rising sea levels. Adaptation measures proposed at certain nearshore landfills and industrial facilities include wetland enhancement or creation and eel grass planting offshore to slow wave action. To address future groundwater rise, many landfills and industrial facilities are proposing

additional pumping from extraction wells or trenches, and disposal of groundwater and leachate at local wastewater treatment plants.

Most landfills and industrial facilities have committed to working collaboratively with cities, neighboring properties, and any other applicable permitting agencies that may have jurisdiction over planning and adaptation projects. For those landfill and industrial facilities that have not made this commitment, staff encouraged engagement and collaboration with other sites within their Operational Landscape Unit, as referenced in the San Francisco Estuary Institute's Adaptation Atlas. As the Long-Term Flood Protection Plans are updated every five years, we expect to start seeing some of the proposed adaptation measures and collaborative planning processes being implemented.