REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

EXECUTIVE OFFICER SUMMARY REPORT
AUGUST 13, 2025

ITEM 4a

SUBJECT
Staff from the Scripps Institution of Oceanography (SIO) will give a presentation on Phase One of their Pathogen Forecast Model, released in July 2025. Phase One of the Pathogen Forecast Model includes an online, five-day prediction of ocean sewage and swimming-related illness risk for beaches in the San Diego and Tijuana border region, from Coronado to Playas de Tijuana.

STAFF RECOMMENDATION
Informational item only. No action will be taken.

KEY ISSUE
Beach advisories and closures are determined based on retroactive sampling for fecal indicator bacteria. SIO's Pathogen Forecast Model relies on constant and forecasted parameters for weather, offshore current, tides, waves, flow from the lower Tijuana River, and discharges at Punta Bandera, to generate a five-day prediction of ocean sewage and swimming-related illness risk at the Region's southern beaches.

PRACTICAL VISION
Consistent with our Practical Vision values of leadership, stewardship, and communication, this item informs the San Diego Water Board and public of the most up-to-date scientific developments related to modelling of transboundary pollution.

DISCUSSION
Transboundary flows of untreated domestic and industrial wastewater originating in Tijuana result in significant and prolonged water quality impairments in the Region's near-shore coastal waters. Controlling transboundary flows from Mexico and improving border water quality is one of the Board's highest priorities. The purpose of this presentation is to inform the Board and the public on emerging research and modelling capabilities pertaining to transboundary pollution.

PUBLIC NOTICE
The San Diego Water Board included this item in its notice and agenda for the August 13, 2025 meeting.

SUPPORTING DOCUMENTS
None