REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

EXECUTIVE OFFICER SUMMARY REPORT December 11, 2024

ITEM 8

SUBJECT

State of the Ocean Report by the City of Oceanside; Marine Corps Base, Camp Pendleton; and Fallbrook Public Utility District on Status and Trends of Water Quality Conditions in the Vicinity of Oceanside Ocean Outfall. (*Joann Lim*)

STAFF RECOMMENDATION

This is an informational item, and the Board will not take an action.

KEY ISSUE

This item will provide the San Diego Water Board with information about the status of ocean water quality in the coastal waters surrounding the Oceanside Ocean Outfall (OOO). The City of Oceanside; Marine Corps Base, Camp Pendleton; and Fallbrook Public Utility District (Dischargers) discharge into the OOO and all three will report on the status of ocean water quality as required by their National Pollutant Discharge Elimination System (NPDES) Permit.¹

PRACTICAL VISION

This informational item is consistent with the Monitoring and Assessment chapter of the Practical Vision.² The purpose of the State of the Ocean Report is to transparently and effectively communicate findings and conclusions drawn from the Dischargers' NPDES permits ocean monitoring program to assess the impact of wastewater discharged through the OOO on the coastal marine environment.

DISCUSSION

The Dischargers are each regulated under three separate NPDES permits. The three NPDES permits require the same extensive ocean monitoring program to evaluate potential environmental effects associated with the discharge of treated wastewater and waste brine from their domestic wastewater treatment plants to the Pacific Ocean through

¹ The following Orders were adopted on February 12, 2020; became effective on April 1, 2020, and expires on March 31, 2025:

Order No. R9-2019-0166, as amended, NPDES No. CA0107433, Waste Discharge Requirements for the City of Oceanside San Luis Rey Water Reclamation Facility, La Salina Wastewater Treatment Plant, and Mission Basin Groundwater Purification Facility Discharge to the Pacific Ocean through the Oceanside Ocean Outfall.

Order No. R9-2019-0167, as amended, NPDES No. CA0109347, Waste Discharge Requirements for the Marine Corps Base, Camp Pendleton Southern Regional Tertiary Treatment Plant and Advanced Water Treatment Plant at Haybarn Canyon Discharge to the Pacific Ocean through the Oceanside Ocean Outfall.

Order No. R9-2019-0169, as amended, NPDES No. CA0108031, Waste Discharge Requirements for the Fallbrook Public Utility District, Fallbrook Water Reclamation Plant and Santa Margarita Groundwater Treatment Plant Discharge to the Pacific Ocean through the Oceanside Ocean Outfall.

² The San Diego Water Board Practical Vision is available at: https://www.waterboards.ca.gov/sandiego/water issues/programs/practical vision/

the OOO. Since secondary- and tertiary-treated wastewater and waste brine from the Dischargers treatment plants commingle before discharge to the ocean through the OOO, the Dischargers conducted a joint ocean monitoring program. A joint ocean monitoring program is permitted by the three individual NPDES permits. The data collected from the joint ocean monitoring program is used to determine compliance with receiving water condition requirements specified in the three NPDES permits. The ocean monitoring program for the three NPDES permits includes:

- 1. Surf Zone Water Quality Monitoring Requirements (visual observations, temperature, and bacterial indictors);
- 2. Nearshore and Offshore Water Quality Monitoring Requirements (visual observations, bacterial indicators, temperature and depth, dissolved oxygen, light transmittance, pH, salinity, and colored dissolved organic matter);
- 3. Sediment Assessment for Physical and Chemical Properties (sediment grain size, total organic carbon, total nitrogen, sulfide, metals, and other pollutants of concern);
- 4. Sediment Toxicity;
- 5. Benthic Community Condition (number of species, number of individuals per species, and total numerical abundance present);
- 6. Fish and Invertebrate Trawls (community structure and chemical analysis of the liver tissues):
- 7. Rig Fishing (tissue analysis and chemical analysis of the muscle tissues); and
- 8. Plume Tracking Monitoring.

Supporting Document No. 1 shows the location of the surf zone, nearshore, and offshore stations related to the OOO. The trawl and rig fishing stations include one near the outfall, one upcoast of the outfall, and one downcoast of the outfall.

The main objectives of the ocean monitoring program are to 1) provide data that satisfy NPDES permit requirements, 2) demonstrate compliance with NPDES permit receiving water limitations including California Ocean Plan water-contact bacteriological standards, 3) track movement and dispersion of the wastewater fields or plumes discharged through the outfall, and 4) identify any biological or chemical changes that may be associated with the wastewater discharge. These data are used to evaluate and document any effects of wastewater discharge, other anthropogenic influences (e.g., stormwater discharge, urban runoff), or natural factors (e.g., climate change) on coastal water quality, seafloor sediment conditions, and local marine organisms.

Attachment E, section V.B. of each of the NPDES permits require the Dischargers to participate in the Southern California Bight Regional Monitoring Program coordinated by the Southern California Coastal Water Research Project (SCCWRP), or any other coordinator named by the San Diego Water Board. During these coordinated sampling efforts, a portion of the Dischargers' receiving water sampling and analytical effort may be reallocated to provide a regional assessment of the impact of the discharge of wastewater to the Southern California Bight. By letter dated September 6, 2023, the San Diego Water Board approved the reallocation of funds from the receiving water program to participate in the Southern California Bight '23. The letter included the reallocation of funds to perform benthic monitoring at Offshore Station B1 to SCCWRP to perform benthic monitoring at one regional reference station. The Dischargers were directed to incorporate the benthic monitoring results from the regional reference station into its receiving water monitoring report, due October 2, 2024. If the results of the Southern California Bight '23

monitoring are not available by the due date, the Dischargers were directed to incorporate the monitoring results of the Southern California Bight '18 study.

Supporting Document No. 2 is the Dischargers' September 30, 2024, Receiving Water Monitoring Report which contains data files, detailed sample methodologies, and other pertinent information regarding the ocean monitoring program for the OOO.

LEGAL CONCERNS

None.

PUBLIC NOTICE

The agenda notice for today's meeting was posted on the San Diego water Board's website and sent to subscribers to the email list for Board meetings. This satisfies the Bagley-Keene Open Meeting Act requirements to publish the meeting notice and agenda.

SUPPORTING DOCUMENTS

- 1. Receiving Water Monitoring Stations for the Oceanside Ocean Outfall
- 2. Receiving Water Monitoring Report for the Oceanside Ocean Outfall, dated September 30, 2024