Regional Water Quality Control Board
North Coast Region
Staff Summary Report
May 7-8, 2026

ITEM: #7

SUBJECT: Public Hearing to consider adoption of proposed Waste Discharge Requirements Order No. R1-2026-0014 for the California Polytechnic State University, Humboldt, Telonicher Marine Laboratory, WDID No. 1B12187NHUM, NPDES Permit No. CA0025151 (Justin McSmith).

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements Order No. R1-2026-0014. The Order will serve as a National Pollutant Discharge Elimination System (NPDES) permit for a period of five years.

BACKGROUND: The California Polytechnic State University, Humboldt (Permittee) owns and operates a teaching and marine research institute at Telonicher Marine Laboratory (Facility). The Facility is currently regulated under Waste Discharge Requirements Order No. R1-2019-0037, which serves as an NPDES permit for waste seawater discharges to surface water. The Facility is located within the Trinidad Head Area of Special Biological Significance (ASBS) at 570 Ewing Street, Trinidad, Humboldt County.

The Facility supports education and research for the department of Oceanography, Fisheries Biology, and Biology (Marine Biology option). The Facility also serves a public outreach function, including guided tours and summer programs led by marine naturalist, and self-guided tours of the laboratory's exhibits (public display aquaria and touch tanks).

The Facility has two large instructional classrooms/laboratories, offices for fourteen faculty and graduate students, specialized research laboratories, an algal and zooplankton rearing area, and other rooms that support education and research. A recirculating seawater system supplies classrooms, a wet laboratory, and public display aquaria and touch tanks with high-quality filtered seawater.

The Facility discharges waste seawater and filter backwash at Discharge Point 001 to the Pacific Ocean and has a facility design flow of 123,232 gallons per day (gpd). The Facility is classified as an NPDES minor discharge.

Treatment operations at the Facility include two sand filters, two chillers, and intake suction hose equipped with a quarter inch mesh screen. The Permittee occasionally uses a small ultraviolet light sterilizer. Projects involving non-native or invasive species are conducted in isolated systems and do not contribute wastewater to the waste seawater system. Water from floor drains is discharged to the septic system.

The most frequent discharge from the Facility's waste seawater system consists of filter backwash. Sand filters are backwashed one to two times per month, resulting in roughly 7,000 to 15,000 gallons of filter backwash water. Other intermittent discharges arise from the following:

1. Discharge from draining and refilling the two approximately 20,000-gallon underground storage tanks (40,000 gallons total).

2. Discharge from overflow caused by operating the pier pump after the storage tanks are full, estimated at 50,000 gallons per year.

3. Discharge from "sump diversion", which involves draining seawater instead of returning it to the sump to periodically replace a portion of older recirculating seawater with new seawater, estimated at 50,000 gallons per year.

4. Discharge from draining approximately 2,000 gallons from the sump during routine preventive maintenance. The sump is emptied and cleaned once per year during the summer to prevent check valve malfunction.

5. Discharge from incidental spills, leaks, and draining of display aquariums, estimated at 46,000 gallons per year.

DISCUSSION: Order No. R1-2026-0014 (Proposed Permit), replaces Order No. R1-2019-0037 (Previous Permit). While the Previous Permit expired on December 31, 2024, it was administratively extended pending issuance of a new permit pursuant to California Code of Regulations, title 23, section 2235.4.

The Proposed Permit continues to prescribe water quality-based effluent limitations for total suspended solids, settleable solids, pH, turbidity, arsenic, copper, nickel, zinc, cadmium, chromium, and polynuclear aromatic hydrocarbons (PAHs). The Proposed Permit further retains the special provisions which require studies and reports to ensure compliance with the operations, toxicity, and source control requirements.

Noteworthy changes to the Proposed Permit include the following:

1. **Storm Water Revisions.** The Facility previously discharged seawater to a single pipe, shared with their direct storm water discharge to Trinidad Bay. The Facility now captures and drains all storm water to the City of Trinidad's Municipal Separate Storm Sewer System (MS4) that discharges storm water into inground infiltration basins. Therefore, storm water monitoring location EFF-001C has been removed along with storm water monitoring requirements that will now be permitted under the City of Trinidad's MS4 Permit. (Factsheet Section 3.5.2, 6.2.5.1. and throughout)

2. **Removal of Receiving Water Limitations.** This Order removes generalized receiving water limitations contained in the Permittee's prior waste discharge requirements. The removal of this requirement is consistent with the U.S. Supreme Court's decision in *City and County of San Francisco, California v. Environmental Protection Agency* (2025). (Factsheet section 5.1)

4. **Chromium and Cadmium.** Reasonable potential analysis resulted in effluent limitations for chromium and cadmium. (Section 4.1.1. and MRP Section 4.2.1 Factsheet Section 4.3.5.).

5. **Lead, Mercury, and Bis(2-ethylhexyl)phthalate.** Reasonable potential analysis resulted in removal of effluent limitations for lead, mercury, and bis(2-ethylhexyl)phthalate. (Factsheet Section 4.3.4.1 and 4.4.1).

6. **Monitoring and Reporting Requirements.** Changes to the monitoring and reporting requirements have been made as follows:

    a. **Toxicity Monitoring Requirements.** The Test of Significant Toxicity (TST) method was removed from the required methods for monitoring. (MRP Section 4.2.1 Factsheet Section 4.3.6).

A copy of the Draft Permit was posted on the Regional Water Board website and was available for public comment from January 12, 2026, and February 13, 2026. A comment letter was received from the Permittee on February 13, 2026. No other comments were received. Several modifications to the Draft Permit were made in response to the Permittee's comments. Additionally, staff initiated changes were made following circulation of the Draft Permit. The changes do not materially impact Permittee or substantively modify permit requirements. Detailed responses to the Permittee and explanation of staff-initiated changes are included in the attached Response to Comments document.

Staff notified the Permittee of the proposed changes on March 18, 2026. The Permittee found the responses and modifications acceptable. Staff anticipates the Proposed Permit will be uncontested.

RECOMMENDATION: Adopt Order No. R1-2026-0014 as proposed.

SUPPORTING DOCUMENTS:

1. Proposed Order No. R1-2026-0014
2. Response to Comments Document
3. Notice of Public Hearing
4. California Poly Technic State University, Humboldt comment letter will be provided to Board members and is available to the public upon request. To access this document please contact Justin McSmith at Justin.McSmith@waterboards.ca.gov or (707) 576-2082.