

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

**STAFF SUMMARY REPORT: Kerry O'Connor and Aidan Cecchetti
MEETING DATE: September 9, 2026**

ITEM: 5

Nutrients Watershed Permit 2026 Update – Informational Item

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DISCUSSION

This informational item provides an update on recent work related to the 2024 Nutrients Watershed Permit, Order R2-2024-0013, which regulates discharges from 40 municipal wastewater treatment plants (dischargers) to the San Francisco Bay (Bay).

In 2022, a major harmful algal bloom fueled by inorganic nitrogen in the Bay caused mass fish kills. To protect aquatic life and the beneficial uses of the Bay, the 2024 Nutrients Watershed Permit requires a 40 percent reduction in inorganic nitrogen loads from the dischargers compared to the 2022 dry season over a 10-year compliance schedule (i.e., by 2034). After just 2 years into the 10-year compliance schedule, dischargers have already made progress toward that 40 percent reduction requirement.

The 2024 Nutrients Watershed Permit requires annual reporting on inorganic nitrogen loading and trends, as well as specific annual milestones to be completed by the dischargers as part of the compliance schedule. In 2025, the dischargers reported an approximate 5 percent decrease in their inorganic nitrogen loading when compared to 2024 and an approximate 6 percent decrease relative to 2022. For their annual compliance schedule milestone in 2025, we required the dischargers to evaluate potential nutrient reduction projects they had identified in the previous annual report for each of their facilities to conclude which projects or combinations of projects best fit the needs of their facilities. Dischargers also submitted optimization schedules, as relevant, and reported on the implementation of those schedules.

In addition to the dischargers that identified potential compliance plans in accordance with the compliance schedule described above, 8 of the 36 wastewater treatment plants with final effluent limits already perform sufficient nutrient removal to comply with those limits, and 23 dischargers have nutrient reduction projects in progress. Among those 23 dischargers, 2 have recently completed designs for their projects, 8 are conducting pilot studies or pursuing optimization efforts, and 7 have projects that are currently in construction.¹ The 6 remaining dischargers with active projects are pursuing multi-benefit projects including nature-based systems (in feasibility to implementation phase) or recycled-water projects (new or expanded capacity) or both. Because a regional nutrient trading framework is still in development, several of the smaller dischargers have evaluated what it would take to upgrade their facilities but are awaiting the

¹ Of the Dischargers that are piloting, have completed designs, or are in construction, 6 are considering or have implemented multi-benefit nature-based solutions or recycled-water projects.

framework details before making final decisions on their most advantageous compliance pathways. In our presentation, we will describe the types of projects planned or underway and trends in nutrient data in greater detail.

For next year's compliance schedule milestone, the dischargers are required to submit compliance plans and implementation schedules for the construction of their identified nutrient reduction projects. Additionally, the dischargers completing projects that are multi-benefit solutions, such as treatment wetlands, will submit governance plans to document legal commitment to their projects.

Our presentation will also describe the dischargers' Scoping Plan 2026 status report, which primarily focuses on nutrient trading work facilitated by the Freshwater Trust, and work conducted by the San Francisco Estuary Institute (SFEI) on the Nutrient Management Strategy with financial support from the dischargers. The Nutrient Management Strategy continues to gather more information on nutrients, harmful algal blooms, and past and future impacts to the Bay to inform future regulations. Work this past year has continued to address these topics through modeling, monitoring, literature research, lab and field work, and communicating with interested parties. Additionally, the Bay Area Clean Water Agencies are actively working with The Freshwater Trust to develop a point source to point source nutrient trading framework for the region.