
North Coast Regional Water Quality Control Board

Regional Water Quality Control Board North Coast Region Staff Summary Report June 13-14, 2024

ITEM: 6

SUBJECT: Tour of Santa Rosa Water's Laguna Wastewater Treatment Plant

BOARD ACTION: This is an informational item; no action will be taken by the Board.

BACKGROUND: The City of Santa Rosa (City) operates the City of Santa Rosa Regional Water Reuse System, Laguna Treatment Plant, discharging treated wastewater under NPDES Permit, Order No. R1-2020-0012, as amended by Order No. R1-2021-0041.

The Laguna Treatment Plant provides tertiary treatment and ultraviolet light disinfection of municipal wastewater and has an average dry-weather design flow of 21.34 million gallons per day (mgd). Treated wastewater is discharged to an effluent storage pond system prior to discharge to the water reclamation system or the surface water discharge system. The pond system consists of Brown Pond; Meadow Lane Ponds A, B, C, and D; and Delta Pond. The combined maximum capacity of the existing storage ponds is 1,650 million gallons. The storage ponds allow the Permittee to control the timing, location, and volume of discharge to protect beneficial uses of the receiving water and provide a source of recycled water during the surface water discharge prohibition period. Additionally, discharges of municipal wastewater to surface waters are limited to no more than one-percent of the flow of the receiving water during the period of October 1 through May 14.

Instead of establishing a numeric water quality-based effluent limitation for total phosphorus, the permit for the facility includes a narrative (BMP-based) effluent limitation, expressed as “no net loading.” The “no net loading” effluent limitation represents a conservative effluent limitation to control phosphorus loading to water bodies of the Laguna de Santa Rosa and to prevent further water quality degradation. Compliance with the “no net loading” effluent limitation for total phosphorus is determined through compliance with the Regional Board’s Water Quality Trading Framework.

The City's Regional Water Reuse System is a leader in water reuse. The City has been using recycled water for over 40 years. Today, about 98% of the City's tertiary-treated recycled water is used to irrigate approximately 6,400 acres of agricultural lands and public and private urban landscaping, and for the Geysers Recharge Project to generate electricity.

RECOMMENDATION: N/A

SUPPORTING DOCUMENTS: [Water Reuse | Santa Rosa, CA \(srcity.org\)](https://www.srcity.org/water-reuse)