Regional Water Quality Control Board North Coast Region Executive Officer's Summary Report April 7, 2022

ITEM: 2

SUBJECT: Public Hearing on Order No. R1-2022-0004 to consider adoption of proposed Waste Discharge Requirements (WDRs) for the Gualala Community Services District (CSD) Wastewater Treatment Facility and Recycled Water System, WDID No. 1B89005RMEN (Matthew Herman)

BOARD ACTION: The Board will consider adoption of WDRs Order No. R1-2022-0004.

BACKGROUND: The Gualala Community Services District (Permittee) owns and operates the Gualala CSD Wastewater Treatment Facility (Facility), a domestic wastewater treatment plant that serves the community of Gualala in Mendocino County, and the Sea Ranch North Sanitation Zone in Sonoma County (Sea Ranch North). Gualala's median household income (MHI) of \$56,648 is less than 80 percent of the California MHI, which qualifies the area as a disadvantaged community per the State Water Board Division of Financial Assistance (DFA) criteria.

The Facility has an average dry weather design treatment capacity of 0.131 million gallons per day (mgd), an average wet weather treatment capacity of 0.151 mgd, and a peak hour wet weather treatment capacity of 0.269 mgd. The wastewater treatment system includes two aerated ponds and two clarifiers for secondary treatment, a travelling bridge and fine screen filter for tertiary treatment, and a chlorine contact chamber for disinfection. The Facility is designed as an extended aeration activated sludge plant.

The Facility includes four effluent storage ponds with a combined capacity of 28.4 million gallons. Three of the ponds, totaling 20 million gallons of capacity, are located adjacent to the Facility. The fourth pond, with a capacity of 8.4 million gallons, is located at the Sea Ranch North site. The stored recycled water is delivered to the 80-acre Sea Ranch Golf Links through an 8-inch diameter pipeline for irrigation of turf grass within the fairways, tee boxes, and greens. The Permittee has a Title 22 Recycled Water Engineering Report that was approved by the State Water Board, Division of Drinking Water that allows for the production, distribution, and use of recycled water on the golf course at Sea Ranch.

The Permittee's ROWD includes an analysis of recycled water capacity, noting that storage pond capacity may be inadequate during periods of above average precipitation. The Permittee has identified that constructing additional recycled water ponds to increase storage capacity during extreme wet weather conditions is not an immediately available solution due to the Permittee's limited financial resources. Previous rehabilitation work on the Permittee's lift stations has demonstrated a 35 to 40

percent reduction in the Facility's wet-weather influent flows by reducing inflow and infiltration of rainwater into the collection system and ultimately into the Facility during wet weather events. As such, the Permittee has focused its efforts on addressing inflow and infiltration issues in its collection system. The Permittee is currently seeking financial assistance in the form of grants and/or low-interest loans from DFA for several Facility upgrade projects to improve treatment operations and expects a portion of this funding to allow significant rehabilitation of their collection system. Additionally, the Permittee is planning to add flow meters to their lift stations and complete a rain study to better determine sources of inflow and infiltration during wet weather events.

The Permittee has requested that this Order provide allowance for use of the approximately two-million gallon percolation pond at The Sea Ranch Golf Links for subsurface disposal during periods of above average precipitation when the storage ponds are filling to capacity. According to the ROWD, the percolation pond has the capacity to percolate up to 600,000 gallons per day. This percolation pond has been used for disposal of disinfected tertiary effluent in recent years when all storage ponds have filled during periods of extreme wet weather and effluent and groundwater monitoring data showed that limited use of the percolation pond for effluent disposal has not resulted in impacts to groundwater. Therefore, the Proposed Order includes effluent and groundwater monitoring requirements for occasional use of the percolation pond under specific conditions identified in section IV.E (Land Discharge Requirements) of the Proposed Order.

As an alternative to installing new recycled water storage ponds, Gualala CSD and The Sea Ranch Golf Links are also investigating the potential to convert other existing ponds at the golf course for future recycled water storage. This project is not expected to eliminate the recycled water storage capacity deficit but is expected to reduce any need to direct effluent water to The Sea Ranch Golf Links percolation pond. It has been estimated that an additional eight million gallons of recycled water storage may be required to eliminate the use of the percolation pond during extreme wet weather conditions.

Historically, Gualala CSD, Sea Ranch North, and The Sea Ranch Golf Links have been regulated by separate WDRs, Order Nos. 92-120, 92-121, and 94-004 (Previous Orders), respectively. Proposed Order No. R1-2022-0004 will serve as a single waste discharge requirements permit and a master water recycling permit, thus replacing all three Previous Orders.

DISCUSSION: The Proposed Order continues to prescribe technology-based effluent limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS), and effluent limitations for total coliform bacteria, turbidity, and pH. The Proposed Order also include requirements for the production, distribution, and use of recycled water as well as requirements that apply during periods of sustained wet weather.

The Proposed Order further includes special provisions which require studies and reports to ensure compliance with the operations, recycled water, source control, and biosolids disposal requirements. Additionally, a special study requirement for the

preparation and submittal of a Disaster Preparedness Assessment Report and Action Plan has been included in the Proposed Order. Other noteworthy changes to the Proposed Order include the following:

- 1. Recycled Water Requirements. The Proposed Order serves as waste discharge and master recycling requirements. It combines components of Order Nos. 92-120 (WDRs for Gualala CSD), 92-121 (Water Reclamation Requirements for Gualala CSD and Sea Ranch Village Incorporated Sea Ranch Golf Links), and 94-004 (WDRs for County of Sonoma County Service Area #6 Sea Ranch North Wastewater Treatment and Disposal Facilities). Thus, the Proposed Order includes Water Recycling Requirements (Order section IV.C), Recycled Water Use Site Specifications (Order section IV.D), and Land Discharge Requirements that apply for any discharges to the percolation pond (Order section IV.E).
- 2. **Disinfection Process Requirements.** The requirement from the Previous Order No. 92-120 that a minimum chlorine residual of 1.5 mg/L be maintained at the end of the chlorine contact basin (before dechlorination) has been replaced by Title 22 chlorine disinfection requirements for recycled water, as specified in section B.2 of the Proposed Order.
- 3. Septage Receiving. The Proposed Order includes language that would allow the Permittee to accept septage at an approved septage receiving station upon approval of a septage management program by the Regional Water Board Executive Officer. The Permittee would need to submit a written septage management plan for such approval. The Permittee is not currently proposing to accept and treat domestic septage. (Order section III.M)
- 4. Land Discharge Requirements. The Proposed Order allows for the occasional use of the percolation pond at The Sea Ranch Golf Links for disposal of excess disinfected tertiary effluent during above-average wet-weather years. The Proposed Order requires the Permittee to demonstrate that recycled water storage and use has been managed to minimize the potential for needing to discharge to the percolation pond and that the discharge is necessary to prevent uncontrolled releases of stored effluent due to circumstances that are beyond the control of the Permittee.
- 5. **Revised Basin Plan receiving water limitations.** A new Basin Plan groundwater toxicity receiving water objective is included in the Proposed Order to implement the 2016 amendments to the Basin Plan. (Order section VII.A.6)
- 6. **Compliance Determination Language.** The Compliance Determination section of the Proposed Order provides clarity on how compliance with Order requirements will be determined. (Order section IX)
- 7. **Monitoring and Reporting Requirements.** Changes to the monitoring and reporting program (MRP) have been made as follows:

- a. MRP Table E-1, Monitoring Station Locations identifies all monitoring locations and provides a description of each one. Monitoring location names are identified to prepare for future electronic monitoring through the State's data management system.
- b. MRP Table E-5 requires reporting of information and calculations to demonstrate that recycled water use at The Sea Ranch Golf Links is being applied at hydraulic and nutrient agronomic rates and that other Title 22 requirements are being met (no soil saturation, ponding, or runoff off site, signage in place, no vectors). (MRP section III.D)
- c. Storage pond monitoring requirements are included both for recycled water storage ponds and the influent storage pond at Sea Ranch North. With the adoption of the Proposed Order, the Sea Ranch North WDRs (Order No. 94-004) will be rescinded. Since Gualala CSD is accepting wastewater from Sea Ranch North pursuant to an agreement, it is appropriate that this monitoring be included in the Gualala CSD WDRs. (MRP section III.G)
- d. Land discharge monitoring requirements include extra reporting requirements that apply when wet weather causes recycled water storage ponds to fill above specified levels (MRP section III.H.1), as well as monitoring and reporting requirements when discharges occur to the percolation pond (MRP sections III.H.2 and IV.1).
- e. Sanitary sewer system reporting requirements in MRP section V.B.2.h are included to demonstrate that the Permittee continues to work on measures to address infiltration and inflow to minimize the impact of wet weather on the treatment plant and particularly the recycled water storage ponds in order to minimize the need for use of the percolation pond disposal option.
- f. The MRP includes a new annual volumetric reporting requirement to implement the requirements of the State Water Board Recycled Water Policy (MRP section 10.4.3).

A copy of the Draft Order was posted on the Regional Water Board website and was available for public comment from December 15, 2021 through January 14, 2022 for the 30-day comment period. Regional Water Board Staff (staff) received a single comment letter from the U.S. Fish and Wildlife Service (FWS) within the allotted public comment period. A description of the comment received, and staff's response is provided in the attached Response to Comments document. The comments and staff's response are summarized below.

The FWS provided comment that the Permittee can view the FWS's planning tool, the IPac System, which streamlines the environmental review process, and generate a species list to determine if consideration is required to any applicable listed species in the action area of the Proposed Order. Regional Water Board staff identified that Section II.I of the Proposed Order specifies that the Permittee is responsible for meeting

all requirements of the applicable Endangered Species Act. No changes were made to the Draft Order in response to this comment.

After the end of the public comment period, staff identified several items in the Draft Order that required correction through staff-initiated changes. These corrections are explained in detail within the Response to Comments document and notable changes are as follows:

- 1. The Draft Order did not identify that the effluent limitations for tertiary treated recycled water identified in Section IV.A of the Order also apply to the discharge of disinfected tertiary treated effluent to the percolation pond. Section IV.E of the Proposed Order was updated to clarify this relationship.
- 2. Tables within the MRP were identified with a Prefix of "E" in the Draft Order and should have been identified with a "D", representative of the MRP's Attachment designation. The MRP tables and any references to such has been corrected to use a prefix of "D".
- 3. Table E-1 of the Draft Order's MRP has been modified to list Monitoring Locations INF-001, INF-001A, INF-001B(2), and INF-001C in separate rows to better clarify these locations.
- 4. Table Note 1, within Table D-8 of the Proposed Order was omitted from the Draft Order. The Table note has now been included and identifies that the minimum monitoring frequency disinfected tertiary effluent water to the percolation pond shall be at the initiation of the discharge and weekly thereafter until the discharge ceases.

Staff discussed all staff-initiated changes made to the Proposed Order with the Permittee during a January 18, 2022 virtual meeting. The Permittee indicated to staff that the changes made to the Proposed Order are acceptable and are consistent with how the Permittee understands the Order. A summary of all changes made to the Proposed Order, using strikethrough and underline formatting, is provided in the attached Response to Comments document. Staff anticipates that the Proposed Order will be uncontested.

RECOMMENDATION: Adopt Order No. R1-2022-0004, as proposed.

SUPPORTING DOCUMENTS:

- 1. Proposed Order R1-2022-0004
- 2. Notice of Public Hearing
- 3. Response to Comments (Comment letter available upon request)