#### STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

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#### STAFF REPORT FOR REGULAR MEETING OF JUNE 28, 2018 Prepared on May 23, 2018

#### ITEM NUMBER:

SUBJECT: Woodlands Mutual Water District, Waste Discharge Requirements and Water Recycling Requirements, San Luis Obispo County, Order No. R3-2018-0002

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#### **KEY INFORMATION**

Location:	1775 Via Entrada, Nipomo, CA 93446
Type of Discharge(s):	Title 22 Reclaimed Municipal Wastewater
Design Capacity:	240,000 gallons per day
Treatment:	Disinfected Tertiary Recycled Water
Disposal:	Irrigation of Golf Courses, Vineyard, and Landscape Buffer Areas
Reclamation:	Yes
Existing Orders:	00-139, WQ 2016-0068-DDW
Owner/Operator:	Woodlands Mutual Water Company
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# THIS ACTION: Consider Adoption of Waste Discharge Requirements and Water Recycling Requirements Order No. R3-2018-0002

#### SUMMARY

Woodland Mutual Water Company (Discharger) is currently regulated by two permits:

- Waste Discharge Requirements (WDRs) Order No. 00-139 for the production of Title 22 recycled water and use in golf course areas.
- Water Reclamation Requirements for Recycled Water Use Order WQ 2016-0068-DDW to deliver and use disinfected, tertiary treated, municipal wastewater for irrigating two golf courses and new vineyard and landscape buffer areas, at the Woodlands development on the Nipomo Mesa.

100% of the recycled water that is produced at the Woodlands wastewater treatment and water recycling facility is used within the confines of the 957-acre Woodlands development.

This update consolidates multiple permits, specifies the Discharger as the "administrator" for the use of recycled water, and updates information contained in both Order No. 00-139 and the monitoring and reporting program.

## DISCUSSION

## Background

On November 29, 2000, the Central Coast Regional Water Quality Control Board adopted Waste Discharge Requirements Order No. 00-139 for the treatment and discharge of reclaimed water by the Woodlands Mutual Water Company, serving a proposed residential and commercial development in San Luis Obispo County. The Woodlands development is located on the Nipomo Mesa, bordering Highway 1, approximately 2/3 of a mile south of Willow Road.

The 957-acre area as originally planned included 1,320 clustered residential units, a 500-unit resort, three golf courses, a community center, a business park, an elementary school, and recreational facilities. Wastewater treatment and water recycling facilities are located in the southwest corner of the development property. The full build-out of the Woodlands development was delayed due to economic conditions, and the plan has now evolved from originally including a third golf course irrigated with reclaimed water to instead installing a 113.5-acre vineyard with surrounding buffer areas to be irrigated with reclaimed water (see Attachment 1).

Phase 2 of the wastewater treatment and water reclamation facility is currently underway and includes the addition of a fourth treatment pond and a second tertiary filter to ensure adequate capacity to accommodate development build-out. Full build-out of the development includes the construction of 405 additional single-family dwellings.

The Woodland Mutual Water Company enrolled in General Order WQ 2016-0068-DDW in January 2018 to permit the expeditious use of reclaimed water for irrigation of the vineyard and landscape buffer areas.

## **Groundwater Quality**

The Woodlands development is located within the Lower Nipomo Hydrologic Sub-Area of the Santa Maria Groundwater Basin. The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) lists the beneficial uses for groundwater in this area as Municipal and Domestic Supply (MUN) and Agricultural Supply (AGR). Analysis of groundwater quality in this agricultural area show generally increasing concentrations of total dissolved solids (TDS) and nitrate in monitoring wells. Figure 1 is taken from a recent twice-yearly groundwater monitoring report and shows the locations of monitoring wells and groundwater elevation contours. As shown in Figure 1, the general groundwater flow direction is toward the southwest. Figures 2 and 3 show concentration trend lines for nitrate as N and TDS in select monitoring wells. Figures 2 and 3 illustrate that the highest concentrations of nitrate and TDS are found in MW3 and appear to originate off-site.

The Santa Maria Groundwater Basin is an adjudicated basin with a long-term plan to develop a salt and nutrient management plan to address the groundwater quality issues present throughout the Nipomo Mesa Management Area.

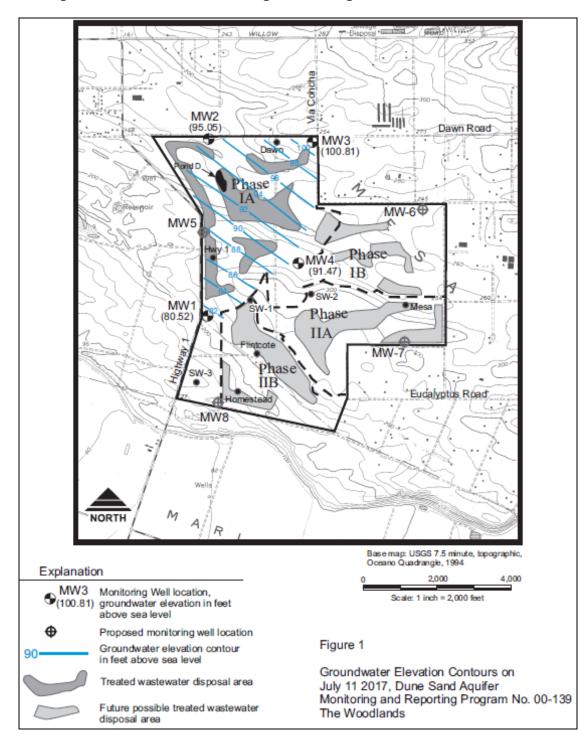
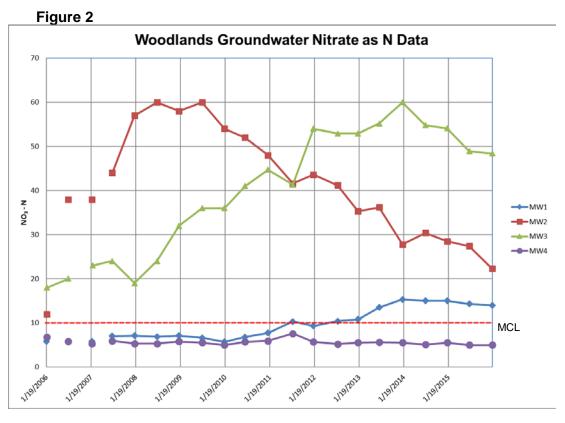
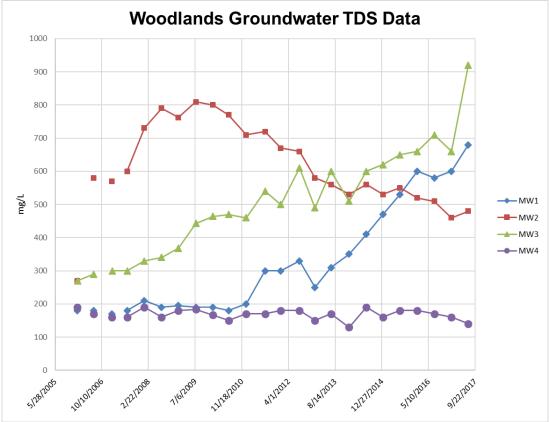


Figure 1. Location of monitoring wells and groundwater elevation contours







# **Violations History**

The Discharger has consistently not met the facility's TDS limit since it began operations and has incurred a TDS effluent violation virtually every month they have been in operation. The Nipomo Mesa as a whole usually fails to meet the Basin Plan's groundwater quality objective of 710 mg/L for TDS. Plans are in place to use the Santa Maria Groundwater Basin Characterization and Planning Activities study as the foundation for the development of a salt and nutrient management plan for this adjudicated basin. The Discharger is participating in the development efforts.

The current point of compliance for TDS is prior to the reclaimed water's being placed in the reclaimed water storage units. The storage units consist of lined ponds where the reclaimed water is mixed with other water prior to being used for irrigation. With this updated permit, the point of compliance will be moved to the storage units and the effluent limit mean will be a rolling 6-month average. The new sampling locations and limit methodology will produce data more representative of the discharges occurring at the recycled water irrigation sites.

The Discharger will be required in this updated permit to develop and implement steps to reduce TDS in the reclaimed water delivered. It is anticipated that the change of point of compliance along with the steps taken to reduce TDS will result in a discharge that meets the facility's TDS limit.

## **New Requirements**

New requirements in proposed Waste Discharge Requirements and Water Recycling Requirements Order No. R3-2018-0002 (Order) and the associated Monitoring and Reporting Program (MRP) include:

- 1. A requirement that within one year of the adoption date of the Order, the Discharger submit a study analyzing the steps that will be taken to reduce TDS in the water delivered to all reclaimed water users.
- 2. A new provision requiring the completion and development of a groundwater monitoring network by installing wells MW5, MW6, MW7, and MW8 (Figure 1) within one year of the adoption of the Order.
- 3. A new point of compliance for total dissolved solids will be located within each reclaimed water storage unit, and the effluent limit mean will be a rolling 6-month average.
- 4. The MRP will now require electronic submittal of all reports, documents, and laboratory data to the GeoTracker database.

# CONCLUSION

The proposed Waste Discharge Requirements and Water Recycling Requirements Order consolidates producer and user permits into one document. The Order clarifies changes to the Woodland development since Order No. 00-139 was adopted and to the responsibilities of the Discharger as the administrator of the recycled water program with compliance and reporting responsibility. The Order moves the point of compliance and requires the Discharger to take steps to reduce salts (i.e., TDS and chloride).

# RECOMMENDATION

Adopt proposed Waste Discharge Requirements and Water Recycling Requirements Order No. R3-2018-0002.

# ATTACHMENTS

- 1. Woodlands Project Map
- 2. Process Design Diagram
- 3. Waste Discharge Requirements and Water Recycling Requirements, Draft Order R2-2018-0002
- 4. Draft Monitoring and Reporting Program No. R3-2018-0002

WDR Program ECM # 272964

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