



Central Valley Regional Water Quality Control Board

25 October 2022

Tom Dogias
Yolo County Housing Authority
Davis Migrant Center
147 West Main Street
Woodland, CA 95696

CERTIFIED MAIL
7020 1810 0002 0569 6106

NOTICE OF APPLICABILITY

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS
ORDER WQ 2014-0153-DWQ-R5380
FOR
YOLO COUNTY HOUSING AUTHORITY
DAVIS MIGRANT CENTER WASTEWATER TREATMENT FACILITY
YOLO COUNTY**

Yolo County Housing Authority submitted a Report of Waste Discharge (RWD) dated September 2017 for the Davis Migrant Center Wastewater Treatment Facility (WWTF) in Yolo County. The WWTF is currently regulated under Waste Discharge Requirements (WDRs) Order 5-01-030. Based on information provided, the treatment system and discharge are consistent with the requirements of the State Water Resources Control Board's *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems*, Order WQ 2014-0153-DWQ (General Order).

This Notice of Applicability (NOA) provides notice that the General Order is applicable to the site as described below. The discharge is assigned enrollee number **WQ 2014-0153-DWQ-R5380**. Please include this number on all correspondence related to this discharge. A copy of the General Order WQ 2014-0153-DWQ is enclosed and also available on the [Water Boards Adopted Orders webpage](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wq2014_0153_dwq.pdf) (http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wq2014_0153_dwq.pdf).

You should familiarize yourself with the entire General Order and its attachments, which describe mandatory discharge and monitoring requirements. The General Order contains operational and reporting requirements by wastewater system type. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached Monitoring and Reporting Program

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

(MRP) No. 2014-0153-DWQ-R5380. Yolo County Housing Authority is responsible for all the applicable requirements that exist in the General Order and this NOA.

REGULATORY BACKGROUND

Waste Discharge Requirements (WDRs) Order 5-01-030, adopted by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 26 January 2001, prescribes requirements for wastewater treatment and disposal at the Davis Migrant Center. Upon issuance of this NOA, WDRs Order 5-01-030 will be revoked at an upcoming Central Valley Water Board meeting. Effective upon revocation of Order 5-01-030, the discharge described in this NOA shall be regulated pursuant to the General Order.

FACILITY AND DISCHARGE DESCRIPTION

Yolo County Housing Authority (hereafter “Discharger”) owns and operates the Davis Migrant Center Wastewater Treatment Facility located at 31150 County Road 105 in Yolo County. The Davis Migrant Center (Center) provides seasonal housing for migrant workers during the harvest season. The Center is situated on a 16.27-acre parcel (Assessor’s Parcel No. 33-150-37), approximately 4 miles southeast of the City of Davis, in Section 6, T7N, R3E, MD&M as shown on Attachment A, which is attached hereto and is made part of this NOA by reference.

The Center has been operating since 1969 and current facilities were built in 2003 and 2004. There are 62 rental units to house residents, two staff housing units, one laundry facility, community center, day care center, office, and maintenance shop. During the harvest season (months of April through mid-October), occupancy ranges from 300 to 400 residents. During the off-season months (November through March), maintenance staff and their families are housed at the Center. Water is supplied by two domestic wells, DW-1 (backup well) and DW-2 (primary well) and their locations are shown in Attachment A.

Domestic waste is generated from the housing units and community facilities. Wastewater is conveyed through an onsite gravity collection system. Treatment and disposal are by two percolation ponds with a combined capacity of approximately 2.21 acre-feet (at 2-feet of freeboard). When Ponds 1 and 2 exceed capacity, wastewater can be pumped to the adjacent 0.33-acre evaporation/percolation basin (i.e., land application area). Native grasses and vegetation are currently grown in the land application area.

GROUNDWATER CONDITIONS

Three groundwater monitoring wells are used to monitor shallow groundwater conditions surrounding the pond system. Based on a preliminary assessment of groundwater trends, MW-1 is assumed to be representative of ambient conditions, MW-2 is a cross-gradient well, and MW-3 is down-gradient. However, the depth and direction of groundwater flow varies throughout the year. Offsite pumping is suspected to influence groundwater elevations.

SITE-SPECIFIC REQUIREMENTS

The Discharger shall comply with all applicable sections of the General Order including:

1. Prohibitions Section A.
2. Wastewater System Type Section B.1.a.

Wastewater discharged to the treatment and disposal ponds shall not exceed a **monthly maximum daily discharge of 34,000 gallons per day (gpd)**.

3. Wastewater System Type Sections B.1.b through B.1.l.

For Section B.1.l., the Discharger shall comply with the following setback requirements in accordance with the General Order.

Table 1 - Setback Requirements

Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Treatment System or Collection System	150 ft	50 ft	50 ft	5 ft	200 ft
Land Application Area (LAA)	150 ft	100 ft	100 ft	100 ft	200 ft
Ponds	150 ft	150 ft	150 ft	50 ft	200 ft

This is an existing facility, constructed prior to the issuance of the General Order. Wastewater system setbacks may not be in compliance with those in the table above. The WWTF is permitted under this General Order provided that nuisance conditions do not result from noncompliance. Expansion of a noncomplying wastewater treatment system shall trigger further evaluation of the setbacks, as described in Section B.1.l of the General Order.

4. Pond Systems Section B.5.
5. Land Application and/or Recycled Water Systems Section B.7.
6. Sludge/Solids/Biosolids Disposal Section B.8.
7. Groundwater and Surface Water Limitations Section C.
8. Effluent Limitations Section D.

The pond system is not subject to technology performance effluent limits for biochemical oxygen demand (BOD) as specified in the General Order. Wastewater has been historically treated and disposed of by means of evaporation and percolation within the ponds. Treatment is performed through the soil column.

Staff evaluated the need for a total nitrogen effluent limit using the method contained in the General Order and determined that a nitrogen effluent limit is not required based on reported historical flows.

9. Provisions Section E.

Section E.1.a., E.1.b, E.1.c., E.2., E.3., and E.4 of the General Order applies. Provision E.1 requires Dischargers enrolled under the General Order to prepare and implement the following reports within **90 days of the issuance of the NOA**:

- Spill Prevention and Emergency Response Plan (Provision E.1.a)
- Sampling and Analysis Plan (Provision E.1.b)
- Sludge Management Plan (Provision E.1.c)

The General Order requires that the Sludge Management Plan be submitted to the Central Valley Water Board within **90 days of the issuance of the NOA**. A copy of the Spill Prevention and Emergency Response Plan and the Sampling and Analysis Plan shall be maintained at the treatment facility and shall be presented to the Regional Water Board staff upon request.

On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative. Further details of these strategies are discussed in the enclosed memorandum. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of this NOA to ensure the goals of the Salt and Nitrate Control Program are met. For the Salt Control Program, the Discharger (**CV-SALTS ID 1946**) has selected Pathway 2, Participation in Prioritization & Optimization (P&O Study). For the Nitrate Control Program, the facility falls in the Solano Subbasin, which is a non-prioritized basin. At this time, a Management Zone

does not currently exist. The Discharger may be subject to comply with the Nitrate Control Program through a later formed Management Zone.

MONITORING AND REPORTING PROGRAM

The Discharger shall comply with **MRP No. 2014-0153-DWQ-R5380**, which is attached hereto and made part of this NOA by reference. Effective upon the first day of the month following rescission of Order 5-01-030, the Discharger shall comply with MRP WQ 2014-0153-DWQ-R5380.

ENFORCEMENT

Please review this NOA carefully to ensure that it completely and accurately reflects the discharge. Discharge of wastes other than those described in this NOA is prohibited. Prior to allowing changes to the wastewater strength or generation rate, or to the method of waste disposal, you must contact the Central Valley Water Board to determine if submittal of an RWD is required.

The Discharger generates the waste subject to the terms and conditions of WQ 2014-0153-DWQ and will maintain exclusive control over the discharge. As such, Yolo County Housing Authority is primarily responsible for compliance with this NOA, MRP, and General Order, with all attachments. Failure to comply with the requirements in the General Order or this NOA could result in an enforcement action as authorized by provisions of the California Water Code.

DOCUMENT SUBMITTALS

All monitoring reports and other correspondence should be converted to searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: centralvalleysacramento@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

Facility Name: Davis Migrant Center WWTF, Yolo County
Program: Non-15 Compliance
Order: 2014-0153-DWQ-R5380
CIWQS Place ID: 219219

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions are available to the public on the internet at the [Water Boards Water Quality Petitions webpage](https://www.waterboards.ca.gov/public_notices/petitions/water_quality) (https://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

Now that the Notice of Applicability has been issued, the Water Board's Compliance and Enforcement section will take over management of your case. Brendan Kenny is your new point of contact for any questions regarding compliance with the General Order. If you find it necessary to make a change to your permitted operations, Brendan will direct you to the appropriate Permitting staff. You may contact Brendan at (916) 464-4635 or at brendan.kenny@waterboards.ca.gov.

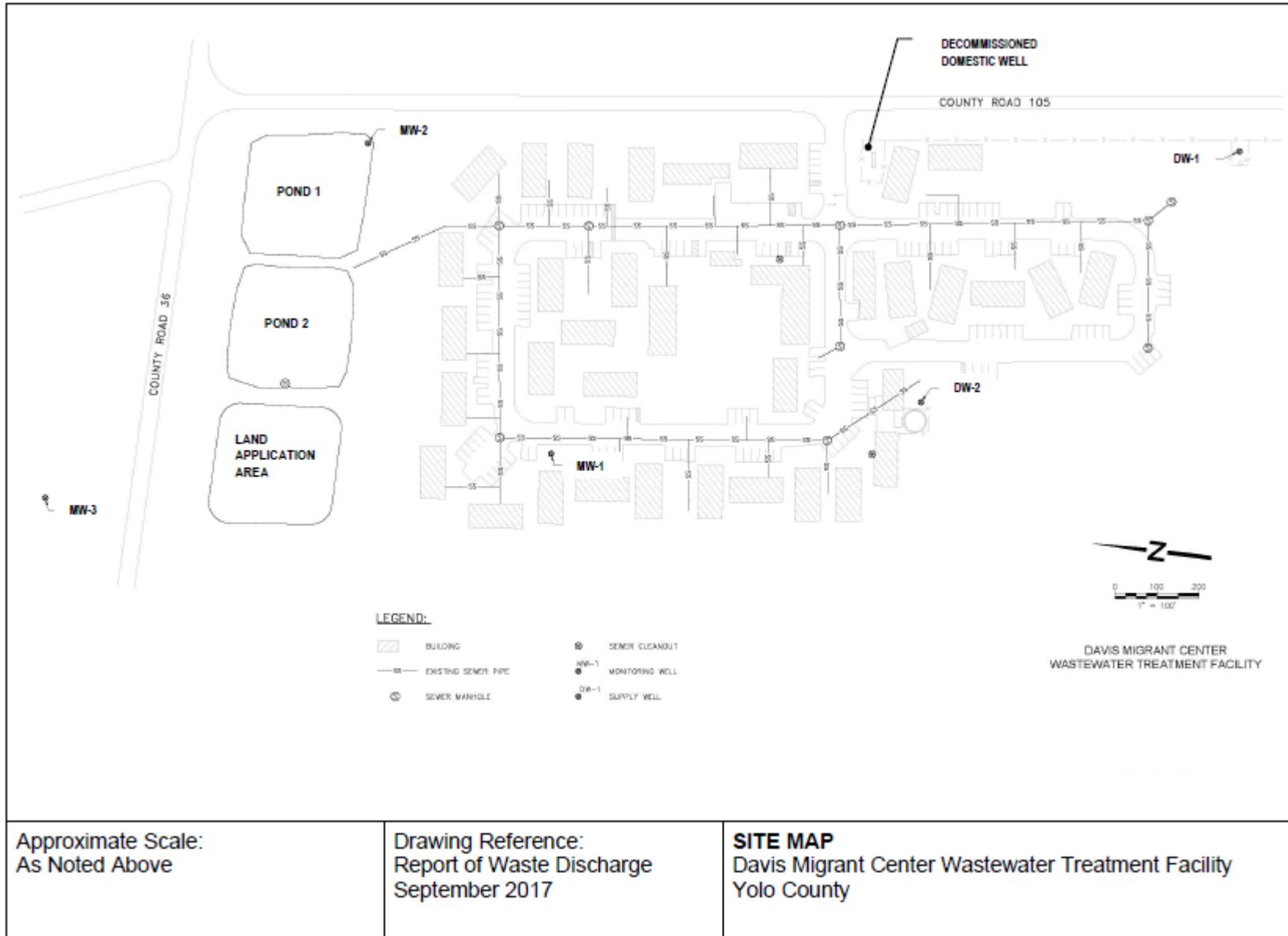
for Patrick Pulupa
Executive Officer

Attachments: Attachment A, Site Location Map
Monitoring and Reporting Program No. 2014-0153-DWQ-R5380

Enclosure: Water Quality Order WQ 2014-0153-DWQ (Discharger only)

Cc via email: Laurel Warddrip, SWRCB, Division of Water Quality, Sacramento
Debbie Anderson, Yolo County Environmental Health Division, Woodland
Guy Childs, CVWQCB, Compliance and Enforcement, Rancho Cordova
Howard Hold, CVWQCB, Compliance and Enforcement Rancho Cordova
Debbie Webster, CVCWA, Sacramento

ATTACHMENT A



Approximate Scale:
As Noted Above

Drawing Reference:
Report of Waste Discharge
September 2017

SITE MAP
Davis Migrant Center Wastewater Treatment Facility
Yolo County

TO: Rob Busby
Supervising Geologist

FROM: Scott Armstrong
Senior Engineering Geologist
P.G. #6787, C.H.G. #620

Lani Andam
Water Resource Control Engineer

DATE: 23 September 2022

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; YOLO COUNTY HOUSING AUTHORITY; DAVIS MIGRANT CENTER; YOLO COUNTY

Central Valley Water Board staff received a Report of Waste Discharge (RWD) consisting of a Form 200 and technical report dated September 2017 for the Davis Migrant Center. The RWD was prepared by NV5, Inc. on behalf of the Yolo County Housing Authority (hereafter, "Discharger"). The RWD was signed and stamped by David Richard (No. 33479) and Jill Sylvester (No. C73849), both California registered professional engineers. The Discharger is requesting coverage under State Water Resources Control Board Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order)* in response to a 10 May 2017 Water Board letter, titled *Notice of Adoption of the New General Order and Request for Report of Waste Discharge*. This memorandum provides a summary of Central Valley Water Board staff's review of the RWD and the applicability that the existing discharge is eligible for enrollment under the General Order.

BACKGROUND INFORMATION AND DISCHARGE DESCRIPTION

Waste Discharge Requirements (WDRs) Order 5-01-030 regulates the Davis Migrant Center Wastewater Treatment Facility (WWTF) and allows the discharge of domestic wastewater to two percolation ponds with the following requirements:

- Monthly average dry weather discharge flow up to 21,000 gallons per day (gpd).
- Daily maximum flow not to exceed 34,000 gpd.

The ponds were reportedly constructed in 1968. When wastewater volume exceeds pond capacity, a pump is used to convey wastewater from the ponds to an evaporation/percolation basin (i.e., land application area or LAA) for disposal. The LAA was constructed in 1985 and is bordered by 0.5-foot-high levees on the east and west sides. Native grasses and vegetation are currently grown in the LAA. Large levees

(approximately 7 to 8 feet in height) were constructed along the northern and southern boundaries of the ponds and LAA. Pond parameters are summarized below.

Pond Name	Pond Depth, feet (at 2-feet of freeboard)	Capacity, ac- feet (at 2-feet of freeboard)
Pond 1	4.0	1.17
Pond 2	4.0	1.04
Total	--	2.21

Based on the Quarterly Monitoring Reports from 2016 through 2021, occupancy at the Center is approximately 220 residents during the months of April through mid-October and 10 maintenance staff during the off-season months of November through March. Wastewater flows during the season and off-season were estimated at 13,200 and 600 gpd, respectively. Flows were calculated using 60 gallons per day (gpd) multiplied by the number of migrant residents and maintenance staff. The multiplier of 60 gpd is the average flow for domestic use as referenced in Wastewater Engineering Treatment Disposal Reuse, Metcalf & Eddy, Third Edition.

Water is supplied from two on-site domestic water wells, DW-1 and DW-2. Based on data from 2018 through 2021, the average EC concentration is 1,089 and 974 $\mu\text{mhos/cm}$, respectively. The domestic wells are metered and will be used to calculate a more accurate wastewater flow measurement. Flows will be adjusted accordingly when water from the domestic well is used to irrigate the property.

Wastewater character based on water quality data reported from 2004 – 2017, as provided in the RWD, is summarized below. A range of average concentrations are shown below.

Constituent	Pond 1	Pond 2	Potential Water Quality Objective
pH, standard units	7.2 – 9.8	7.2 – 9.9	6.0 – 8.0 Secondary MCL
Dissolved Oxygen, mg/L	0.10 - 18	0.1 - 113	---
TSS, mg/L	10 – 1,200	2 - 1,200	---
BOD ₅ , mg/L	16 - 330	5 - 990	---
TDS, mg/L	300 – 2,400	320 – 1,600	500 -1,000 Secondary MCL (recommended – upper)
Nitrate as Nitrogen, mg/L	< 0.01 – 13.9	<0.01 - 113	10, Primary MCL

Based on Quarterly Monitoring Reports, more recent data from 2018 through 2021 is summarized below. Pond 1 was dry during the entire year of 2018 and 2021. Pond 2 was dry during the second half of 2019 and all of 2020. A range of average concentrations are shown below.

Constituent	Pond 1	Pond 2	Potential Water Quality Objective
pH, standard units	7.2 – 9.3	7.6 – 9.8	6.0 – 8.0 Secondary MCL
Dissolved Oxygen, mg/L	0.5 - 12	<0.5 - 11	---
TSS, mg/L	9 - 550	1 - 240	---
BOD ₅ , mg/L	12 - 230	7 - 190	---
EC, µmhos/cm	305 – 1,980	343 – 1,940	900, Secondary MCL
TDS, mg/L	300 – 1,300	710 – 1,200	500 -1,000 Secondary MCL (recommended – upper)
Nitrate as Nitrogen, mg/L	< 0.1 – 0.4	<0.1 – 0.1	10, Primary MCL

There are no plans to expand the WWTF. The Discharger does not anticipate flows to exceed 21,000 gpd as a monthly average dry weather flow or 34,000 gpd as a daily maximum flow. Based on historical and current flows, the WWTF is eligible for regulatory coverage under the General Order.

The pond system is not subject to technology performance effluent limits for BOD. Wastewater disposal is primarily by means of evaporation and percolation. Treatment is performed through the soil column.

The General Order includes five-site specific conditions to be considered when evaluating a discharge and the need for nitrogen control. These five conditions include: flow, depth to groundwater, percolation rate, wastewater strength, and if nitrogen is of concern in the area. Although the ponds are designed for a much higher capacity, historical and current flows have been less than 20,000 gpd. Recent data show the average depth to groundwater is approximately 30 feet. Historical and current nitrate concentrations in the wastewater do not exceed 10 mg/L, the primary maximum contaminant level for nitrate. Based on these conditions, a nitrogen effluent limit evaluation is not required.

GROUNDWATER AND SITE CONDITIONS

The regional soils are underlain by alluvial deposits derived from the erosion of area sedimentary rock from the nearby Coast Range. The area is dominated generally by

silty clay loam to sandy loam. The Federal Emergency Management Agency (FEMA) floodplain designation is Flood Zone A, no base flood elevations determined.

Groundwater monitoring wells MW-1, MW-2, and MW-3 are used to monitor groundwater conditions at the site. Well depths are summarized below.

Monitoring Well	Approximate Well Depth
MW-1	64 feet
MW-2	64 feet
MW-3	68 feet

Groundwater depth and direction of groundwater flow varies throughout the year. Offsite pumping is suspected to influence groundwater elevations. More recent data show the average depth to groundwater at approximately 30 feet and direction of flow to the south and southwest.

Groundwater conditions based on the Quarterly Reports from 2018 through 2021 are presented below. Constituents shown are those that have a water quality objective. Average concentrations for TDS and EC are shown in parenthesis.

Constituent	MW-1	MW-2	MW-3	Potential Water Quality Objective
pH, standard units	7.5 – 8.2	7.5 – 8.3	7.5 – 9.3	6.0 – 8.0 Sec MCL
EC, μ mhos/cm	1,330 – 3,670 (2,236)	1,210 – 2,340 (1,729)	673 – 2,340 (1,554)	900, Sec MCL
TDS, mg/L	830 – 2,800 (1,486)	740 – 1,500 (1,155)	490 – 1,400 (1,005)	500 -1,000 Sec MCL (recommended – upper)
Nitrate as Nitrogen, mg/L	1.5 - 17	1.3 – 19	2.0 – 12	10, Primary MCL
Sodium	190 - 210	100 – 190	70 – 190	69, Ag WQG
chloride	160 - 300	76 – 220	38 – 210	250 - 500, Sec MCL (recommended – upper)
sulfate	130 - 150	88 – 150	27 – 140	250 - 500, Sec MCL (recommended – upper)

Although salinity (EC and TDS) and nitrate data show concentrations greater than water quality objectives, based on review of the data, groundwater trends are not significant at 98 percent confidence level. The MRP requires continued groundwater monitoring for salinity and nitrates.

Total coliform and E. coli data from 2018 through 2021 is presented below. Although there were detections of total coliform in groundwater, e. coli was detected in one of the samples from MW-1 and in 2 samples obtained from MW-3. The WWTF does not provide disinfection to remove pathogens in the wastewater and must rely on site conditions (climate and soil) to control the persistence and transport of pathogens into the aquifer; therefore, the MRP requires continued monitoring for total coliform.

	Total Coliform		E. coli	
	No. of data points	No. of non-detections	No. of data points	No. of non-detections
MW-1, upgradient	16	9	16	15
MW-2, cross gradient	16	9	16	16
MW-3, down gradient	16	6	16	14

MONITORING REQUIREMENTS

Monitoring requirements included in the following section from Attachment B of the General Order are appropriate for this discharge:

- Pond System Monitoring (influent and wastewater monitoring),
- Land Application Area Monitoring,
- Solids Disposal Monitoring, and
- Groundwater Monitoring

WDRs Order 5-01-030 required soil sampling at the LAA. Wastewater was last applied to the LAA in 2009, which was also the last time soil sampling occurred. At this time soil sampling will not be required because of the limited use of the LAA. Native grasses and vegetation are maintained and cropped to remove nitrogen applied to the LAA. Any groundwater impacts from the discharge with respect to salinity and nitrates can be monitored using the existing groundwater monitoring well network.

To establish a realistic estimate of statewide recycled water use and potential for increased recycled water use statewide, the Recycled Water Policy requires dischargers to report the volume of treated wastewater and recycled water. The

treatment facility has a design flow of more than 20,000 gpd and therefore, the Discharger is required to submit volumetric annual reporting.

SALT AND NITRATE CONTROL PROGRAMS

The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting. The Basin Plan amendments were conditionally approved by the State Water Resources Control Board on 16 October 2019 (Resolution No. 2019-0057) and by the Office of Administrative Law on 15 January 2020 (OAL Matter No. 2019-1203-03).

For salinity, dischargers that are unable to comply with stringent requirements will instead need to meet performance-based requirements and participate in a basin-wide effort to develop a long-term salinity strategy for the Central Valley. The Discharger received a Notice to Comply (CV-SALTS ID 1946) with instructions and obligations for the Salt Control Program within one year of 17 January 2020, the effective date of the amendments. The Discharger has elected Option 2 (Alternative Salinity Permitting Approach).

For nitrate, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternative compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers may comply with the new nitrate program either individually or collectively with other dischargers. For the Nitrate Control Program, the facility falls in the Solano Subbasin, a non-prioritized basin. At this time, a Management Zone does not exist, therefore the Central Valley Water Board may use its discretion to issue a time schedule for complying with the Nitrate Control Program through a later formed Management Zone.

As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of this Order to ensure the goals of the Salt and Nitrate Control Programs are met. This NOA may be amended or modified to incorporate newly applicable requirements. [More information on the Salt and Nitrate Control Program](https://www.cvsalinity.org/) may be found on the internet (<https://www.cvsalinity.org/>).