CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

320 West 4th Street, Suite 200, Los Angeles, California 90013

ORDER NO. R4-2024-0300
FILE NO.66-066
CI-5322
WASTE DISCHARGE REQUIREMENTS AND
WATER RECLAMATION REQUIREMENTS
FOR
THE LIMONEIRA COMPANY

The following Discharger is subject to the Waste Discharge Requirements (WDRs) and Water Reclamation Requirements (WRRs) set forth in this Order.

Table 1. Discharger Information

Discharger/Permittee	Limoneira Company
Facility Name	Limoneira Wastewater Treatment Plant (WWTP)
Facility Address	1141 Cummings Road Santa Paula, CA 93060 Ventura County

Table 2. Effluent Discharge Information

Discharge Location	The 6-acre Former Alfalfa Field located in the Orchard Farm Ranch: Latitude of 34º 56' 59.4'' N and longitude of 119º 06' 15.1'' W
Recycled Water Use Area	The 96-acre citrus and avocados orchards located in the Limoneira Ranch: Latitude of 34º 19' 50.6'' N and longitude of 119º 06' 53.1'' W
Discharge Description	Disinfected secondary recycled water
Receiving Groundwater	Santa Clara – Santa Paula Hydrologic Area West of Peck Road Groundwater Basin (DWR Basin No. 4-4.04)

Table 3. Administrative Information

This Order was adopted on:	June 27, 2024
This Order shall become effective on:	June 27, 2024

I, Susana Arredondo, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on the date indicated above.

Jenny Newman

Digitally signed by Jenny Newman
Date: 2024.07.16 11:16:52 -07'00'

for Susana Arredondo, Executive Officer

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) finds:

BACKGROUND

1. The Limoneira Company (hereinafter Discharger) owns and operates the Limoneira Ranch, Olivelands Ranch, and Orchard Farm Ranch located in the unincorporated area of Ventura County at 1141 Cummings Road, Santa Paula, California (Site). The Site vicinity and locations of the Limoneira Ranch, Olivelands Ranch and Orchard Farm Ranch are shown in Figure 1.

2. Limoneira Ranch and Olivelands Ranch encompass approximately 1,750 acres. There are approximately 1,200 acres of agricultural plantings, including approximately 540 acres of lemons, 640 acres of avocados, and 20 acres of specialty citrus and other crops.

3. Orchard Farm Ranch encompasses approximately 1,120 acres. There are approximately 800 acres of agricultural plantings, including approximately 410 acres of lemons, 30 acres of avocados, and 10 acres of specialty citrus and other crops. Approximately 350 acres of land is leased to a third-party agricultural tenant who grows a variety of row crops.

4. The Discharger operates the Limoneira Wastewater Treatment Plant (WWTP) to treat domestic and commercial wash wastewater generated from the Limoneira Ranch and Olivelands Ranch under the WDRs and WRRs contained in Los Angeles Water Board Order No. R4-2014-0040. The WWTP is classified as a secondary treatment plant, and the effluent from the WWTP is currently discharged via spray irrigation on a 6-acre disposal field (formerly known as Alfalfa Field) located at the Orchard Farm Ranch. The locations of the WWTP and disposal area are shown in Figure 2.

5. The WWTP serves an approximate population of 988 including administrative staff, employees, and residents. The WWTP has a design capacity of 180,000 gallons per day (gpd). Currently, the average combined influent wastewater flowrate is approximately 90,000 gpd of which approximately 75,000 gpd is rinse wastewater from the two packing houses. The WWTP has sufficient capacity for future expansion projects.

6. The Discharger offers low-cost housing for its farm workers with approximately 217 homes located in the Limoneira Ranch and Olivelands Ranch. A portion of the expansion projects permitted as part of WDRs and WRRs Order R4-2014-0040 have been completed. The remaining farmworker housing expansion projects will include six infill farmworker housing units located at the Olivelands Ranch. Total housing anticipated after the expansion projects will be approximately 223 units.

7. The Discharger operates an administration building, a 62,000 square-foot cold storage facility, a 244,000 square-foot packing house (referred to as “old packing house”), and another 71,060 square-foot packing house (built in 2015) located at the

Limoneira Ranch. The wastewater generated from the office and packing facilities includes: 1) non-domestic process wastewater generated from the citrus fruit washing from the packing houses operations; and 2) domestic wastewater generated from the restrooms located in the packing house and the administration building.

LIMONEIRA RANCH

8. Limoneira Ranch is located approximately 1,900 feet east of Todd Barranca and 9,900 feet northwest of the Santa Clara River in Section 19, Township 3N, and Range 21W, based on the San Bernardino Base & Meridian. The Limoneira Ranch has an approximate latitude of 34º 19' 50.6'' N and longitude of 119º 06' 53.1'' W.

9. The WWTP and its collection system are located at the Limoneira Ranch, which treat domestic and non-domestic process wastewater generated from the residential units and commercial buildings in the Limoneira Ranch and domestic wastewater from the Olivelands Ranch.

10. At the Limoneira Ranch, domestic wastewater is generated from farmworker housing located at Wheeler Canyon, 100 Camp, LPH Courts, Cummings Courts, and Headquarters, and from restrooms/domestic use at the Administration Building and Packing House. Non-domestic wastewater consists of citrus fruit rinse water from the Packing House.

11. The second phase expansion of an additional 60,000 square-foot packing house located at the main campus of Limoneira Ranch was completed in 2015. The new packing house is located adjacent to the existing cold storage facility at the main campus area and is connected to the existing wastewater collection line. There is no additional domestic wastewater generated from the packing house expansion due to no additional restrooms being added to the expansion.

OLIVELANDS RANCH

12. Olivelands Ranch is located approximately two miles west of Limoneira Ranch and approximately 59 feet from Ellsworth Barranca in Section 25, Township 3N, Range 22 W, based on the San Bernardino Base & Meridian. It has an approximate latitude of 34º 19' 35.1'' N and longitude of 119º 07' 17.7'' W. The Ellsworth Barranca directs intermittent surface water flow to the Santa Clara River approximately 9,000 feet southeast of Olivelands Ranch.

13. The Discharger operated a wastewater collection and treatment system for domestic wastewater from approximately 30 homes located in the Olivelands Ranch until the treatment plant was decommissioned in 2013. Since February 2014, the domestic wastewater generated from the Olivelands Ranch has been sent to the WWTP for treatment.

14. The Discharger has planned for expansion which will add additional wastewater flows to the existing WWTP. The first expansion project includes 71 new residential

farm worker housing units that have been completed. The majority of these units are in a newly created Aliso Village East neighborhood located northeast of Olivelands Ranch. There are six remaining units to be added to the Aliso Village East neighborhood throughout the next several years. The total wastewater flowrate from the first phase expansion project for the Aliso Village area is anticipated to be 10,000 gpd. The discharge of wastewater from the new housing development was approved in the August 25, 2011, Los Angeles Water Quality Control Board letter and by the Ventura County Planning Division.

ORCHARD FARM RANCH

15. The Orchard Farm Ranch is located approximately 2.5 miles southwest of Limoneira Ranch and occupies a total of approximately 1,119 acres. It has an approximate latitude of 34º 56' 59.4'' N and longitude of 119º 06' 15.1'' W.

16. Lemons, avocados, and row crops (cilantro, celery, lettuce, cabbage, and strawberries) are being grown in Orchard Farm Ranch. Approximately 6 acres of the farm was used to grow alfalfa and hay crops. Currently, treated wastewater from the WWTP is pumped to the former Alfalfa Field for effluent disposal by spray irrigation.

17. Domestic water used at the Limoneira Ranch and Olivelands Ranch is provided by the City of Santa Paula. Domestic water used at the Orchard Farm Ranch is also provided by the City of Santa Paula and a small domestic water well located approximately 3,000 feet northeast of the former Alfalfa Field. Irrigation water is provided by the Farmers Irrigation and Thermalbelt Company and is used for irrigation at the Limoneira Ranch, Olivelands Ranch, and Orchard Farm Ranch.

PROPOSED RECYCLED WATER APPLICATION PROJECT

18. The Discharger proposes to drip-irrigate approximately 96.4-acres of orchards comprised of citrus, mostly lemons and some avocados, using the disinfected recycled water from the WWTP. Excess recycled water that is not used for irrigation during the non-growing season or during wet weather will be disposed in the former Alfalfa Field by spray irrigation. Upon the adoption of this Order, the Discharger will start the distribution piping connection and required modification to the WWTP for delivering the recycled water to the lemon and avocado orchards. It is anticipated to take approximately 6 to 9 months to complete the required modification associated with the recycled water application.

PURPOSE OF ORDER

19. The Discharger is currently subject to the WDRs and WRRs contained in Los Angeles Water Board Order No. R4-2014-0040 and monitoring and reporting program (MRP) CI No. 5322, adopted by the Los Angeles Water Board on April 15, 2014.

    On October 29, 2021, the Discharger submitted a Report of Waste Discharge (ROWD) for the renewal of Order No. R4-2014-0040. On March 25, 2022, the Los

Angeles Water Board issued an incomplete ROWD letter requiring the Discharger to submit a Title 22 Engineering Report (T22ER) to the Division of Drinking Water (DDW) for approval by April 25, 2022 for the recycled water irrigation application at the 96.4-acre citrus orchards located in the Limoneira Ranch. Pursuant to California Water Code (CWC) section 13523, the Los Angeles Water Board is required to consult with and receive recommendations from the DDW regarding recycled water uses to protect public health, safety, and welfare.

On August 9, 2022, the Los Angeles Water Board approved the second extension request for the submittal of the T22ER due to additional time needed to plan for the newly proposed recycled use area and to retain a third-party contractor.

On March 21, 2023, the Discharger submitted the first draft T22ER for the DDW's review and approval. On May 23, 2023, the DDW provided comments requesting additional information on the proposed recycled water use area. On August 4, 2023, the DDW approved the final T22ER dated June 5, 2023. On April 24, 2024, the DDW approved the expanded drip irrigation of avocado orchards which were subject to the same recycled water irrigation requirements as citrus orchards.

20. CWC section 13260 requires any person "proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than to a community sewer system," to file a report of waste discharge. The term "waste" is defined in CWC section 13050(d) to include "sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, … prior to, and for purposes of, disposal." The Discharger proposes to continue discharging secondary-treated human sewage, i.e. "waste," to land where it could affect the quality of the waters of the state. Sewage contains various waste constituents, including total dissolved solids (TDS), salts (e.g., sulfate, chloride, boron), bacteria, nitrogen, priority pollutants, and constituents of emerging concern (CECs).

21. CWC section 13263 (e) provides that all waste discharge requirements shall be reviewed periodically and, upon such review, may be revised by the Los Angeles Water Board. Following a review of requirements in Los Angeles Water Board Order No. R4-2014-0040, these requirements have been revised to include new recycled water use area, effluent disposal area, additional findings, revised effluent limitations, recycled water limitations, updated standard provisions, and revised monitoring and reporting program.

22. CWC section 13263 authorizes the Los Angeles Water Board, after any necessary hearing, to prescribe requirements as to the nature of any proposed discharge with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements must implement any relevant water quality control plans that have been adopted and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of CWC section 13241.

23. CWC section 13267 authorizes the Los Angeles Water Board to require that any person who proposes to discharge waste submit, under penalty of perjury, technical or monitoring program reports to the Los Angeles Water Board. The estimated costs of these reports are approximately between $25,000 and $50,000. The burden, including costs of these reports, bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports, which include protection of public health and the environment. This Order incorporates revised MRP, which is also necessary to ensure that the discharge of waste, and the use of recycled water, complies with this Order and is protective of human health and the environment.

24. This Order is adopted pursuant to CWC sections 13263, 13267, and 13523. It sets forth requirements, prohibitions, and other conditions to implement the Basin Plan; prescribes the limits for discharge of treated wastewater and recycled water and the Discharger's responsibilities for the production, distribution, monitoring, and application of recycled water; and includes an MRP. The Discharger is responsible for inspecting point-of-use facilities and ensuring compliance with the WDRs and WRRs contained in this Order.

COMPLIANCE HISTORY

25. The compliance history is summarized as follows:

    On June 30, 2017, the Los Angeles Water Board issued a Notice of Violation (NOV) letter for exceedances of the following constituents of concern (COCs) in the effluent: turbidity, total nitrogen, nitrate as nitrogen, total coliform, fecal coliform, and enterococcus. In addition, the exceedances in the groundwater included TDS, chloride, sulfate, boron, total nitrogen, nitrate as nitrogen, total coliform, fecal coliform, and enterococcus in the groundwater monitoring wells: MW-A2, MW-A3, MW-A4, MW-M2, MW-M3, and MW-M4. The NOV letter required the Discharger to submit a report with corrective actions taken by August 29, 2017.

    On August 9, 2017, the Discharger submitted a response to the June 30, 2017 NOV letter with the corrective actions completed at the WWTP, which included modifying the aeration system to address the nitrogen exceedances and upgrading the filtration system and ultra-violet (UV) disinfection process to address the turbidity and bacteria exceedances. Upon completion of the corrective measures in April 2017, the Discharger met the COC effluent limits. However, the Discharger indicated that exceedances in the groundwater, specifically the upstream conditions of the WWTP, were challenging to control and the Discharger was working with an engineering firm to address the groundwater quality concerns.

26. From January 2018 through September 2023, there were multiple effluent COC exceedances that primarily occurred in 2020 and during the recent 3rd quarter of 2023, specifically for chloride, total nitrogen, turbidity, total coliform, fecal coliform, and enterococcus as listed below and summarized in Table 6.

Chloride was detected up to 510 milligrams per liter (mg/L) as compared to its discharge limit of 110 mg/L;

Total nitrogen was detected up to 42 mg/L as compared to its limit of 10 mg/L;

Nitrate nitrogen was detected up to 16 mg/L as compared to its limit of 10 mg/L;

Total coliform and fecal coliform were detected up to 1,600 most probable number per 100 milliliters (MPN/100 mL) as compared to its respective limit of 23 MPN/100 mL; and

Enterococcus was detected up to 700 MPN/100 mL as compared to its limit of 2.2 MPN/100 mL.

27. Subsequently, the Discharger has optimized the treatment process to address the exceedances of the above-referenced COCs in the effluent. During the most recent 4th quarter 2023, the COCs detected at the effluent were below the respective limits with the exception of a one-time exceedance in nitrate at 12 mg/L, nitrite at 4 mg/L, and total nitrogen at 13 mg/L.

28. The results of the groundwater sampling from January 2018 through July 2023 indicated that the following parameters have exceeded their respective groundwater quality objectives in several groundwater monitoring wells at the Site, including the upgradient wells: MW-M1, MW-A1, and OL-1, which make the determination of the impact of effluent discharge on groundwater quality inconclusive. Generally, the majority of the COCs detected in the upgradient wells were either slightly elevated or consistent with the COCs detected in the cross- and down-gradient wells with exceptions of bacteria levels in cross- and down-gradient wells: MW-M3, MW-M4, MW-A2 and MW-A3. Groundwater sampling analytical results from January 2018 through July 2023 are summarized in Tables 7A, 7B and 7C. The COC exceedances in groundwater are listed below.

TDS exceedance in groundwater was detected up to 4,000 mg/L (MW-A1) in 8 of 11 groundwater monitoring wells as compared to its groundwater quality objective of 2,000 mg/L;

Sulfate exceedance was detected up to 1,800 mg/L (MW-A1) in 9 of 11 wells as compared to its groundwater quality objective of 800 mg/L;

Chloride exceedance was detected up to 230 mg/L (MW-A2) in 9 of 11 wells as compared to its groundwater quality objective of 110 mg/L;

Boron exceedance was detected up to 1.5 mg/L (MW-M3 and MW-A1) in 6 of 11 wells as compared to its groundwater quality objective of 1.0 mg/L;

Total nitrogen exceedance was detected up to 93 mg/L (MW-A1) in 9 of 11 wells as compared to its groundwater quality objective of 10 mg/L;

Nitrate as nitrogen exceedance was detected up to 92 mg/L (MW-M2 and MW-A1) in 9 of 11 wells as compared to its groundwater quality objective is 10 mg/L;

Total coliform exceedance was detected up to 23 MPN/100 mL in all 11 wells as compared to its groundwater quality objective of 1.1 MPN/100 mL;

Fecal coliform exceedance was detected up to 23 MPN/100 mL in all 11 wells as compared to its groundwater quality objective of 1.1 MPN/100 mL; and

Enterococcus exceedance was detected up to 520 MPN/100 mL (MW-M1) in all 11 wells as compared to its groundwater quality objective of 1.1 MPN/100 mL.

FACILITY AND TREATMENT PROCESS DESCRIPTION

29. The WWTP is located at the Limoneira Ranch approximately 1,900 feet east of Todd Barranca and 9,900 feet northwest of the Santa Clara River in Section 19, Township 3N, and Range 21W, based on the San Bernardino Base & Meridian. The WWTP has an approximate latitude of 34º 19’ 42.6’’ N and longitude of 119º 06’ 40.5’’ W.

30. The WWTP consists of the following key components and process, as shown in the Process Flow Diagram (Figure 3).

    two solid and liquid mixing splitter basins;

    four extended aeration tanks;

    two clarifiers;

    two settling chambers;

    a sludge storage tank;

    two settling ponds;

    a rock filtration pond;

    sand filters (Nexsand media); and

    an ultraviolet (UV) disinfecting system.

    Preceding the extended aeration system, the raw wastewater passes through two Imhoff Tanks to provide preliminary treatment and scum removal.

    The first stage of wastewater treatment consists of two solids and liquid mixing splitter basins/chambers. The second stage consists of four extended aeration basins/chambers, and the third stage consists of two clarifier settling chambers.

The effluent from the clarifiers is then discharged to a series of three lined ponds (Pond Nos. 1-3) for additional nutrient removal and polishing of the effluent before sand filtration and disinfection. Both Pond Nos. 1 and 2 are equipped with floating planted islands, and Pond No. 3 is a constructed wetland used for final polishing and filtration through a gravel filter bed.

The effluent from Pond No. 3 is pumped through sand filters and then a UV disinfection unit.

After UV disinfection, the effluent is metered and pumped either to the effluent disposal field in the Orchard Farm Ranch for surface disposal by spray irrigation or to recycled water storage Pond Nos. 4 and 5 for recycled water application at citrus and avocado fields, as illustrated in Figure 3.

For the recycled water application, some minor improvements to the WWTP and effluent distribution system will be required to meet Title 22 Requirements. Pond Nos. 1, 2 and 3 will continue to be used for biological treatment and storage. Pond Nos. 4 and 5 will be converted from emergency storage to recycled water storage ponds. A nearby irrigation well will be used to supplement the water level in Pond Nos. 4 and 5, during times of high irrigation demand or low production of recycled water from the WWTP.

Pond No. 6 will remain as a dedicated emergency storage pond to accept raw sewage or partially treated wastewater during times of process interruptions caused by power outage or treatment plant upset. Pond No. 3 can also store effluent if downstream processes (filters, UV disinfection) are temporarily out of service. The locations of the WWTP and proposed recycled water distribution piping layout are shown in Figure 4.

Table 4 lists each pond's storage capacities. Table 5 shows recycled water storage capacities in Pond Nos. 4 and 5. Pond No. 6 has emergency storage for 8 days at the proposed peak flowrate of 118,000 gpd and 5.4 days at the proposed maximum design flowrate of 180,000 gpd. The locations of the storage ponds are shown in Figure 5.

Table 4. Pond Storage Capacity

Pond	Capacity (gallons)
No. 1	790,122
No. 2	652,913
No. 3	940,391
No. 4	166,255
No. 5	202,580
No. 6	966,244
Total	**4,018,475**

Table 5. Recycled Water Use Storage Capacity

Pond	Capacity (gallons)
No. 4	166,255
No. 5	202,580
Total	**4,018,475**

WASTE DISCHARGE DESCRIPTION

31. The sources of wastewater discharged at Limoneira Ranch and Olivelands Ranch are described below.

Wastewater Source	Wastewater Flow, gpd		Total Wastewater Flow, gpd
	Limoneira Farm	Olivelands Farm	
	EXISTING (2021) FLOWS		
Packing House[a] Rinse Water	75,000		90,000
Domestic Wastewater	10,000	5,000	
	FUTURE BUILD-OUT FLOWS		
Packing House Rinse Water	75,000		118,000
Domestic Wastewater	15,000	28,000	
MAXIMUM DAILY FLOW (permit)	**180,000 gpd**		

[a]Includes old and new packing house facilities

32. Currently, the WWTP is treating approximately 90,000 gpd of domestic wastewater and rinse water generated from the Limoneira Ranch and the residential units from Olivelands Ranch. No wastewater is generated from the Orchard Farm Ranch.

33. At Limoneira Ranch, the primary COCs in domestic wastewater are total suspended solids, biodegradable organics, dissolved inorganics, and pathogenic organisms. Rinse water from the packinghouses may contain chlorine, herbicides, pesticides, and fungicides. Specifically, solvent-refined light paraffinic distillate, abamectin, norflurazon, chlorpyrifos, metaldehyde, glyphosate, and simazine, are used during the growing of lemons, avocados, and row crops. No Maximum Contaminant Levels exist for these constituents, except for glyphosate and simazine. Based on the Maximum Contaminant Levels (MCLs) provided in the California Code of Regulations (CCR), the monthly average limits for glyphosate and simazine are 0.7 and 0.004 mg/L, respectively. The Discharger has been meeting these effluent limits, as shown in Table 6.

34. At Olivelands Ranch, the primary COCs in domestic wastewater are total suspended solids, biodegradable organics, dissolved inorganics, and quarterly pathogenic organisms.

SITE-SPECIFIC CONDITIONS

35. The Site is located in an unsewered area of Ventura County. To date no public sewers have been scheduled for construction in the vicinity of the Site.

36. Limoneira Ranch, Olivelands Ranch, and Orchard Farm Ranch are centrally located along the southern boundary of the Santa Paula Ground Water Basin. The southern boundary of the basin is defined by the Oakridge Fault which roughly lies beneath the present Santa Clara River channel and Todd Barranca. The channelized Todd Barranca forms the western boundary of the Site.

37. Shallow groundwater within the basin is primarily contained in alluvial fan and river deposits of Quaternary geologic age that extend to depths up to several hundred feet. These sediments unconformably overlie the Tertiary age San Pedro Formation where groundwater conditions are generally semi-confined to confined.

38. Groundwater beneath the Site is contained in alluvial flood plain and fan deposits. Groundwater levels and flow directions beneath the Site are controlled by these deposits. The shallow aquifer beneath the northern portion of the Site is composed of predominantly fine-grained fan deposits. The shallow aquifer in the southern portion of the Site consists of coarse-grained fluvial sediments deposited by the Santa Clara River.

39. The soil consists of interbedded clay and silty clay; clayey silt and silt; and silty sand, sand, gravelly sand and minor amounts of cobbles. In general, the soil contains coarser interbeds toward the Santa Clara River. The predominantly fine-grained soils (clay and silt) encountered in the northwestern portion of the subject Site appear to extend into the southern portion of the Site where they contain interbedded lenses and continuous beds of silt, sand, and gravel.

40. Land use in the vicinity of the Limoneira Company facility is primarily agricultural for lemon trees and avocado orchards.

41. Based on the most recent available depths to groundwater data from October 2023, the depths to groundwater at the Limoneira Ranch, Olivelands Ranch, and Orchard Farm Ranch range from approximately 11 to 17 feet below ground surface (bgs), 83 to 107 bgs, and 16 to 20 bgs, respectively. Groundwater flows toward the southeast at the Limoneira Ranch and Olivelands Ranch and flows toward the southwest at Orchard Farm Ranch. In general, the groundwater flows in a southwesterly direction towards the Santa Clara River.

42. Effluent water quality based on the self-monitoring reports (SMRs) from January 2018 to September 2023 is summarized as follows.

Table 6. Effluent Water Quality Summary

Constituents	Units[1]	Effluent Limit[2]	Range of Effluent Concentration[3]
pH	standard unit	6.5 – 8.5	7.3 – 8.10
Biochemical oxygen demand (5-day BOD @20oC)	mg/L	45 (daily) 30 (monthly)	1.5 – **35** [4] **(monthly)**
Total suspended solids	mg/L	45 (daily) 30 (monthly)	0.75 – 15
Total nitrogen	mg/L	10	1.0 – **42**
Nitrate as nitrogen	mg/L	10	0.27 – **16**
Nitrite as nitrogen	mg/L	1.0	0.01 – 0.93
Oil & Grease	mg/L	15	0.85 – 2.3
Total dissolved solids	mg/L	2,000	880 – **2,400**
Sulfate	mg/L	800	300 – 520
Chloride	mg/L	110	58 – **510**
Boron	mg/L	1.0	0.41 – 0.90
Methylene blue active substances (MBAS)	mg/L	0.5	0.016 – **0.74**
Total residual chlorine	mg/L	0.01	ND<0.01 – **0.16**
Glyphosate	mg/L	0.7	ND
Simazine	mg/L	0.004	ND
Fecal coliform	MPN/100 mL	2.2	ND<1.1 – **>1,600**
Enterococcus	MPN/100 mL	2.2	ND<1.0 – **700**
Total coliform	MPN/100 mL	23/240	ND<1.8 – **>1,600**
Turbidity	NTU	2, 5, 10	0.19 – **240**

Table 6 Notes:

[1] mg/L: milligrams per liter; MPN/100 mL: most probable number (MPN) per 100 milliliters; and NTU: nephelometric turbidity units.

[2] Effluent limits prescribed in Order No. R4-2014-0040.

[3] Multiple effluent COC exceedances occurred primarily in 2020 and in the 3rd quarter of 2023, specifically for chloride, total nitrogen, turbidity, total coliform, fecal coliform, and enterococcus.

[4] Biochemical oxygen demand (BOD) was detected one time at 35 mg/L as compared to its monthly average limit 30 mg/L.

Bolded numbers denote exceedances.

43. In July 2013, the Discharger installed four monitoring wells: MW-M1 (upgradient), MW-M2 (cross-gradient), MW-M3 (downgradient), and MW-M4 (downgradient) in the vicinity of the WWTP, as shown in Figure 6. The completed well depths ranged from 25 to 30 feet bgs. Based on the most recent groundwater monitoring event conducted in October 2023, the depths to groundwater ranged from approximately

11 feet to 17 feet bgs. The ambient groundwater quality based on the SMRs from January 2018 to July 2023 is summarized in Table 7A. In general, upgradient groundwater quality appears to be more degraded for most constituents than that of cross-gradient and downgradient groundwater.

Table 7A. Ambient Groundwater Quality Summary

Constituents	Units[1]	MW-M1	MW-M2	MW-M3	MW-M4	Groundwater Quality Objectives (Basin Plan)
Total dissolved solids	mg/L	**2,300**	**2,300**	**1,800**	**2,300**	2,000
Sulfate	mg/L	**1,100**	**1,100**	790	**940**	800
Chloride	mg/L	**120**	74	100	**150**	110
Boron	mg/L	**1.2**	0.93	**1.5**	0.98	1.0
Total nitrogen	mg/L	**76**	**92**	**22**	**21**	10
Nitrate as nitrogen	mg/L	**75**	**92**	**28**	**14**	10
Nitrite as nitrogen	mg/L	0.79	0.36	0.28	0.034	1.0
Glyphosate	mg/L	ND	ND	ND	ND	0.04
Simazine	mg/L	ND	ND	ND	ND	0.0007
Total coliform	MPN/100 mL	**12**	**16**	**>23**	**>23**	1.1
Fecal coliform	MPN/100 mL	**2.0**	**23**	**>23**	**>23**	1.1
Enterococcus	MPN/100 mL	**520**	**250**	**28**	**32**	1.1

Table 7A Notes:

[1] mg/L: milligrams per liter; MPN/100 mL: most probable number (MPN) per 100 milliliters
ND: Not Detected
MW-M1: Upgradient well from the WWTP
MW-M2: Cross-gradient Well from the WWTP
MW-M3 and MW-M4: Downgradient wells from the WWTP
Bolded numbers denote exceedances.

44. In July 2013, the Discharger installed four monitoring wells: MW-A1 (upgradient), MW-A2 (cross-gradient), MW-A3 (cross-gradient), and MW-A4 (downgradient) in the vicinity of the former Alfalfa Field in the Orchard Farm Ranch, as shown in Figure 7. The completed well depths vary from 25 to 30 feet bgs. Based on the most recent groundwater sampling event in October 2023, the depths to groundwater ranged from approximately 16 feet to 20 feet bgs. The ambient groundwater quality based on the SMRs from January 2018 to July 2023 is summarized in Table 7B. In general, the groundwater quality beneath the former Alfalfa Field has been degrading as compared to Basin Plan groundwater quality objectives, indicating no assimilative capabilities available for TDS, chloride, sulfate, and boron. In addition, concentrations of total coliform, fecal coliform, and enterococcus in groundwater all exceed their respective groundwater quality objectives. Total and nitrate nitrogen concentrations in upgradient and cross-gradient wells all exceed their respective groundwater quality objectives.

Table 7B. Ambient Groundwater Quality Summary

Constituents	Units[1]	MW-A1	MW-A2	MW-A3	MW-A4	Groundwater Quality Objectives (Basin Plan)
Total dissolved solids	mg/L	**4,000**	**2,900**	**3,100**	**3,500**	2,000
Sulfate	mg/L	**1,800**	**1,600**	**1,600**	**1,700**	800
Chloride	mg/L	**220**	**230**	**200**	**180**	110
Boron	mg/L	**1.5**	**1.1**	**1.4**	**1.3**	1.0
Total nitrogen	mg/L	**93**	**38**	**38**	4.0	10
Nitrate as nitrogen	mg/L	**92**	**36**	**36**	2.7	10
Nitrite as nitrogen	mg/L	0.026	0.1	0.1	0.037	1.0
Glyphosate	mg/L	ND	ND	ND	ND	0.004
Simazine	mg/L	ND	ND	ND	ND	0.0007
Total coliform	MPN/100 mL	**6.9**	**>23**	**6.9**	**>23**	<1.1
Fecal coliform	MPN/100 mL	**16**	**2.2**	**>23**	**16**	<1.1
Enterococcus	MPN/100 mL	**180**	**66**	**2.0**	**12**	<1.1

Table 7B Notes:

[1] mg/L: milligrams per liter; MPN/100 mL: most probable number (MPN) per 100 milliliters
ND: Not Detected
MW-A1: Upgradient well to the Alfalfa Field in Orchard Farm Ranch
MW-A2 and MW-A3: Cross-gradient wells to the Alfalfa Field in Orchard Farm Ranch
MW-A4: Downgradient well to the Alfalfa Field in Orchard Farm Ranch
Bolded numbers denote exceedances.

45. There are three groundwater monitoring wells: OL-1, OL-2, and OL-3 located in the Olivelands Ranch, as shown in Figure 8. Based on the most recent groundwater monitoring event conducted in October 2023, the depths to groundwater ranged from approximately 83 to 107 feet bgs. The ambient groundwater quality based on the SMRs from January 2018 to July 2023 is summarized in Table 7C.

Table 7C. Ambient Groundwater Quality Summary

Constituents	Units[1]	OL-1	OL-2	OL-3	Groundwater Quality Objectives (Basin Plan)
Total dissolved solids	mg/L	**2,200**	1,900	1,600	2,000
Sulfate	mg/L	**880**	**860**	690	800
Chloride	mg/L	**130**	**140**	**120**	110
Boron	mg/L	0.89	0.89	0.96	1.0
Total nitrogen	mg/L	**21**	4.9	**19**	10
Nitrate as nitrogen	mg/L	**21**	4.6	**18**	10
Nitrite as nitrogen	mg/L	0.026	0.039	0.065	1.0
Glyphosate	mg/L	ND	ND	ND	0.04
Simazine	mg/L	ND	ND	ND	0.0007
Total coliform	MPN/100 mL	**>23**	**>23**	**>23**	1.1
Fecal coliform	MPN/100 mL	**>23**	**>23**	**>23**	1.1
Enterococcus	MPN/100 mL	**140**	**27**	**11**	1.1

Table 7C Notes:

[1] mg/L: milligrams per liter; MPN/100 mL: most probable number (MPN) per 100 milliliters
ND: Not Detected
OL-1: Upgradient well in Olivelands Ranch
OL-2: Cross-gradient well in Olivelands Ranch
OL-3: Downgradient well in Olivelands Ranch
Bolded numbers denote exceedances.

APPLICABLE PLANS, POLICIES AND REGULATIONS

46. ***Water Quality Control Plan for the Coastal Watersheds* of Los Angeles and Ventura Counties (Basin Plan)** - The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (i) designates beneficial uses for surface and ground waters, (ii) establishes narrative and numeric water quality objectives that must be attained or maintained to protect the designated beneficial uses, and (iii) sets forth implementation programs to protect the beneficial uses of the waters of the state. The Basin Plan also incorporates State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California ("Antidegradation Policy"). In addition, the Basin Plan incorporates by reference applicable State and Los Angeles Water Board plans and policies and other pertinent water quality policies and regulations. Since 1994, numerous Basin Plan amendments have been adopted and more current background, program, and geographical information have become available. This Order implements the plans, policies and provisions of the Los Angeles Water Board's Basin Plan.

47. The Basin Plan (Chapter 3) establishes water quality objectives for groundwater. The chemical constituents and radioactivity water quality objectives for groundwater designated as domestic or municipal supply (MUN) incorporate the primary and secondary MCLs for inorganic, organic, and radioactive contaminants in drinking water that are codified in CCR Title 22, Division 1 (CCR Title 22). This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. Also, the Basin Plan establishes the following taste and odor water quality objective for groundwater: "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." These water quality objectives are implemented in this Order to protect groundwater quality.

48. Limoneira Ranch, Olivelands Ranch, and Orchard Farm Ranch are located within the Santa Clara River Valley Basin – Santa Paula Hydrologic Area West of Peck Road (Subbasin). The Subbasin has the following beneficial use designations:

    Groundwater (Santa Clara – Santa Paula Hydrologic Area - West of Peck Road)

    Existing: MUN; Industrial Service Supply (IND); Industrial Process Supply (PROC); and Agricultural Supply (AGR).

    Surface water (Santa Paula Creek - Santa Clara River Watershed)

    Potential: MUN

    Existing: IND; PROC; AGR; groundwater recharge; freshwater replenishment; water-contact recreation (REC-1); non-water contact recreation (REC-2); warm and cold freshwater habitat; spawning rare, threatened, or endangered species; wildlife habitat; migration of aquatic organisms; and spawning, reproduction, and/or early development of fish.

49. **Assembly Bill No. 685 (AB 685) – CWC section 106.3** – It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet MCLs developed to protect human health and ensure that water is safe for domestic use.

50. Pursuant to CWC section 13263, the requirements of this Order take into consideration the provisions of CWC section 13241, including the following factors.

    a) Past, present, and probable future beneficial uses of water.

    The receiving water for discharges from the WWTP is the Santa Clara River Valley Basin within the sub-basin of Santa Paula West of the Peck Road Area. The receiving water limitations in this Order are to maintain the existing and probable future beneficial uses of this basin for MUN and AGR and potential beneficial use for IND. This Order also specifies effluent limitations to protect

the beneficial uses with effluent monitoring and reporting requirements to verify that discharges will not adversely affect the beneficial uses of groundwater.

b) Environmental characteristics of the hydrographic unit under consideration, including the quality of the water available thereto.

This Order incorporates the site-specific groundwater quality objectives in the Basin Plan in considering geology, hydrogeology, and hydrology. The WWTP will produce effluent quality that meets or is better than the groundwater quality objectives and will comply with the state's Antidegradation Policy (Resolution No. 68-16). The project will therefore limit further groundwater degradation.

c). Economic considerations.

Groundwater monitoring required in prior permits yielded information that demonstrated that ambient groundwater quality is impacted and degrading beneath the Site causing uncertainty in determination of compliance with the groundwater quality objectives. Moving the compliance point for coliforms to the end of the treatment process will prevent further groundwater degradation and provide certainty that discharges to groundwater from the facility meet or are better than the groundwater quality objectives.

d). The need for developing housing within the region.

As indicated in items 6 and 14 above, the Discharger has planned for housing development and expansion which adds 77 new residential farm worker housing units. The total wastewater from this expansion project for the Aliso Village area is anticipated to be 10,000 gpd which will be sent to the WWTP for treatment.

e). The need to develop and use recycled water.

This Order authorizes the Discharger to expand and implement the recycled water reuse application in the 96.4-acre of citrus and avocado orchards with up to 180,000 gpd of recycled water via drip irrigation.

51. **Antidegradation Policy, State Water Board Resolution No. 68-16** – State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California (Antidegradation Policy) requires the Los Angeles Water Board, in regulating the discharge of waste, to maintain high-quality waters of the state until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the State Water Board's policies (e.g., quality that exceeds water quality objectives). The Los Angeles Water Board finds that the discharge, as allowed in these WDRs, is consistent with Resolution No. 68-16 since this Order requires (1) compliance with more stringent revised coliform effluent discharge requirements set forth in this Order, including the use of best practicable treatment and control (BPTC)

technology, (2) implementation of the revised MRP; and (3) regular monitoring of the discharge to comply with water quality objectives and WRRs.

Antidegradation Analysis: As described in Finding 28 above, the groundwater quality beneath the Site exceeds groundwater quality objectives for total coliform, fecal coliform, enterococcus, TDS, sulfate, chloride, boron, nitrate as nitrogen, and total nitrogen; therefore, to prevent further groundwater degradation and to provide certainty for compliance with groundwater quality objectives for coliform, this Order requires the Discharger to comply with discharge limitations equal to groundwater quality objectives at the effluent discharge point of the WWTP. The effluent limitations for TDS, sulfate, chloride, boron, nitrate as nitrogen, and total nitrogen remain unchanged from the previous Order No. R4-2014-0040 and are the same as the groundwater quality objectives.

This Order specifies more stringent revised coliform effluent limitations than the previous WDRs Order No. R4-2014-0040. The revised total coliform effluent limitation of 1.1 MPN/100 mL based on a daily average is more stringent than the existing total coliform effluent limits of 23 MPN/100 mL (7-day median) and 240 MPN/100 mL (not to exceed 1 sample in 30 days). Similarly, the revised fecal coliform effluent limit of 1.1 MPN/100 mL based on a daily average is more stringent than the existing fecal coliform daily maximum effluent limitation of 2.2 MPN/100 mL. This Order also specifies a new effluent limitation of 1.1 MPN/100 mL for enterococcus based on groundwater quality objectives. The previous Order prescribed a 1.1 MPN/100 mL groundwater limitation for enterococcus, but no effluent limitation for this constituent was specified. Moving the compliance point for the limitations for coliform specified in Table 8 to the end of the treatment process from the WWTP not only provides certainty that the discharge from WWTP meets groundwater quality objectives, but the additional soil treatment that may occur will potentially reduce pollutant concentrations further, thus contributing to groundwater quality improvement beneath the Site. Since this Order contains tasks for assuring that best practical treatment and control of pollutants occurs, and the highest water quality consistent with the maximum benefit to the people of the State results, the discharge is consistent with the Antidegradation Policy, Basin Plan, and Recycled Water Policy. However, the Los Angeles Water Board will review this Order periodically and may revise requirements when necessary.

The requirements contained in this Order are in conformance with the goals and objectives of the Basin Plan and implement the requirements of the CWC and Water Recycling Criteria and Policy.

52. **State Water Board Resolution No. 77-1** – The State Water Board adopted Resolution No. 77-1, *Policy with Respect to Water Recycling in California*, which includes principles that encouraged and recommend funding for water recycling and its use in water-short areas of the State.

53. **Recycled Water Policy** – State Water Board Resolution No. 2009-0011, Adoption of a Policy for Water Quality Control for Recycled Water (Recycled Water Policy) as

amended in 2013 and 2018, is intended to support the State Water Board's Strategic Plan to promote sustainable local water supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Recycled Water Policy is also intended to encourage beneficial use of, rather than sole disposal of, recycled water generated from municipal wastewater sources in a manner that fully implements state and federal water quality laws.

The most recent amendment to the Recycled Water Policy was adopted on December 11, 2018 and became effective on April 8, 2019. The amended Recycled Water Policy requires wastewater and recycled water dischargers to annually report monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. As applicable, dischargers are additionally required to annually report recycled water use by volume and category of reuse. This Order implements the reporting requirements of the Recycled Water Policy.

54. CWC section 13523.5 on the WRRs states that a Regional Board may not deny issuance of water recycling requirements to a project that violates only a salinity standard in a basin plan. In 1985, soon after this provision was added to the Water Code, the State Board Office of Chief Counsel issued a legal opinion concluding that this provision does not apply to waste discharge requirements. Hence, waste discharge requirements for recycled water projects may contain effluent and other limitations on discharges of salts as necessary to meet water quality objectives, comply with the Antidegradation Policy, or otherwise protect beneficial uses.

    These WRRs are proposed pursuant to CWC section 13523. The WRRs prescribe the limits for recycled water and the Discharger's responsibilities for the production and monitoring of recycled water. The Discharger is also responsible for inspecting point-of-use facilities and ensuring compliance with the WRRs contained in this Order. The distribution and irrigation systems will be maintained by the Discharger.

55. The use of recycled wastewater for the irrigation of crops could affect public health, safety, or welfare; therefore, requirements for such use are necessary in accordance with section 13523 of the CWC.

56. The Discharger shall be able to achieve compliance with all the effluent limitations listed in this Order and is prohibited from discharging any wastewater to surface water from the treatment plant.

57. Section 13267(b) of the CWC states, in part, that "In conducting an investigation specified in subdivision (a), the Los Angeles Water Board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within

its region shall furnish under penalty of perjury, technical or monitoring program reports which the Los Angeles Water Board requires to protect public health and provide water beneficial use benefits. The burden, including the costs of preparing these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The reports including quarterly SMRs and annual reports required by the revised MRP No. CI-5322 are necessary to assure compliance with these waste discharge requirements to protect future beneficial uses. The costs to prepare a quarterly SMR including analytical and labor costs typically range from $18,000 to $25,000. The costs to prepare an annual summary report typically range from $7,000 to $14,000. The submission of the SMRs ensures effluent limitations are compiled. The benefits to water quality and public health outweigh the costs associated with the production of these reports.

GLOBAL WARMING AND CLIMATE CHANGE

58. In Southern California, the predicted impacts of climate change are numerous, including the following.

    Annual average temperatures are expected to increase, coupled with a higher frequency of extreme heat days. A likely consequence of this warmer climate will be more severe drought periods, leading to an increase in the amount and intensity of wildfires and a longer wildfire season. In addition, precipitation patterns are likely to be modified.

    A decrease in snowfall, combined with warmer temperatures, will induce a decrease in the amount and duration of snowpack, an essential source of freshwater to the region. Although changes to mean precipitation are expected to be small, the increasing occurrence of extreme precipitation events will amplify the risk of flooding. These impacts may affect water quality in multiple ways, including decreases in stream flow, reductions in, and changes to, aquatic habitats, increases in surface water temperature, increases in pollutant levels, sedimentation, algal growth, and changes in salinity levels and acidification in coastal areas.

59. On March 7, 2017, recognizing the challenges posed by climate change, the State Water Board adopted Resolution No. 2017-0012, Comprehensive Response to Climate Change, directed state agencies to take climate change into account in their planning decisions which are guided by the following principles: Priority should be given to actions that both build climate preparedness and reduce greenhouse gas emissions; where possible, flexible and adaptive approaches should be taken to prepare for uncertain climate impacts; actions should protect the state's most vulnerable populations; and natural infrastructure solutions should be prioritized.

60. On May 10, 2018, the Los Angeles Water Board adopted Resolution No. R18-004, a Resolution to Prioritize Actions to Adapt to and Mitigate the Impacts of Climate Change on the Los Angeles Region’s Water Resources and Associated Beneficial Uses, which encourages mitigating direct and indirect impacts of climate change on water quality and beneficial uses.

61. This Order contains provisions to require planning and taking actions to address climate-related impacts that can cause or contribute to violations of permit requirements and/or degradation of the waters of the state.

62. **California Environmental Quality Act and Notification:** This project involves the issuance of WDRs and WRRs for an existing facility and the WWTP has sufficient capacity for the expansion projects as such the action to adopt WDRs and WRRs is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.) in accordance with CCR, Title 14, section 15301.

63. The Provisions of this Order specify the effluent limitations.

64. On May 3, 2024, the Los Angeles Water Board notified the Discharger and interested agencies and persons of the intent to revise the WDRs and WRRs for this discharge and provided them with an opportunity to submit written comments for the requirements by June 3, 2024.

65. The Los Angeles Water Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

66. Pursuant to CWC section 13320, any person affected by this action of the Los Angeles Water Board may petition the State Board to review the action in accordance with section 13320 of the CWC and Title 23, CCR, section 2050. The State Water Board (P.O. Box 100, Sacramento, California, 95812) must receive the petition within 30 days of the date this Order is adopted. The regulations regarding petitions may be found at

    http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml

    IT IS HEREBY ORDERED that the Discharger shall be responsible and comply with the following requirements in all operations and activities at the WWTP.

A. EFFLUENT AND RECYLED WATER LIMITATIONS

1. The daily discharge flowrate shall not exceed 180,000 gpd.

2. The pH in the effluent shall at all times be from 6.5 to 8.5 standard units.

3. Waste discharge shall not contain constituents in excess of the following limits.

4. Compliance with the effluent limitations will be determined at the outlet of the clear well after the UV disinfection system prior to discharge to the effluent disposal as shown in Figure 3 Process Flow Diagram.

Table 8. Effluent Limitations

Constituent	Units[1]	Daily Maximum	Monthly Average
BOD_5, 5 Days @20°c	mg/L	45	30
Total suspended solids	mg/L	45	30
Total nitrogen[2]	mg/L	10	None
Nitrate as nitrogen	mg/L	10	None
Nitrite as nitrogen	mg/L	1	None
Oil and grease	mg/L	15	10
Total dissolved solids	mg/L	2,000	None
Sulfate	mg/L	800	None
Chloride	mg/L	110	None
Boron	mg/L	1.0	None
MBAS (Surfactants)	mg/L	0.5	None
Total residual chlorine	mg/L	0.01	None
Glyphosate	mg/L	None	0.7
Simazine	mg/L	None	0.004
Total coliform	MPN/100 mL	1.1	None
Fecal coliform	MPN/100 mL	1.1	None
Enterococcus	MPN/100 mL	1.1	None

Table Notes:

[1] mg/L denotes milligrams per liter; MPN/100mL denotes most probable number (MPN) per 100 milliliters

[2] Total nitrogen is the sum of ammonia as nitrogen, nitrite as nitrogen, nitrate as nitrogen, and organic nitrogen.

5. Turbidity Limits: The turbidity of the recycled water used for irrigation shall be monitored continuously using a turbidity meter and a recorder following filtration and shall not exceed any of the following.

   A. A daily average of 2 Nephelometric turbidity units (NTUs).

   B. 5 NTUs more than 5 percent of the time (72 minutes) during any 24-hour period, and 10 NTU at any time.

6. Total coliform limits for the recycled water used for irrigation: The median concentration of total coliform bacteria measured at the outlet of the clear well after the UV disinfection system shall not exceed 2.2 MPN/100mL utilizing the bacteriological results of the last seven days and the number of total coliform bacteria shall not exceed 23 MPN/100mL in more than one sample in any 30-day period. No sample shall exceed 240 MPN/100 mL.

7. Effluent (wastewater discharged from the WWTP) shall not contain heavy metals, arsenic, or cyanide, or other pollutants designated Priority Pollutants (Appendix A to 40 CFR, Part 423--126 Priority Pollutants) by the USEPA in concentrations

exceeding the limits contained in the California Drinking Water Standards, CCR Title 22, section 64431 (Attachment A-1).

8. Radioactivity shall not exceed the limits specified in the CCR Title 22, chapter 15, section 64441 et seq., or subsequent revisions (Attachment A-2).

9. Effluent shall not contain organic chemicals in concentrations exceeding the limits contained in the current California Drinking Water Standards, CCR Title 22, section 64444 or subsequent revisions (Attachment A-3).

10. Effluent shall not contain disinfectant byproducts in concentrations exceeding the limits contained in the current California Drinking Water Standards, CCR Title 22, section 64533, Chapter 15.5 or subsequent revisions (Attachment A-4).

11. Effluent shall not exceed the Secondary MCLs, California Drinking Water Standards, CCR Title 22, Table 64449-A (Attachment A-5).

12. Effluent shall be monitored for the CECs as health-based and performance indicators in accordance with the Recycled Water Policy, effective April 8, 2019 (Attachment B).

B. RECEIVING WATER LIMITATIONS FOR GROUNDWATER QUALITY

1. "Receiving water" is defined as groundwater beneath the Site.

2. The Site's groundwater quality limitations consistent with the Basin Plan are listed in Table 9, and the groundwater quality collected from the monitoring wells: MW-M1, MW-M2, MW-M3, MW-M4, MW-A1 MW-A2, MW-A3, MW-A4, OL-1, OL-2, and OL-3 shall not exceed the following limits.

Table 9. Groundwater Limitations

Constituent	Units[1]	Maximum Limitation
Total Dissolved Solids	mg/L	2,000
Sulfate	mg/L	800
Chloride	mg/L	110
Boron	mg/L	1.0
Total Nitrogen[2]	mg/L	10
Nitrate as nitrogen	mg/L	10
Nitrite as nitrogen	mg/L	1
Glyphosate	mg/L	0.7
Simazine	mg/L	0.004
Total coliform	MPN/100 mL	1.1
Fecal coliform	MPN/100 mL	1.1
Enterococcus	MPN/100 mL	1.1

Table 9 Notes:

[1] mg/L: milligrams per liter; MPN/100 mL: most probable number (MPN) per 100 milliliters
[2] Total nitrogen is the sum of ammonia as nitrogen, nitrite as nitrogen, nitrate as nitrogen, and organic nitrogen.

3. The Discharger shall demonstrate that the discharge from the WWTP does not contribute to the degradation of groundwater quality.

C. RECYCLED WATER SPECIFICATIONS FOR AGRICUTURAL IRRIGATION

1. Adequately disinfected and treated wastewater shall be used for irrigation of citrus and avocado orchards at all times.

2. Recycled water used for irrigation shall be retained in the areas of use and shall not be allowed to escape as surface flow.

3. Recycled water shall be applied at such a rate and volume as not to exceed vegetation demand and soil moisture conditions. Special precautions shall be taken to prevent clogging of drip tubes, over-watering and production of runoff. Pipelines shall be maintained to prevent leaks.

4. Recycled water shall not be applied within 100 feet of any well used for domestic purposes.

5. The use of the recycled water shall not cause the concentration of organic and inorganic chemicals (i.e., heavy metals, arsenic, or cyanide) in the receiving water to exceed the limits contained in Title 22 of the CCR, sections 64431 (Inorganic chemical) and 64444 (Organic chemical).

6. Recycled water shall not be used for irrigation during periods of rainfall and/or runoff.

7. Recycled water reuse shall not result in breeding of mosquitoes, gnats, or other pests.

8. Recycled water used as spray disposal shall not result in earth movement in geologically unstable areas.

9. No physical connection shall be made or allowed to exist between any recycled water piping and any piping conveying potable water, except as allowed under section 7604 of Title 17, CCR.

10. Public contact with recycled water shall be precluded or controlled through such means as fences and signs, or acceptable alternatives.

11. All disposal areas with public access and landscape impoundments should be posted to warn the public that recycled water is being stored or used.

12. Recycled water distribution systems shall be inspected at least monthly to assure proper operation, absence of leaks, and absence of illegal connections.

13. All areas where recycled water is used shall be posted with conspicuous signs that include the following wording in a size no less than 4 inches high by 8 inches wide: "ATTENTION: NON-POTABLE WATER - DO NOT DRINK" or “RECYCLED WATER USED FOR IRRIGATION – DO NOT DRINK.” Perimeter warning signs indicating that the treated water is in use shall be posted at least every 500 feet, with a minimum of at least one sign on each corner of each irrigation area at access road entrances.

14. The portions of the water piping system that are in areas subject to access by the general public shall not include any hose bibs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the water piping system in areas subject to public access.

D. GENERAL REQUIREMENTS

1. Dischargers shall operate and maintain facilities, treatment operations, associated collection systems, and discharge locations in ways to preclude adverse impacts to surface or groundwater from impacts predicted to occur due to climate change.

2. The Discharger shall submit a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan) no later than 12 months after adoption of this permit. Submittal of the Climate Change Plan is required pursuant to CWC section 13267. As required by this provision, a regional water board may require a person to submit technical or monitoring program reports which the regional water board requires. The Climate Change Plan is needed in order to assess and manage climate change related effects associated with Discharger operations that may affect water quality.

3. The Climate Change Plan shall include an assessment of short- and long-term vulnerabilities of the facility and operations, as well as plans to vulnerabilities of collection systems, facilities, treatment systems, and discharge locations for predicted impacts in order to ensure that facility operations are not disrupted, compliance with permit conditions is achieved, and receiving waters are not adversely impacted by discharges. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate climate-induced impacts including, but not limited to, changing influent and receiving water quality and conditions, as well as the impact of rising sea level (where applicable) storm surges and back-to-back severe storms that are expected to become more frequent.

4. Standby or emergency power facilities and/or sufficient capacity shall be provided for treated wastewater storage during rainfall or in the event of plant upsets or outages.

5. Adequate facilities shall be provided to protect the WWTP treatment and wastewater collection system from damage by storm flows and runoff or runoff generated by a 100-year storm.

6. The Discharger's wastewater treatment system and land application system shall be operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

7. The Discharger shall optimize the wastewater treatment processes periodically to maximize treatment of wastewater and produce a high quality of effluent for discharge. Sludge and other solids shall be removed from wastewater treatment equipment, sumps, tanks, etc. as needed to ensure optimal system operation and adequate hydraulic capacity.

8. The wastewater collection system, treatment system, and the treated wastewater dispersal system shall be maintained in such a manner that prevents wastewater from surfacing or overflowing at any location.

9. Sludge and other solids removed from wastewater treatment shall be disposed of in a manner that is consistent with Title 27, Division 2, Subdivision 1 of the CCR and approved by the Executive Officer.

10. Storage and disposal of domestic wastewater shall comply with existing federal, state, and local laws and regulations, including permitting requirements and technical standards.

11. Any proposed change in solids use or disposal practice from a previously approved practice shall be reported to the Executive Officer at least 60 days in advance of the change.

12. Dischargers are directed to submit all reports required by the WDRs and WRRs and MRP, including self-monitoring reports, groundwater monitoring analytical data, and discharge location data to the State Water Resources Control Board GeoTracker database website at:

    https://geotracker.waterboards.ca.gov/ under Global ID WDR100017186.

E. PROHIBITIONS

1. The direct or indirect discharge of any waste and/or wastewater to surface waters or surface water drainage courses is prohibited.

2. Discharge of waste classified as ‘hazardous’, as defined in Section 2521(a) of Title 23, CCR, section 2510 et seq., is prohibited. Discharge of waste classified as ‘designated,’ as defined in CWC section 13173, in a manner that causes violation of groundwater limitations, is prohibited.

3. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.

4. Wastes discharged shall not impart tastes, odors, color, foaming or other objectionable characteristics to the receiving waters.

5. There shall be no onsite permanent disposal of sludge. Sludge-drying activities are allowed, but only as an intermediate treatment prior to off-site disposal. Any offsite disposal of wastewater or sludge shall be made only to a legal point of disposal. For purposes of this Order, a legal disposal site is one for which requirements have been established by the Los Angeles Water Board or comparable regulatory entity. Any wastewater or sludge handling shall be in such a manner as to prevent its reaching surface waters or watercourses.

6. Odors originating at this facility shall not be perceivable beyond the limits of the property owned by the Discharger.

7. Wastes discharged from the WWTP shall at no time contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

8. The discharge of waste shall not create a condition of pollution, contamination, or nuisance. No new connections may be made without notification to the Los Angeles Water Board.

10. Nutrient materials in the waste discharged to the holding ponds shall not cause objectionable aquatic growth or degrade indigenous biota.

11. The discharge of any wastewater to surface waters or surface water drainage courses is prohibited without a National Pollutant Discharge Elimination System (NPDES) permit.

12. The holding ponds shall not contain floating materials, including solids, foams or scum in concentrations that cause nuisance, adversely affect beneficial uses, or serve as a substrate for undesirable bacterial or algae growth or insect vectors.

13. Bypass (the intentional diversion of waste stream from any portion of a treatment facility) is prohibited. The Los Angeles Water Board may take enforcement actions against the Discharger for bypass unless:

    a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that cause them to become inoperable, or substantial and permanent loss in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production);

    b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal

periods of equipment down time. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and

c) The Discharger submitted a notice at least 48 hours in advance of the need for a bypass to the Los Angeles Water Board.

14. Any discharge of wastewater from the treatment system (including the wastewater collection system) at any point other than specifically described in this Order is prohibited and constitutes a violation of this Order.

F. PROVISIONS

1. A copy of this Order shall be maintained at the WWTP to be available at all times to operating personnel.

2. The Discharger shall file with the Los Angeles Water Board technical reports on self-monitoring work performed according to the detailed specifications contained in MRP CI No. 5322 attached hereto and incorporated herein by reference, as directed by the Executive Officer. The results of any monitoring done more frequently than required at the location and/or times specified in the MRP shall be reported to the Los Angeles Water Board. The Discharger shall comply with all of the provisions and requirements of the Monitoring and Reporting Program.

3. The Discharger shall comply with all applicable requirements of chapter 4.5 (commencing with section 13290) of division 7 of the CWC.

4. MRP CI No. 5322 contains requirements, among others, a groundwater monitoring program for the WWTP so that the groundwater downgradient and upgradient from the discharge/disposal area can be sampled and analyzed to determine if discharges from the disposal system are impacting water quality.

5. The Discharger shall monitor the background of the receiving groundwater quality as it relates to its effluent discharges. Should the constituent concentrations in any downgradient monitoring well exceed the receiving water quality objectives prescribed in the Basin Plan, and the increase in constituents is attributable to the effluent disposal practices, the Discharger must develop a source control plan including a detailed source identification and pollution minimization plan, together with the time schedule of implementation, and must be submitted within 90 days of recording the exceedance.

6. Should effluent monitoring data indicate possible degradation of groundwater attributable to Discharger's effluent, the Discharger shall submit, within 90 days after discovery of the problem, plans for measures that will be taken, or have been taken, to mitigate any long-term effects that may result from the discharge(s).

7. Should the nitrate- and nitrite-nitrogen concentrations in effluent exceed 15 mg/L in three (monthly sampling plus two additional sampling events for result verification) consecutive samples taken within one month, the Discharger must submit an investigation plan (Plan) to the Executive Officer for approval within 90 days from the occurrence. The Plan must contain a detailed description of pollutant minimization strategies and prevention measures proposed, together with the time schedule of implementation.

8. Wastewater treatment and discharge at the discharge/disposal area shall not cause pollution or nuisance as defined in CWC section 13050.

9. In accordance with CWC section 13260(c), the Discharger shall file a report of any material change or proposed change in the character, location, or volume of the discharge.

10. The Discharger shall operate and maintain its wastewater collection, treatment, and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's responsibilities. Anyone employed in the operation of the wastewater treatment plant must be certified pursuant to CWC sections 13625-13633.

11. By **December 1, 2024**, the Discharger shall submit to the Executive Office for approval of an Operations and Maintenance Manual (O & M Manual) for the entire updated Limoneira wastewater treatment system and disposal facilities for the Limoneira Company facility. The O & M Manual shall include the minimum UV intensity needed to meet the disinfection requirements as required by the DDW and this Order. The Discharger shall maintain the O & M Manual in useable condition, and available for reference and use by all applicable personnel. The Discharger shall regularly review, and revise or update as necessary, the O & M Manual(s) in order for the document(s) to remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary and submitted to the Los Angeles Water Board by July 1 of each year.

12. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

13. For any violation of requirements in this Order, the Discharger shall notify the Los Angeles Water Board within 24 hours of knowledge of the violation either by telephone or electronic mail. The notification shall be followed by a written report within one week. The Discharger in the next monitoring report shall also confirm this information. In addition, the report shall include the reasons for the violations or adverse conditions, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.

14. This Order does not relieve the Discharger from the responsibility to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.

15. After notice and opportunity for a hearing, this Order may be terminated or modified for causes including, but not limited, to:

    a). Violation of any term or condition contained in this Order;

    b). Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or

    c). A change in any condition, or the discovery of any information, that requires either a temporary or permanent reduction or elimination of the authorized discharge.

16. The Discharger shall furnish, within a reasonable time, any information the Los Angeles Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Los Angeles Water Board, upon request, copies of records required to be kept by this Order.

17. This Order includes the attached *Standard Provisions Applicable to Waste Discharge Requirements* which are incorporated herein by reference. If there is any conflict between provisions stated herein and the *Standard Provisions Applicable to Waste Discharge Requirements*, the provisions stated herein will prevail.

18. The Discharger shall allow the Los Angeles Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

    a) Enter the Discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;

    b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

    c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d) Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWC, any substances or parameters at any locations.

19. Until terminated by the Los Angeles Water Board, the WDRs and WRRs contained in this Order will remain in effect and will be reviewed periodically.

20. All discharges of waste into the waters of the State are privileges, not rights. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification.

21. Failure to comply with this Order and MRP No. 5322, could subject the Discharger to monetary civil liability pursuant to the CWC, including sections 13268 and 13350. Person's failing to furnish monitoring reports or falsifying any information provided therein is guilty of a misdemeanor.

G. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section A of this Order will be determined as specified below.

1. **General:** Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e.g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used for compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.

2. **Average Monthly Effluent Limitation:** If the average of daily discharges over a calendar month exceeds the average monthly effluent limitation for a given parameter in Table 8, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the average monthly effluent limitation, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no effluent compliance determination can be made for that calendar month.

3. **Maximum Daily Effluent Limitation:** If a daily discharge exceeds the maximum daily effluent limitation for a given parameter in Table 8, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no effluent compliance determination can be made for that day.

H. TERMINATION

Los Angeles Water Order No. R4-2014-0040, adopted by the Los Angeles Water Board on April 15, 2014, is hereby terminated, except for enforcement purposes.

I. REOPENER

1. The Los Angeles Water Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.

2. This Order may be reopened to include additional or modified requirements to address Discharger's expansion or mitigation plans, total maximum daily load (TMDL) or Basin Plan mandates, or groundwater limitation for compliance with Resolution 68-16.

J. EFFECTIVE DATE OF THE ORDER

This Order takes effect upon its adoption.

I, Susana Arredondo, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 27, 2024.

Jenny Newman

Digitally signed by Jenny Newman
Date: 2024.07.16 15:09:15 -07'00'

for Susana Arredondo

Executive Office

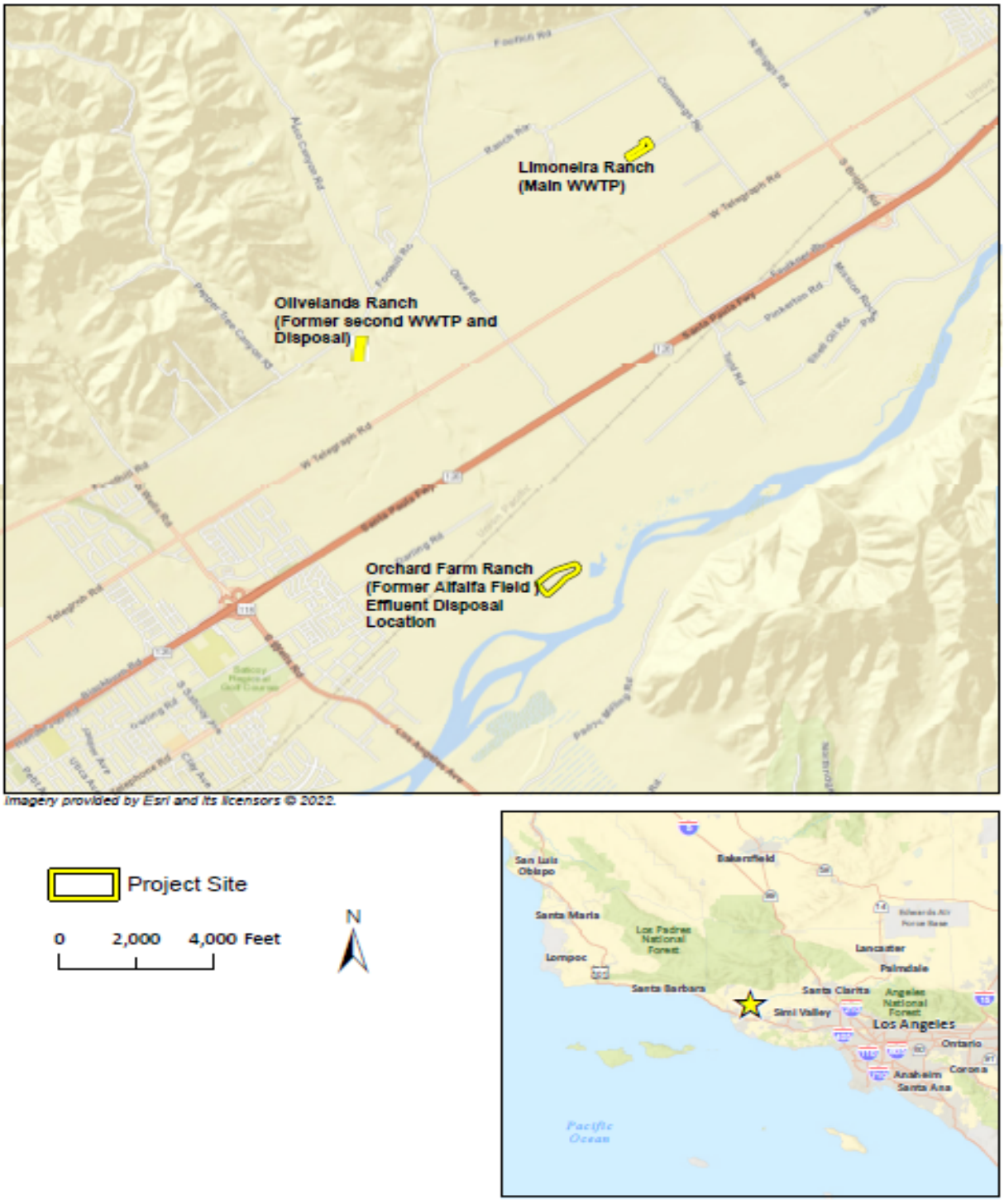

Figure 1. Site Vicinity and Locations of the Limoneira Ranch, Olivelands Ranch, and Orchard Farm Ranch

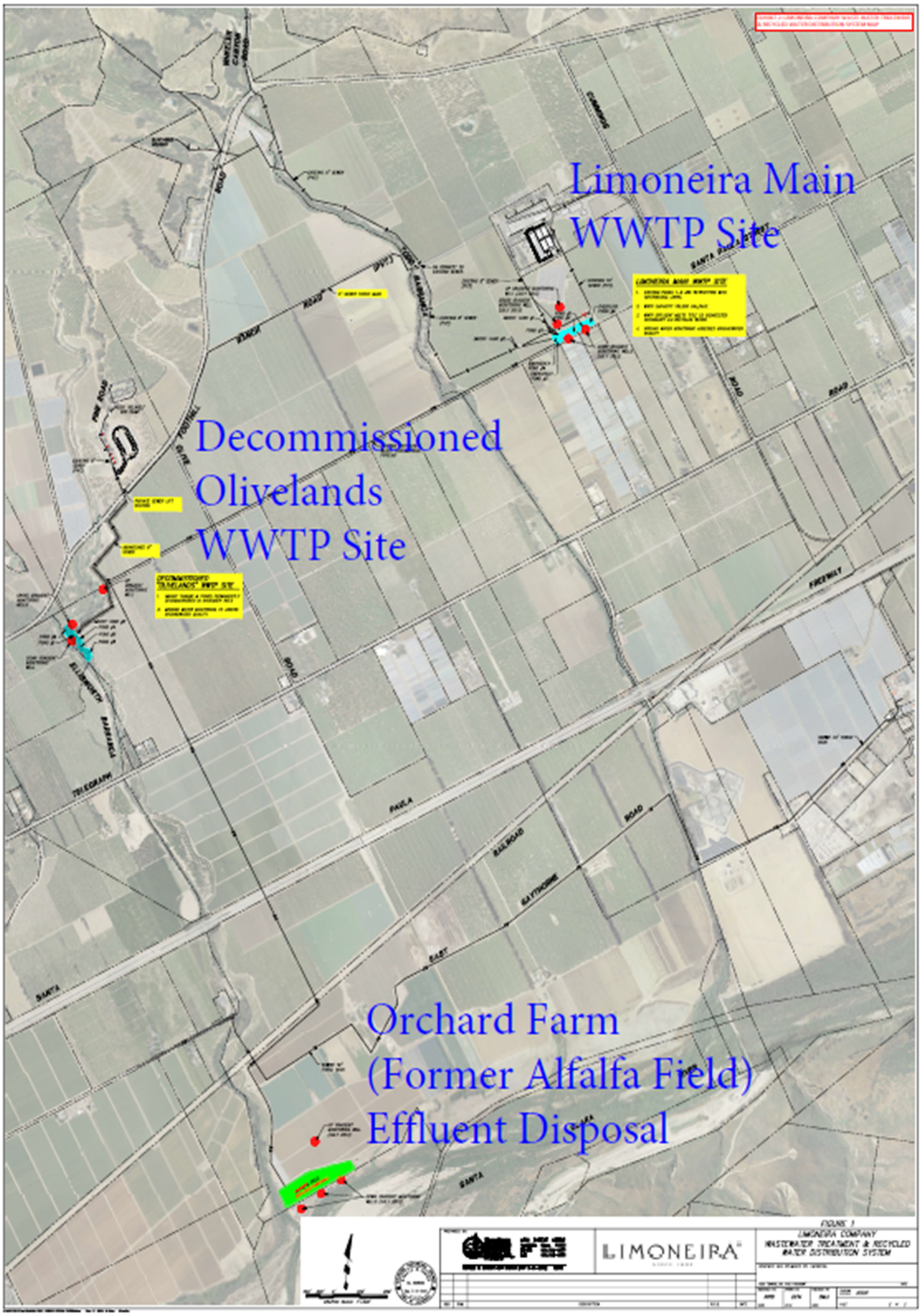

Figure 2. Locations of the Wastewater Treatment Plant and Disposal Area

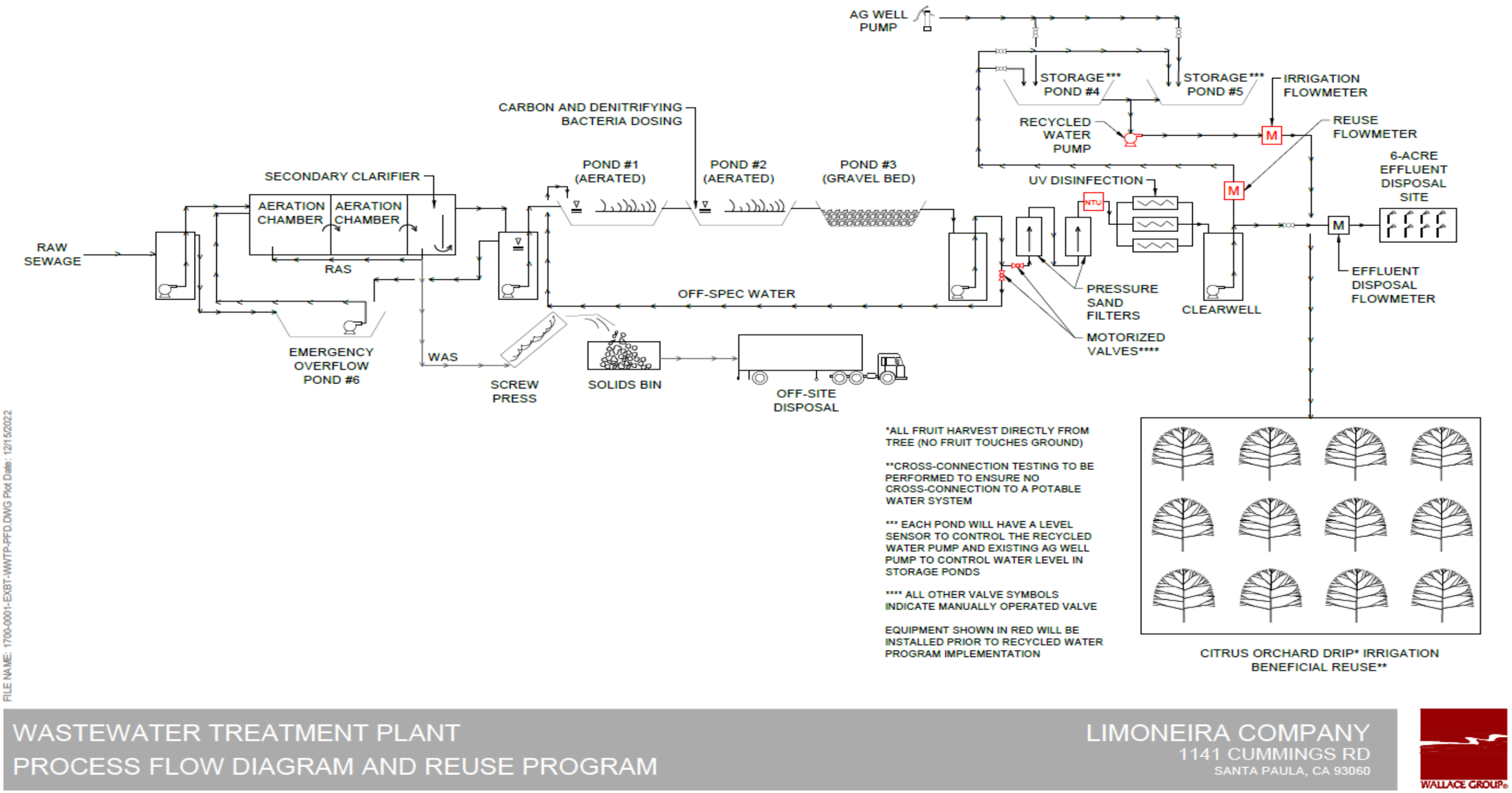

Figure 3: Process Flow Diagram

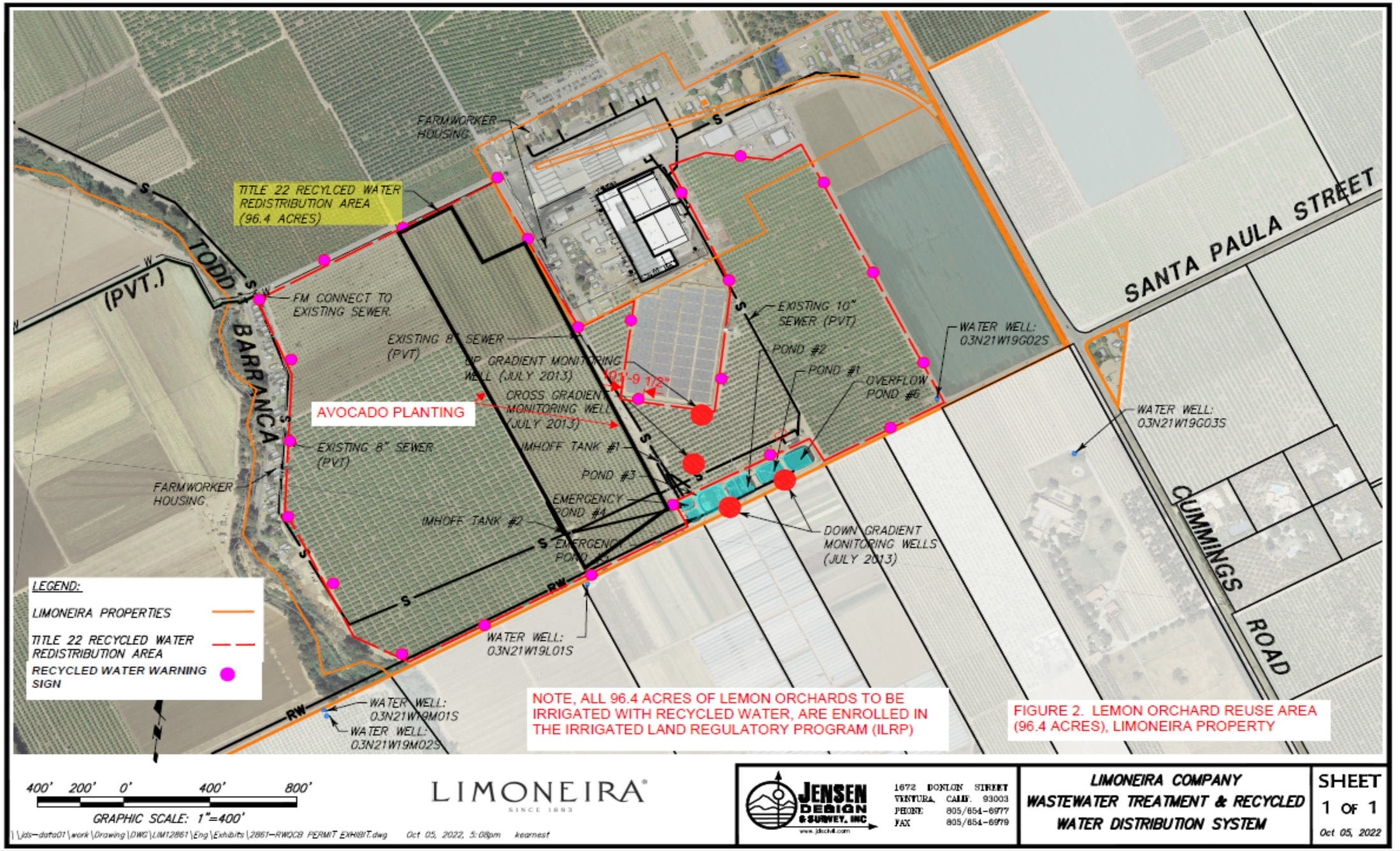

Figure 4: Locations and Layout of the Wastewater Treatment Plant and Proposed Recycled Water Distribution Area

Figure 5. Storage Pond Locations and Layout

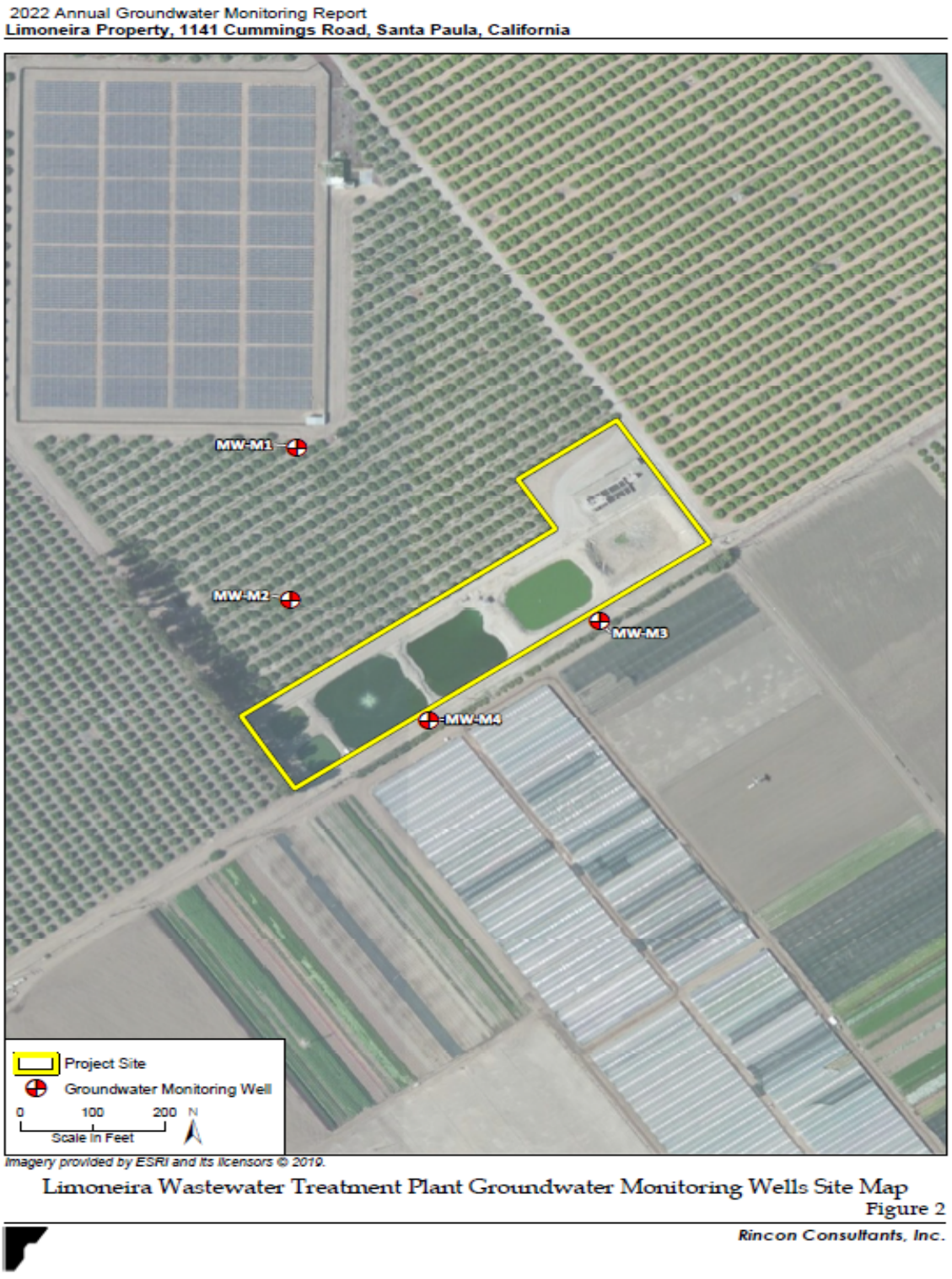

Figure 6. Groundwater Monitoring Well Locations at Limoneira Ranch

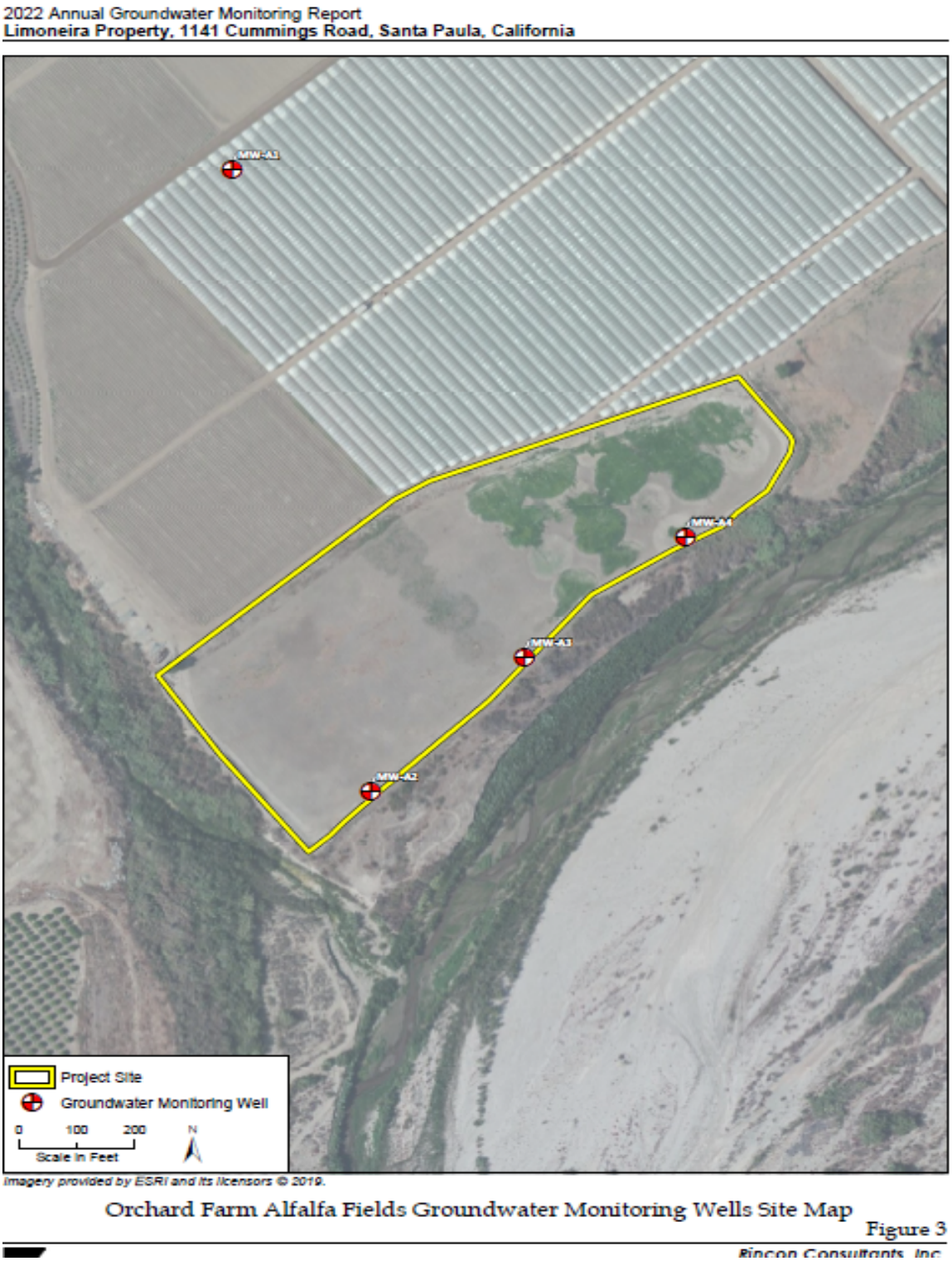

Figure 7. Groundwater Monitoring Well Locations at Orchard Farm Ranch

Figure 8. Groundwater Monitoring Well Locations at Olivelands Ranch