May 2025

VENTURA COUNTY AGRICULTURAL IRRIGATED LANDS GROUP

2025 Water Quality Management Plan

SUBMITTED TO

Los Angeles Regional Water Quality Control Board

SUBMITTED BY

Ventura County Agricultural Irrigated Lands Group (VCAILG)

VENTURA COUNTY
Agricultural Irrigated Lands Group

PREPARED BY

LARRY WALKER ASSOCIATES
science | policy | solutions

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Document Overview

On September 28, 2023, the Los Angeles Regional Water Quality Control Board (Regional Board) adopted the Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region (Order No. R4-2023-0353), referred to as Ag Order herein. The Ag Order replaces the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region (Order No. R4-2021-0045), referred to as Conditional Waiver herein, and subsequent extensions, most recently Order No. R4-2021-0045-A02, which extended the Conditional Waiver through September 30, 2023. The Ag Order includes the requirement for discharger groups to develop a water quality management plan (WQMP) to address exceedances of water quality benchmarks. The WQMP is an iterative process which includes plans for additional or upgraded management practices to achieve water quality benchmarks. On behalf of the Ventura County Agricultural Irrigated Lands Group (VCAILG, this WQMP fulfills the requirements of the Ag Order and builds on the previous WQMPs submitted under the Conditional Waivers. This WQMP also reflects the monitoring strategy in the 2024 VCAILG Monitoring and Reporting Plan (MRP) and Quality Assurance Project Plan (QAPP). The WQMP includes graphs of the complete history of available VCAILG monitoring data going back as early as 2007, for water quality benchmark exceedances that require further action. To determine the need for additional action in the form of management practices, the water quality benchmark exceedance evaluation is based on water quality monitoring data from July 1, 2020 (where the previous WQMP left off) to June 30, 2023 (the end of the 2023 monitoring year and specified in Ag Order, Appendix 3, Section 4.4).

AG ORDER WATER QUALITY MANAGEMENT PLAN (WQMP) REQUIREMENTS

Appendix 3 of the Ag Order details the monitoring and reporting requirements for any Ventura County discharger group, with section 2 outlining WQMP requirements. The major elements are as follows:

- Summary of Existing Conditions (organized by monitoring site) and to include: maps, graphs of constituents that exceed the exceedance threshold for the associated water quality, a report of the management practices currently implemented in each responsibility area (as well as a grower-specific field-level report of management practices by Anonymous Member ID), a comparison of the graphs/exceeded constituents to the level of management practice implementation, and a pesticide use evaluation.
- Proposed Additional or Upgraded Management Practices – to be based on the evaluation described in the previous bullet and recommending the types of management practices (MPs) specified in the Ag Order for the appropriate water quality benchmark exceedance category and TMDL-specific management practices, where specified; and including an implementation schedule.
- Outreach Plan with a strategy for communicating with group members to at least the minimum frequency specified in Ag Order, Appendix 3, Section 2.3.

The WQMP shall also include a list of any members that meet the criteria for alternative nitrogen reporting or that are exempt from nitrogen management requirements. As of March 1, 2025, only the Irrigation and Nitrogen Management Plan (INMP) are required to have been completed for the year and kept on farm. It is not until March 1, 2026, when the Irrigation and Nitrogen Management Reports (INMRs) are due to be submitted to VCAILG, that we will have a list of those requesting alternative reporting or claiming an exemption.

WQMP STRUCTURE

To meet the requirements of a WQMP, this plan is organized into the following sections:

- Document Overview
- Introduction

- Group Membership and Setting
    - Description of VCAILG governance and membership; general overview of agriculture in Ventura County.
- WQMP Development Process
    - Responsibility area development and association with monitoring sites.
- Summary of Existing Conditions by Responsibility Area
    - Map of each responsibility area and representative monitoring site(s). More detailed maps with monitoring site drainages and parcel enrollment status can be found in Appendix C.
    - Farm Evaluation Survey results by responsibility area.
    - Proposal for additional management practices presented as tables that bring together benchmark exceedances, applicable MPs to address those exceedances, current level of MP adoption, and designation of whether additional implementation of each MP is being recommended.
    - Pesticide use evaluation for the three current use pesticides with water quality benchmarks
- Schedule
    - Schedule with TMDL driven compliance dates and target adoption rates for applicable MPs in each responsibility area
- Outreach Plan
    - Description of VCAILG's approach to informing its members of the benchmark exceedances within their responsibility area and the applicable MPs required for implementation.
- Appendices Summary

Introduction

On September 28, 2023, the Los Angeles Regional Water Quality Control Board (Regional Board) adopted the *Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region* (Order No. R4-2023-0353), referred to as *Ag Order* herein. The *Ag Order* replaces the *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region* (Order No. R4-2021-0045), referred to as *Conditional Waiver* herein, and subsequent extensions, most recently Order No. R4-2021-0045-A02, which extended the *Conditional Waiver* through September 30, 2023. For simplicity, the term "Conditional Waiver" herein refers to the 2016 *Conditional Waiver* and its subsequent extensions; the requirements in the 2016 *Conditional Waiver* were not substantially changed by subsequent extensions. The purpose of the *Ag Order* and *Conditional Waiver* is to assess the effects of, and control discharges from, irrigated agricultural lands in Los Angeles and Ventura Counties to surface and groundwater. These discharges can affect water quality by transporting nutrients, pesticides, sediment, salts, and other pollutants from cultivated fields into surface waters, potentially impairing designated beneficial uses. Owners and operators of agricultural lands in Ventura and Los Angeles Counties must comply with provisions contained in the *Ag Order* or be regulated under other Regional Board programs.

The *Ag Order* allows individual landowners and growers to comply with its provisions by working collectively as a Discharger Group, or as an individual. A Discharger Group is defined by the *Ag Order* as "any group of dischargers and/or organizations that forms to comply with this Order. Discharger Groups can be, but are not limited to, organizations formed on a geographic basis or formed with other factors in common such as commodities." The primary purpose of allowing Discharger Groups is to encourage collaboration on monitoring and reporting and to increase the effectiveness of management practices throughout a watershed to attain water quality standards. Those landowners and growers choosing to

comply with the *Ag Order* as a Discharger Group must signify by submitting a Group Notice of Intent and by developing a Discharger Group monitoring program.

To assist agricultural landowners and growers that farm within the boundaries of Ventura County, various agricultural organizations, water districts and individual farmers joined together in 2006 to form the Ventura County Agricultural Irrigated Lands Group (VCAILG), which is intended to act as one unified "Discharger Group" for those agricultural landowners and growers that wish to participate. A Notice of Intent (NOI) to comply with the *Ag Order* was submitted to the Regional Board by the VCAILG on March 28, 2024. The NOI included the VCAILG membership roster, as well as the required Quality Assurance Project Plan (QAPP) and Monitoring and Reporting Program Plan (MRP), which detail the water quality monitoring and reporting procedures being conducted in compliance with the new terms of the *Ag Order*, were submitted to the Regional Board on May 13, 2024. Revised drafts of the MPR and QAPP were submitted to the Regional Board on December 13, 2024.

Following the completion of each monitoring year, VCAILG submits Annual Monitoring Reports (AMR) that provide a detailed summary of activities conducted by the VCAILG during the past year, including, a discussion of monitoring results that exceeded water quality benchmarks. The next AMR will be submitted on December 15, 2025 and reports on data collected between July 2024 and June 2025.

The data compilation and identification of benchmark exceedances in the AMRs lends itself to the work of developing a Water Quality Management Plan (WQMP), which serves to evaluate long-term water quality in the context of on-farm management practices, and develop a plan to implement additional and upgraded practices in order to achieve water quality benchmarks, as well as the approach of VCAILG to inform and provide outreach to its members regarding the outcome and need for additional management practices. This document serves as the fourth WQMP to meet the requirements of the *Ag Order* and *Conditional Waiver* and is based on exceedances occurring during the three-year data period from July 1, 2020 to June 30, 2023.

Group Membership and Setting

VCAILG was formed in 2006 to act as one unified "Discharger Group" in Ventura County for the purpose of compliance with the *Conditional Waiver*. VCAILG oversight is provided by a Steering Committee. Steering Committee membership consists of agricultural organization representatives, agricultural water district representatives, landowners and growers from the three primary watersheds in Ventura County (Calleguas Creek, Santa Clara River, and Ventura River). Steering Committee membership also represents the major commodities grown in Ventura County (strawberries, nursery stock, citrus, vegetables, and avocados). The Steering Committee roster is presented in Table 1.

Because the VCAILG is an unincorporated organization, the Farm Bureau of Ventura County acts as the responsible entity for the collection of funds, contracting with consultants, and other fiscal and/or business matters that require an organization with some form of tax status; the Farm Bureau is a non-profit 501(c)(5) organization.

Table 2 contains a summary of VCAILG membership statistics, including the number of landowners and parcels enrolled, as well as irrigated acreage enrolled in each watershed as recorded on April 1, 2025. Membership statistics in the remainder of this report represent group status when the Farm Evaluation data export was pulled in November 2024 to produce survey statistics. Per the April 2025 membership rolls, VCAILG represents 1,223 unique agricultural landowners 128 non-landowner growers, and 78,853 irrigated acres. According to the Ventura County Assessor's records, there are an estimated 434 landowners in the county with irrigated agricultural acreage not enrolled in VCAILG. Therefore, the current VCAILG membership represents 73.8 percent of agricultural landowners in Ventura County, accounting for approximately 89 percent of the estimated irrigated acreage (estimated irrigated acreage is calculated using the ratio of irrigated to assessed acreage in each watershed and applying that ratio to the non-enrolled parcels' assessed acreage). Current membership status by parcel is detailed in Appendix C.

Table 1. VCAILG Steering Committee Membership

Member, Organization [1]	Crop(s) Represented	Watershed(s) Represented
Jesse Gomez, FivePoint (Committee Chair)	Citrus, Hay, Nursery, Vegetables, Sod	Santa Clara River
Jared Bouchard, Pleasant Valley Co. Water District	N/A	N/A
Jason Cole, Cole Ranch	Orchard	Santa Clara River
Paul DeBusschere, DeBusschere Ranch	Strawberries, Avocados	Calleguas Creek
Mike Friel, Laguna Grove Service	Citrus	Calleguas Creek
Jurgen Gramckow, Southland Sod Farms	Sod, Hay, Oats, Vegetables	Calleguas Creek, Santa Clara River, Ventura River
Edgar Gutiérrez, Limoneira Company	Avocado, Citrus	Santa Clara River
Craig Held, Rancho Gemelos/Held Ranches	Avocado, Citrus	Santa Clara River
Scott Klittich, Otto and Sons Nursery	Orchard, Nursery	Santa Clara River
Maureen McGuire, Farm Bureau of Ventura County	N/A	N/A
Doug O'Hara, Buena Farms	Orchard	Calleguas Creek, Santa Clara River
Kelle Pistone, Assoc. of Water Agencies of Ventura County	N/A	N/A
Rob Roy, Ventura County Agricultural Association	N/A	N/A
Mike Sullivan, Essick Farm Management	Avocado, Citrus	Ventura River
William Terry, Terry Farms, Inc.	Strawberries, Vegetables	Calleguas Creek, Santa Clara River
Craig Underwood, Underwood Ranches	Avocado, Citrus, Vegetables	Calleguas Creek, Santa Clara River
Larry Yee, Former Director, UC Cooperative Extension – Ventura	N/A	N/A

N/A = Not Applicable

Table 2. VCAILG Membership Statistics as of April 2025

Watershed	Landowner Count	Parcel Count	Irrigated Acres
Calleguas Creek	598	1,296	42,242
Santa Clara River	467	1,139	28,651
Ventura River	152	256	4,164
Oxnard Coastal	59	106	3,790
Malibu Creek	1	1	5
Total	*1,223* [1]	*2,798*	*78,852*

1. Total landowner count is not a sum across the watersheds but a count of the unique landowners across the area.

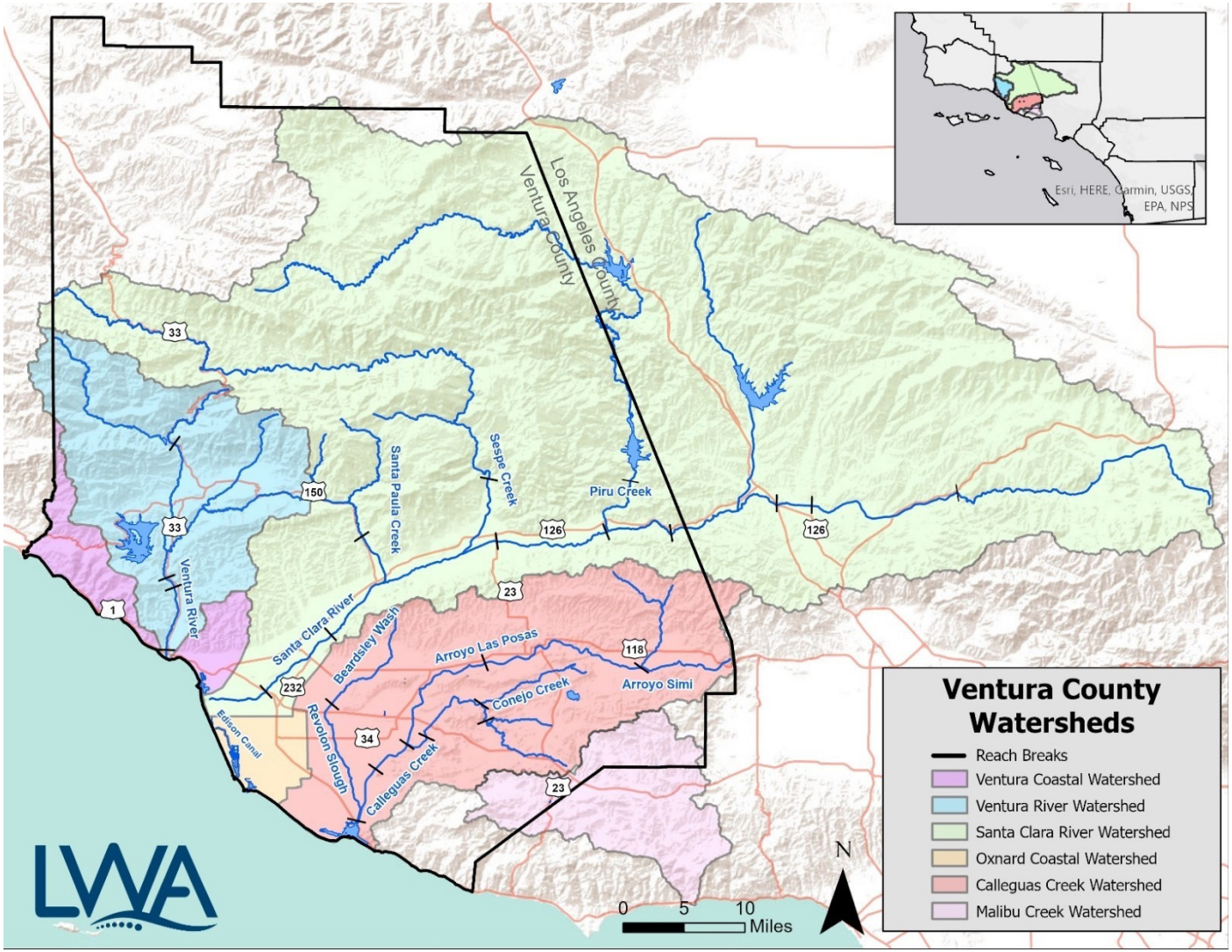


Figure 1. Ventura County Watersheds

Calleguas Creek Watershed

The Calleguas Creek Watershed (Figure 2) is approximately 30 miles long, 14 miles wide, and drains an area of approximately 343 square miles or 219,520 acres. Cities within the watershed include Camarillo, Thousand Oaks, Moorpark, and Simi Valley. The main surface water system drains from the mountains in the northeast part of the watershed toward the southwest, where it flows through the Oxnard Plain before emptying into the Pacific Ocean through Mugu Lagoon. The main waterbodies in the watershed include Calleguas Creek, Revolon Slough, Beardsley Channel, Conejo Creek, Arroyo Santa Rosa, Arroyo Las Posas and Arroyo Simi. All of the previously listed waterbodies appear on the federal 303(d) list of impaired waterbodies, triggering the requirement to develop Total Maximum Daily Loads (TMDLs) for specified pollutants identified as causing impairments. Runoff from irrigated agricultural lands has been identified as one of the sources of these water quality impairments for specified pollutants. To date, TMDLs have been adopted for Nitrogen Compounds, Trash, Organochlorine Pesticides, Polychlorinated Biphenyls (PCBs) and Siltation, Toxicity, Metals and Selenium, and Salts.

Avocados and citrus crops such as lemons and oranges are typically grown in flat or gently sloping foothill areas in the watershed. Agricultural land located on the Oxnard Plain is planted predominately in a wide variety of truck crops, including strawberries, raspberries, peppers, green beans, celery, and onions, as well as sod farms and nurseries. Many farms located in the watershed grow multiple crops during a single calendar year. This multi-cropping technique is most common in the lower parts of the watershed, adjacent to Revolon Slough and Lower Calleguas Creek. Figure 2 shows the distribution of crop types throughout the Calleguas Creek and Oxnard Coastal Watersheds.

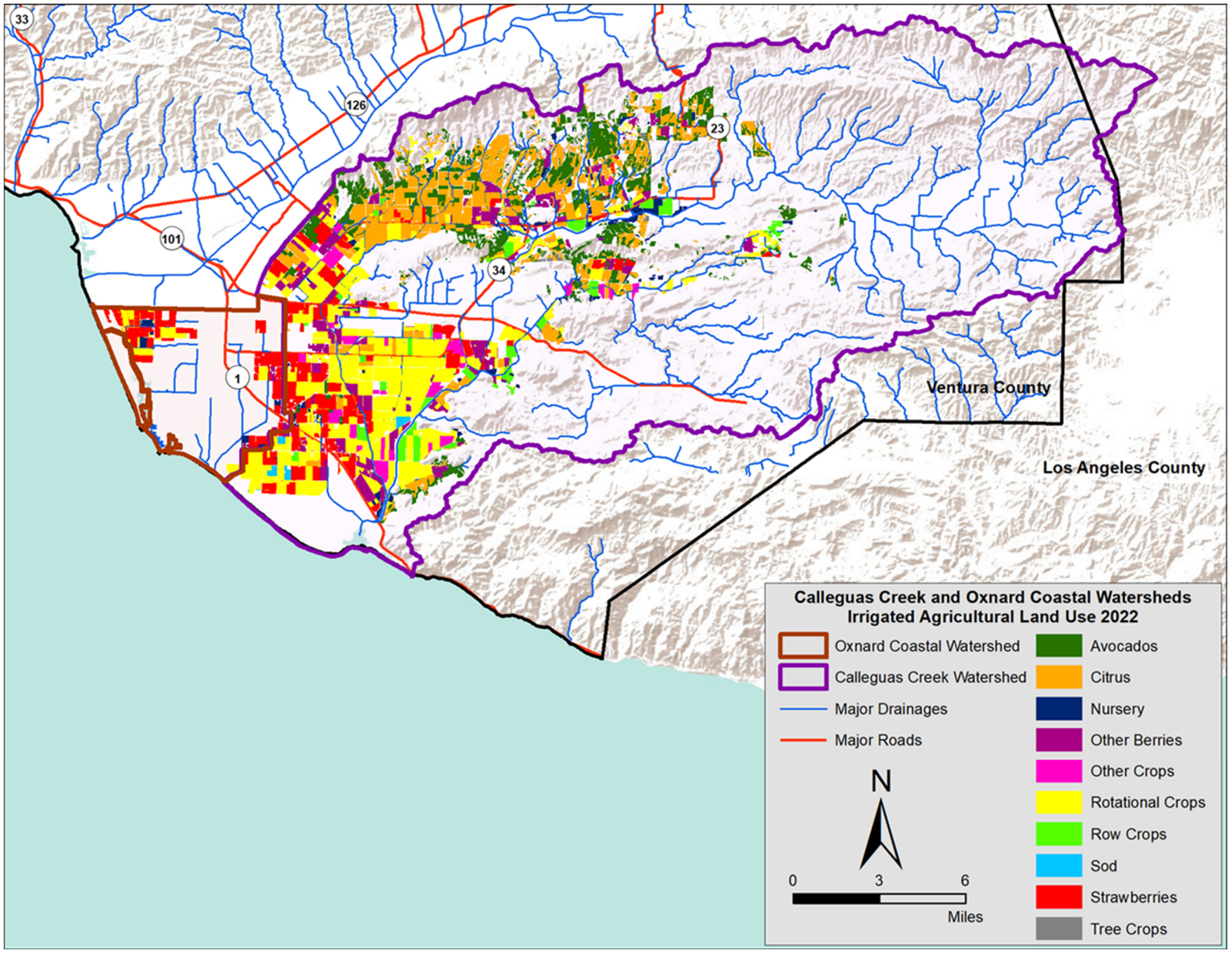


Figure 2. Calleguas Creek and Oxnard Coastal Watersheds Agricultural Land Use

Santa Clara River Watershed

The Santa Clara River is the largest river system in southern California remaining in a relatively natural state. The river originates in the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean halfway between the cities of San Buenaventura and Oxnard. The Santa Clara River and tributary system has a watershed area of about 1,634 square miles (Figure 3). Cities within the watershed include Ventura, Santa Paula, Fillmore, Piru, Santa Clarita, and Newhall. Within Ventura County, major tributaries the Sespe, Piru, and Santa Paula Creeks. Approximately 60 percent of the watershed is located in Ventura County. The most prevalent land use in the 500-year flood plain of the Santa Clara River is agriculture (62 percent), followed by industry (22 percent). Row crops and orchards are planted across the valley floor primarily in Ventura County and extend up adjacent slopes.

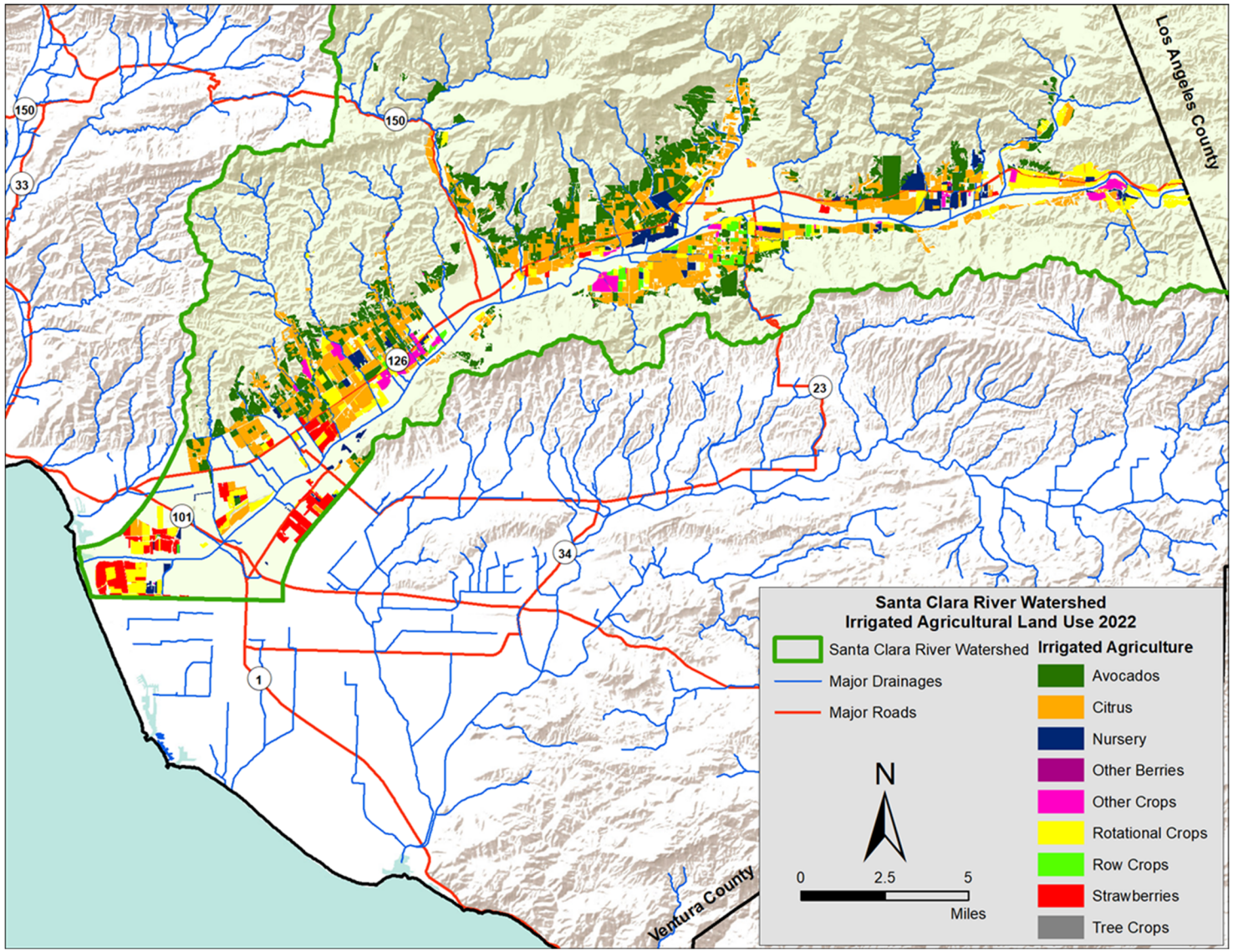


Figure 3. Santa Clara River Watershed Agricultural Land Use

Ventura River Watershed

The Ventura River and its tributaries drain a coastal watershed in western Ventura County. The watershed covers a fan-shaped area of 235 square miles, which is located within the western Transverse Ranges and is 31 miles long from upper Matilija Canyon to the Pacific Ocean (Figure 4). From the upper slopes of the Transverse Ranges, the surface water system in the Ventura River Watershed generally flows in a southerly direction to the estuary, located at the mouth of the Ventura River. Main tributaries in the watershed include Matilija Creek, Coyote Creek and San Antonio Creek. The City of Ojai and communities of Meiners Oaks, Oak View and Casitas Springs are located in the watershed, with surrounding suburban and agricultural areas comprising the Ventura River, Santa Ana, and Upper Ojai Valleys. Portions of the City of San Buenaventura border the lower reaches of the Ventura River. Irrigated agriculture constitutes approximately five percent of land uses in the watershed, with avocado and citrus as the predominant crops grown.

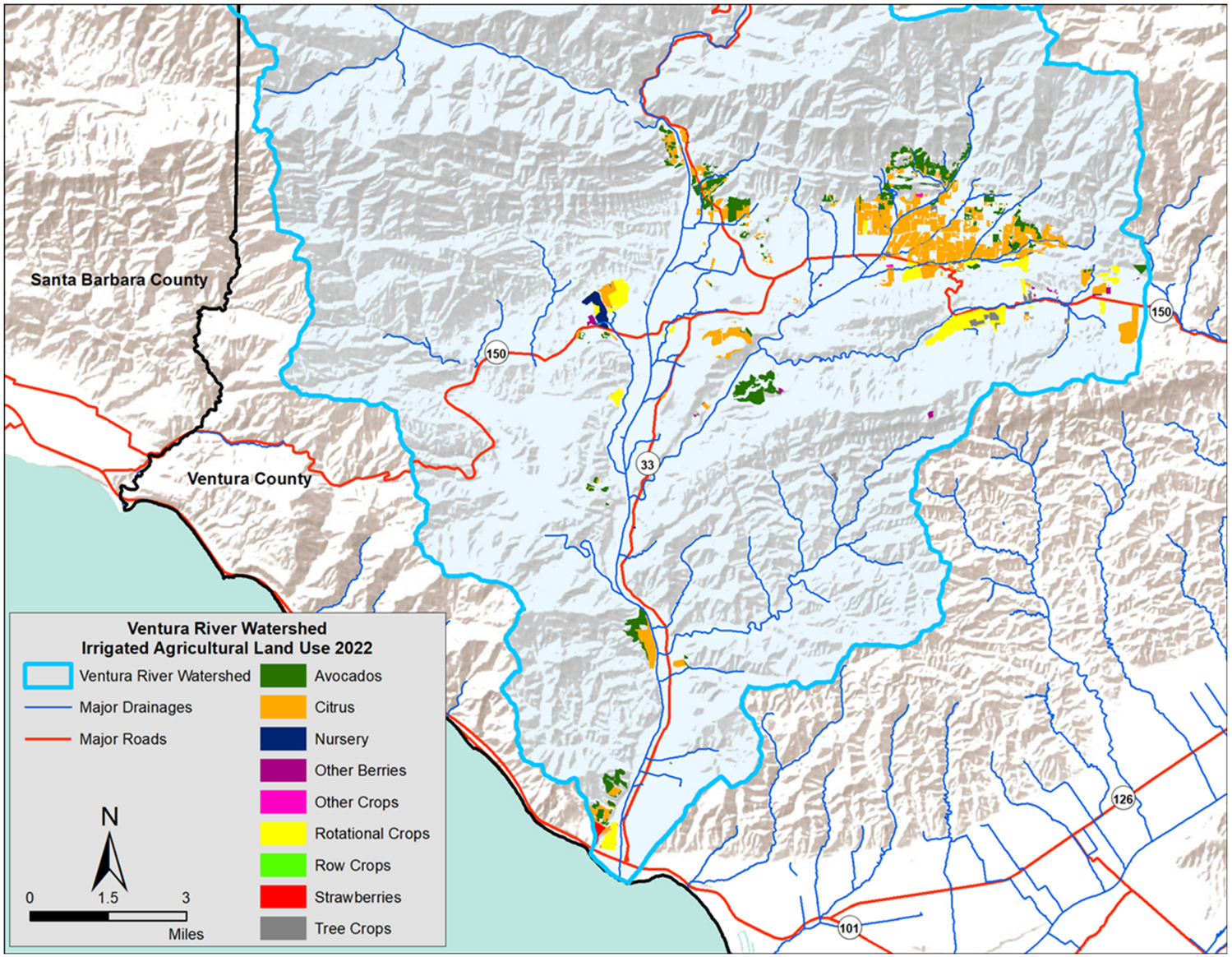


Figure 4. Ventura River Watershed Agricultural Land Use

WQMP Development Process

This WQMP, while developed during the *Ag Order,* bridges the previous *Conditional* Waiver and the current *Ag Order* regulations; using data collected during the *Conditional Waiver* and following the requirements of the *Ag Order.* All WQMPs developed to date required three distinct processes that joined together to result in area specific management practice (MP) recommendations in order to meet water quality benchmarks by their specified compliance dates. As before, this WQMP is an adaptive management plan which has been revised and modified with each iteration as additional survey and monitoring data are available and as additional MPs are implemented by VCAILG members. The three processes of assigning responsibility areas (completed during the first WQMP under the 2016 *Conditional Waiver* and recently updated under the *Ag Order*), compiling management practice surveys, and evaluating benchmark exceedances (revised in this WQMP to include more recent data) are described below.

RESPONSIBILITY AREAS

Appendix 3, Section 2.1. of the Ag Order specifies:

> *"The WQMP shall be organized by monitoring site. For each monitoring site provide:*
>
> *a. A map showing the monitoring site, the land area draining to the monitoring site, the responsibility area, and the enrolled and non-enrolled irrigated agricultural parcels within each responsibility area. Maps shall be submitted electronically in GIS format in addition to being included in the written WQMP.*

In order to evaluate monitoring results for attainment of Ag Order water quality benchmarks and TMDL load allocation benchmarks, monitoring sites are assigned as representative of defined areas. The areas defined to be represented by a particular monitoring site or site(s) for compliance with the benchmarks applicable to them are referred to as responsibility areas (RAs). The VCAILG Monitoring and Reporting Plan (MRP)[1] provides details of monitoring sites that are continuing, replaced, or added in the program under the *Ag Order* as compared to the *2016/2021 Conditional Waiver* MRP.

In addition to specifying monitoring site locations and their purpose, the MRP lists the Discharger Group member sites that are being represented by each monitoring site (Ag Order, Appendix 3, Section 1.1.1). To associate member sites (parcels) for representation by a particular monitoring site or combination of monitoring sites, it is necessary to first understand where and which water quality benchmarks apply within Ventura County. VCAILG worked with Los Angeles Water Board staff to receive or obtain approval of maps of TMDL boundaries. TMDL boundaries were overlain to define areas that are responsible for compliance with the same TMDL load allocation benchmarks. These defined areas, where all the properties within them are represented by the same monitoring site(s) and must attain the same TMDL load allocation(s) are referred to as RAs. The responsibility areas and associated watershed and representative VCAILG monitoring sites are listed in Table 3.

ArcGIS was used to assign each irrigated agricultural parcel in the County (known to VCAILG as of January 2025) to one of the 31 responsibility areas and to VCAILG monitoring site drainages. Parcels were located using Los Angeles and Ventura County Assessor's parcel shapefile downloaded in December 2024. For parcels that straddled the boundary of a responsibility area and/or a VCAILG monitoring site drainage, the parcel was assigned to the area which contained ≥ 50% of its assessed acreage. Updates to VCAILG's GIS resources regarding irrigated agricultural parcels and their enrollment status are made on an ongoing basis as parcels are split, re-numbered, and/or enrollment status changes.

A map illustrating enrolled and non-enrolled parcels for each responsibility area and their representative VCAILG monitoring site drainage areas is provided in Appendix C. Individual maps showing each responsibility area and applicable monitoring sites used for evaluation of water quality (Ag Order benchmark sites and TMDL-related monitoring sites), are provided later in the document. Summaries of

[1] *Monitoring and Reporting Plan (MRP) for the Ventura County Agricultural Irrigated Lands Group (VCAILG), Revision 1. December 2024*

the enrolled, non-enrolled and exempt acreage are tabulated for each responsibility area and VCAILG monitoring site drainage later in the document.

Table 3. Responsibility Areas and Representative VCAILG Monitoring Sites

Watershed	Responsibility Area	Representative VCAILG Site
Calleguas Creek	Lower Revolon	04D_WOOD
	Lower Calleguas Creek	02D_DEER
	Mugu Lagoon	01T_ODD2_DCH
	Oxnard Drain #3	01T_ODD3_EDI
	Arroyo Simi	07D_HITCH_LEVEE_2
	Upper Conejo	9BD_GERRY
	Lower Las Posas	06T_FC_BR
	Calleguas-Howard	09AD_HOWARD
	Calleguas-CSU	09AD_HOWARD
	Upper Las Posas	06T_FC_BR
	Lower Conejo	9BD_GERRY
	Beardsley Wash	05D_LAVD
	East Camarillo Hills	05D_LAVD
Santa Clara River	SCR Reach 5	S04T_TAPO
	Tapo Canyon	S04T_TAPO
	Santa Paula-Fillmore	S03T_BOULD
	Bardsdale	S03D_BARDS
	Saticoy	S02T_ELLS
	Lower Santa Clara River	S02T_ELLS
	McGrath Central Ditch	CIHD_DORIS
	SCR - Victoria and Gonzales	CIHD_DORIS
	McGrath Lake Adjacent	CIHD_DORIS (WDR)
Ventura River	Ventura River Milling Rd.	VRT_THACH
	Lower Ventura River	VRT_THACH
	Ventura River Inland	VRT_THACH
	San Antonio Creek	VRT_SANTO
Malibu Creek	Malibu	05D_LAVD
	Malibu-Las Virgenes	05D_LAVD
Ventura Coastal	Ventura Coastal	VRT_THACH
Oxnard Coastal	Oxnard Coastal - Oxnard Drain #3	01T_ODD3_EDI
	Oxnard Coastal	CIHD_DORIS

MANAGEMENT PRACTICE SURVEY PROCESS

Ag Order, Appendix 3, Section 4.3 required VCAILG to submit a Farm Evaluation Survey template to the Regional Board's Executive Officer for review and approval within 120 days of the adoption of the order. VCAILG submitted a proposed Farm Evaluation Survey template on January 25, 2024 and received survey approval on April 8, 2024. The Farm Evaluation Survey retains almost all of the questions from the survey used to comply with the *2016/2021 Conditional Waivers*, but was modified to reflect some of the new priorities and requirements of the *Ag Order* (e.g., questions related to certified nutrient management plans will be removed following this first survey period because the *Ag Order* made Irrigation and Nutrient Management Plans and Reports a region-wide requirement; the structural management question was separated out into four questions to track the specific type of retention, detention, or treatment being used, etc.). Following Farm Evaluation Survey template approval, VCAILG worked to integrate the survey questions and process with it's membership database and invoicing platform, Clearwater. Farm Evaluation Survey was open for 12 weeks and the data was downloaded to begin the evaluation process in November 2024

Appendix 3, Section 2.1.c. of the *Ag Order* specifies that the WQMP contain:

> *"A grower specific field level report, submitted with Anonymous Member IDs, of existing management practices[19] being implemented in the responsibility area. In addition to adoption rates, report on the degree of implementation (e.g., size of area treated), for each type of management practice, as follows:…*
>
> *[19] To determine existing management practice implementation, a discharger group must compile information from Farm Evaluation Surveys completed by members. The Farm Evaluation Surveys must be specific enough to produce the required level of detail for management practice reporting."*

Because separate surveys were submitted for individual parcels, and because each surveyed member parcel was unambiguously assigned to a responsibility area (and a VCAILG monitoring site drainage, where pertinent), it was a straightforward procedure to tally up the acres, or linear feet, upon which practices or MPs were indicated to be in use for individual responsibility areas and VCAILG monitoring site drainages. The data was also organized to tally the total irrigated acreage that applied to each survey question. Aggregate survey results were reported in two ways:

- Surveyed units (acres or linear feet) meeting criterion
- Percent of total applicable surveyed units meeting criterion (can be considered an estimated adoption rate)

Survey results were tabulated separately for VCAILG monitoring site drainages and the overall responsibility area acreage. In 2024, VCAILG members completed surveys covering 65,888 irrigated acres. This represents 83.6% of the irrigated acres currently enrolled in VCAILG.

WATER QUALITY BENCHMARK EXCEEDANCE EVALUATION PROCESS

Water Quality Benchmarks

This section presents the water quality benchmarks as specified in the *Ag Order*, used to evaluate the VCAILG monitoring data. The standard water quality benchmarks are presented below, followed by water quality benchmarks based upon total maximum daily load (TMDL) load allocations (LAs) for agricultural discharges (*Ag Order* Appendix 5). Due to the complexity of appropriately comparing TMDL LAs to the proper location, site type, sample media, and sampling condition, these benchmarks are described separately. However, when presenting the benchmark exceedance graphs for each responsibility area (Appendix D), all applicable benchmarks are considered and shown together.

Standard Water Quality Benchmarks (Ag Order Appendix 4)

“Standard water quality benchmarks” in the *Ag Order* include numeric and narrative water quality objectives contained in Appendix 4 and include several narrative and numeric Basin Plan objectives and water quality standards from the California Toxics Rule (CTR). In cases where the *Ag Order*, in Appendix 4, references the Basin Plan or CTR, without specifying a benchmark number, the lowest applicable number was selected for each watershed. The *Ag Order* specifies the goal for attaining these benchmarks as ten years from WQMP submittal.

Several of the narrative water quality objectives contained in the Basin Plan specify that discharges of wastes to receiving waters cannot alter “natural” or “ambient” conditions above or below a stated level. Many of the VCAILG monitoring sites are located on agricultural drains that discharge to receiving waters. Because “natural” and “ambient” conditions have not been established in receiving waters or are non-existent on agricultural drains and ephemeral streams, monitoring data from sites located on agricultural drains are evaluated based on the assumption that if benchmarks are not exceeded in the agricultural drain, it is unlikely that the discharge from that drain will cause benchmark exceedances in the receiving water.

Table 4. *Ag Order* Appendix 4 Standard Water Quality Benchmarks Derived from Narrative Objectives

Constituent	Watershed[1]	Narrative Objective [2]	Applicable Benchmark
pH	CC, OXD, SCR, VR	The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed by more than 0.5 pH units from natural conditions as a result of waste discharges.	$6.5 \leq pH \leq 8.5$ Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established
Temperature	CC, OXD, SCR, VR	For waters designated WARM, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall WARM-designated waters be raised above 80°F as a result of waste discharges.	WARM: $\leq$ 80°F Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established
	SCR, VR	For waters designated COLD, water temperature shall not be altered by more than 5°F above the natural temperature.	COLD: No numeric benchmark. Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established
Dissolved Oxygen	OXD	No single dissolved oxygen determination shall be less than 5 mg/L, except when natural conditions cause lesser concentrations.	$\geq$ 5 mg/L
	CC, SCR, VR	The dissolved oxygen content of all surface waters designated as WARM shall not be depressed below 5 mg/L as a result of waste discharges.	WARM: $\geq$ 5 mg/L
	SCR, VR	The dissolved oxygen content of all surface waters designated as COLD and SPWN shall not be depressed below 7 mg/L as a result of waste discharges.	COLD, SPWN: $\geq$ 7 mg/L
Turbidity	CC, OXD, SCR, VR	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits: Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%; Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.	No numeric benchmarks. Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established
Total Suspended Solids (TSS)	CC, OXD, SCR, VR	Wastes shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.	No numeric benchmarks.

Constituent	Watershed[1]	Narrative Objective [2]	Applicable Benchmark
Toxicity	CC, OXD, SCR, VR	All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal or aquatic life. There shall be no chronic toxicity in ambient waters outside mixing zones.	Pass [3] Benchmarks for specific potentially toxic constituents are listed in Tables 5, 6, 7, and 9.

1. CC = Calleguas Creek Watershed OXD = Oxnard Coastal Watershed SCR = Santa Clara River Watershed VR = Ventura River Watershed
2. Source: Water Quality Control Plan, Los Angeles Region (Basin Plan), 1994.
3. Source: "Waste Discharge Requirements for Discharges from Irrigated Lands," Order No. R4-2023-0353, Los Angeles Regional Water Quality Control Board, adopted September 28, 2023.

Table 5. *Ag Order* Appendix 4 Standard Water Quality Benchmarks for Salts and Nutrients (Basin Plan Table 3-8 Numeric Water Quality Objectives)

Watershed / Reach	Reach Description	Chloride (mg/L)	Sulfate (mg/L)	TDS (mg/L)	Nitrogen (mg/L)	Ammonia [1] (mg/L)	Phosphate (mg/L)
CC below Potrero Rd.	-----	-----	-----	-----	10 [2]	pH, temperature dependent	-----
CC above Potrero Rd.	-----	150	250	850	10 [3]	pH, temperature dependent	-----
OXD	-----	-----	-----	-----	10 [2]	pH, temperature dependent	-----
SCR Reach 1	Tidally-influenced mouth of Santa Clara River upstream to 101 Bridge	-----	-----	-----	10 [2]	pH, temperature dependent	-----
SCR Reach 2	Upstream of Hwy 101 Bridge to Freeman Diversion	150	600	1200	10 [2]	pH, temperature dependent	-----
SCR Reach 3	Upstream of Freeman Diversion to A Street Bridge in Fillmore	100 [4]	650	1300	5 [3]	pH, temperature dependent	-----
SCR Reach 4	Upstream of A Street Bridge in Fillmore to Blue Cut Gaging Station	100	600	1300	5 [3]	pH, temperature dependent	-----
VR Reach 4	Between Camino Cielo Rd. and Casitas Vista Rd.	60	300	800	5 [3]	pH, temperature dependent	-----

Watersheds: CC = Calleguas Creek OXD = Oxnard Coastal SCR = Santa Clara River VR = Ventura River

2. Ammonia benchmarks are based on 1) freshwater ammonia objectives as calculated according to LARWQCB Resolutions 2002-011 and 2005-014, and 2) saltwater ammonia objectives as calculated according to LARWQCB Resolution 2004-022. Ammonia objectives are calculated based on the pH and temperature of the receiving water measured at the time of sample collection for ammonia analysis. Ammonia objectives used as benchmarks are chronic, 30-day averages.
3. There is no site-specific nitrogen objective in the Basin Plan (Table 3-8) applicable to this reach. The Basin Plan objective of 10 mg/L Nitrate-N was used for comparison with VCAILG data collected at monitoring sites in this reach.

4. The Nitrogen benchmark listed is as Nitrate-N plus Nitrite-N.
5. 4. The 100 mg/L benchmark for chloride is the revised water quality objective adopted by the Regional Board in Resolution 2003-015.

Table 6. *Ag Order* Appendix 4 Standard Water Quality Benchmarks for Copper

Constituent	Freshwater [1, 2]		Brackish or Saltwater [1]	
	Benchmark (µg/L)	Benchmark Source	Benchmark (µg/L)	Benchmark Source
Copper	$= \mathbf{0.96}e^{[\mathbf{0.8545}(\ln hardness)+(-\mathbf{1.702})]}$	CTR CCC [3]	3.1	CTR CCC [3]

1. Freshwater benchmark applies to discharges to waters with salinities <1 ppt at least 95% of the time. Saltwater benchmark applies when salinities are ≥10 ppt at least 95% of the time. For discharges between these categories, or tidally influenced freshwater that supports EST beneficial uses, the lower criteria of the two shall be used; which is the saltwater benchmark.
2. As per footnote "m" to the Table in Paragraph (b)(1) of the CTR; "The freshwater criteria for metals are expressed in terms of the dissolved fraction of the metal in the water column." In instances where the measured hardness is >400 mg/L as $CaCO_3$, a hardness of 400 is used to calculate the benchmark. This was done in accordance with CTR §31692, f. Hardness.
3. CTR = California Toxics Rule (USEPA, May 18, 2000).
4. CCC = Criteria Continuous Concentration

Table 7. *Ag Order* Appendix 4 Standard Water Quality Benchmarks for Current Use Pesticides (Organophosphorus and Pyrethroid Pesticides)

Constituent	CC, OXD, SCR, VR Watersheds
	Benchmark (µg/L)
Chlorpyrifos	0.025
Diazinon	0.10
Bifenthrin	0.0006

Watersheds: CC = Calleguas Creek OXD = Oxnard Coastal SCR = Santa Clara River VR = Ventura River

Table 8. *Ag Order* Water Quality Benchmark for Bacteria

Constituent	CC, OXD, SCR, VR Watersheds	
	Unit	Benchmark
E. coli	MPN/100mL	320 STV
Enterococci	MPN/100mL	320 STV

Watersheds: CC = Calleguas Creek OXD = Oxnard Coastal SCR = Santa Clara River VR = Ventura River

Table 9. *Ag Order* Appendix 4 Water Quality Benchmarks for Legacy Pesticides (Organochlorine Pesticides)

Constituent	CC, OXD, SCR, VR Watersheds	
	Benchmark (µg/L)	Benchmark Source [1]
Chlordane, sum	0.00059	CTR HHO
4,4'-DDD	0.00084	CTR HHO
4,4'-DDE	0.00059	CTR HHO
4,4'-DDT	0.00059	CTR HHO
Dieldrin	0.00014	CTR HHO
Toxaphene	0.00075	CTR HHO

Watersheds: CC = Calleguas Creek OXD = Oxnard Coastal SCR = Santa Clara River VR = Ventura River

1. CTR = California Toxics Rule (USEPA, May 18, 2000).
   HHO = Human Health for Consumption of Organisms Only (30-day average)
   HHWO = Human Health for Consumption of Water and Organisms (MUN-designation) (30-day average)

Water Quality Benchmarks Based Upon TMDL LAs (Ag Order Appendix 5)

Effective TMDL monitoring requirements were incorporated into the Conditional Waivers beginning in 2010 (Order No. R4-2010-0186) and all subsequent Orders. VCAILG coordinates with established TMDL monitoring programs or conducts additional monitoring where necessary in order to meet TMDL requirements. Monitoring approaches to meet the requirements of all effective TMDLs were included in the in the draft 2024 VCAILG MRP and QAPP. Summaries of each TMDL including the LA benchmarks and sites used to evaluate benchmark attainment are provided below. Along with the specific benchmarks, the *Ag Order* also includes deadlines for achieving them as listed in Table 10. Please refer to the revised VCAILG Monitoring and Reporting Plan submitted in December 2024 for details on the TMDL monitoring sites and associated responsibility areas. The evaluation of main stem and agricultural site data is included in each Annual Monitoring Report.

Table 10. TMDL Water Quality Benchmarks Compliance Dates

TMDLs	Compliance Date
Calleguas Creek Watershed and Mugu Lagoon Siltation TMDL [1]	March 24, 2015
Revolon Slough and Beardsley Wash Trash TMDL	March 6, 2010
Calleguas Creek Watershed and Mugu Lagoon Toxicity, Chlorpyrifos, and Diazinon TMDL	March 24, 2016
Calleguas Creek Watershed and Mugu Lagoon Metals and Selenium TMDL	March 26, 2022
Calleguas Creek Watershed Boron, Chloride, Sulfate and TDS (Salts) TMDL	December 23, 2023
Calleguas Creek Nitrogen Compounds and Related Effects TMDL	July 16, 2010
Calleguas Creek Watershed and Mugu Lagoon OC Pesticides and PCBs TMDL	March 24, 2026
Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity TMDL	April 14, 2026
Upper Santa Clara River Chloride TMDL	April 6, 2010
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004
Santa Clara River Estuary Toxaphene TMDL	October 7, 2025
Santa Clara River Bacteria TMDL	March 21, 2023 / 2029 [2]
Ventura River Algae TMDL	June 28, 2019
Ventura River Estuary Trash TMDL	March 6, 2010
McGrath Lake OC Pesticides and PCBs TMDL	June 30, 2021
Malibu Creek Watershed Sedimentation and Nutrients TMDL	October 14, 2022
Malibu Creek Watershed Nutrients TMDL	October 14, 2022

1. Additional time may be added to this TMDL deadline should a TMDL reconsideration revise the implementation schedule based on the results of special studies.
2. March 21, 2023 for dry weather and March 21, 2029 for wet weather.

Calleguas Creek Watershed and Mugu Lagoon OC Pesticides and PCBs TMDL

Final LAs for this TMDL are to be achieved by March 24, 2026. Monitoring data was compared to benchmarks applicable at the time of sample collection. Data collected under the *Conditional Waiver* and prior to TMDL final compliance date was compared to the interim allocations that were in effect based on the time of sampling per the TMDL deadline in the *Conditional Waiver* at that time. Compliance with these LAs is measured at the base of the subwatershed in the receiving water. Interim and final LAs are presented in Table 11.

Table 11. CCW OC Pesticides and PCBs Sediment Interim and Final Allocations

Constituent	Units [1]	Interim Sediment LAs					
		Subwatershed					
		Mugu Lagoon [2]	Calleguas Creek	Revolon Slough	Arroyo Las Posas	Arroyo Simi	Conejo Creek
Chlordane	ng/g	25	17	48	3.3	3.3	3.4
4,4'-DDD	ng/g	69	66	400	290	14	5.3
4,4'-DDE	ng/g	300	470	1,600	950	170	20
4,4'-DDT	ng/g	39	110	690	670	25	2
Dieldrin	ng/g	19	3	5.7	1.1	1.1	3
PCBs	ng/g	180	3,800	7,600	25,700	25,700	3,800
Toxaphene	ng/g	22,900	260	790	230	230	260
Final Sediment LAs							
Chlordane	ng/g	3.3	3.3	0.9	3.3	3.3	3.3
4,4'-DDD	ng/g	2.0	2.0	2.0	2.0	2.0	2.0
4,4'-DDE	ng/g	2.2	1.4	1.4	1.4	1.4	1.4
4,4'-DDT	ng/g	0.3	0.3	0.3	0.3	0.3	0.3
Dieldrin	ng/g	4.3	0.2	0.1	0.2	0.2	0.2
PCBs	ng/g	180	120	130	120	120	120
Toxaphene	ng/g	360	0.6	1.0	0.6	0.6	0.6

1. ng/g = nanograms/ gram
2. The Mugu Lagoon subwatershed includes Duck Pond/Agricultural Drain/Mugu/Oxnard Drain #2.

Calleguas Creek Watershed and Mugu Lagoon Toxicity, Chlorpyrifos, and Diazinon TMDL

The final compliance date for LAs in the *Ag Order* was March 24, 2016. Prior to the adoption of the *Ag Order*, the final compliance date for this TMDL in the *Conditional Waiver* was March 24, 2022. Monitoring data was compared to benchmarks applicable at the time of sample collection. Data collected under the *Conditional Waiver* and prior to TMDL final compliance date was compared to the interim allocations that were in effect based on the time of sampling per the TMDL deadline in the *Conditional Waiver* at that time. As no exceedances of the allowable exceedance rate of the interim benchmarks were observed, a conservative analysis for benchmark compliance was also performed applying the allowable exceedance rate to the final LAs. Compliance with LAs is measured watershed wide. Interim and final LAs are presented in Table 12.

Table 12. CCW Toxicity, Chlorpyrifos, and Diazinon Load Interim and Final Allocations

Constituent	Interim LA		Final LA
	Acute (1 hour) (µg/L) [1]	Chronic (4 day) (µg/L) [2]	Acute and Chronic (µg/L) [1,2]
Chlorpyrifos	2.57	0.81	0.014 / 0.0133[4]
Diazinon	0.278	0.138	0.1
Toxicity	1 TU_c	1 TU_c	1 TU_c

1. Acute LAs are used for assessing wet-weather data.
2. Chronic LAs are used for assessing dry-weather data.
3. Final chlorpyrifos LA of 0.014 applies to the Arroyo Simi, Arroyo Las Posas, Conejo, and Mugu Lagoon subwatersheds; 0.0133 applies to Calleguas and Revolon subwatersheds.

Calleguas Creek Watershed Boron, Chloride, Sulfate, and TDS (Salts) TMDL

Monitoring data was compared to benchmarks applicable at the time of sample collection. Data collected under the *Conditional Waiver* and prior to TMDL final compliance date was compared to the interim allocations that were in effect based on the time of sampling per the TMDL deadline in the *Conditional Waiver* at that time. Interim dry weather LAs are measured as in-stream monthly averages at the base of each subwatershed, except for chloride which is measured as an instantaneous maximum. Dry weather LAs apply when flow rates are below the 86th percentile and there was no measurable precipitation in the previous 24 hour period. The final compliance date for LAs was December 23, 2023. Interim and final LAs are presented in Table 13.

Table 13. CCW Salts TMDL Dry Weather Interim and Final Load Allocations

Constituent	Units	Interim LAs					
		Subwatershed					
		Simi	Las Posas	Conejo	Camarillo	Pleasant Valley	Revolon
Boron	mg/L	1.8	1.8	1.8	1.8	1.8	1.8
Chloride	mg/L	230	230	230	230	230	230
Sulfate	mg/L	1,962	1,962	1,962	1,962	1,962	1,962
TDS	mg/L	3,995	3,995	3,995	3,995	3,995	3,995
Final LAs							
Boron	lbs/day	4	N/A	N/A	N/A	N/A	48
Chloride	lbs/day	641	2,109	743	59	305	7,238
Sulfate	lbs/day	1,068	3,515	1,239	99	509	12,063
TDS	lbs/day	3,631	11,952	4,212	336	1,730	41,015

Calleguas Creek Watershed and Mugu Lagoon Metals and Selenium (Metals) TMDL

Monitoring data was compared to benchmarks applicable at the time of sample collection. Data collected under the *Conditional Waiver* and prior to TMDL final compliance date was compared to the interim allocations that were in effect based on the time of sampling per the TMDL deadline in the *Conditional Waiver* at that time which are listed in Table 14 and Table 15. Monitoring data collected after the March 26, 2022 final compliance deadline was compared to final LA in Table 16 through Table 21. Dry weather

LAs apply to days when flows in the stream are less than the 86th percentile flow rate for the subwatershed. Wet weather LAs apply to days when flows in the stream exceed the 86th percentile flow rate for the subwatershed. Compliance with LAs is measured in-stream at the base of each specified subwatershed. CCW TMDL Monitoring Program agricultural land use data was used to verify exceedances were the result of ag discharges. The final compliance date for LAs was March 26, 2022.

Table 14. CCW Metals TMDL Interim Load Allocations for Total Recoverable Metals and Selenium

	Calleguas and Conejo Creeks			Revolon Slough		
Constituent	Dry Daily Max (µg/L)	Dry Monthly Avg. (µg/L)	Wet Daily Max (µg/L)	Dry Daily Max (µg/L)	Dry Monthly Avg. (µg/L)	Wet Daily Max (µg/L)
Copper	24	19	1,390	24	19	1,390
Nickel	43	42	---	43	42	---
Selenium	---	---	---	6.7 [1]	6 [1]	---

1. Attainment of interim LAs will be evaluated in consideration of background loading data, if available.

Interim LAs for mercury are evaluated based on suspended sediment measured in-stream at the base of Revolon Slough and Calleguas Creek.

Table 15. CCW Metals TMDL Interim Load Allocations for Mercury in Suspended Sediment

Flow Range (Million gallons/year)	Interim Calleguas Creek (lbs/yr)	Interim Revolon Slough (lbs/yr)
0-15,000	3.9	2
15,000-25,000	12.6	4.8
>25,000	77.5	12.2

Table 16. CCW Metals TMDL Dry Weather - Final Load Allocations in pounds per day (lbs/day) for Total Recoverable Metals for Calleguas and Conejo Creek

Constituent	Low Flow	Average Flow	Elevated Flow
Copper[2]	0.07 x WER – 0.03	0.12 x WER – 0.02	0.31 x WER – 0.05
Nickel	0.42	0.26	0.97
Selenium	--[3]	--[8]	--[8]

[2] The approved site-specific WER of 1.51 for Mugu Lagoon is used to calculate the assigned LAs for discharges to Calleguas and Conejo Creek to ensure the downstream standard is achieved. Agricultural dischargers may apply a WER of up to 3.69 for discharges to upstream reaches, with the exception of Reaches 4 and 5, to calculate the assigned WLAs. If a WER of greater than 1.51 is applied, the agricultural dischargers shall be required to provide detailed quantitative analysis to demonstrate that the WLAs as modified by the WER are protective of downstream reaches. No site specific WER for Revolon Slough was approved so default WER value of 1 is applied. Regardless of the final WERs, total copper loading shall not exceed current loading.

[3] Current loads do not exceed loading capacity during wet weather. Sum of all loads cannot exceed loads presented in table.

Table 17. CCW Metals TMDL Calleguas Creek Flow Category and Flow Rate in Cubic Feet Per Second (cfs)

Flow Category	Flow Rate (cfs)
Low	0-5
Average	5-21
Elevated	21-30

Table 18. CCW Metals TMDL Dry Weather - Final Load Allocations in pounds per day (lbs/day) for Total Recoverable Metals for Revolon Slough

Constituent	Low Flow	Average Flow	Elevated Flow
Copper[7]	0.07 x WER – 0.03	0.14 x WER – 0.07	0.35 x WER 0.07
Nickel	0.39	0.69	1.6
Selenium	0.008	0.007	0.018

Table 19. CCW Metals TMDL Revolon Slough Flow Category and Flow Rate

Flow Category	Flow Rate (cfs)
Low	0-10
Average	10-17
Elevated	17-22

Table 20. CCW Metals TMDL Wet Weather - Final Load Allocations (lbs/day) for Total Recoverable Metals, Where "Q" is the Daily Storm Volume (cfs)

Constituent	Calleguas and Conejo Creek	Revolon Slough
Copper	$(0.00017 \times Q^2 \times 0.01 \times Q - 0.05) \times WER - 0.02$	$(0.00123 \times Q^2 + 0.0034 \times Q) \times WER$
Nickel	$0.014 \times Q^2 + 0.82 \times Q$	$0.027 \times Q^2 + 0.47 \times Q$
Selenium	--[8]	$0.1 \times Q^2 + 1.8 \times Q$

Table 21. CCW Metals TMDL Final Load Allocations for Mercury in Suspended Sediment

Flow Range (Million gallons/year)	Final Calleguas Creek (lbs/yr)	Final Revolon Slough (lbs/yr)
0-15,000	0.5	0.2
15,000-25,000	1.9	0.8
>25,000	11.2	2.2

Calleguas Creek Watershed Nitrogen TMDL

The final compliance date for LAs in the *Ag Order* was July 16, 2010. Prior to the adoption of the *Ag Order*, the final compliance date for this TMDL in the *Conditional Waiver* was October 14, 2025. Compliance with LAs is measured watershed wide. Load allocations are presented in Table 22.

Table 22. CCW Nitrogen TMDL Load Allocations

Constituent	Load Allocation (mg/L)
Nitrate-N + Nitrite-N	9

Revolon Slough and Beardsley Wash Trash TMDL

The LA for this TMDL is zero trash. Dischargers may achieve compliance with the LAs by implementing a minimum frequency of assessment and collection/management practice (MFAC/MP) program. The compliance date in the *Ag Order* was March 6, 2010. Prior to the adoption of the Ag Order, the final compliance date for this TMDL in the *Conditional Waiver* was October 14, 2025. VCAILG members are complying with the Trash TMDL requirements through a MFAC/MP Program. The MFAC program includes regular collection and assessment of trash. VCAILG members are in compliance with the TMDL requirement to ensure zero trash immediately after each MFAC event. Additionally, VCAILG has implemented additional MPs to control trash and reduce the accumulation of trash between collection events. The importance of collecting and properly disposing of trash has also been a reoccurring topic at multiple VCAILG education classes. No further evaluation has been performed for this TMDL.

Santa Clara River Nitrogen Compounds TMDL

The final compliance date for LAs in the *Ag Order* was March 23, 2004. Prior to the adoption of the *Ag Order*, the final compliance date for this TMDL in the *Conditional Waiver* was October 14, 2022. Monitoring data collected at the VCAILG monitoring program sites located within the SCR watershed is compared to the LA. Load allocations are presented in Table 23.

Table 23. Santa Clara River Nitrogen TMDL Load Allocation

Constituent	Load Allocation (mg/L) [1]
Ammonia-N + Nitrate-N + Nitrite-N	10

1. The specified LA applies to all Santa Clara River reaches within Ventura County.

Upper Santa Clara River Chloride TMDL

The final compliance date for LAs in the *Ag Order* was April 6, 2010. Prior to the adoption of the *Ag Order*, the final compliance date for this TMDL in the *Conditional Waiver* was October 14, 2020. The chloride LA applies to reaches 4B, 5, and 6 of the SCR (reach 4B is within Ventura County). Load allocations are presented in Table 24. It is important to note that the Regional Board has accepted VCAILG's 2020 Annual Monitoring Report submittal which included a natural source determination for chloride at the S04T_TAPO monitoring site and exceedances of the chloride LA do not trigger discharge limitations.

Table 24. Upper Santa Clara River Chloride TMDL Load Allocation

Constituent	Load Allocation (mg/L) [1]
Chloride	100

1. Allocation applies as a 3-month rolling average.

Santa Clara River Estuary Toxaphene TMDL

The *Ag Order* final compliance date for this TMDL is October 7, 2025. LAs were established for toxaphene measured in fish tissue collected in the estuary and suspended sediment discharges. Load allocations are presented in Table 25.

Table 25. Santa Clara River Estuary Toxaphene TMDL Load Allocations

Reach	Toxaphene in Fish Tissue (µg/kg)	Toxaphene in Suspended Sediment (µg/kg)
Santa Clara River Estuary	6.1	0.1

Santa Clara River Bacteria TMDL

The SCR Bacteria TMDL was incorporated in the 2016 *Conditional Waiver* and includes monitoring and reporting requirements as well as TMDL numeric targets (Table 26) and allowable exceedance days (Table 27), which were included in the *Conditional Waiver* and *Ag Order* as water quality benchmarks. The TMDL identifies load allocations for Reaches 3, 5, 6 & 7. Final compliance dates for this TMDL are March 21, 2023 for dry weather and March 21, 2029 for wet weather.

Table 26. Santa Clara River Bacteria TMDL, Numeric Targets

Objective	Constituent	Numeric Target: Reaches 3, 5, 6, & 7
Single Sample	*E. coli*	235/100 mL
Geometric Mean[2]	*E. coli*	126/100 mL

NA = Not Applicable

1. S03D_BARDS sampling location discharges to Santa Clara River Reach 3.
2. Geometric mean targets are not in effect for wet weather until 2029.

Table 27. Santa Clara River Bacteria TMDL, Final Allowable Exceedance Days[1]

Time Period	Santa Clara River Reaches 3,5,6, & 7
Dry Weather	5 allowable exceedance days of single sample objectives
	0 allowable exceedance days of geometric mean objectives
Wet Weather [2]	16 allowable exceedance days of single sample objectives
	0 allowable exceedance days of geometric mean objectives

1. The calculated number of exceedance days assumes that daily sampling is conducted. To determine the number of allowable exceedances for less frequent sampling, a ratio is used.
2. Wet weather is defined as days of 0.1 inch of rain or more plus three days following the rain event.

Ventura River Estuary Trash TMDL

The LA for this TMDL is zero trash. Dischargers may achieve compliance with the LAs by implementing a minimum frequency of assessment and collection/ management practice (MFAC/MP) program. The compliance date for LAs in the *Ag Order* was March 6, 2010. Prior to the adoption of the *Ag Order*, the compliance date for this TMDL in the *Conditional Waiver* was October 14, 2020. VCAILG members are

complying with the Trash TMDL requirements through a MFAC/MP Program. The MFAC program includes regular collection and assessment of trash. VCAILG members are in compliance with the TMDL requirement to ensure zero trash immediately after each MFAC event. Additionally, VCAILG has implemented additional MPs to control trash and reduce the accumulation of trash between collection events. The importance of collecting and properly disposing of trash has also been a reoccurring topic at VCAILG education classes. No further evaluation has been performed for this TMDL.

Ventura River Algae TMDL

The VR Algae TMDL LAs were incorporated into the 2016 Conditional Waiver as benchmarks. Monitoring for this TMDL began following the approval of the VCAILG MRP and QAPP. The final compliance date for this TMDL was June 28, 2019. Dry weather LAs are presented in Table 28 and wet weather LAs are presented in Table 29.

Table 28. Dry Weather Load Allocations for the Ventura River Algae TMDL

Constituent	Load Allocation (lbs/day)[1]
Total Nitrogen	16
Total Phosphorus	0.12

1. Dry weather load allocations are the same for all reaches

Table 29. Wet Weather Load Allocations for the Ventura River Algae TMDL

Reach	Constituent	Load Allocation (mg/L)
Reach 3, San Antonio Creek, Reach 4, and 5	Nitrate-N + Nitrite-N	5
Estuary, Reach 1, 2, and Cañada Larga	Nitrate-N + Nitrite-N	10

1. Sampling site drains to Reach 4
2. Sampling site drains to Reach 2

McGrath Lake PCBs, Pesticides, and Sediment Toxicity TMDL

The final compliance date in the *Ag Order* was June 30, 2021, and LAs are included for water column and suspended sediment concentrations. For this WQMP OC pesticides water column concentrations and suspended sediment concentrations have been evaluated for exceedances. Load allocations are presented in Table 30.

Table 30. McGrath Lake PCBs, Pesticides, and Sediment Toxicity TMDL Load Allocations

Constituent	Water Column Load Allocation (µg/L)	Suspended Sediment Load Allocation (µg/dry kg)
Chlordane	0.00059	0.5
Dieldrin	0.00014	0.02
4,4'-DDD	0.00084	2
4,4'-DDE	0.00059	2.2
4,4'-DDT	0.00059	1
Total DDT	---	1.58
Total PCBs	0.00017	22.7

Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity TMDL

The Oxnard Drain #3 Pesticides TMDL was incorporated into the 2016 *Conditional Waiver* and additional monitoring to evaluate attainment of TMDL LA benchmarks was included in the 2016 MRP and QAPP. Sediment data as well as PCBs concentrations for water and sediment are included in the AMR. Table 31 lists all LA benchmarks for this TMDL. The final compliance date for the Oxnard Drain #3 Pesticides TMDL is April 14, 2026.

Table 31. Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity TMDL Load Allocations

Constituent	Water Allocations (chronic) (µg/L)	Sediment Allocations[1,2] (µg/dry kg)	Alternate Sediment Allocations[1,3] (µg/dry kg)
Bifenthrin[4]	0.0006	--	--
Chlordane, total	0.00059	0.5	3.3
Chlorpyrifos[4]	0.0056	--	--
4,4'-DDT	0.00059	1.0	0.3
4,4'-DDE	0.00059	2.2	2.2
4,4'-DDD	0.00084	2.0	2.0
Dieldrin	0.00014	0.02	4.3
PCBs, total	0.00017	22.7	180
Sediment Toxicity	--	No significant chronic sediment toxicity	--
Toxaphene	0.0002	0.1	360

1. Sediment concentrations associated with suspended sediment and Oxnard Drain #3 bottom sediment.
2. Sediment allocations apply if there are fish tissue or sediment toxicity exceedances. All sediment allocations are ERLs, except toxaphene. Toxaphene does not have n ERL, so the TEL concentration was selected.
3. The alternate sediment allocation applies when the fish tissue target and the sediment toxicity allocation are achieved in Oxnard Drain #3. The alternate sediment allocation concentrations match the Mugu Lagoon TMDL allocations.
4. Bifenthrin and chlorpyrifos allocations included to address the sediment toxicity impairment.

Malibu Creek and Lagoon TMDLs for Sedimentation and Nutrients to Address Benthic Community Impairments and Malibu Creek Watershed Nutrients TMDL

There is minimal agricultural acreage within the small portion of the Malibu Creek watershed that is also within Ventura County. These TMDLs were newly incorporated into the 2016 *Conditional Waiver*. A proxy site (05T_HONDO) was selected based on similar crop types in the adjacent Calleguas Creek watershed

to evaluate TMDL LA benchmark compliance with the two Malibu Creek TMDLs. Following approval of monitoring sites in the draft 2024 MRP and QAPP, future WQMPs will use the monitoring site 05D_LAVD as the proxy site for evaluating these two TMDLs. The compliance date was changed in the *Ag Order* adoption from July 2, 2021 to October 14, 2022 for the Sedimentation and Nutrients TMDL. The final compliance date for the Nutrients TMDL was October 14, 2022. Table 32 and Table 33 list all LA benchmarks for the two Malibu Creek TMDLs.

Table 32. Malibu Creek and Lagoon TMDLs for Sedimentation and Nutrients Load Allocations

Constituent	Season	Load Allocation (mg/L)
Total Nitrogen	Summer	0.65
	Winter	1.00
Total Phosphorus	Summer	0.10
	Winter	0.10

Table 33. Malibu Creek Watershed Nutrients TMDL Load Allocations

Constituent	Season	Load Allocation	Units
Total Nitrogen	Summer (April 15 – November 15)	3	lbs/day
Total Phosphorus		0.2	lbs/day
Nitrogen (nitrate-N + nitrite-N)	Winter (November 16 – April 14)	8	mg/L

Benchmark Exceedance Evaluation Process

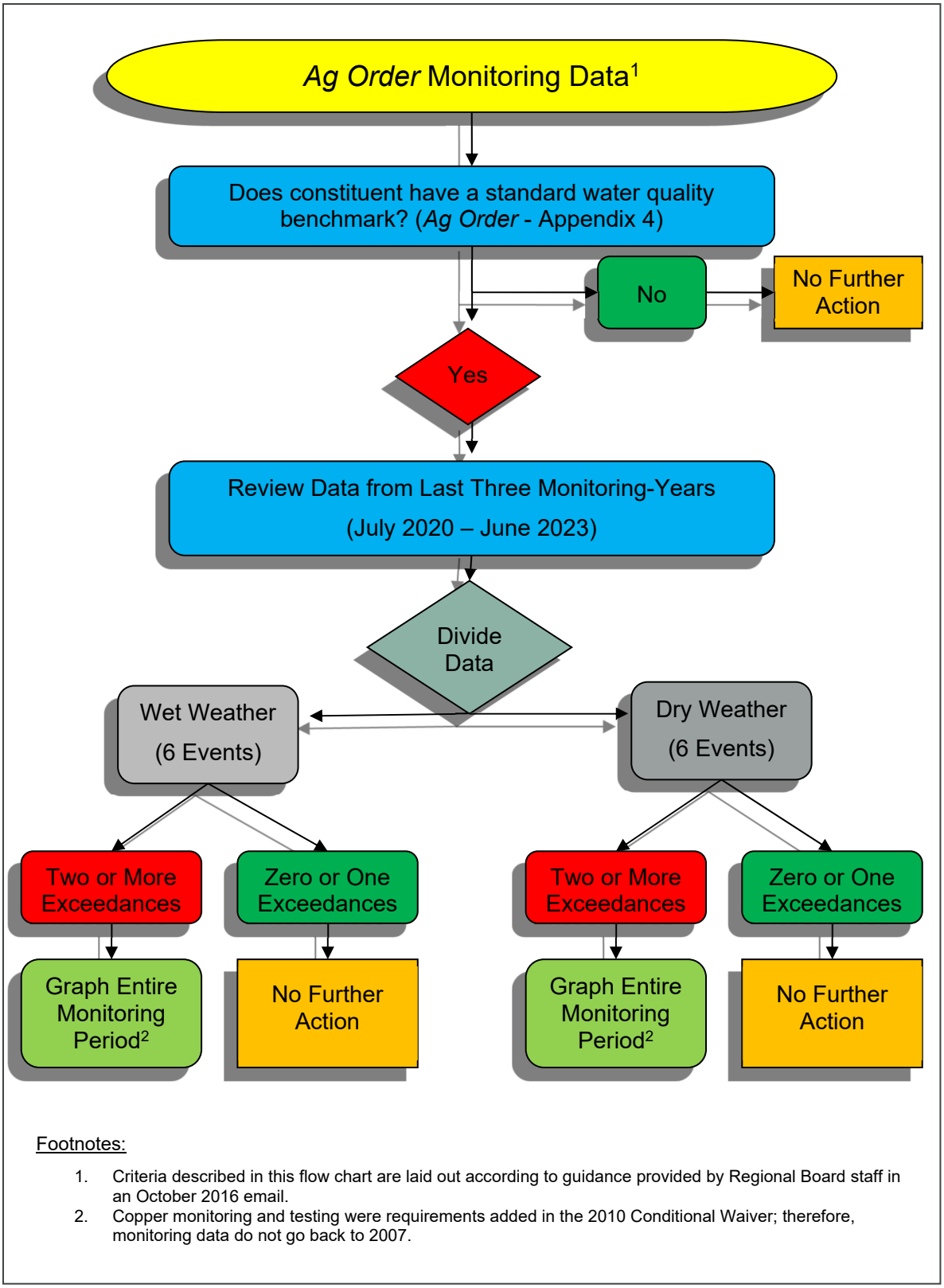
Monitoring data must be evaluated in comparison to the standard water quality benchmarks and TMDL LA benchmarks specified in the *Ag Order*. Appendix 3, Section 2.1.b. specifies that, "for each constituent that has exceeded a Water Quality Benchmark (considering applicable averaging periods), a graph showing the concentrations and the trends of the constituent over time since 2007." The VCAILG received directions from Regional Board staff regarding the averaging period and exceedance threshold for generating a graph in the WQMP on October 28 and November 2, 2016. Directions for data and exceedance evaluation were as follows:

- Separate monitoring data by wet and dry weather samples.
- Consider the most recent three years of monitoring.[4]
- The recurrence frequency to trigger a graph should be more than one exceedance of a benchmark in a three-year period.

Figure 5 outlines the process used to evaluate monitoring data compared to the standard water quality benchmarks.

It should be noted that the draft 2024 MRP/QAPP contains new monitoring locations that will be used as representative VCAILG monitoring sites for evaluating standard water quality benchmarks and TMDL LA benchmarks in responsibility areas. Because monitoring data at new monitoring sites is not yet available, benchmark evaluations could not be conducted at those monitoring locations, but will be included in future WQMPs.

[4] *Ag Order* Appendix 3 Section 2 requires that this WQMP will be "based on water quality monitoring data from 2007-2023." Therefore, monitoring data from July 2020 through June 2023 was evaluated. Future WQMPs will evaluate most recent three years of monitoring data.

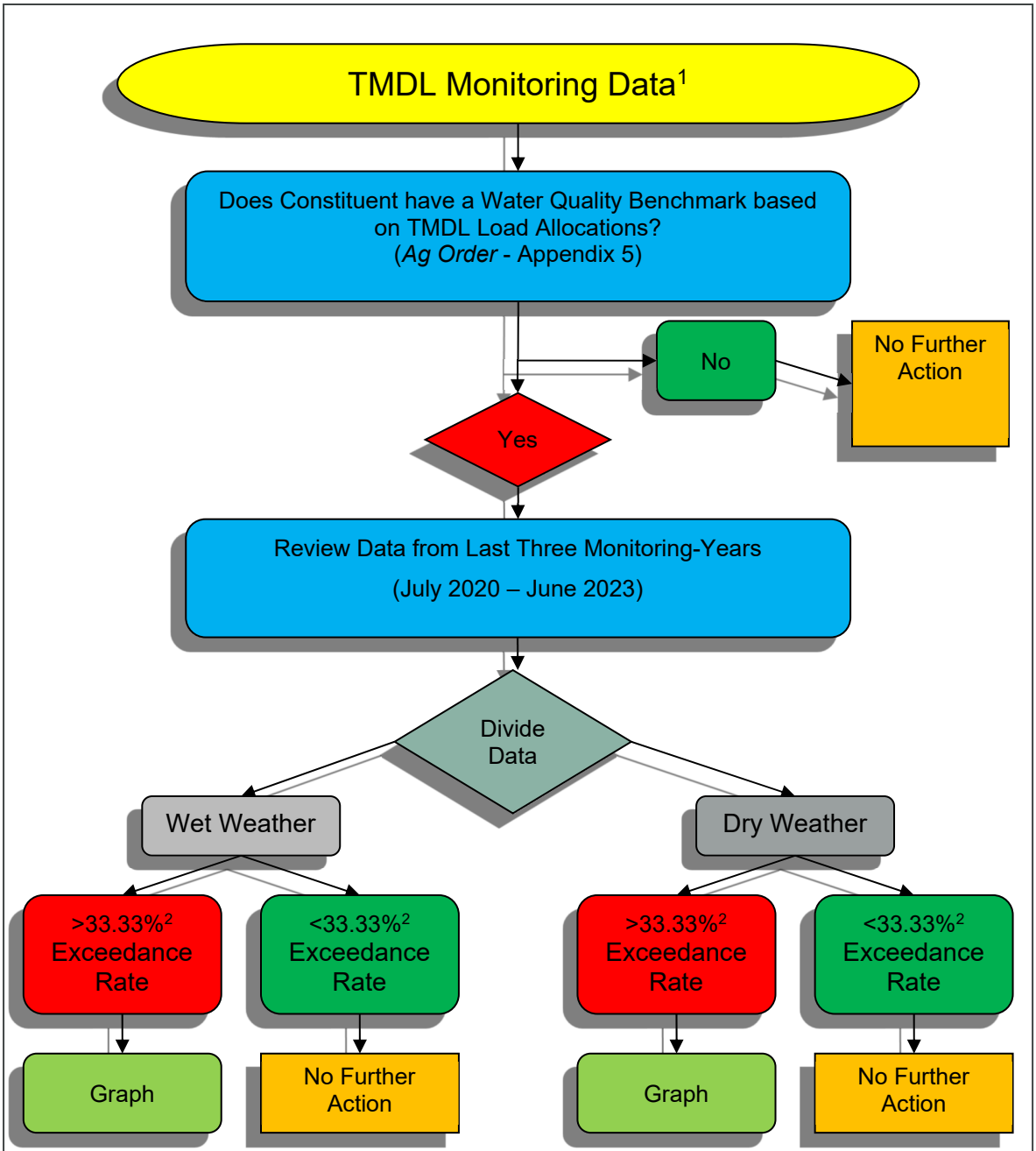


Footnotes:

1. Criteria described in this flow chart are laid out according to guidance provided by Regional Board staff in an October 2016 email.
2. Copper monitoring and testing were requirements added in the 2010 Conditional Waiver; therefore, monitoring data do not go back to 2007.

Figure 5. Process for Comparing VCAILG Monitoring Data to Standard Water Quality Benchmarks and Triggering Concentration Graphs

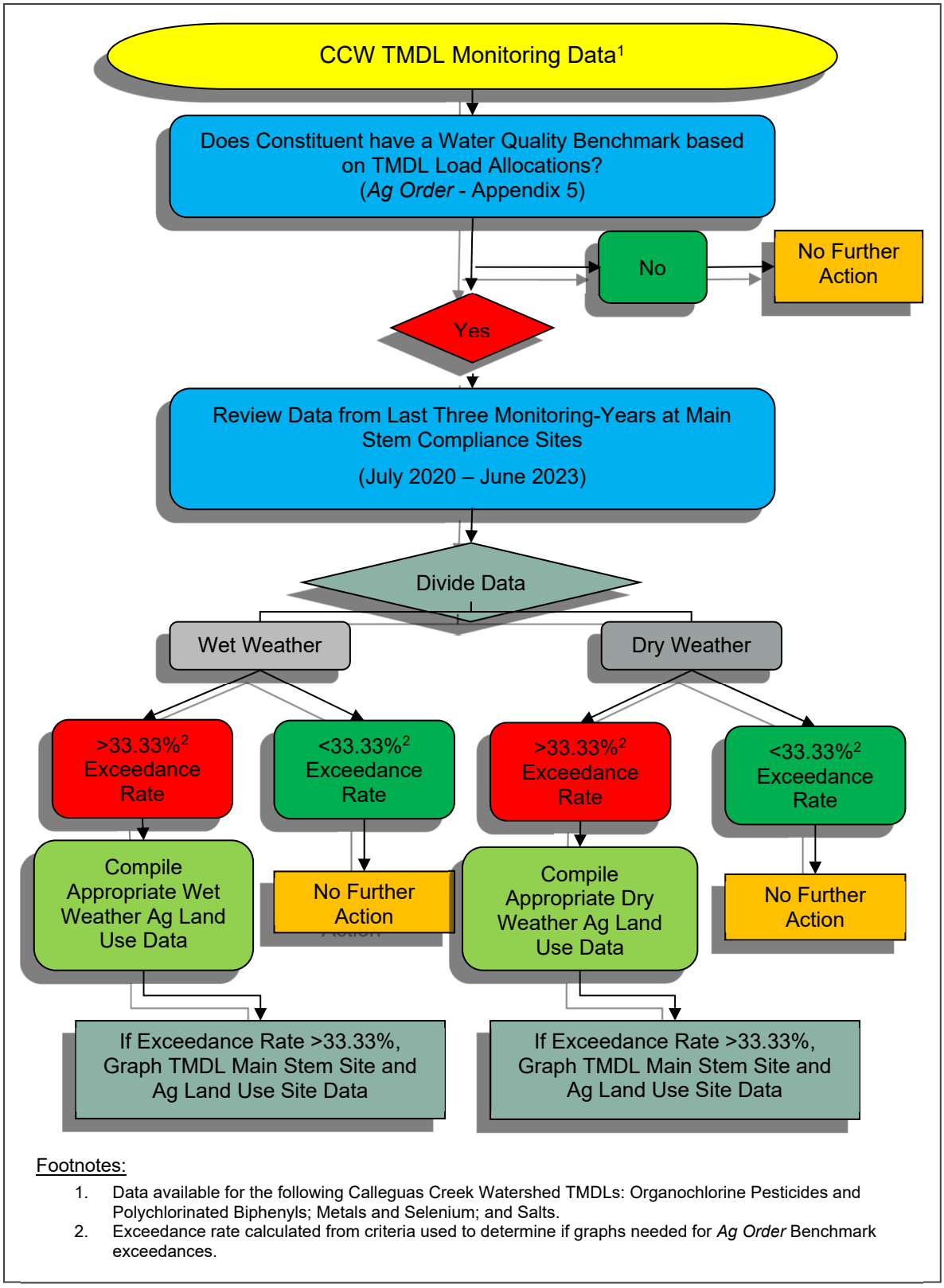
The two following flowcharts detail the data evaluation process used for data compared to TMDL LAs. Figure 6 demonstrates the handling of monitoring data collected by the VCAILG and CCW TMDLs that apply watershed wide. The evaluation of monitoring data collected under the CCW TMDL Monitoring program where compliance is measured at the base of the subwatershed is provided in Figure 7. Since the number of monitoring events varies for certain TMDLs, the exceedance rate of 33%, calculated from the criteria specified by the Regional Board was applied. For constituents without an extensive monitoring history, available data was considered and if two or more exceedances occurred, the data is graphed and MP requirements are included in this WQMP. As previously mentioned, monitoring data was compared to benchmarks applicable at the time of sample collection. Data collected under the *Conditional Waiver* and prior to TMDL final compliance date was compared to the interim allocations that were in effect based on the time of sampling per the TMDL deadline in the *Conditional Waiver* at that time.



Footnotes:

1. Data available for the following TMDLs: CCW Nitrogen Compounds; CCW Toxicity, Chlorpyrifos, and Diazinon; Upper Santa Clara River Chloride; Santa Clara River Nitrogen; Santa Clara River Estuary Toxaphene; Santa Clara River Bacteria; McGrath Lake Pesticides and PCBs; Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity; Malibu Creek Watershed Nutrients TMDL; Malibu Creek and Lagoon TMDLs for Sedimentation and Nutrients to Address Benthic Community Impairments and Ventura River Algae.
2. Exceedance rate calculated from criteria used to determine if graphs needed for *Ag Order* exceedances.

Figure 6. Process for Comparing TMDL Monitoring Data Collected by VCAILG and CCW TMDLs that Apply Watershed Wide to TMDL LA Benchmarks and Triggering Concentration Graphs



Footnotes:

1. Data available for the following Calleguas Creek Watershed TMDLs: Organochlorine Pesticides and Polychlorinated Biphenyls; Metals and Selenium; and Salts.
2. Exceedance rate calculated from criteria used to determine if graphs needed for *Ag Order* Benchmark exceedances.

Figure 7. Process for Comparing Monitoring Data Collected by the CCW TMDL Monitoring Program to CCW TMDL LA Benchmarks and Triggering Concentration Graphs

Summary of Existing Conditions by Responsibility Area

This section presents the requisite WQMP content described in Ag Order Appendix 3 Section 2.1. All information is presented according to responsibility area (RA. Each RA is named for a notable waterbody or subwatershed descriptor within the RA. Every RA has a monitoring site that serves as its beacon site for comparison of monitoring data to the standard water quality benchmarks from Ag Order Appendix 4. In some cases, data from the Ag Order monitoring site is also used to evaluate attainment of TMDL LAs. Any additional monitoring sites referred to in maps or text are for TMDL assessment purposes. Maps identifying the enrolled and non-enrolled parcels for each responsibility area are provided in Appendix C. Graphs showing the concentrations and trends over time since 2007 for constituents that have exceeded a water quality benchmark in the applicable responsibility area are provided in Appendix D. Table 34 lists responsibility area names and numbers. Enrollment information in the subsequent tables was current as of January 21, 2025.

For each responsibility area, the following information is presented below:

- General map of the responsibility area and applicable monitoring sites for evaluating benchmark exceedances.
- Management practice survey results
- Table summarizing the benchmark exceedance evaluation
- Table combining the benchmark exceedance evaluation, applicable MPs, and current MP adoption rates to identify where additional implementation of specific MPs is warranted. Per communications with Regional Board staff during the *Conditional Waiver*, a MP is considered fully adopted at a 98% adoption rate. TMDL-specific MPs specified in the Ag Order are also identified.

The pesticide use evaluation assessment concludes this section of the WQMP.

Table 34. List of Responsibility Area Names and Numbers

Responsibility Area Name	RA Number
Arroyo Simi	1
Upper Conejo	2
Lower Conejo	3
Calleguas-Howard	4
Lower Las Posas	5
Calleguas-CSUCI	6
Upper Las Posas	7
East Camarillo Hills	8
Lower Revolon	9
Beardsley Wash	10
Lower Calleguas Creek	11
Mugu Lagoon	12
Oxnard Drain #3	13
Oxnard Coastal – Oxnard Drain #3	14
Malibu	15
Malibu-Las Virgenes	16
Santa Clara Reach 5	17
Tapo Canyon	18
Santa Paula-Fillmore	19
Bardsdale	20
Saticoy	21
Lower Santa Clara River	22
McGrath Central Ditch	23
McGrath Lake Adjacent	24
Santa Clara River – Victoria and Gonzales	25
Lower Ventura River	26
Ventura River Inland	27
Ventura Coastal	28
San Antonio Creek	29
Ventura River Milling Rd.	30
Oxnard Coastal	31

ARROYO SIMI

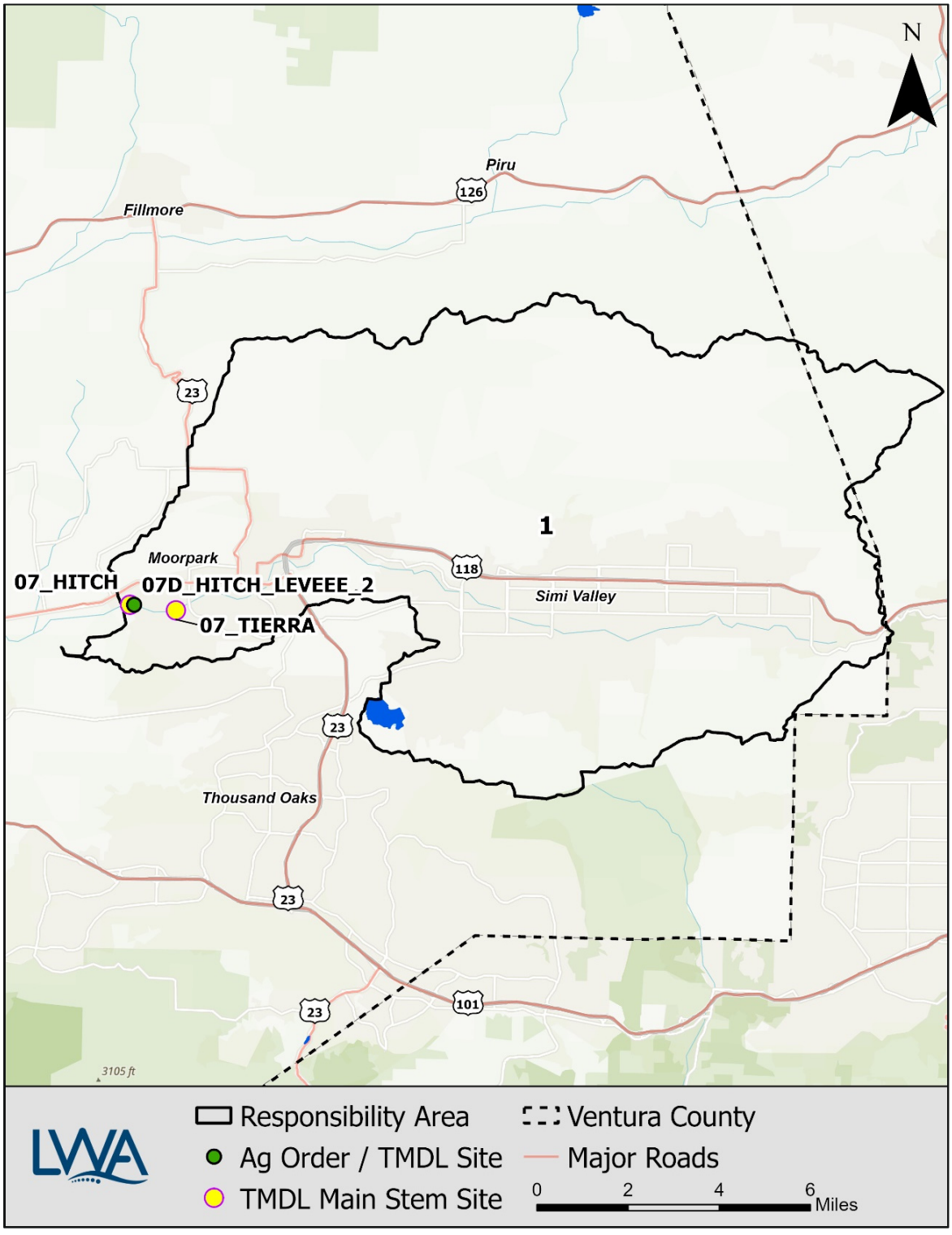


Figure 8. Arroyo Simi Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Arroyo Simi responsibility area are illustrated in **Figure 8** and outlined in **Table 35.**

Table 35. Arroyo Simi Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
07D_HITCH_LEVEE_2	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL [a]
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
07_TIERRA	TMDL Main Stem Site	CCW Salts TMDL
07_HITCH	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL

[a] CCW Metals TMDL is applicable, but Ag load allocations are not identified for this subwatershed/RA.

Table 36. Arroyo Simi Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 07D_HITCH_LEVEE_2
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	3,546	117
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	367	3
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	2,361	68
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	1,184	48
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	1,741	49
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.74	0.72
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	873	30
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	3,135	79
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	56%	62%
Survey Response Information		
Sum Surveyed Irrigated Acres	1,304	34
Percent of Total Estimated Irrigated Acres that were Surveyed	42%	43%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	75%	69%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 37. Arroyo Simi Responsibility Area Crop Types and General Production Practices

Crop or Practice	Arroyo Simi Responsibility Area		07D_HITCH_LEVEE_2 Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	-	-	-
Blueberries	23	2%	-	-
Raspberries	-	-	-	-
Row Crop	56	4%	-	-
Orchard	1,138	87%	-	-
Nursery	59	4%	34	100%
Flowers	-	-	-	-
Sod	-	-	-	-
Other	36	3%	-	-
Overhead Cover in Production Areas				
Hoop House	19	1%	-	-
No Cover	244	19%	34	100%
Greenhouse	1	0.04%	-	-
Shade	1	0.04%	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	437	33%	34	100%
Cover Crop	35	3%	-	-
Plastic	28	2%	-	-
Weed Cloth	1	0.1%	-	-
Mulch	770	59%	-	-
Gravel	-	-	-	-
Other	-	-	-	-
Irrigation Systems in Production Areas				
Drip Only	499	38%	-	-
Microsprinkler/Drip	18	1%	-	-
Microsprinkler	733	56%	34	100%
Overhead Sprinkler	56	4%	-	-
Overhead/Drip	-	-	-	-
Furrow Flood	-	-	-	-
Hand Watering	9	1%	-	-
Other	-	-	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 38. Arroyo Simi Responsibility Area Grower MPs

Survey Question	Units	Arroyo Simi Responsibility Area		07D_HITCH_LEVEE_2 Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	1,121	88%	514	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	709	54%	373	73%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	643	56%	373	73%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	1,001	77%	514	100%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	966	97%	514	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	988	76%	514	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	857	87%	514	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	1,181	91%	514	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	1,045	80%	514	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	939	90%	475	92%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	793		-	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	760	96%	-	-
Q10a: How many non-cropped acres exist?	Acres	422		73	

Survey Question	Units	Arroyo Simi Responsibility Area		07D_HITCH_LEVEE_2 Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q10b: How much non-cropped area is bare soil? [c]	Acres	159	38%	73	100%
Q11a: How many feet of ditches exist?	Feet	124,018		21,180	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	110,678	89%	1,800	8%
Q12a: Are grassed waterways present? [e]	Acres	2	3%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	1	0.08%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	26	2%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	1,230	94%	514	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	1,217	93%	514	100%
Q16a: How many acres are organically farmed? [a]	Acres	39	3%	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	1,256	96%	514	100%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	13	1%	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	18	1%	373	73%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	3	0.2%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	4	0.2%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-

Survey Question	Units	Arroyo Simi Responsibility Area		07D_HITCH_LEVEE_2 Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 39. Summary of Benchmark Exceedance Evaluation for Arroyo Simi Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Waiver Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Waiver Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Nitrate-N + Nitrite-N					●	☑
Nitrate-N				●		☑
Ammonia-N				●		☑
OC Pesticides (Legacy)						
DDD				●		☑
DDE				●		☑
DDT				●		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

Table 40. MPs for Additional Implementation in the Arroyo Simi Responsibility Area

Exceedance Condition			Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Legacy Pesticides	Current Pesticides				
Wet	Wet	Wet			Arroyo Simi Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	64%	Y
X			4b	Certified nutrient management plan has been prepared for the property	97%	Y
X			5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	87%	Y
X			6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	91%	Y
X			7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	90%	Y
X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	96%	Y
X	X	X	10b	How much non-cropped area is bare soil	38%	Y
X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	89%	Y
X	X	X	12a	Grassed waterways are used	3%	Y
X	X	X	13	Vegetated filter strips are used	2%	Y
		X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	94%	Y
		X	15	An integrated pest management plan is implemented	93%	Y
X	X	X	18a	Property is treated with detention/sediment basins	<1%	Y
X	X	X	18b	Property is treated with retention basins	<1%	Y
X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	18d	Property is treated with constructed wetlands	-	Y

Table 41. Proposed Management Practices for the Arroyo Simi Responsibility Area

Water Quality Issues			MPs
Nutrients	Legacy Pesticides	Current Use Pesticides	
Wet Weather	Wet Weather	Wet Weather	
			Source Control MPs
X			Prepare a certified nutrient management plan for the property
X			Conduct soil residual nitrate tests and use results to adjust fertilizer application
X			Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
X			Analyze irrigation water nitrate and use results to adjust fertilizer application
		X	Use a pest control advisor (PCA) or certified qualified applicator for pesticide management decisions
		X	Implement an integrated pest management plan
			Structural MPs
X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
X	X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	Use grassed waterways
X	X	X	Use vegetated filter strips
X	X	X	Runoff is treated with detention/sediment basins
X	X	X	Runoff is treated with retention basins
X	X	X	Runoff is treated with bioreactor
X	X	X	Runoff is treated with constructed wetlands

UPPER CONEJO

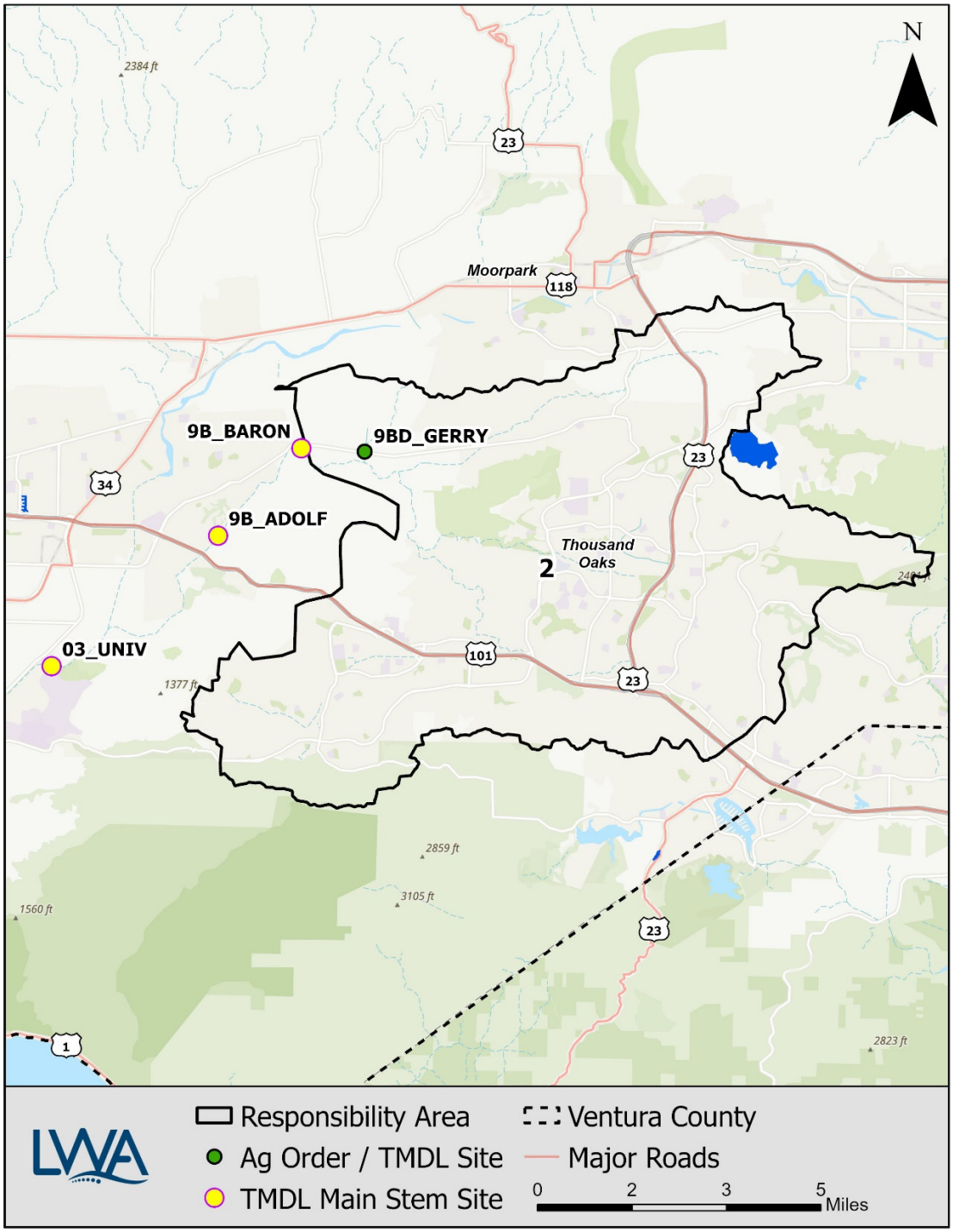


Figure 9. Upper Conejo Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Upper Conejo responsibility area are illustrated in **Figure 9** and outlined in **Table 42.**

Table 42. Upper Conejo Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
09BD_GERRY	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
9B_BARON	TMDL Main Stem Site	CCW Salts TMDL
9B_ADOLF	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
03_UNIV	TMDL Main Stem Site	CCW Metals TMDL

Table 43. Upper Conejo Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 9BD_GERRY
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	4,133	545
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	367	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	3,205	545
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	928	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	2,134	340
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.67	0.62
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	618	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	2,753	340
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	78%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	1,860	289
Percent of Total Estimated Irrigated Acres that were Surveyed	68%	85%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	87%	85%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 44. Upper Conejo Responsibility Area Crop Types and General Production Practices

Crop or Practice	Upper Conejo Responsibility Area		9BD_GERRY Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	248	13%	115	37%
Blueberries	58	3%	-	-
Raspberries	89	5%	-	-
Row Crop	384	20%	-	-
Orchard	1,092	58%	192	62%
Nursery	13	1%	-	-
Flowers	-	-	-	-
Sod	-	-	-	-
Other	7	0.4%	4	1%
Overhead Cover in Production Areas				
Hoop House	147	8%	-	0%
No Cover	837	44%	226	73%
Greenhouse	4	0.2%	-	-
Shade	-	-	-	-
Other	4	0.2%	4	1%
Surface Treatments in Production Areas				
Bare Soil	812	43%	47	15%
Cover Crop	45	2%	-	-
Plastic	220	12%	90	29%
Weed Cloth	62	3%	-	-
Mulch	611	32%	179	58%
Gravel	0.8	0.04%	-	-
Other	11	1%	-	-
Irrigation Systems in Production Areas				
Drip Only	523	28%	73	24%
Microsprinkler/Drip	153	8%	80	26%
Microsprinkler	818	43%	123	39%
Overhead Sprinkler	127	7%	-	-
Overhead/Drip	271	14%	35	11%
Furrow Flood	-	-	-	-
Hand Watering	1	0.1%	-	-
Other	30	2%	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 45. Upper Conejo Responsibility Area Grower MPs

Survey Question	Units	Upper Conejo Responsibility Area		09BD_GERRY Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	1,375	75%	229	79%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	563	30%	80	28%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	708	42%	162	56%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	1,163	63%	229	79%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	1,153	99%	229	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	1,331	72%	229	79%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	1,286	97%	229	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	1,440	78%	229	79%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	1,345	72%	229	79%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	1,322	98%	229	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	825		219	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	592	72%	219	100%
Q10a: How many non-cropped acres exist?	Acres	959		185	
Q10b: How much non-cropped area is bare soil? [c]	Acres	346	36%	20	11%

Survey Question	Units	Upper Conejo Responsibility Area		09BD_GERRY Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	312,759		182,540	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	56,115	18%	29,250	16%
Q12a: Are grassed waterways present? [e]	Acres	3	3%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	32	2%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	46	2%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	1,824	98%	289	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	1,834	99%	289	100%
Q16a: How many acres are organically farmed? [a]	Acres	146	8%	1	0.3%
Q16b: How many acres are conventionally farmed? [a]	Acres	1,740	94%	311	108%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	201	11%	192	66%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	160	9%	116	40%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	178	6%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	2	0.08%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 46. Summary of Benchmark Exceedance Evaluation for Upper Conejo Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Nitrate-N + Nitrite-N					•	☑
Nitrate-N				•		☑
OC Pesticides (Legacy)						
DDD				•		☑
DDE				•		☑
DDT				•		☑
Chlordane				•		☑
Toxaphene				•		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				•		☑

Table 47. MPs for Additional Implementation in the Upper Conejo Responsibility Area

Exceedance Condition			Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Legacy Pesticides	Current Pesticides			Upper Conejo Responsibility Area	Additional Implementation of Pertinent MP Needed?
Wet	Wet	Wet				
X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	50%	Y
X			4b	Certified nutrient management plan has been prepared for the property	99%	N
X			5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	97%	Y
X			6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	78%	Y
X			7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	98%	N
X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	72%	Y
X	X	X	10b	How much non-cropped area is bare soil	36%	Y
X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	18%	Y
X	X	X	12a	Grassed waterways are used	3%	Y
X	X	X	13	Vegetated filter strips are used	2%	Y
		X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	98%	N
		X	15	An integrated pest management plan is implemented	99%	N
X	X	X	18a	Property is treated with detention/sediment basins	6%	Y
X	X	X	18b	Property is treated with retention basins	<1	Y
X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	18d	Property is treated with constructed wetlands	-	Y

Table 48. Proposed Management Practices for the Upper Conejo Responsibility Area

Water Quality Issues			MPs
Nutrients	Legacy Pesticides	Current Use Pesticides	
Wet Weather	Wet Weather	Wet Weather	
			Source Control MPs
X			Conduct soil residual nitrate tests and use results to adjust fertilizer application
X			Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
			Structural MPs
X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
X	X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	Use grassed waterways
X	X	X	Use vegetated filter strips
X	X	X	Runoff is treated with detention/sediment basins
X	X	X	Runoff is treated with retention basins
X	X	X	Runoff is treated with bioreactor
X	X	X	Runoff is treated with constructed wetlands

LOWER CONEJO

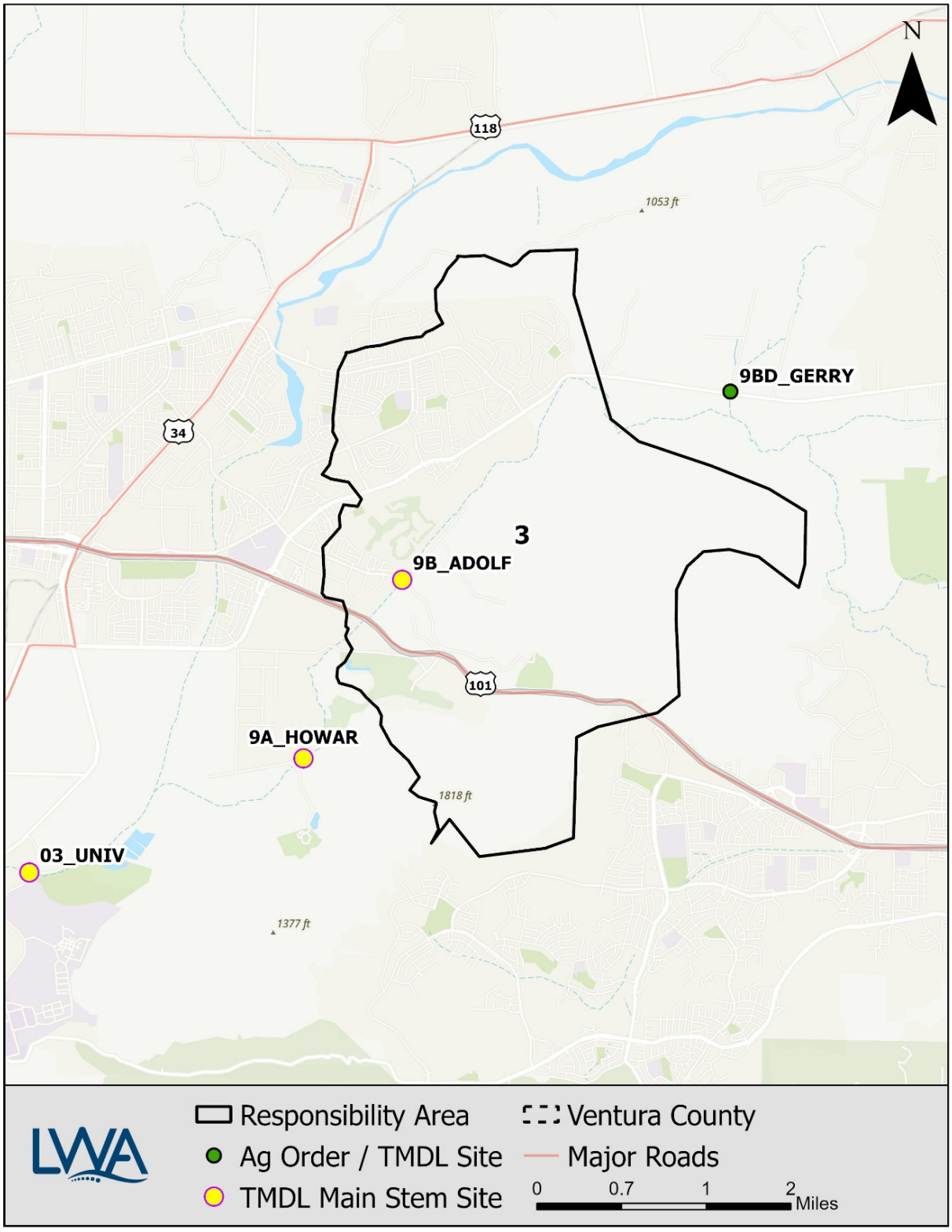


Figure 10. Lower Conejo Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Lower Conejo responsibility area are illustrated in **Figure 10** and outlined in **Table 49**.

Table 49. Lower Conejo Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
09BD_GERRY	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
9A_HOWAR	TMDL Main Stem Site	CCW Salts TMDL
9B_ADOLF	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
03_UNIV	TMDL Main Stem Site	CCW Metals TMDL

Table 50. Lower Conejo Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	2,168
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	58
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	2,074
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	94
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	665
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.32
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	30
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	695
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	96%
Survey Response Information	
Sum Surveyed Irrigated Acres	616
Percent of Total Estimated Irrigated Acres that were Surveyed	89%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	93%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 51. Lower Conejo Responsibility Area Crop Types and General Production Practices

Crop or Practice	Lower Conejo Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	-	-
Blueberries	76	12%
Raspberries	-	-
Row Crop	166	26%
Orchard	383	61%
Nursery	2	0.4%
Flowers	-	-
Sod	-	-
Other	-	-
Overhead Cover in Production Area		
Hoop House	9	1%
No Cover	220	35%
Greenhouse	-	-
Shade	50	8%
Other	-	-
Surface Treatments in Production Area		
Bare Soil	305	49%
Cover Crop	9	1%
Plastic	-	-
Weed Cloth	76	12%
Mulch	96	15%
Gravel	-	-
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	136	22%
Microsprinkler/Drip	-	-
Microsprinkler	322	51%
Overhead Sprinkler	118	19%
Overhead/Drip	42	7%
Furrow Flood	-	-
Hand Watering	2	0.4%
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 52. Lower Conejo Responsibility Area Grower MPs

Survey Question	Units	Lower Conejo Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	441	79%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	42	7%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	228	43%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	287	47%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	271	94%
Q5a: Are soil residual nitrate tests done? [a]	Acres	317	52%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	306	96%
Q6: Are leaf/petiole tests conducted? [a]	Acres	385	64%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	275	45%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	275	100%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	407	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	75	18%
Q10a: How many non-cropped acres exist?	Acres	1,266	
Q10b: How much non-cropped area is bare soil? [c]	Acres	1,066	84%
Q11a: How many feet of ditches exist?	Feet	20,880	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	11,855	57%
Q12a: Are grassed waterways present? [e]	Acres	1	6%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	5	1%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	11	2%
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	576	93%
Q15: Is an IPM Plan being implemented? [a]	Acres	583	95%
Q16a: How many acres are organically farmed? [a]	Acres	76	12%
Q16b: How many acres are conventionally farmed? [a]	Acres	529	86%

Survey Question	Units	Lower Conejo Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	18	3%
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	21	1%
Q18b: How many acres drain to a retention basin? [f]	Acres	21	1%
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 53. Summary of Benchmark Exceedance Evaluation for Lower Conejo Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Nitrate-N + Nitrite-N					•	☑
Nitrate-N				•		☑
OC Pesticides (Legacy)						
DDD				•		☑
DDE				•		☑
DDT				•		☑
Chlordane				•		☑
Toxaphene				•		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				•		☑

Table 54. MPs for Additional Implementation in the Lower Conejo Responsibility Area

Exceedance Condition			Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Legacy Pesticides	Current Pesticides				
Wet	Wet	Wet			Lower Conejo Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	28%	Y
X			4b	Certified nutrient management plan has been prepared for the property	94%	Y
X			5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	96%	Y
X			6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	64%	Y
X			7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	100%	N
X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	18%	Y
X	X	X	10b	How much non-cropped area is bare soil	84%	Y
X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	57%	Y
X	X	X	12a	Grassed waterways are used	6%	Y
X	X	X	13	Vegetated filter strips are used	2%	Y
		X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	93%	Y
		X	15	An integrated pest management plan is implemented	95%	Y
X	X	X	18a	Property is treated with detention/sediment basins	1%	Y
X	X	X	18b	Property is treated with retention basins	1%	Y
X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	18d	Property is treated with constructed wetlands	-	Y

Table 55. Proposed Management Practices for the Lower Conejo Responsibility Area

Water Quality Issues			MPs
Nutrients	Legacy Pesticides	Current Use Pesticides	
Wet Weather	Wet Weather	Wet Weather	
			Source Control MPs
X			Prepare a certified nutrient management plan for the property
X			Conduct soil residual nitrate tests and use results to adjust fertilizer application
X			Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
		X	Use a pest control advisor (PCA) or certified qualified applicator for pesticide management decisions
		X	Implement an integrated pest management plan
			Structural MPs
X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
X	X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	Use grassed waterways
X	X	X	Use vegetated filter strips
X	X	X	Runoff is treated with detention/sediment basins
X	X	X	Runoff is treated with retention basins
X	X	X	Runoff is treated with bioreactor
X	X	X	Runoff is treated with constructed wetlands

CALLEGUAS-HOWARD

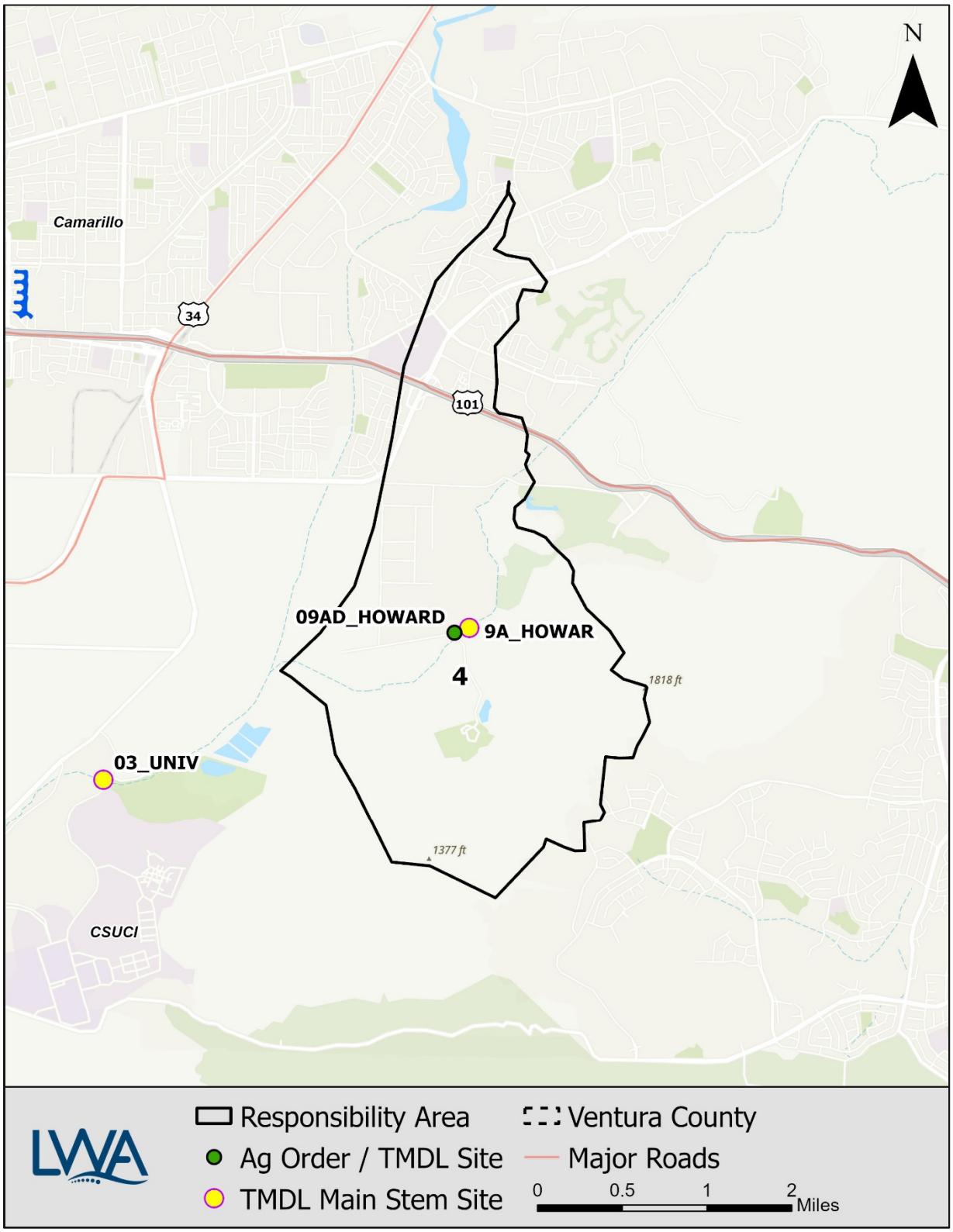


Figure 11. Calleguas-Howard Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Calleguas-Howard responsibility area are illustrated in **Figure 11** and outlined in **Table 56.**

Table 56. Calleguas-Howard Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
09AD_HOWARD	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
9A_HOWAR	TMDL Main Stem Site	CCW Salts TMDL
03_UNIV	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
		CCW Metals TMDL

Table 57. Calleguas-Howard Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 09AD_HOWARD
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	1,116	96
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	489	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	864	96
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	252	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	597	89
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.69	1.0
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	174	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	772	89
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	77%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	597	89
Percent of Total Estimated Irrigated Acres that were Surveyed	77%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 58. Calleguas-Howard Responsibility Area Crop Types and General Production Practices

Crop or Practice	Calleguas-Howard Responsibility Area		09AD_HOWARD Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	-	-	-
Blueberries	-	-	-	-
Raspberries	110	16%	-	-
Row Crop	551	78%	49	55%
Orchard	41	6%	40	45%
Nursery	1	0.1%	-	-
Flowers	5	1%	-	-
Sod	-	-	-	-
Other	-	-	-	-
Overhead Cover in Production Areas				
Hoop House	128	18%	-	-
No Cover	418	59%	49	55%
Greenhouse	-	-	-	-
Shade	-	-	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	568	80%	89	100%
Cover Crop	-	-	-	-
Plastic	-	-	-	-
Weed Cloth	-	-	-	-
Mulch	1	0.2%	-	-
Gravel	-	-	-	-
Other	-	-	-	-
Irrigation Systems in Production Areas				
Drip Only	311	44%	89	100%
Microsprinkler/Drip	-	-	-	-
Microsprinkler	-	-	-	-
Overhead Sprinkler	119	17%	-	-
Overhead/Drip	277	39%	-	-
Furrow Flood	1	0.1%	-	-
Hand Watering	0.25	0.04%	-	-
Other	-	-	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 59. Calleguas-Howard Responsibility Area Grower MPs

Survey Question	Units	Calleguas-Howard Responsibility Area		09AD_HOWARD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	159	27%	-	-
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	159	27%	-	-
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	159	27%	-	-
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	-	-	-	-
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	-	-	-	-
Q5a: Are soil residual nitrate tests done? [a]	Acres	259	43%	-	-
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	259	100%	-	-
Q6: Are leaf/petiole tests conducted? [a]	Acres	259	43%	-	-
Q7a: Is nitrate measured in fertigation water? [a]	Acres	260	43%	1	1%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	250	96%	1	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	23		-	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	21	91%	-	-
Q10a: How many non-cropped acres exist?	Acres	249		7	
Q10b: How much non-cropped area is bare soil? [c]	Acres	64	26%	-	-

Survey Question	Units	Calleguas-Howard Responsibility Area		09AD_HOWARD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	5,900		-	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	-	-	-	-
Q12a: Are grassed waterways present? [e]	Acres	-	-	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	-	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	591	99%	89	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	591	99%	89	100%
Q16a: How many acres are organically farmed? [a]	Acres	-	-	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	597	100%	89	100%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	120	14%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. However, because there are TMDLs that apply, MPs relevant to the TMDLs are included in the Ag Order Compliance Summary (Appendix E).

LOWER LAS POSAS

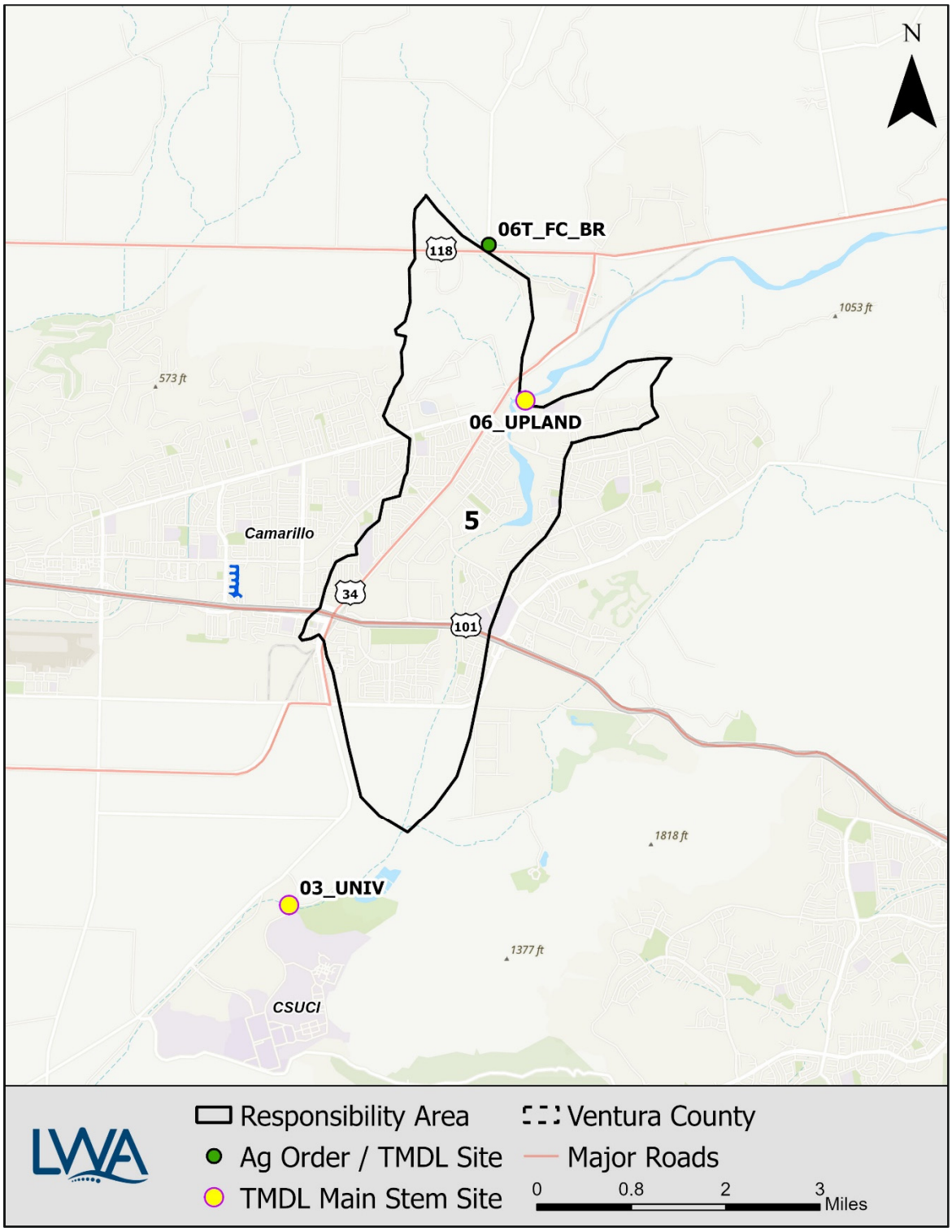


Figure 12. Lower Las Posas Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Lower Las Posas responsibility area are illustrated in **Figure 12** and outlined in **Table 60.**

Table 60. Lower Las Posas Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
06T_FC_BR	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
06_UPLAND	TMDL Main Stem Site	CCW Salts TMDL
03_UNIV	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
		CCW Metals TMDL

Table 61. Lower Las Posas Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	1,857
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	75
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	1,650
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	207
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	1,262
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.77
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	158
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	1,421
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	89%
Survey Response Information	
Sum Surveyed Irrigated Acres	1,226
Percent of Total Estimated Irrigated Acres that were Surveyed	97%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 62. Lower Las Posas Responsibility Area Crop Types and General Production Practices

Crop or Practice	Lower Las Posas Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	103	8%
Blueberries	-	-
Raspberries	105	8%
Row Crop	691	53%
Orchard	370	28%
Nursery	1	0.1%
Flowers	-	-
Sod	-	-
Other	37	3%
Overhead Cover in Production Area		
Hoop House	264	20%
No Cover	743	57%
Greenhouse	-	-
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	660	50%
Cover Crop	29	2%
Plastic	100	8%
Weed Cloth	197	15%
Mulch	320	24%
Gravel	17	1%
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	356	27%
Microsprinkler/Drip	80	6%
Microsprinkler	379	29%
Overhead Sprinkler	37	3%
Overhead/Drip	457	35%
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 63. Lower Las Posas Responsibility Area Grower MPs

Survey Question	Units	Lower Las Posas Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	652	54%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	281	23%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	468	38%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	378	31%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	374	99%
Q5a: Are soil residual nitrate tests done? [a]	Acres	615	50%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	615	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	856	81%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	830	68%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	830	100%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	658	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	243	37%
Q10a: How many non-cropped acres exist?	Acres	351	
Q10b: How much non-cropped area is bare soil? [c]	Acres	129	37%
Q11a: How many feet of ditches exist?	Feet	78,436	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	67,661	86%
Q12a: Are grassed waterways present? [e]	Acres	5	13%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	141	11%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	141	11%
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	1,182	96%
Q15: Is an IPM Plan being implemented? [a]	Acres	1,164	95%
Q16a: How many acres are organically farmed? [a]	Acres	62	5%
Q16b: How many acres are conventionally farmed? [a]	Acres	1,164	95%

Survey Question	Units	Lower Las Posas Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	98	8%
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	313	26%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	130	8%
Q18b: How many acres drain to a retention basin? [f]	Acres	130	8%
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	20	1%

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 64. Summary of Benchmark Exceedance Evaluation for Lower Las Posas Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Nitrate-N + Nitrite-N					•	☑
Nitrate-N				•		☑
OC Pesticides (Legacy)						
DDD				•		☑
DDE				•		☑
DDT				•		☑
Chlordane				•		☑
Toxaphene				•		☑

Table 65. MPs for Additional Implementation in the Lower Las Posas Responsibility Area

Exceedance Condition		Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Legacy Pesticides				
Wet	Wet			Lower Las Posas Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	50%	Y
X		4b	Certified nutrient management plan has been prepared for the property	99%	N
X		5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	100%	N
X		6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	81%	Y
X		7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	100%	N
X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	37%	Y
X	X	10b	How much non-cropped area is bare soil	37%	Y
X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	86%	Y
X	X	12a	Grassed waterways are used	13%	Y
X	X	13	Vegetated filter strips are used	11%	Y
X	X	18a	Property is treated with detention/sediment basins	8%	Y
X	X	18b	Property is treated with retention basins	8%	Y
X	X	18c	Property is treated with bioreactor	-	Y
X	X	18d	Property is treated with constructed wetlands	1%	Y

Table 66. Proposed Management Practices for the Lower Las Posas Responsibility Area

Water Quality Issues		MPs
Nutrients	Legacy Pesticides	
Wet Weather	Wet Weather	
		Source Control MPs
X		Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
		Structural MPs
X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	Use grassed waterways
X	X	Use vegetated filter strips
X	X	Runoff is treated with detention/sediment basins
X	X	Runoff is treated with retention basins
X	X	Runoff is treated with bioreactor
X	X	Runoff is treated with constructed wetlands

CALLEGUAS-CSU

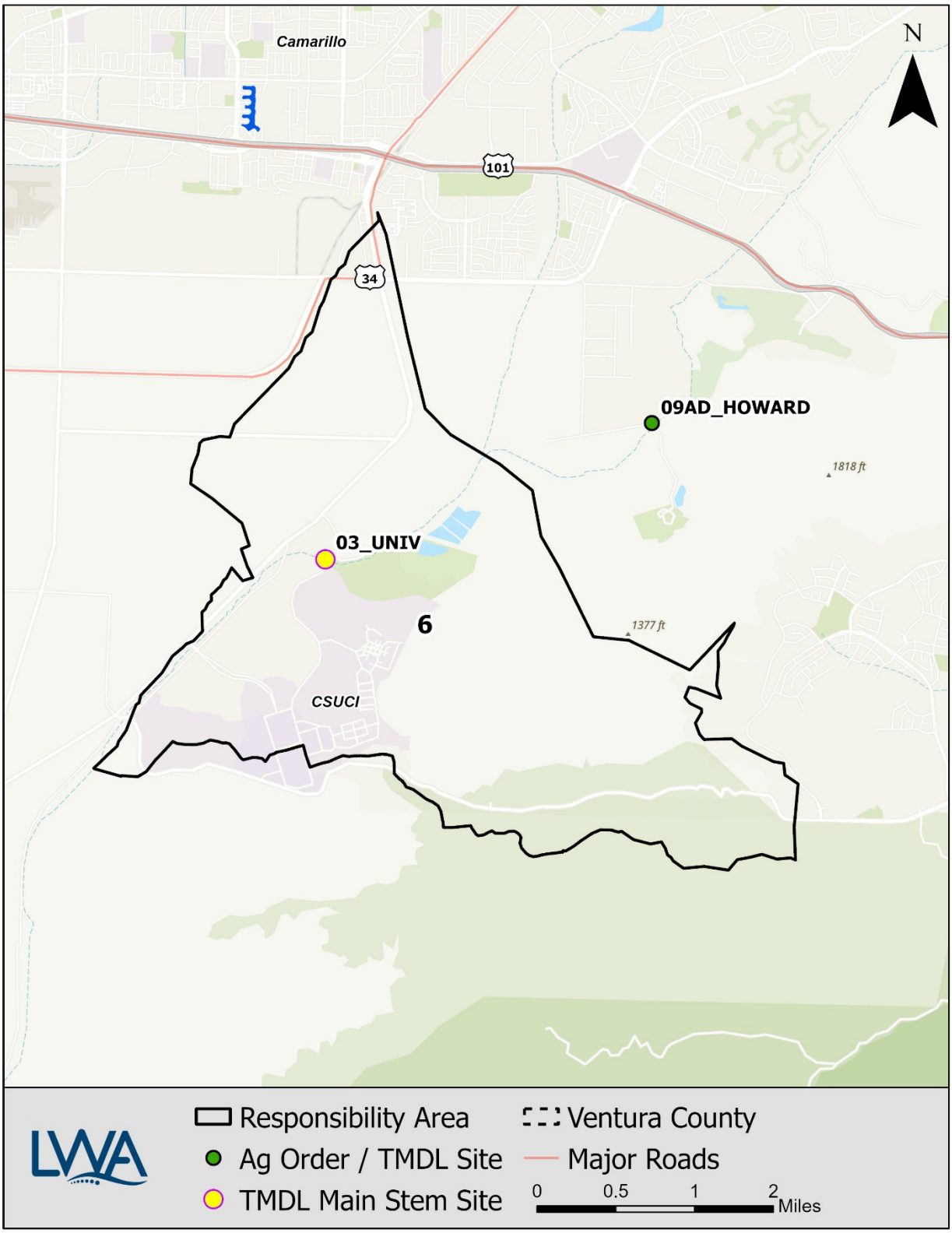


Figure 13. Calleguas-CSU Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Calleguas-CSU responsibility area are illustrated in **Figure 13** and outlined in **Table 67**.

Table 67. Calleguas-CSU Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
09AD_HOWARD	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
03_UNIV	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
		CCW Salts TMDL
		CCW Metals TMDL

Table 68. Calleguas-CSU Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	1,380
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	160
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	1,279
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	102
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	1,119
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.87
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	89
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	1,208
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	93%
Survey Response Information	
Sum Surveyed Irrigated Acres	637
Percent of Total Estimated Irrigated Acres that were Surveyed	53%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	57%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 69. Calleguas-CSU Responsibility Area Crop Types and General Production Practices

Crop or Practice	Calleguas-CSU Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	68	10%
Blueberries	-	-
Raspberries	32	5%
Row Crop	583	85%
Orchard	6	1%
Nursery	-	-
Flowers	-	-
Sod	-	-
Other	-	-
Overhead Cover in Production Area		
Hoop House	32	5%
No Cover	601	87%
Greenhouse	-	-
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	614	89%
Cover Crop	-	-
Plastic	68	10%
Weed Cloth	-	-
Mulch	6	1%
Gravel	4	1%
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	127	18%
Microsprinkler/Drip	68	10%
Microsprinkler	6	1%
Overhead Sprinkler	-	-
Overhead/Drip	487	71%
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 70. Calleguas-CSU Responsibility Area Grower MPs

Survey Question	Units	Calleguas-CSU Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	223	37%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	6	1%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	127	21%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	153	24%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	121	79%
Q5a: Are soil residual nitrate tests done? [a]	Acres	155	24%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	155	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	161	30%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	153	24%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	121	79%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	154	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	13	9%
Q10a: How many non-cropped acres exist?	Acres	60	
Q10b: How much non-cropped area is bare soil? [c]	Acres	37	62%
Q11a: How many feet of ditches exist?	Feet	3,410	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	1,200	35%
Q12a: Are grassed waterways present? [e]	Acres	1	6%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	20	3%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	20	3%
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	542	85%
Q15: Is an IPM Plan being implemented? [a]	Acres	338	53%
Q16a: How many acres are organically farmed? [a]	Acres	32	5%

Survey Question	Units	Calleguas-CSU Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q16b: How many acres are conventionally farmed? [a]	Acres	606	95%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	100	16%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. However, because there are TMDLs that apply, MPs relevant to the TMDLs are included in the Ag Order Compliance Summary (Appendix E).

UPPER LAS POSAS

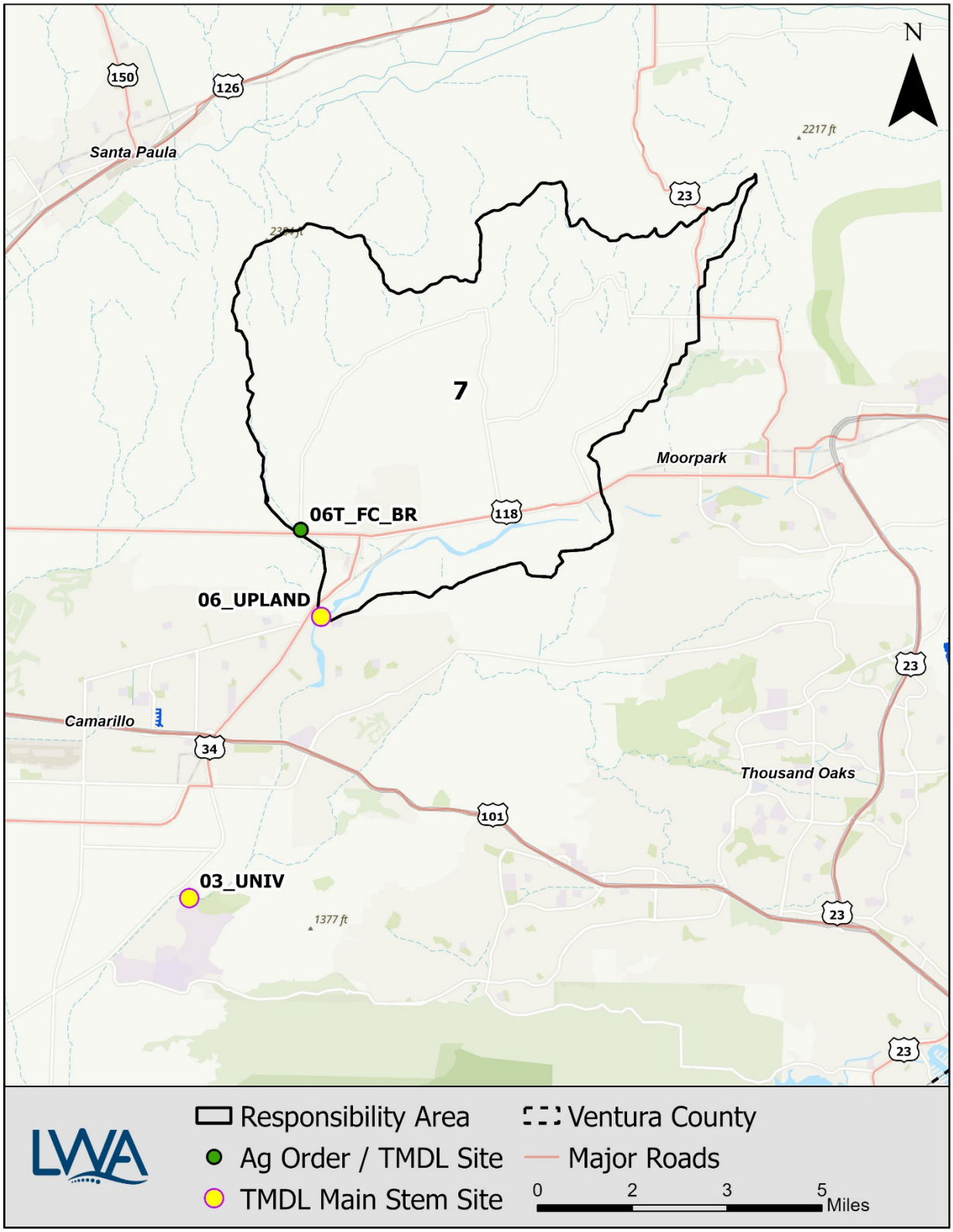


Figure 14. Upper Las Posas Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Upper Las Posas responsibility area are illustrated in **Figure 14** and outlined in **Table 71**.

Table 71. Upper Las Posas Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
06T_FC_BR	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL [a]
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
06_UPLAND	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
		CCW Salts TMDL
03_UNIV	TMDL Main Stem Site	CCW Metals TMDL [a]

[a]CCW Metals TMDL is applicable, but Ag load allocations are not identified for this subwatershed/RA.

Table 72. Upper Las Posas Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 06T_FC_BR
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	14,136	1,209
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	793	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	11,221	83
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	2,916	1,126
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	7,988	850
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.71	0.76
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	2,076	42
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	10,064	893
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	79%	95%
Survey Response Information		
Sum Surveyed Irrigated Acres	6,568	836
Percent of Total Estimated Irrigated Acres that were Surveyed	65%	94%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	82%	98%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 73. Upper Las Posas Responsibility Area Crop Types and General Production Practices

Crop or Practice	Upper Las Posas Responsibility Area		06T_FC_BR Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	248	13%	-	-
Blueberries	58	3%	-	-
Raspberries	89	5%	121	14%
Row Crop	384	20%	152	18%
Orchard	1,092	58%	565	67%
Nursery	13	1%	-	-
Flowers	-	-	-	-
Sod	-	-	-	-
Other	7	0.4%	-	-
Overhead Cover in Production Areas				
Hoop House	147	8%	182	22%
No Cover	837	44%	91	11%
Greenhouse	4	0.2%	-	-
Shade	-	-	-	-
Other	4	0.2%	-	-
Surface Treatments in Production Areas				
Bare Soil	812	43%	596	71%
Cover Crop	45	2%	28	3%
Plastic	220	12%	-	-
Weed Cloth	62	3%	108	13%
Mulch	611	32%	106	13%
Gravel	0.8	0.04%	9	1%
Other	11	1%	-	-
Irrigation Systems in Production Areas				
Drip Only	523	28%	602	72%
Microsprinkler/Drip	153	8%	-	-
Microsprinkler	818	43%	236	28%
Overhead Sprinkler	127	7%	-	-
Overhead/Drip	271	14%	63	8%
Furrow Flood	-	-	-	-
Hand Watering	1	0.1%	-	-
Other	30	2%	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 74. Upper Las Posas Responsibility Area Grower MPs

Survey Question	Units	Upper Las Posas Responsibility Area		06T_FC_BR Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	4,629	72%	701	84%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	3,456	53%	638	76%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	1,784	29%	242	32%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	3,017	46%	564	67%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	2,525	84%	458	81%
Q5a: Are soil residual nitrate tests done? [a]	Acres	4,209	64%	584	70%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	4,146	99%	584	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	4,966	79%	638	76%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	4,386	67%	773	92%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	4,370	99.6%	773	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	3,712		331	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	2,622	71%	189	57%
Q10a: How many non-cropped acres exist?	Acres	2,559		270	
Q10b: How much non-cropped area is bare soil? [c]	Acres	859	34%	237	88%

Survey Question	Units	Upper Las Posas Responsibility Area		06T_FC_BR Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	609,562		14,260	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	141,313	23%	11,660	82%
Q12a: Are grassed waterways present? [e]	Acres	26	8%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	386	6%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	486	7%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	5,957	91%	836	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	5,700	87%	836	100%
Q16a: How many acres are organically farmed? [a]	Acres	1,062	16%	108	13%
Q16b: How many acres are conventionally farmed? [a]	Acres	5,517	84%	728	87%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	2,434	37%	537	64%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	302	5%	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	22	0.2%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	110	1%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	37	0.4%	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	52	0.6%	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 75. Summary of Benchmark Exceedance Evaluation for Upper Las Posas Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Nitrate-N + Nitrite-N					•	☑
Nitrate-N				•		☑
OC Pesticides (Legacy)						
DDD				•		☑
DDE				•		☑
DDT				•		☑
Chlordane				•		☑
Toxaphene				•		☑

Table 76. MPs for Additional Implementation in the Upper Las Posas Responsibility Area

Exceedance Condition		Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Legacy Pesticides				
Wet	Wet			Upper Las Posas Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	50%	Y
X		4b	Certified nutrient management plan has been prepared for the property	84%	Y
X		5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	99%	N
X		6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	79%	Y
X		7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	99%	N
X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	71%	Y
X	X	10b	How much non-cropped area is bare soil	34%	Y
X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	23%	Y
X	X	12a	Grassed waterways are used	8%	Y
X	X	13	Vegetated filter strips are used	7%	Y
X	X	18a	Property is treated with detention/sediment basins	<1%	Y
X	X	18b	Property is treated with retention basins	1%	Y
X	X	18c	Property is treated with bioreactor	<1%	Y
X	X	18d	Property is treated with constructed wetlands	<1%	Y

Table 77. Proposed Management Practices for the Upper Las Posas Responsibility Area

Water Quality Issues		MPs
Nutrients	Legacy Pesticides	
Wet Weather	Wet Weather	
		Source Control MPs
X		Prepare a certified nutrient management plan for the property
X		Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
		Structural MPs
X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	Use grassed waterways
X	X	Use vegetated filter strips
X	X	Runoff is treated with detention/sediment basins
X	X	Runoff is treated with retention basins
X	X	Runoff is treated with bioreactor
X	X	Runoff is treated with constructed wetlands

EAST CAMARILLO HILLS

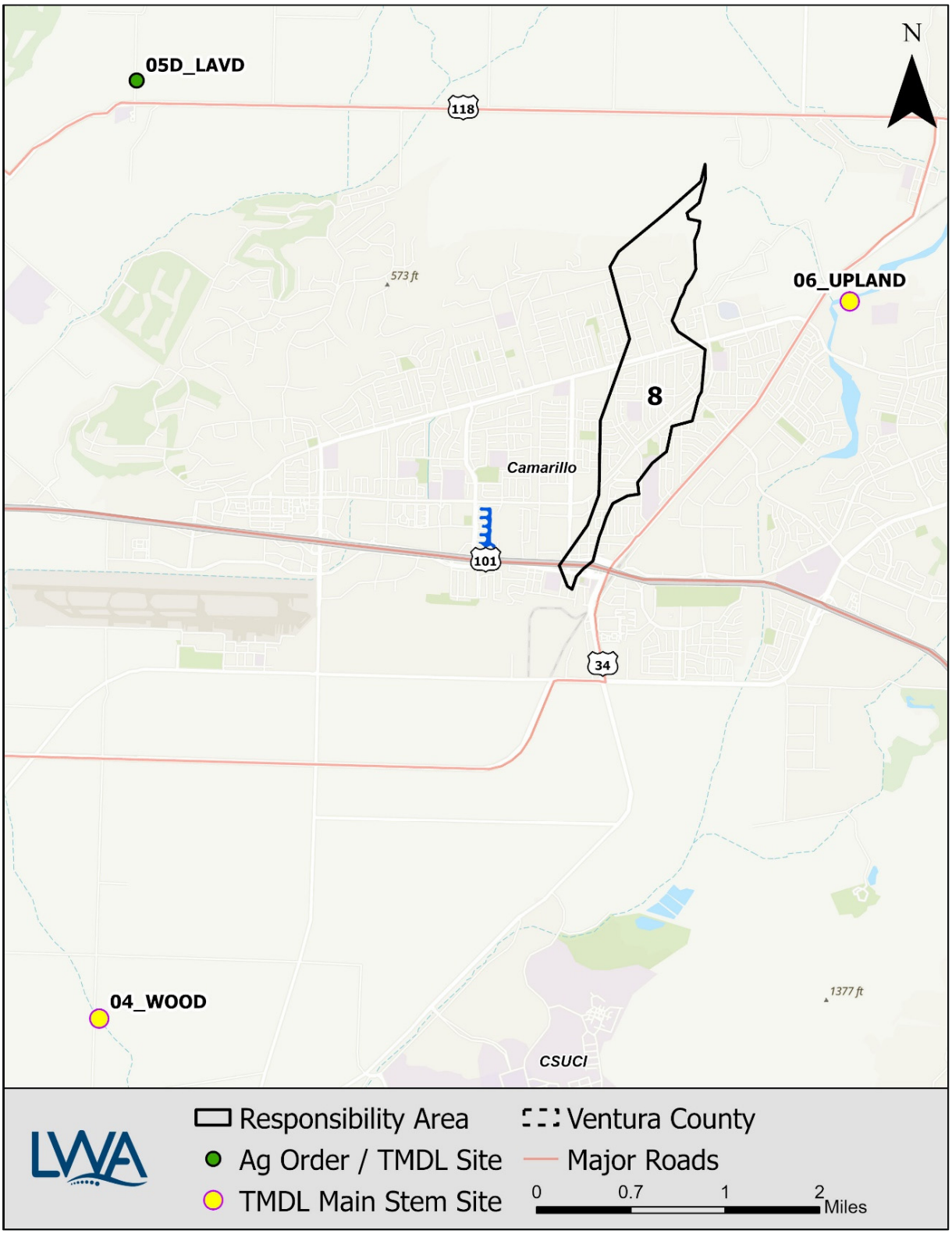


Figure 15. East Camarillo Hills Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the East Camarillo Hills responsibility area are illustrated in **Figure 15** and outlined in **Table 78**.

Table 78. East Camarillo Hills Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
05D_LAVD	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
06_UPLAND	TMDL Main Stem Site	CCW Salts TMDL
04_WOOD	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
		CCW Metals TMDL

At the time of the development of this WQMP, there are no agricultural parcels within the East Camarillo Hills responsibility area. Therefore, survey response tables noting acreages, cropping practices, and MP implementation are not available at this time. This information will be updated in future WQMPs if agricultural parcels are identified within the East Camarillo Hills responsibility area.

Table 79. Summary of Benchmark Exceedance Evaluation for East Camarillo Hills Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	•		☑	•		☑
Metals						
Dissolved Copper	•		☑	•		☑
Total Selenium		•	☑			
OC Pesticides (Legacy)						
DDD				•		☑
DDE				•		☑
DDT				•		☑
Chlordane				•		☑
Toxaphene				•		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				•		☑

LOWER REVOLON

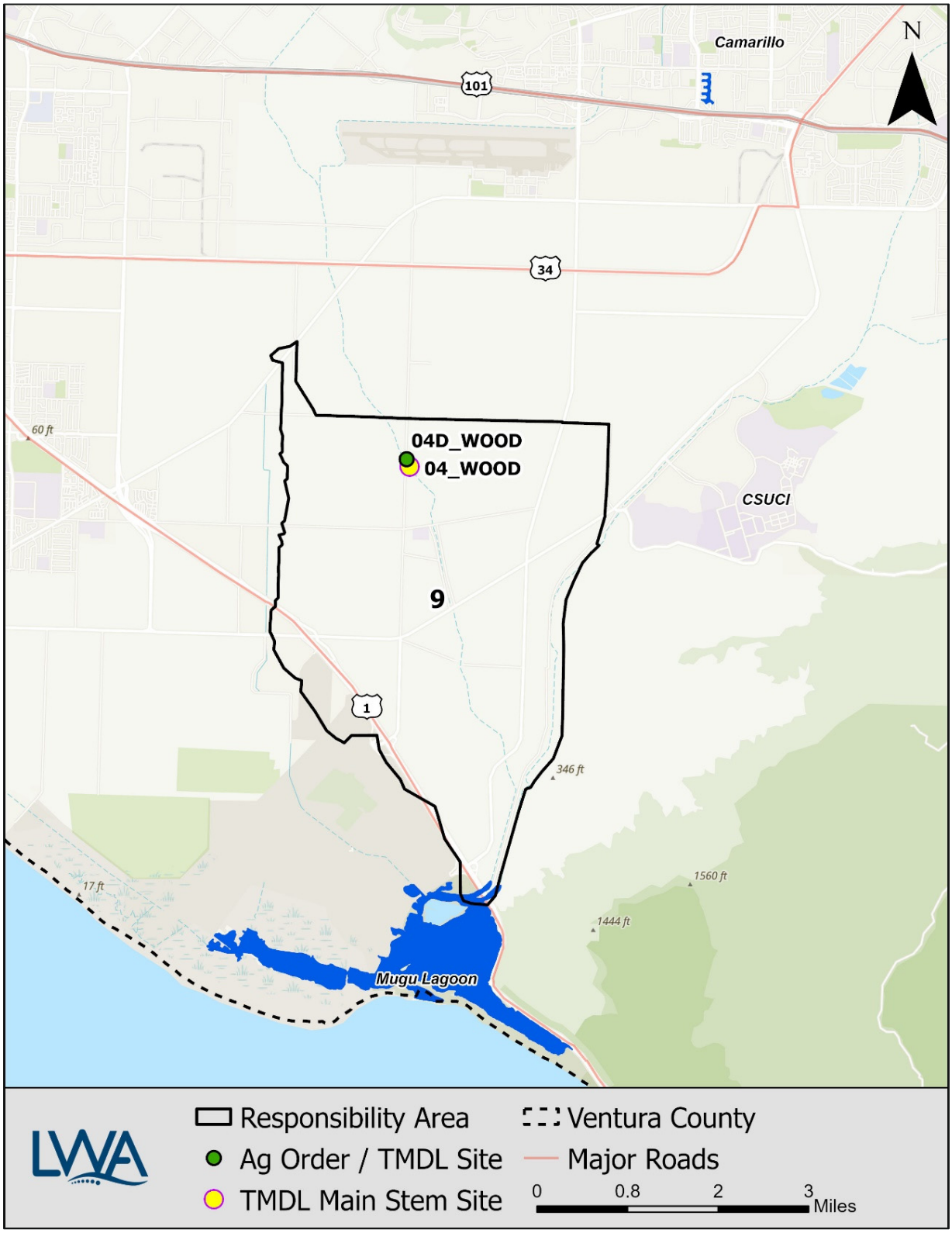


Figure 16. Lower Revolon Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Lower Revolon responsibility area are illustrated in **Figure 16** and outlined in **Table 80**.

Table 80. Lower Revolon Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
04D_WOOD	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW OC Pesticides and PCBs TMDL
04_WOOD	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
		CCW Metals TMDL

Table 81. Lower Revolon Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 04D_WOOD
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	5,420	733
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	75	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	5,164	733
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	77	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	4,501	720
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.87	0.98
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	67	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	4,568	720
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	99%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	3,685	720
Percent of Total Estimated Irrigated Acres that were Surveyed	81%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	82%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 82. Lower Revolon Responsibility Area Crop Types and General Production Practices

Crop or Practice	Lower Revolon Responsibility Area		04D_WOOD Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	701	19%	-	-
Blueberries	-	-	-	-
Raspberries	725	20%	221	31%
Row Crop	2,154	58%	340	47%
Orchard	102	3%	152	21%
Nursery	-	-	8	1%
Flowers	-	-	-	-
Sod	-	-	-	-
Other	1	0.03%	-	-
Overhead Cover in Production Areas				
Hoop House	762	21%	221	31%
No Cover	2,831	77%	341	47%
Greenhouse	-	-	7	1%
Shade	-	-	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	2,414	66%	717	100%
Cover Crop	49	1%	-	-
Plastic	632	17%	4	0.5%
Weed Cloth	-	-	-	-
Mulch	148	4%	-	-
Gravel	-	-	-	-
Other	33	1%	-	-
Irrigation Systems in Production Areas				
Drip Only	1,625	44%	404	56%
Microsprinkler/Drip	319	9%	-	-
Microsprinkler	102	3%	-	-
Overhead Sprinkler	7	0.2%	8	1%
Overhead/Drip	1,630	44%	300	42%
Furrow Flood	0.26	0.007%	-	-
Hand Watering	-	-	-	-
Other	-	-	7	1%

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 83. Lower Revolon Responsibility Area Grower MPs

Survey Question	Units	Lower Revolon Responsibility Area		04D_WOOD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	2,606	71%	528	78%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	2,065	56%	329	46%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	1,998	56%	337	52%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	2,438	66%	380	53%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	1,898	78%	380	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	3,286	89%	536	74%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	3,233	98%	536	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	3,314	90%	536	78%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	2,680	73%	496	69%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	2,680	100%	496	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	75		-	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	12	16%	-	-
Q10a: How many non-cropped acres exist?	Acres	547		13	
Q10b: How much non-cropped area is bare soil? [c]	Acres	361	66%	13	103%

Survey Question	Units	Lower Revolon Responsibility Area		04D_WOOD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	125,237		11,810	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	20,045	16%	6,400	54%
Q12a: Are grassed waterways present? [e]	Acres	1	1%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	29	1%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	3,677	100%	720	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	3,617	98%	720	100%
Q16a: How many acres are organically farmed? [a]	Acres	170	5%	121	17%
Q16b: How many acres are conventionally farmed? [a]	Acres	3,456	94%	599	83%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	1,122	30%	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	1,146	31%	156	22%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	12	0.3%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	40	1%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 84. Summary of Benchmark Exceedance Evaluation for Lower Revolon Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Metals						
Total Selenium		●	☑			
OC Pesticides (Legacy)						
DDD				●		☑
DDE				●		☑
DDT				●		☑
Chlordane				●		☑
Toxaphene				●		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

Table 85. MPs for Additional Implementation in the Lower Revolon Responsibility Area

Exceedance Condition			Survey Responses		% of Total Applicable Surveyed Units	
Metals	Legacy Pesticides	Current Pesticides				
Dry	Wet	Wet			Lower Revolon Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	23%	Y
X			Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	56%	Y
X			1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	71%	Y
X			2	Irrigation practices are based on soil moisture measurements and/or crop evapotranspiration	56%	Y
X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	16%	Y
	X	X	10b	How much non-cropped area is bare soil	66%	Y
X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	16%	Y
X	X	X	12a	Grassed waterways are used	1%	Y
X	X	X	13	Vegetated filter strips are used	1%	Y
		X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	100%	N
X		X	15	An integrated pest management plan is implemented	98%	N
X		X	16a	How many acres are organically farmed	5%	N/A [1]
X		X	16b	How many acres are conventionally farmed	94%	N/A [1]
X		X	16c	How many acres are farmed using regenerative methods	30%	N/A [1]
X			17	How many acres produce irrigation runoff	31%	Y
X	X	X	18a	Property is treated with detention/sediment basins	0.3%	Y
X	X	X	18b	Property is treated with retention basins	1%	Y
X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.

Table 86. Proposed Management Practices for the Lower Revolon Responsibility Area

Water Quality Issues			MPs
Metals	Legacy Pesticides	Current Use Pesticides	
Dry Weather	Wet Weather	Wet Weather	
			Source Control MPs
X			Use efficient irrigation system (sum of drip only, micro-sprinkler then drip, and micro-sprinkler)
X			Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.
X			Implement irrigation practices that are based on soil moisture measurements and/or crop evapotranspiration
X			Avoid/prevent irrigation runoff
			Structural MPs
X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
	X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	Use grassed waterways
X	X	X	Use vegetated filter strips
X	X	X	Runoff is treated with detention/sediment basins
X	X	X	Runoff is treated with retention basins
X	X	X	Runoff is treated with bioreactor
X	X	X	Runoff is treated with constructed wetlands

BEARDSLEY WASH

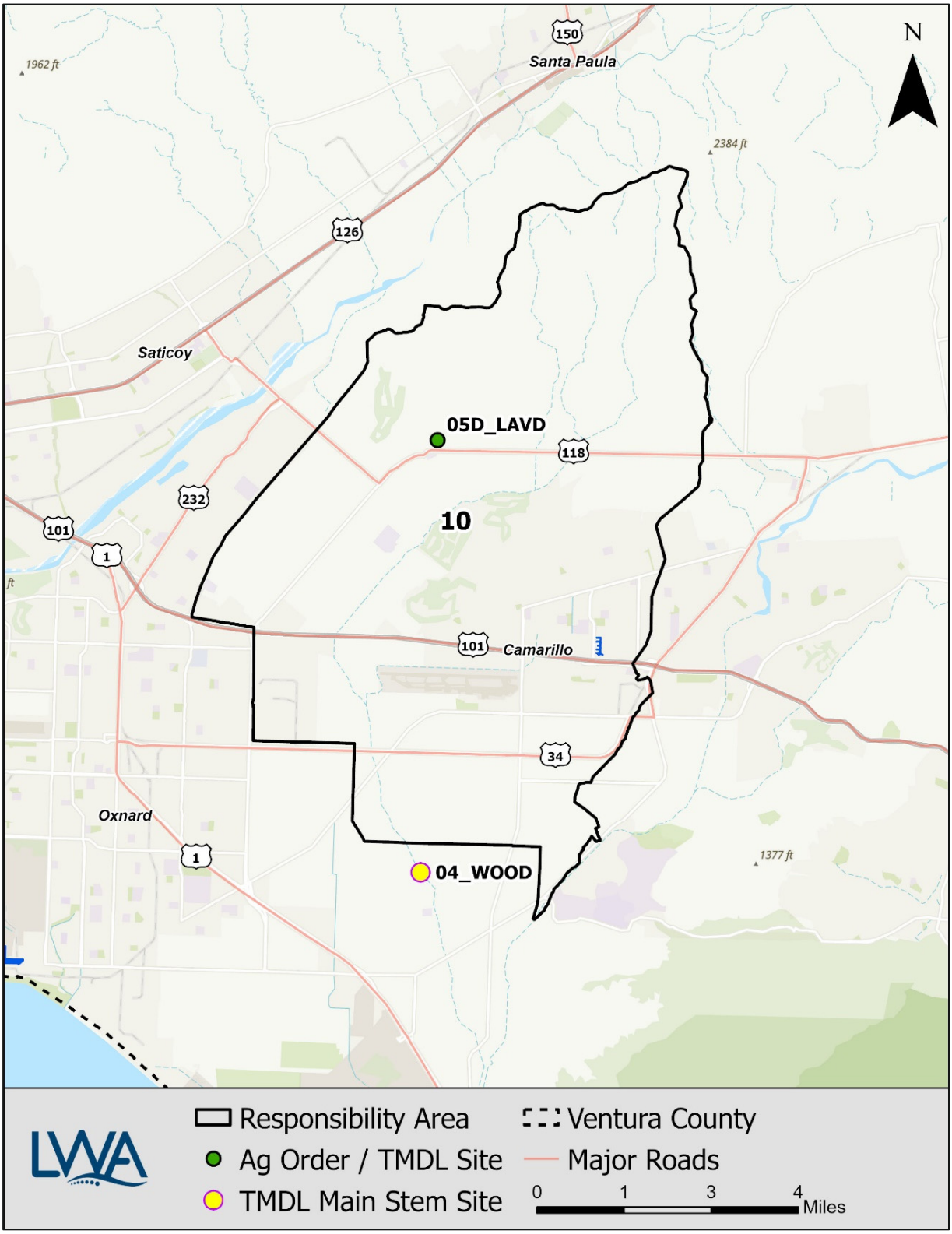


Figure 17. Beardsley Wash Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Beardsley Wash responsibility area are illustrated in **Figure 17** and outlined in **Table 87**.

Table 87. Beardsley Wash Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
05D_LAVD	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
04_WOOD	TMDL Main Stem Site	CCW Salts TMDL
		CCW OC Pesticides and PCBs TMDL
		CCW Metals TMDL

Table 88. Beardsley Wash Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 05D_LAVD
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	21,301	711
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	453	2
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	19,600	802
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	1,700	102
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	15,924	512
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.81	0.64
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	1,381	64
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	17,305	576
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	92%	89%
Survey Response Information		
Sum Surveyed Irrigated Acres	13,345	325
Percent of Total Estimated Irrigated Acres that were Surveyed	77%	56%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	84%	63%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 89. Beardsley Wash Responsibility Area Crop Types and General Production Practices

Crop or Practice	Beardsley Wash Responsibility Area		05D_LAVD Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	916	7%	-	-
Blueberries	29	0.22%	21	6%
Raspberries	929	7%	48	15%
Row Crop	4,702	35%	42	13%
Orchard	6,662	50%	214	66%
Nursery	72	1%	-	-
Flowers	35	0.3%	-	-
Sod	3	0.02%	-	-
Other	1	0.01%	-	-
Overhead Cover in Production Areas				
Hoop House	1,115	8%	69	21%
No Cover	6,355	48%	42	13%
Greenhouse	58	0.43%	-	-
Shade	1	0.01%	-	-
Other	69	0.52%	-	-
Surface Treatments in Production Areas				
Bare Soil	7,369	55%	248	76%
Cover Crop	285	2%	-	-
Plastic	933	7%	42	13%
Weed Cloth	184	1%	-	-
Mulch	4,279	32%	35	11%
Gravel	-	0%	-	-
Other	23	0.2%	-	-
Irrigation Systems in Production Areas				
Drip Only	6,622	50%	141	44%
Microsprinkler/Drip	486	4%	-	0%
Microsprinkler	3,030	23%	184	57%
Overhead Sprinkler	99	1%	-	-
Overhead/Drip	3,153	24%	-	-
Furrow Flood	-	-	-	-
Hand Watering	9	0.1%	-	-
Other	88	1%	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 90. Beardsley Wash Responsibility Area Grower MPs

Survey Question	Units	Beardsley Wash Responsibility Area		05D_LAVD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	8,551	67%	325	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	6,210	47%	267	82%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	4,078	32%	183	56%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	7,763	58%	27	8%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	6,790	87%	27	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	7,692	58%	287	88%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	7,484	97%	287	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	11,036	86%	287	88%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	9,456	71%	287	88%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	8,925	94%	287	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	1,579		41	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	1,282	81%	41	100%
Q10a: How many non-cropped acres exist?	Acres	2,414		121	
Q10b: How much non-cropped area is bare soil? [c]	Acres	1,109	46%	23	19%

Survey Question	Units	Beardsley Wash Responsibility Area		05D_LAVD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	13,237,580		17,040	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	176,123	1%	11,640	68%
Q12a: Are grassed waterways present? [e]	Acres	8	3%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	64	0.5%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	300	2%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	13,158	99%	325	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	12,751	96%	325	100%
Q16a: How many acres are organically farmed? [a]	Acres	1,265	9%	69	21%
Q16b: How many acres are conventionally farmed? [a]	Acres	12,370	93%	256	79%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	2,332	17%	8	3%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	1,719	13%	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	668	4%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	631	4%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 91. Summary of Benchmark Exceedance Evaluation for Beardsley Wash Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli		●	☑	●		☑
Metals						
Dissolved Copper				●		☑
OC Pesticides (Legacy)						
DDD				●		☑
DDE				●		☑
DDT				●		☑
Chlordane				●		☑
Toxaphene				●		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

Table 92. MPs for Additional Implementation in the Beardsley Wash Responsibility Area

Exceedance Condition					Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Metals	Legacy Pesticides	Current Pesticides				
Dry	Wet	Wet	Wet	Wet			Beardsley Wash Responsibility Area	Additional Implementation of Pertinent MP Needed?
		X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	42%	Y
X					Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	77%	Y
		X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	81%	Y
		X	X	X	10b	How much non-cropped area is bare soil	46%	Y
X	X	X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	1%	Y
X	X	X	X	X	12a	Grassed waterways are used	3%	Y
X	X	X	X	X	13	Vegetated filter strips are used	2%	Y
				X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	99%	N
		X		X	15	An integrated pest management plan is implemented	96%	Y
					16a	How many acres are organically farmed	9%	N/A [1]
		X	X	X	16b	How many acres are conventionally farmed	93%	N/A [1]
		X	X	X	16c	How many acres are farmed using regenerative methods	17%	N/A [1]
X		X	X	X	17	How many acres produce irrigation runoff	13%	Y
X	X	X	X	X	18a	Property is treated with detention/sediment basins	4%	Y
X	X	X	X	X	18b	Property is treated with retention basins	4%	Y
X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.

Table 93. Proposed Management Practices for the Beardsley Wash Responsibility Area

Water Quality Issues					MPs
Bacteria		Metals	Legacy Pesticides	Current Use Pesticides	
Dry Weather	Wet Weather	Wet Weather	Wet Weather	Wet Weather	
					Source Control MPs
X					Use efficient irrigation system (sum of drip only, micro-sprinkler then drip, and micro-sprinkler)
		X		X	Implement an integrated pest management plan
X					Avoid/prevent irrigation runoff
					Structural MPs
		X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
		X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
		X	X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	X	X	Use grassed waterways
X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	Runoff is treated with constructed wetlands

LOWER CALLEGUAS CREEK

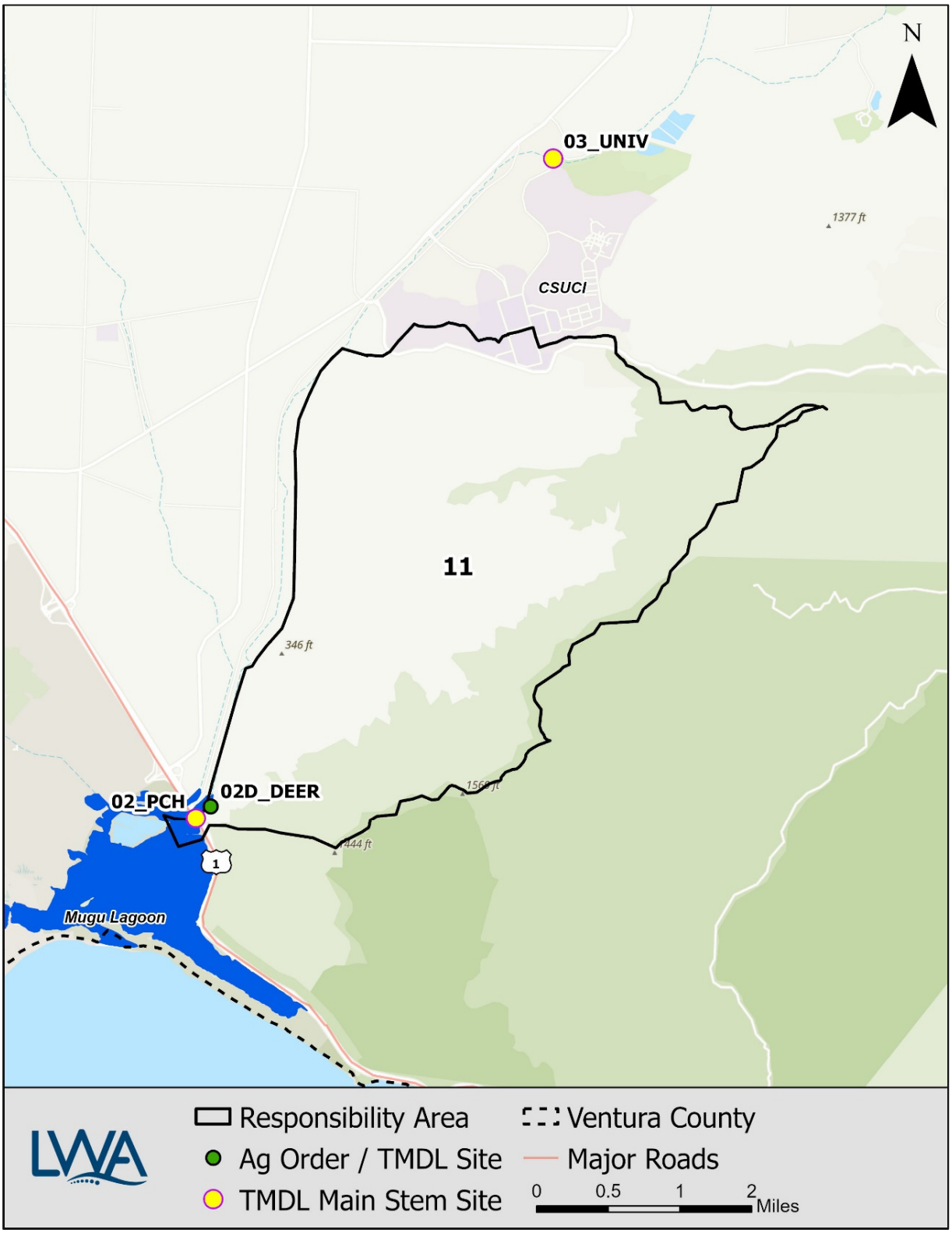


Figure 18. Lower Calleguas Creek Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Lower Calleguas Creek responsibility area are illustrated in **Figure 18** and outlined in **Table 94**.

Table 94. Lower Calleguas Creek Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
02D_DEER	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL
		CCW OC Pesticides and PCBs TMDL
02_PCH	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
03_UNIV		CCW Metals TMDL

Table 95. Lower Calleguas Creek Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 02D_DEER
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	4,439	527
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	86	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	4,223	527
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	217	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	1,928	104
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.46	0.20
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	99	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	2,027	104
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	95%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	1,459	104
Percent of Total Estimated Irrigated Acres that were Surveyed	72%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	76%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 96. Lower Calleguas Creek Responsibility Area Crop Types and General Production Practices

Crop or Practice	Lower Calleguas Creek Responsibility Area		02D_DEER Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	-	-	-
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	940	64%	45	43%
Orchard	348	24%	59	57%
Nursery	-	-	-	-
Flowers	-	-	-	-
Sod	-	-	-	-
Other	176	12%	-	-
Overhead Cover in Production Areas				
Hoop House	176	12%	-	-
No Cover	1,132	77%	104	100%
Greenhouse	-	-	-	-
Shade	-	-	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	1,288	88%	104	100%
Cover Crop	-	-	-	-
Plastic	-	-	-	-
Weed Cloth	176	12%	-	-
Mulch	-	-	-	-
Gravel	-	-	-	-
Other	-	-	-	-
Irrigation Systems in Production Areas				
Drip Only	867	59%	77	74%
Microsprinkler/Drip	-	-	-	-
Microsprinkler	65	4%	27	26%
Overhead Sprinkler	-	-	-	-
Overhead/Drip	532	36%	-	-
Furrow Flood	-	-	-	-
Hand Watering	-	-	-	-
Other	-	-	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 97. Lower Calleguas Creek Responsibility Area Grower MPs

Survey Question	Units	Lower Calleguas Creek Responsibility Area		02D_DEER Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	922	100%	104	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	802	55%	59	57%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	686	74%	-	-
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	1,438	99%	104	100%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	1,438	100%	104	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	1,459	100%	104	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	1,459	100%	104	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	1,459	100%	104	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	1,454	100%	104	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	1,379	95%	104	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	325		59	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	325	100%	59	100%
Q10a: How many non-cropped acres exist?	Acres	1,333		424	
Q10b: How much non-cropped area is bare soil? [c]	Acres	1,316	99%	422	100%

Survey Question	Units	Lower Calleguas Creek Responsibility Area		02D_DEER Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	88,531		12,988	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	41,929	47%	12,988	100%
Q12a: Are grassed waterways present? [e]	Acres	-	-	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	326	22%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	1,459	100%	104	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	1,459	100%	104	100%
Q16a: How many acres are organically farmed? [a]	Acres	220	15%	45	43%
Q16b: How many acres are conventionally farmed? [a]	Acres	1,244	85%	59	57%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	742	26%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. However, because there are TMDLs that apply, MPs relevant to the TMDLs are included in the Ag Order Compliance Summary (Appendix E).

MUGU LAGOON

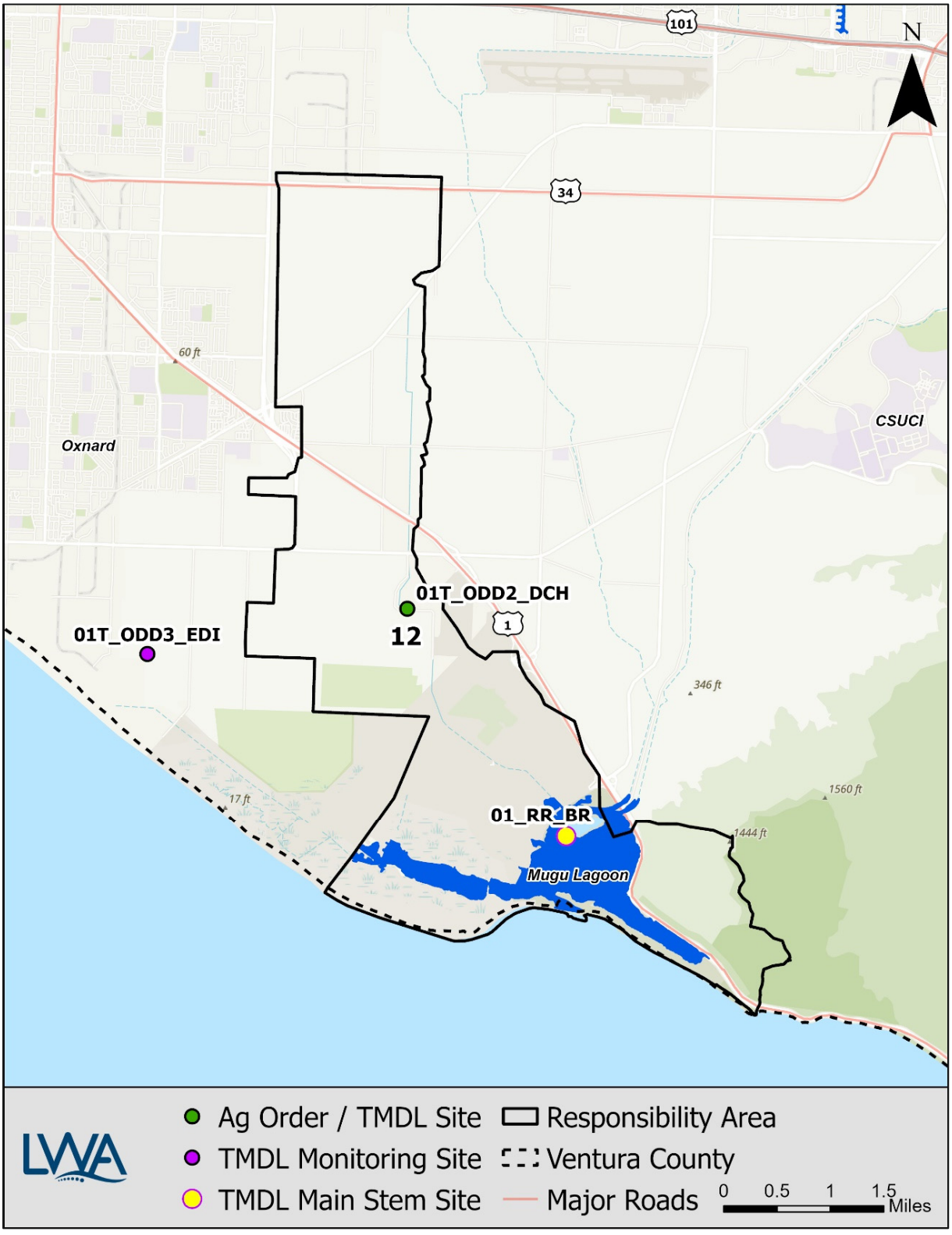


Figure 19. Mugu Lagoon Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Mugu Lagoon responsibility area are illustrated in **Figure 19** and outlined in **Table 98**.

Table 98. Mugu Lagoon Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
01T_ODD2_DCH	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL [a]
		CCW OC Pesticides and PCBs TMDL
01T_ODD3_EDI	TMDL Main Stem Site	CCW OC Pesticides and PCBs TMDL
01_RR_BR	TMDL Main Stem Site	CCW Metals TMDL [a]

[a] CCW Metals TMDL is applicable, but Ag load allocations are not identified for this subwatershed/RA.

Table 99. Mugu Lagoon Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 01T_ODD2_DCH
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	4,181	702
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	4	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	4,069	696
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	112	5
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	3,228	617
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.81	0.89
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	90	4
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	3,378	622
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	97%	99%
Survey Response Information		
Sum Surveyed Irrigated Acres	3,156	606
Percent of Total Estimated Irrigated Acres that were Surveyed	93%	97%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	98%	98%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 100. Mugu Lagoon Responsibility Area Crop Types and General Production Practices

Crop or Practice	Mugu Lagoon Responsibility Area		01T_ODD2_DCH Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	1,664	52%	194	32%
Blueberries	9	0.3%	9	1%
Raspberries	156	5%	43	7%
Row Crop	1,191	37%	360	59%
Orchard	5	0.2%	-	-
Nursery	9	0.3%	-	-
Flowers	10	0.3%	-	-
Sod	140	4%	-	-
Other	29	1%	-	-
Overhead Cover in Production Areas				
Hoop House	214	7%	65	11%
No Cover	2,820	88%	541	89%
Greenhouse	36	1%	-	-
Shade	-	-	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	1,779	55%	391	65%
Cover Crop	4	0.1%	4	1%
Plastic	1,242	39%	170	28%
Weed Cloth	30	1%	-	-
Mulch	223	7%	7	1%
Gravel	-	-	-	-
Other	37	1%	30	5%
Irrigation Systems in Production Areas				
Drip Only	1,044	33%	425	70%
Microsprinkler/Drip	1,151	36%	87	14%
Microsprinkler	26	1%	-	-
Overhead Sprinkler	170	5%	-	-
Overhead/Drip	939	29%	94	15%
Furrow Flood	-	-	-	-
Hand Watering	-	-	-	-
Other	-	-	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 101. Mugu Lagoon Responsibility Area Grower MPs

Survey Question	Units	Mugu Lagoon Responsibility Area		01T_ODD2_DCH Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	2,300	73%	395	65%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	1,192	38%	182	30%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	1,038	35%	94	21%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	1,819	58%	379	63%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	1,729	95%	289	76%
Q5a: Are soil residual nitrate tests done? [a]	Acres	2,634	83%	606	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	2,441	93%	596	98%
Q6: Are leaf/petiole tests conducted? [a]	Acres	2,715	86%	516	85%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	2,200	70%	305	50%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	2,048	93%	305	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	115		-	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	-	-	-	-
Q10a: How many non-cropped acres exist?	Acres	400		65	
Q10b: How much non-cropped area is bare soil? [c]	Acres	210	52%	40	62%

Survey Question	Units	Mugu Lagoon Responsibility Area		01T_ODD2_DCH Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	182,639		37,760	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	35,594	19%	22,760	60%
Q12a: Are grassed waterways present? [e]	Acres	3	4%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	10	0.3%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	-	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	3,040	96%	541	89%
Q15: Is an IPM Plan being implemented? [a]	Acres	2,940	93%	606	100%
Q16a: How many acres are organically farmed? [a]	Acres	69	2%	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	3,094	98%	606	100%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	254	8%	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	1,022	32%	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	5	0.2%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 102. Summary of Benchmark Exceedance Evaluation for Mugu Lagoon Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Nitrate-N + Nitrite-N		•	☑		•	☑
Nitrate-N	•		☑	•		☑
Metals						
Dissolved Copper	•		☑	•		☑
OC Pesticides (Legacy)						
DDD	•		☑	•		☑
DDE	•		☑	•		☑
DDT	•		☑	•		☑
Chlordane			☑	•		☑
Toxaphene	•		☑	•		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin	•		☑	•		☑

Table 103. MPs for Additional Implementation in the Mugu Lagoon Responsibility Area

Exceedance Condition								Survey Responses		% of Total Applicable Surveyed Units	
Nutrients		Metals		Legacy Pesticides		Current Pesticides					
Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet			Mugu Lagoon Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	48%	Y
X		X		X		X		Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	70%	Y
X		X		X		X		1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	73%	Y
X		X				X		2	Irrigation practices are based on soil moisture measurements and/or crop evapotranspiration	38%	Y
X								3	Soil solution electrical conductivity measurements are used to determine when salt leaching is necessary	35%	Y
X	X							4b	Certified nutrient management plan has been prepared for the property	95%	Y
X	X							5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	93%	Y
X	X							6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	86%	Y
X	X							7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	93%	Y
X	X	X	X	X	X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	-	Y
	X		X		X		X	10b	How much non-cropped area is bare soil	52%	Y
X	X	X	X	X	X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	19%	Y
X	X	X	X	X	X	X	X	12a	Grassed waterways are used	4%	Y
X	X	X	X	X	X	X	X	13	Vegetated filter strips are used	-	Y
						X	X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	96%	Y
		X	X			X	X	15	An integrated pest management plan is implemented	93%	Y
X		X		X		X		17	How many acres produce irrigation runoff	32%	Y
X	X	X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	X	X	X	X	X	18b	Property is treated with retention basins	<1%	Y
X	X	X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y

Exceedance Condition								Survey Responses		% of Total Applicable Surveyed Units	
Nutrients		Metals		Legacy Pesticides		Current Pesticides					
Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet			Mugu Lagoon Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

Table 104. Proposed Management Practices for the Mugu Lagoon Responsibility Area

Water Quality Issues								MPs
Nutrients		Metals		Legacy Pesticides		Current Use Pesticides		
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	
								Source Control MPs
X		X		X		X		Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)
X		X		X		X		Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.
X		X				X		Implement irrigation practices that are based on soil moisture measurements and/or crop evapotranspiration
X								Use soil solution electrical conductivity measurements to determine when salt leaching is necessary
X	X							Prepare a certified nutrient management plan for the property
X	X							Conduct soil residual nitrate tests and use results to adjust fertilizer application
X	X							Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
X	X							Analyze irrigation water nitrate and use results to adjust fertilizer application
						X	X	Use a pest control advisor (PCA) or certified qualified applicator for pesticide management decisions
		X	X			X	X	Implement an integrated pest management plan
X		X		X		X		Avoid/prevent irrigation runoff
								Structural MPs
X	X	X	X	X	X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	X	X	X	X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
	X		X		X		X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	X	X	X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals

Water Quality Issues								MPs
Nutrients		Metals		Legacy Pesticides		Current Use Pesticides		
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	
X	X	X	X	X	X	X	X	Use grassed waterways
X	X	X	X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	X	X	X	Runoff is treated with constructed wetlands

OXNARD DRAIN #3

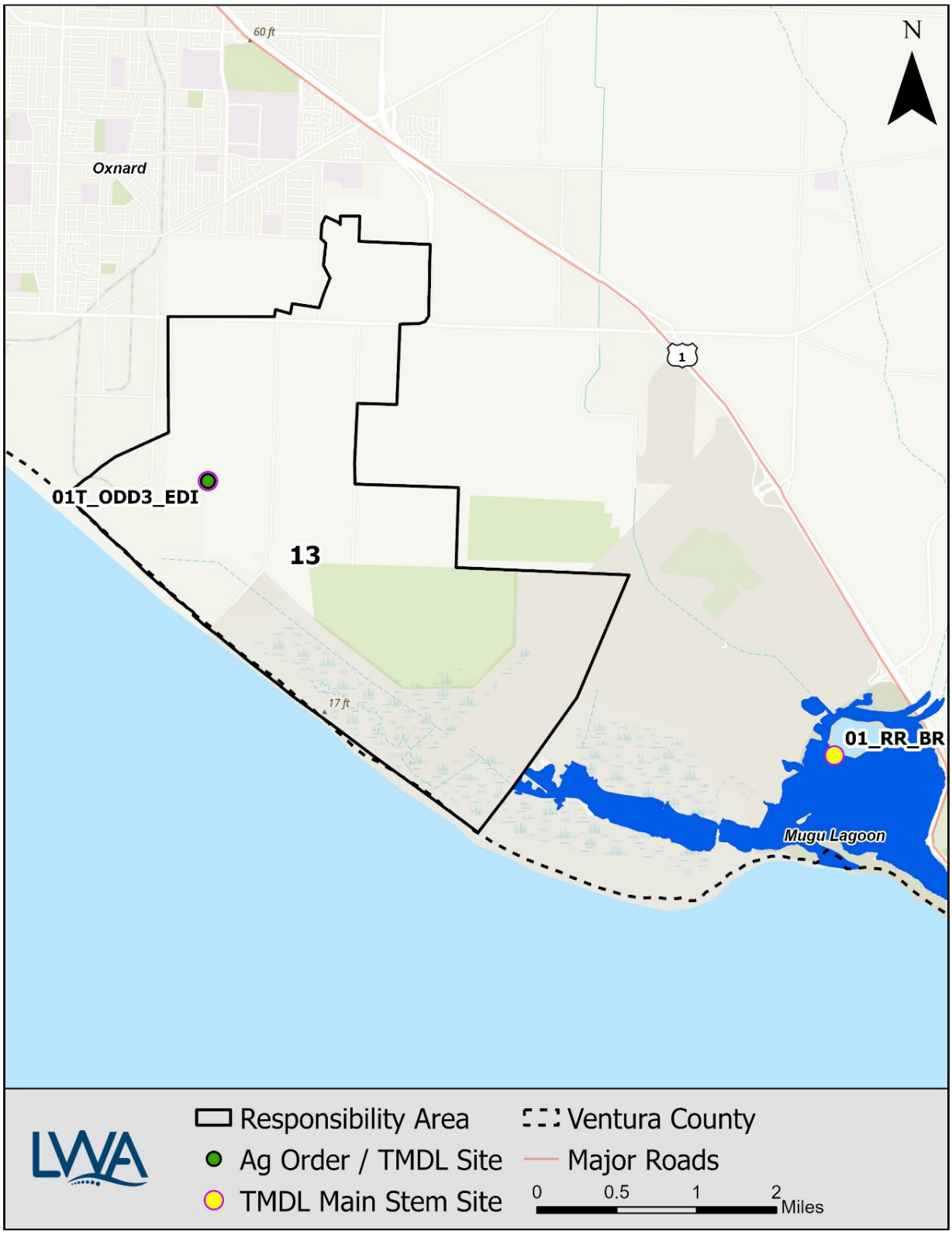


Figure 20. Oxnard Drain #3 Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Oxnard Drain #3 responsibility area are illustrated in **Figure 20** and outlined in **Table 105**.

Table 105. Oxnard Drain #3 Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
01T_ODD3_EDI	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		CCW Nitrogen TMDL
		CCW Toxicity, Chlorpyrifos, and Diazinon TMDL
		CCW Metals TMDL [a]
		Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity TMDL
01_RR_BR	TMDL Main Stem Site	CCW Metals TMDL [a]

[a] CCW Metals TMDL is applicable, but Ag load allocations are not identified for this subwatershed/RA.

Table 106. Oxnard Drain #3 Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site 01T_ODD3_EDI
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	2,137	587
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	2	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	2,137	587
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	0	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	1,481	514
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.69	0.88
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	0	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	1,481	514
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	100%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	1,384	514
Percent of Total Estimated Irrigated Acres that were Surveyed	93%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	93%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 107. Oxnard Drain #3 Responsibility Area Crop Types and General Production Practices

Crop or Practice	Oxnard Drain #3 Responsibility Area		01T_ODD3_EDI Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	555	40%	-	-
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	117	8%	141	27%
Orchard	-	-	-	-
Nursery	-	-	-	-
Flowers	-	-	-	-
Sod	687	50%	373	73%
Other	25	2%	-	-
Overhead Cover in Production Areas				
Hoop House	4	0.3%	4	1%
No Cover	862	62%	196	38%
Greenhouse	-	-	-	-
Shade	-	-	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	252	18%	120	23%
Cover Crop	-	-	-	-
Plastic	555	40%	-	-
Weed Cloth	-	-	-	-
Mulch	-	-	-	-
Gravel	-	-	-	-
Other	443	32%	314	61%
Irrigation Systems in Production Areas				
Drip Only	47	3%	-	-
Microsprinkler/Drip	448	32%	-	-
Microsprinkler	4	0.3%	4	1%
Overhead Sprinkler	718	52%	369	72%
Overhead/Drip	107	8%	81	16%
Furrow Flood	-	-	-	-
Hand Watering	-	-	-	-
Other	60	4%	60	12%

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 108. Oxnard Drain #3 Responsibility Area Grower MPs

Survey Question	Units	Oxnard Drain #3 Responsibility Area		01T_ODD3_EDI Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	937	68%	514	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	826	60%	373	73%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	653	51%	373	73%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	753	54%	514	100%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	684	91%	514	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	996	72%	514	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	987	99%	514	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	965	76%	514	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	927	67%	514	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	800	86%	475	92%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	400		-	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	-	-	-	-
Q10a: How many non-cropped acres exist?	Acres	641		73	
Q10b: How much non-cropped area is bare soil? [c]	Acres	53	8%	73	100%

Survey Question	Units	Oxnard Drain #3 Responsibility Area		01T_ODD3_EDI Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	48,090		21,180	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	1,800	4%	1,800	8%
Q12a: Are grassed waterways present? [e]	Acres	-	-	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	-	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	1,239	90%	514	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	1,200	87%	514	100%
Q16a: How many acres are organically farmed? [a]	Acres	-	-	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	1,384	100%	514	100%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	815	59%	373	73%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 109. Summary of Benchmark Exceedance Evaluation for Oxnard Drain #3 Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Metals						
Dissolved Copper	●		☑	●		☑
Nutrients						
Nitrate-N + Nitrite-N		●	☑		●	☑
Nitrate-N	●		☑	●		☑
OC Pesticides (Legacy)						
DDD	●	● [1]	☑	●	●	☑
DDE	●	● [1]	☑	●	●	☑
DDT	●	● [1]	☑	●	●	☑
Chlordane		● [2]	☑	●	●	☑
Toxaphene	●	● [1]	☑	●	●	☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●	●	☑
Chronic Toxicity						
Sediment Toxicity		● [2]	☑			

1. Exceedances was observed in sample water and sediment.
2. Exceedance was observed in sediment.

Table 110. MPs for Additional Implementation in the Oxnard Drain #3 Responsibility Area

Exceedance Condition								Survey Responses		% of Total Applicable Surveyed Units	
Metals		Nutrients		Legacy Pesticides		Current Pesticides	Toxicity				
Dry	Wet	Dry	Wet	Dry	Wet	Wet	Dry			Oxnard Drain #3 Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	72%	Y
X		X		X			X	Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	35%	Y
X		X		X			X	1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	68%	Y
X		X					X	2	Irrigation practices are based on soil moisture measurements and/or crop evapotranspiration	60%	Y
		X					X	3	Soil solution electrical conductivity measurements are used to determine when salt leaching is necessary	51%	Y
		X	X				X	4b	Certified nutrient management plan has been prepared for the property	91%	Y
		X	X				X	5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	99%	N
		X	X				X	6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	76%	Y
		X	X				X	7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	86%	Y
X	X	X	X	X	X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	-	Y
	X		X		X	X		10b	How much non-cropped area is bare soil	8%	Y
X	X	X	X	X	X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	4%	Y
X	X	X	X	X	X	X	X	12a	Grassed waterways are used	-	Y
X	X	X	X	X	X	X	X	13	Vegetated filter strips are used	-	Y
						X	X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	90%	Y
X	X					X	X	15	An integrated pest management plan is implemented	87%	Y
X	X					X	X	16a	How many acres are organically farmed	-	N/A [1]
X	X					X	X	16b	How many acres are conventionally farmed	100%	N/A [1]
X	X					X	X	16c	How many acres are farmed using regenerative methods	-	N/A [1]
X		X		X			X	17	How many acres produce irrigation runoff	59%	Y
X	X	X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	X	X	X	X	X	18b	Property is treated with retention basins	-	Y
X	X	X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.

Table 111.Proposed Management Practices for the Oxnard Drain #3 Responsibility Area

Water Quality Issues								MPs
Metals		Nutrients		Legacy Pesticides		Current Use Pesticides	Toxicity	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	Dry Weather	
								Source Control MPs
X		X		X			X	Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)
X		X		X			X	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.
X		X					X	Implement irrigation practices that are based on soil moisture measurements and/or crop evapotranspiration
		X					X	Use soil solution electrical conductivity measurements to determine when salt leaching is necessary
		X	X				X	Prepare a certified nutrient management plan for the property
		X	X				X	Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
		X	X				X	Analyze irrigation water nitrate and use results to adjust fertilizer application
						X	X	Use a pest control advisor (PCA) or certified qualified applicator for pesticide management decisions
X	X					X	X	Implement an integrated pest management plan
X		X		X			X	Avoid/prevent irrigation runoff
								Structural MPs
X	X	X	X	X	X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	X	X	X	X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
	X		X		X	X		Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	X	X	X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals

Water Quality Issues								MPs
Metals		Nutrients		Legacy Pesticides		Current Use Pesticides	Toxicity	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	Dry Weather	
X	X	X	X	X	X	X	X	Use grassed waterways
X	X	X	X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	X	X	X	Runoff is treated with constructed wetlands

OXNARD COASTAL – OXNARD DRAIN #3

Figure 21. Oxnard Coastal - Oxnard Drain #3 Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Oxnard Coastal - Oxnard Drain #3 responsibility area are illustrated in **Figure 21** and outlined in **Table 112**.

Table 112. Oxnard Coastal - Oxnard Drain #3 Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
01T_ODD3_EDI	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity TMDL

Table 113. Oxnard Coastal – Oxnard Drain #3 Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	458
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	443
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	15
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	378
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.85
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	13
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	391
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	97%
Survey Response Information	
Sum Surveyed Irrigated Acres	378
Percent of Total Estimated Irrigated Acres that were Surveyed	97%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 114. Oxnard Coastal – Oxnard Drain #3 Responsibility Area Crop Types and General Production Practices

Crop or Practice	Oxnard Coastal – Oxnard Drain #3 Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	282	73%
Blueberries	-	-
Raspberries	-	-
Row Crop	60	16%
Orchard	-	-
Nursery	-	-
Flowers	28	7%
Sod	-	-
Other	16	4%
Overhead Cover in Production Area		
Hoop House	-	-
No Cover	354	92%
Greenhouse	5	1%
Shade	-	-
Other	19	5%
Surface Treatments in Production Area		
Bare Soil	91	24%
Cover Crop	-	-
Plastic	247	64%
Weed Cloth	8	2%
Mulch	35	9%
Gravel	-	-
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	139	36%
Microsprinkler/Drip	131	34%
Microsprinkler	-	-
Overhead Sprinkler	-	-
Overhead/Drip	116	30%
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 115. Oxnard Coastal – Oxnard Drain #3 Responsibility Area Grower MPs

Survey Question	Units	Oxnard Coastal – Oxnard Drain #3 Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	335	89%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	217	57%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	151	41%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	268	71%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	189	71%
Q5a: Are soil residual nitrate tests done? [a]	Acres	211	56%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	211	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	355	94%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	290	77%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	211	73%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	96	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	96	100%
Q10a: How many non-cropped acres exist?	Acres	115	
Q10b: How much non-cropped area is bare soil? [c]	Acres	64	56%
Q11a: How many feet of ditches exist?	Feet	17,806	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	6,000	34%
Q12a: Are grassed waterways present? [e]	Acres	1	9%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	85	22%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	96	25%
Pest Management			

Survey Question	Units	Oxnard Coastal – Oxnard Drain #3 Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	378	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	345	91%
Q16a: How many acres are organically farmed? [a]	Acres	8	2%
Q16b: How many acres are conventionally farmed? [a]	Acres	370	98%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	189	50%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	11	2%
Q18b: How many acres drain to a retention basin? [f]	Acres	11	2%
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 116. Summary of Benchmark Exceedance Evaluation for Oxnard Coastal - Oxnard Drain #3 Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Metals						
Dissolved Copper	●		☑	●		☑
Nutrients						
Nitrate-N	●		☑	●		☑
OC Pesticides (Legacy)						
DDD	●	● [1]	☑	●	●	☑
DDE	●	● [1]	☑	●	●	☑
DDT	●	● [1]	☑	●	●	☑
Chlordane		● [2]	☑	●	●	☑
Toxaphene	●	● [1]	☑	●	●	☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●	●	☑
Chronic Toxicity						
Sediment Toxicity		● [2]	☑			

1. Exceedances was observed in sample water and sediment.
2. Exceedance was observed in sediment.

Table 117. MPs for Additional Implementation in the Oxnard Coastal – Oxnard Drain #3 Responsibility Area

Exceedance Condition								Survey Responses		% of Total Applicable Surveyed Units	
Metals		Nutrients		Legacy Pesticides		Current Pesticides	Toxicity				
Dry	Wet	Dry	Wet	Dry	Wet	Wet	Dry			Oxnard Coastal – Oxnard Drain #3 Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	75%	Y
X		X		X			X	Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	70%	Y
X		X		X			X	1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	89%	Y
X		X					X	2	Irrigation practices are based on soil moisture measurements and/or crop evapotranspiration	57%	Y
		X					X	3	Soil solution electrical conductivity measurements are used to determine when salt leaching is necessary	41%	Y
		X	X				X	4b	Certified nutrient management plan has been prepared for the property	71%	Y
		X	X				X	5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	100%	N
		X	X				X	6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	94%	Y
		X	X				X	7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	73%	Y
X	X	X	X	X	X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	100%	N
	X		X		X	X	X	10b	How much non-cropped area is bare soil	56%	Y
X	X	X	X	X	X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	34%	Y
X	X	X	X	X	X	X	X	12a	Grassed waterways are used	9%	Y
X	X	X	X	X	X	X	X	13	Vegetated filter strips are used	25%	Y
						X	X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	100%	N
X	X					X	X	15	An integrated pest management plan is implemented	91%	Y
X	X					X	X	16a	How many acres are organically farmed	2%	N/A [1]
X	X					X	X	16b	How many acres are conventionally farmed	98%	N/A [1]
X	X					X	X	16c	How many acres are farmed using regenerative methods	-	N/A [1]
X		X		X			X	17	How many acres produce irrigation runoff	50%	Y
X	X	X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	2%	Y
X	X	X	X	X	X	X	X	18b	Property is treated with retention basins	2%	Y
X	X	X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.

Table 118. Proposed Management Practices for the Oxnard Coastal – Oxnard Drain #3 Responsibility Area

Water Quality Issues								MPs
Metals		Nutrients		Legacy Pesticides		Current Use Pesticides	Toxicity	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	Dry Weather	
								Source Control MPs
X		X		X			X	Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)
X		X		X			X	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.
X		X					X	Implement irrigation practices that are based on soil moisture measurements and/or crop evapotranspiration
		X					X	Use soil solution electrical conductivity measurements to determine when salt leaching is necessary
		X	X				X	Prepare a certified nutrient management plan for the property
		X	X				X	Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
		X	X				X	Analyze irrigation water nitrate and use results to adjust fertilizer application
X	X					X	X	Implement an integrated pest management plan
X		X		X			X	Avoid/prevent irrigation runoff
								Structural MPs
X	X	X	X	X	X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X	X	X	X	X	X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
	X		X		X	X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	X	X	X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	X	X	X	X	X	Use grassed waterways

Water Quality Issues								MPs
Metals		Nutrients		Legacy Pesticides		Current Use Pesticides	Toxicity	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	Dry Weather	
X	X	X	X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	X	X	X	Runoff is treated with constructed wetlands

MALIBU

Figure 22. Malibu Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Malibu responsibility area are illustrated in **Figure 22** and outlined in **Table 119**. 05D_LAVD serves as a proxy site for this responsibility area.

Table 119. Malibu Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
05D_LAVD	VCAILG Monitoring Proxy Site	Standard Ag Order Benchmarks
		MCW Nutrients TMDL

Table 120. Malibu Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	106
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	177
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	65
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	41
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	19
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.29
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	12
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	31
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	62%
Survey Response Information	
Sum Surveyed Irrigated Acres	19
Percent of Total Estimated Irrigated Acres that were Surveyed	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 121. Malibu Responsibility Area Crop Types and General Production Practices

Crop or Practice	Malibu Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	-	-
Blueberries	-	-
Raspberries	-	-
Row Crop	-	-
Orchard	14	74%
Nursery	-	-
Flowers	-	-
Sod	-	-
Other	5	26%
Overhead Cover in Production Area		
Hoop House	-	-
No Cover	5	26%
Greenhouse	-	-
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	14	74%
Cover Crop	-	-
Plastic	-	-
Weed Cloth	-	-
Mulch	5	26%
Gravel	-	-
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	19	100%
Microsprinkler/Drip	-	-
Microsprinkler	-	-
Overhead Sprinkler	-	-
Overhead/Drip	-	-
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 122. Malibu Responsibility Area Grower MPs

Survey Question	Units	Malibu Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	19	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	5	26%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	5	26%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	-	-
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	-	-
Q5a: Are soil residual nitrate tests done? [a]	Acres	-	-
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	-	-
Q6: Are leaf/petiole tests conducted? [a]	Acres	-	-
Q7a: Is nitrate measured in fertigation water? [a]	Acres	-	-
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	-	-
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	47	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	47	100%
Q10a: How many non-cropped acres exist?	Acres	46	
Q10b: How much non-cropped area is bare soil? [c]	Acres	13	28%
Q11a: How many feet of ditches exist?	Feet	50	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	50	100%
Q12a: Are grassed waterways present? [e]	Acres	-	0%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	0%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	0%
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	5	26%
Q15: Is an IPM Plan being implemented? [a]	Acres	-	-
Q16a: How many acres are organically farmed? [a]	Acres	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	19	100%

Survey Question	Units	Malibu Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 123. Summary of Benchmark Exceedance Evaluation for Malibu Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	•		☑	•		☑
Metals						
Dissolved Copper				•		☑
OC Pesticides (Legacy)						
DDD				•		☑
DDE				•		☑
DDT				•		☑
Chlordane				•		☑
Toxaphene				•		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				•		☑

Table 124. MPs for Additional Implementation in the Malibu Responsibility Area

Exceedance Condition					Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Metals	Legacy Pesticides	Current Pesticides				
Dry	Wet	Wet	Wet	Wet			Malibu Responsibility Area	Additional Implementation of Pertinent MP Needed?
		X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	26%	Y
X					Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	100%	N
		X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	100%	N
		X	X	X	10b	How much non-cropped area is bare soil	28%	Y
X	X	X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	100%	N
X	X	X	X	X	12a	Grassed waterways are used	0%	Y
X	X	X	X	X	13	Vegetated filter strips are used	0%	Y
				X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	26%	Y
		X		X	15	An integrated pest management plan is implemented	-	Y
		X		X	16a	How many acres are organically farmed	-	N/A [1]
		X		X	16b	How many acres are conventionally farmed	100%	N/A [1]
		X		X	16c	How many acres are farmed using regenerative methods	-	N/A [1]
X					17	How many acres produce irrigation runoff	-	Y
X	X	X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	X	X	18b	Property is treated with retention basins	-	Y
X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.

Table 125. Proposed Management Practices for the Malibu Responsibility Area

Water Quality Issues					MPs
Bacteria		Metals	Legacy Pesticides	Current Use Pesticides	
Dry Weather	Wet Weather	Wet Weather	Wet Weather	Wet Weather	
					Source Control MPs
				X	Use a pest control advisor (PCA) or certified qualified applicator for pesticide management decisions
		X		X	Implement an integrated pest management plan
X					Avoid/prevent irrigation runoff
					Structural MPs
		X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
		X	X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	X	X	Use grassed waterways
X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	Runoff is treated with constructed wetlands

MALIBU-LAS VIRGENES

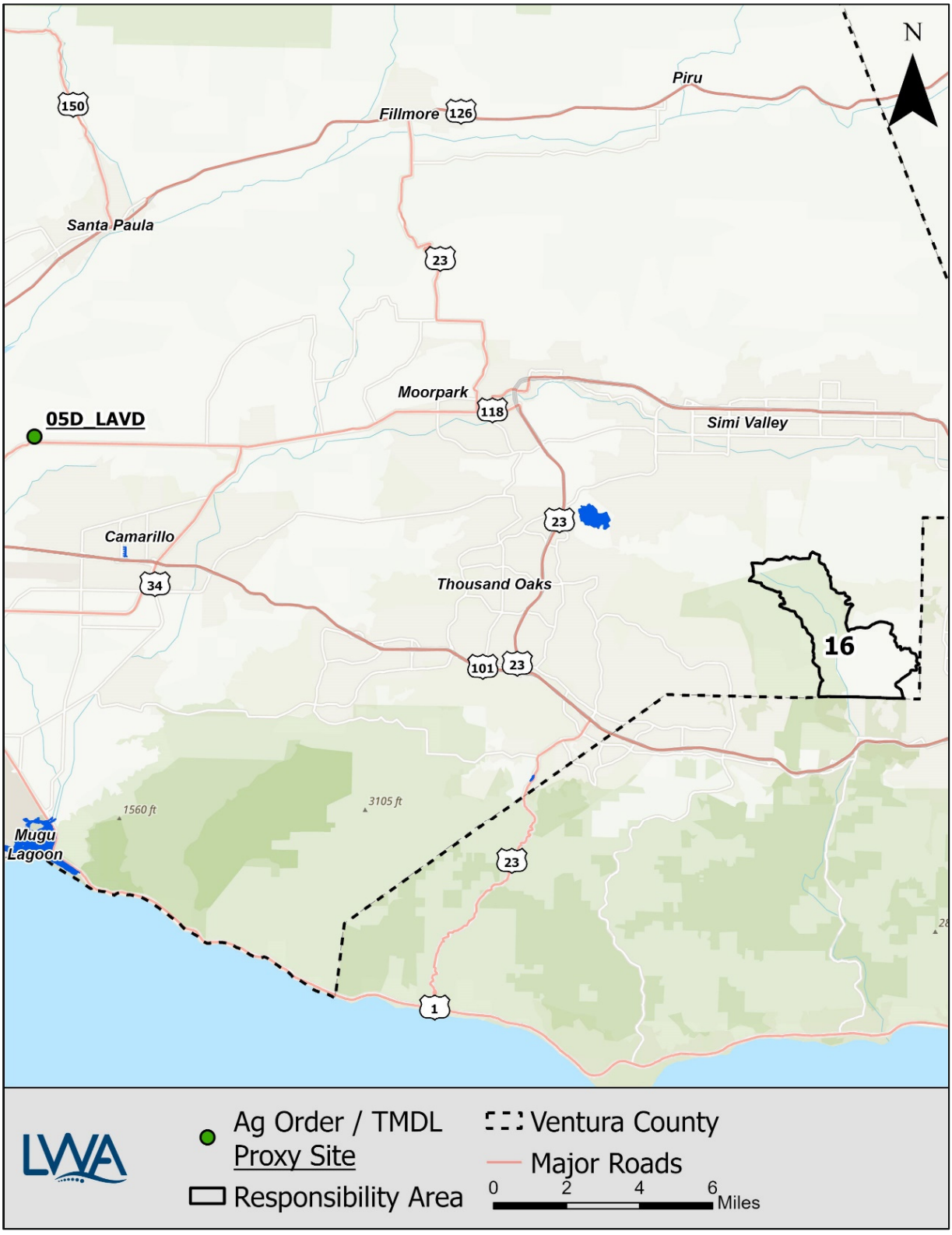


Figure 23. Malibu-Las Virgenes Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Malibu-Las Virgenes responsibility area are illustrated in **Figure 23** and outlined in **Table 126**. 05D_LAVD serves as a proxy site for this responsibility area.

Table 126. Malibu-Las Virgenes Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
05D_LAVD	VCAILG Monitoring Proxy Site	Standard Ag Order Benchmarks
		MCW Nutrients TMDL
		MCW Sedimentation and Nutrients TMDL

At the time of the development of this WQMP, there are no agricultural parcels within the Malibu-Las Virgenes responsibility area. Therefore, survey response tables noting acreages, cropping practices, and MP implementation are not available at this time. This information will be updated in future WQMPs if agricultural parcels are identified within the Malibu-Las Virgenes responsibility area.

Table 127. Summary of Benchmark Exceedance Evaluation for Malibu-Las Virgenes Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	●		☑	●		☑
Metals						
Dissolved Copper				●		☑
Nutrients						
Total Nitrogen					● [1]	☑
Total Phosphorus					● [1]	☑
OC Pesticides (Legacy)						
DDD				●		☑
DDE				●		☑
DDT				●		☑
Chlordane				●		☑
Toxaphene				●		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

1. Exceedances are of the winter load allocation and are most similar to wet weather implementation actions.

SANTA CLARA RIVER REACH 5

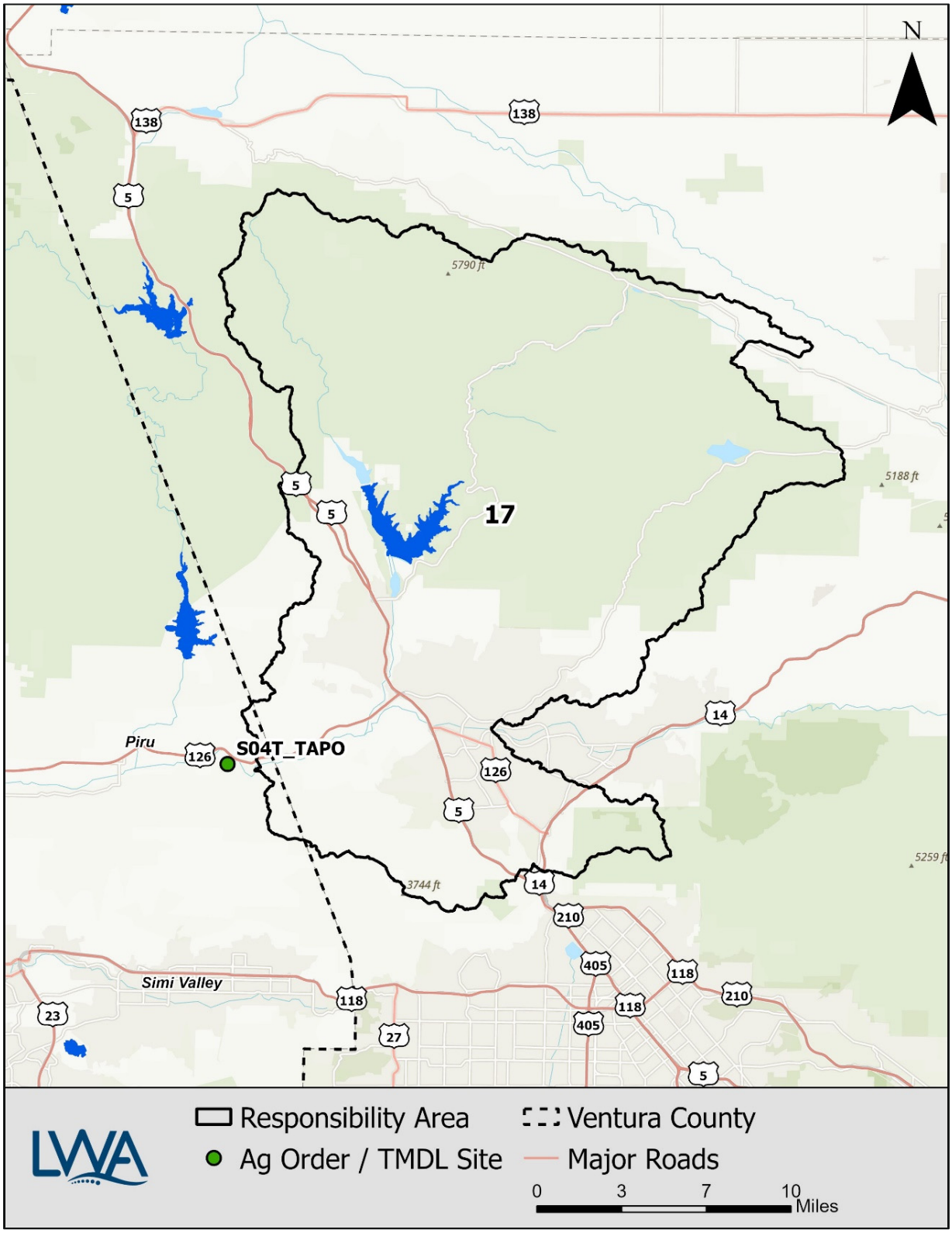


Figure 24. Santa Clara River Reach 5 Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Santa Clara River Reach 5 responsibility area are illustrated in **Figure 24** and outlined in **Table 128**.

Table 128. Santa Clara River Reach 5 Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
S04T_TAPO	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		SCR Nitrogen TMDL
		SCR Bacteria TMDL
		Upper SCR Chloride TMDL

Table 129. Santa Clara River Reach 5 Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	3,726
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	1,739
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	3,726
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	0
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	968
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.26
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	968
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	100%
Survey Response Information	
Sum Surveyed Irrigated Acres	968
Percent of Total Estimated Irrigated Acres that were Surveyed	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 130. Santa Clara River Reach 5 Responsibility Area Crop Types and General Production Practices

Crop or Practice	Santa Clara River Reach 5 Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	-	-
Blueberries	-	-
Raspberries	-	-
Row Crop	3	0.3%
Orchard	-	-
Nursery	-	-
Flowers	-	-
Sod	119	12%
Other	850	87%
Overhead Cover in Production Area		
Hoop House	-	-
No Cover	853	88%
Greenhouse	-	-
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	3	0.3%
Cover Crop	850	87%
Plastic	-	-
Weed Cloth	-	-
Mulch	-	-
Gravel	-	-
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	-	-
Microsprinkler/Drip	-	-
Microsprinkler	-	-
Overhead Sprinkler	951	98%
Overhead/Drip	21	2%
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 131. Santa Clara River Reach 5 Responsibility Area Grower MPs

Survey Question	Units	Santa Clara River Reach 5 Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	968	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	962	99%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	968	100%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	968	100%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	968	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	968	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	968	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	968	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	968	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	968	100%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	964	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	739	77%
Q10a: How many non-cropped acres exist?	Acres	2,773	
Q10b: How much non-cropped area is bare soil? [c]	Acres	24	1%
Q11a: How many feet of ditches exist?	Feet	78,837	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	53,059	67%
Q12a: Are grassed waterways present? [e]	Acres	1	2%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	-
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	968	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	968	100%
Q16a: How many acres are organically farmed? [a]	Acres	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	964	100%

Survey Question	Units	Santa Clara River Reach 5 Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	157	16%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 132. Summary of Benchmark Exceedance Evaluation for Santa Clara River Reach 5 Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	●		☑	●		☑
Salts [1]						
TDS	●		☑	●		☑
Sulfate	●		☑	●		☑
Chloride	●	●	☑	●	●	☑
OC Pesticides (Legacy)						
DDD				●		☑
DDE				●		☑
DDT				●		☑
Chlordane				●		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

1. Excess salts in this RA are due to natural geological sources. Therefore, per the decision of Regional Board staff, exceedances of the Chloride TMDL load allocation do not trigger discharge limitations. However, MPs used to address other constituents may also reduce salts.

Table 133. MPs for Additional Implementation in the Santa Clara River Reach 5 Responsibility Area

Exceedance Condition						Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Salts [2]		Legacy Pesticides	Current Pesticides				
Dry	Wet	Dry	Wet	Wet	Wet			Santa Clara River Reach 5 Responsibility Area	Additional Implementation of Pertinent MP Needed?
				X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	87%	Y
X		X				Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	-	Y
		X				1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	100%	N
		X				2	Irrigation practices are based on soil moisture measurements and/or crop evapotranspiration	99%	N
		X				3	Soil solution electrical conductivity measurements are used to determine when salt leaching is necessary	100%	N
				X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	77%	Y
				X	X	10b	How much non-cropped area is bare soil	1%	Y
X	X			X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	67%	Y
X	X	X	X	X	X	12a	Grassed waterways are used	2%	Y
X	X	X	X	X	X	13	Vegetated filter strips are used	-	Y
					X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	100%	N
					X	15	An integrated pest management plan is implemented	100%	N
					X	16a	How many acres are organically farmed	-	N/A [1]
					X	16b	How many acres are conventionally farmed	100%	N/A [1]
					X	16c	How many acres are farmed using regenerative methods	-	N/A [1]
X		X				17	How many acres produce irrigation runoff	16%	Y
X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	X	X	X	18b	Property is treated with retention basins	-	Y
X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y

Exceedance Condition						Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Salts [2]		Legacy Pesticides	Current Pesticides				
Dry	Wet	Dry	Wet	Wet	Wet			Santa Clara River Reach 5 Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.
2. Excess salts in this RA are due to natural geological sources. Therefore, per the decision of Regional Board staff, exceedances of the Chloride TMDL load allocation do not trigger discharge limitations. However, MPs used to address other constituents may also reduce salts.

Table 134. Proposed Management Practices for the Santa Clara River Reach 5 Responsibility Area

Water Quality Issues						MPs
Bacteria		Salts [1]		Legacy Pesticides	Current Use Pesticides	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	Wet Weather	
						Source Control MPs
X		X				Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)
X		X				Avoid/prevent irrigation runoff
						Structural MPs
				X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
				X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
				X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X			X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	X	X	X	Use grassed waterways
X	X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	X	Runoff is treated with constructed wetlands

1. Excess salts in this RA are due to natural geological sources. Therefore, per the decision of Regional Board staff, exceedances of the Chloride TMDL load allocation do not trigger discharge limitations. However, MPs used to address other constituents may also reduce salts.

TAPO CANYON

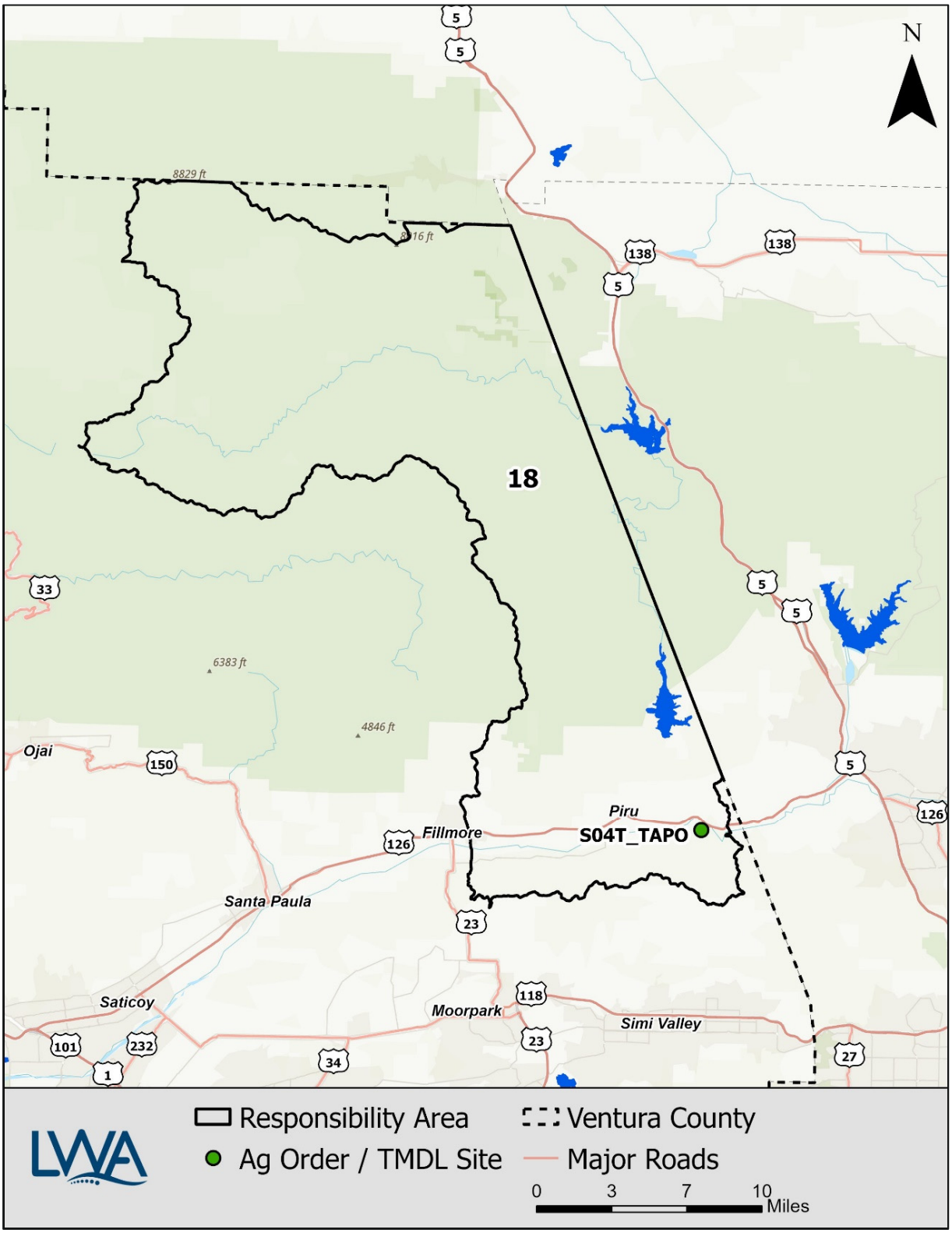


Figure 25. Tapo Canyon Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Tapo Canyon responsibility area are illustrated in **Figure 25** and outlined in **Table 135**.

Table 135. Tapo Canyon Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
S04T_TAPO	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		SCR Nitrogen TMDL
		Upper SCR Chloride TMDL

Table 136. Tapo Canyon Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site S04T_TAPO
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	16,489	1,216
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	1,375	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	15,152	1,216
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	1,337	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	5,447	76
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.36	0.06
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	481	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	5,928	76
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	92%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	4,910	76
Percent of Total Estimated Irrigated Acres that were Surveyed	83%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	90%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 137. Tapo Canyon Responsibility Area Crop Types and General Production Practices

Crop or Practice	Tapo Canyon Responsibility Area		S04T_TAPO Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	0%	-	-
Blueberries	-	0%	-	-
Raspberries	24	0.5%	-	-
Row Crop	1,058	21%	-	-
Orchard	3,269	64%	29	39%
Nursery	381	7%	-	-
Flowers	6	0.1%	-	-
Sod	2	0.03%	-	-
Other	383	7%	47	61%
Overhead Cover in Production Areas				
Hoop House	116	2%	-	-
No Cover	1,761	34%	47	61%
Greenhouse	11	0.2%	-	-
Shade	7	0.1%	-	-
Other	-	0%	-	-
Surface Treatments in Production Areas				
Bare Soil	1,531	30%	-	-
Cover Crop	1,378	27%	76	100%
Plastic	246	5%	-	-
Weed Cloth	94	2%	-	-
Mulch	2,050	40%	-	-
Gravel	86	2%	-	-
Other	4	0.1%	-	-
Irrigation Systems in Production Areas				
Drip Only	823	16%	-	-
Microsprinkler/Drip	11	0.2%	-	-
Microsprinkler	3,086	60%	29	39%
Overhead Sprinkler	349	7%	47	61%
Overhead/Drip	729	14%	-	-
Furrow Flood	18	0.3%	-	-
Hand Watering	19	0.4%	-	-
Other	8	0.2%	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 138. Tapo Canyon Responsibility Area Grower MPs

Survey Question	Units	Tapo Canyon Responsibility Area		Tapo Canyon Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	4,210	86%	76	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	3,118	64%	76	100%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	1,898	41%	76	100%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	2,625	53%	76	100%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	2,224	85%	76	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	4,554	93%	76	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	4,506	99%	76	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	4,482	94%	76	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	4,227	86%	76	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	3,440	81%	50	65%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	2,429		76	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	2,313	95%	76	100%
Q10a: How many non-cropped acres exist?	Acres	8,266		1,140	
Q10b: How much non-cropped area is bare soil? [c]	Acres	593	7%	-	-

Survey Question	Units	Tapo Canyon Responsibility Area		Tapo Canyon Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	172,387		2,700	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	106,389	62%	2,552	95%
Q12a: Are grassed waterways present? [e]	Acres	1	1%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	15	0.3%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	89	2%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	4,832	98%	76	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	4,689	96%	76	100%
Q16a: How many acres are organically farmed? [a]	Acres	686	14%	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	4,220	86%	76	100%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	1,143	23%	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	374	8%	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	268	2%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	373	3%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 139. Summary of Benchmark Exceedance Evaluation for Tapo Canyon Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	●		☑	●		☑
Salts [1]						
TDS	●		☑	●		☑
Sulfate	●		☑	●		☑
Chloride	●	●	☑	●	●	☑
OC Pesticides (Legacy)						
DDD				●		☑
DDE				●		☑
DDT				●		☑
Chlordane				●		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

1. Excess salts in this RA are due to natural geological sources. Therefore, per the decision of Regional Board staff, exceedances of the Chloride TMDL load allocation do not trigger discharge limitations. However, MPs used to address other constituents may also reduce salts.

Table 140. MPs for Additional Implementation in the Tapo Canyon Responsibility Area

Exceedance Condition						Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Salts [2]		Legacy Pesticides	Current Pesticides				
Dry	Wet	Dry	Wet	Wet	Wet			Tapo Canyon Responsibility Area	Additional Implementation of Pertinent MP Needed?
				X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	76%	Y
X		X				Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	76%	Y
		X				1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	86%	Y
		X				2	Irrigation practices are based on soil moisture measurements and/or crop evapotranspiration	64%	Y
		X				3	Soil solution electrical conductivity measurements are used to determine when salt leaching is necessary	41%	Y
				X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	95%	Y
				X	X	10b	How much non-cropped area is bare soil	7%	Y
X	X			X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	62%	Y
X	X	X	X	X	X	12a	Grassed waterways are used	1%	Y
X	X	X	X	X	X	13	Vegetated filter strips are used	2%	Y
					X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	98%	N
					X	15	An integrated pest management plan is implemented	96%	Y
					X	16a	How many acres are organically farmed	14%	N/A [1]
					X	16b	How many acres are conventionally farmed	86%	N/A [1]
					X	16c	How many acres are farmed using regenerative methods	23%	N/A [1]
X		X				17	How many acres produce irrigation runoff	8%	Y
X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	2%	Y
X	X	X	X	X	X	18b	Property is treated with retention basins	3%	Y
X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.
2. Excess salts in this RA are due to natural geological sources. Therefore, per the decision of Regional Board staff, exceedances of the Chloride TMDL load allocation do not trigger discharge limitations. However, MPs used to address other constituents may also reduce salts.

Table 141. Proposed Management Practices for the Tapo Canyon Responsibility Area

Water Quality Issues						MPs
Bacteria		Salts		Legacy Pesticides	Current Use Pesticides	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	Wet Weather	
						Source Control MPs
X		X				Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)
		X				Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.
		X				Implement irrigation practices that are based on soil moisture measurements and/or crop evapotranspiration
		X				Use soil solution electrical conductivity measurements to determine when salt leaching is necessary
					X	Implement an integrated pest management plan
X		X				Avoid/prevent irrigation runoff
						Structural MPs
				X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
				X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
				X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X			X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	X	X	X	Use grassed waterways
X	X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	X	Runoff is treated with constructed wetlands

1. Excess salts in this RA are due to natural geological sources. Therefore, per the decision of Regional Board staff, exceedances of the Chloride TMDL load allocation do not trigger discharge limitations. However, MPs used to address other constituents may also reduce salts.

SANTA PAULA-FILLMORE

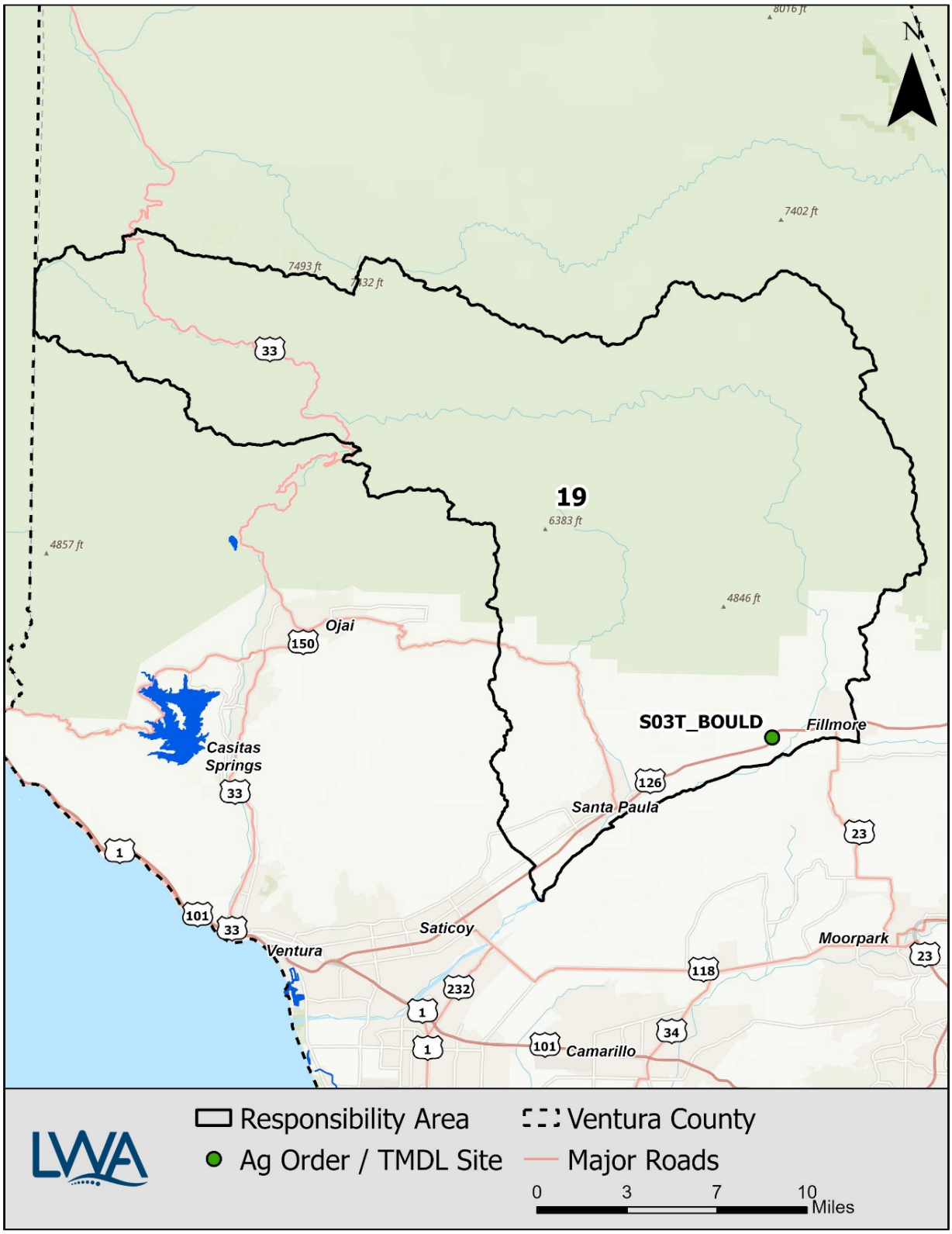


Figure 26. Santa Paula-Fillmore Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Santa Paula-Fillmore responsibility area are illustrated in **Figure 26** and outlined in **Table 142**.

Table 142. Santa Paula-Fillmore Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
S03T_BOULD	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		SCR Nitrogen TMDL
		SCR Bacteria TMDL

Table 143. Santa Paula-Fillmore Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site S03T_BOULD
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	21,022	2,005
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	1,662	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	18,870	2,005
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	2,153	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	10,171	1,186
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.54	0.59
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	1,160	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	11,332	1,186
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	90%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	8,683	1,003
Percent of Total Estimated Irrigated Acres that were Surveyed	77%	85%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	85%	85%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 144. Santa Paula-Fillmore Responsibility Area Crop Types and General Production Practices

Crop or Practice	Santa Paula-Fillmore Responsibility Area		S03T_BOULD Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	-	-	-
Blueberries	-	-	-	-
Raspberries	1	0.01%	-	-
Row Crop	460	5%	-	-
Orchard	7,778	89%	823	82%
Nursery	422	5%	180	18%
Flowers	27	0.3%	-	-
Sod	-	-	-	-
Other	10	0.1%	-	-
Overhead Cover in Production Areas				
Hoop House	23	0.3%	5	0.5%
No Cover	2,306	27%	477	48%
Greenhouse	14	0.2%	5	0.5%
Shade	5	0.1%	5	0.5%
Other	9	0.1%	-	-
Surface Treatments in Production Areas				
Bare Soil	3,264	38%	178	18%
Cover Crop	375	4%	-	-
Plastic	17	0.2%	-	-
Weed Cloth	54	1%	-	-
Mulch	4,505	52%	747	74%
Gravel	336	4%	95	9%
Other	134	2%	-	-
Irrigation Systems in Production Areas				
Drip Only	1,105	13%	243	24%
Microsprinkler/Drip	14	0.2%	-	-
Microsprinkler	7,196	83%	746	74%
Overhead Sprinkler	28	0.3%	5	0.5%
Overhead/Drip	319	4%	-	-
Furrow Flood	8	0.1%	-	-
Hand Watering	16	0.2%	10	1%
Other	63	1%	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 145. Santa Paula-Fillmore Responsibility Area Grower MPs

Survey Question	Units	Santa Paula-Fillmore Responsibility Area		S03T_BOULD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	6,785	78%	647	65%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	4,106	47%	467	47%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	1,842	23%	279	32%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	4,688	54%	828	83%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	3,946	84%	793	96%
Q5a: Are soil residual nitrate tests done? [a]	Acres	5,650	65%	978	98%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	5,478	97%	935	96%
Q6: Are leaf/petiole tests conducted? [a]	Acres	6,847	80%	925	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	5,905	68%	935	93%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	5,752	97%	907	97%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	3,850		554	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	2,638	69%	259	47%
Q10a: How many non-cropped acres exist?	Acres	7,313		808	
Q10b: How much non-cropped area is bare soil? [c]	Acres	1,732	24%	443	55%

Survey Question	Units	Santa Paula-Fillmore Responsibility Area		S03T_BOULD Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	294,763		18,490	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	155,188	53%	15,590	84%
Q12a: Are grassed waterways present? [e]	Acres	10	3%	1	6%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	104	1%	5	0.5%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	463	5%	197	20%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	8,385	97%	1,003	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	7,339	85%	1,003	100%
Q16a: How many acres are organically farmed? [a]	Acres	52	1%	16	2%
Q16b: How many acres are conventionally farmed? [a]	Acres	8,625	99%	987	98%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	1,666	19%	175	17%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	583	7%	135	13%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	294	2%	135	8%
Q18b: How many acres drain to a retention basin? [f]	Acres	110	1%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	27	0.2%	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 146. Summary of Benchmark Exceedance Evaluation for Santa Paula-Fillmore Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Ammonia-N + Nitrate-N					•	☑
Nitrate-N				•		☑
Salts						
TDS				•		☑
Sulfate				•		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				•		☑

Table 147. MPs for Additional Implementation in the Santa Paula - Fillmore Responsibility Area

Exceedance Condition			Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Salts	Current Pesticides			Santa Paula - Fillmore Responsibility Area	Additional Implementation of Pertinent MP Needed?
Wet	Wet	Wet				
X		X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	63%	Y
X			4b	Certified nutrient management plan has been prepared for the property	84%	Y
X			5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	97%	Y
X			6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	80%	Y
X			7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	97%	Y
X		X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	69%	Y
X		X	10b	How much non-cropped area is bare soil	24%	Y
X		X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	53%	Y
X	X	X	12a	Grassed waterways are used	3%	Y
X	X	X	13	Vegetated filter strips are used	5%	Y
		X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	97%	Y
		X	15	An integrated pest management plan is implemented	85%	Y
X	X	X	18a	Property is treated with detention/sediment basins	2%	Y
X	X	X	18b	Property is treated with retention basins	1%	Y
X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	18d	Property is treated with constructed wetlands	<1%	Y

Table 148. Proposed Management Practices for the Santa Paula - Fillmore Responsibility Area

Water Quality Issues			MPs
Nutrients	Salts	Current Use Pesticides	
Wet Weather	Wet Weather	Wet Weather	
			Source Control MPs
X			Prepare a certified nutrient management plan for the property
X			Conduct soil residual nitrate tests and use results to adjust fertilizer application
X			Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
X			Analyze irrigation water nitrate and use results to adjust fertilizer application
		X	Use a pest control advisor (PCA) or certified qualified applicator for pesticide management decisions
		X	Implement an integrated pest management plan
			Structural MPs
X		X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
X		X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
X		X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X		X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	Use grassed waterways
X	X	X	Use vegetated filter strips
X	X	X	Runoff is treated with detention/sediment basins
X	X	X	Runoff is treated with retention basins
X	X	X	Runoff is treated with bioreactor
X	X	X	Runoff is treated with constructed wetlands

BARDSDALE

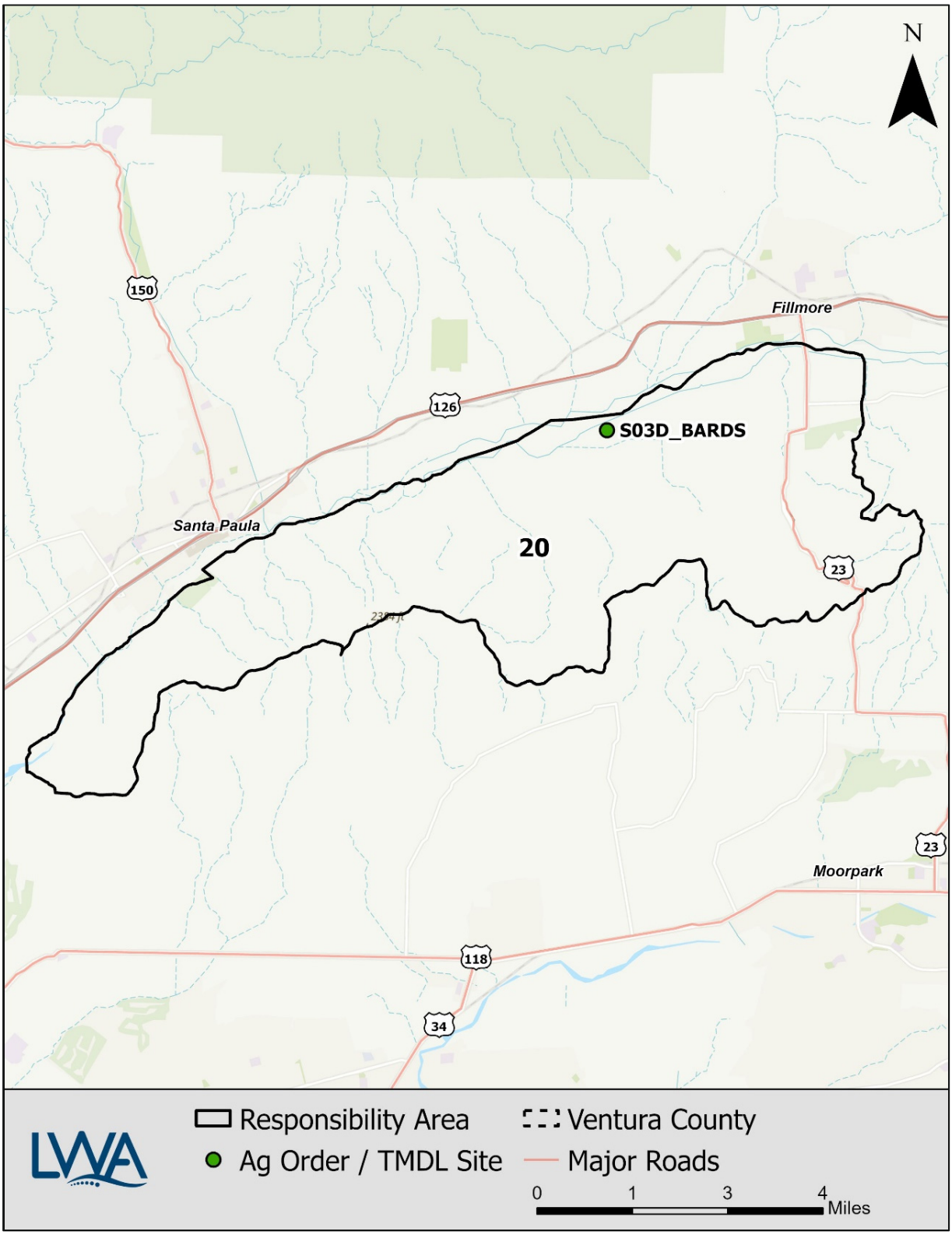


Figure 27. Bardsdale Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Bardsdale responsibility area are illustrated in **Figure 27** and outlined in **Table 149**.

Table 149. Bardsdale Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
S03D_BARDS	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		SCR Nitrogen TMDL
		SCR Bacteria TMDL

Table 150. Bardsdale Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site S03D_BARDS
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	7,277	546
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	241	6
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	5,778	378
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	1,498	168
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	3,298	306
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.57	0.81
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	855	99
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	4,153	404
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	79%	76%
Survey Response Information		
Sum Surveyed Irrigated Acres	2,339	190
Percent of Total Estimated Irrigated Acres that were Surveyed	56%	47%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	71%	62%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 151. Bardsdale Responsibility Area Crop Types and General Production Practices

Crop or Practice	Bardsdale Responsibility Area		S03D_BARDS Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	0.05	0.002%	-	-
Blueberries	1	0.02%	-	-
Raspberries	0.05	0.002%	-	-
Row Crop	512	22%	22	12%
Orchard	1,785	76%	156	81%
Nursery	12	1%	-	-
Flowers	16	1%	-	-
Sod	-	-	-	-
Other	16	1%	14	7%
Overhead Cover in Production Areas				
Hoop House	32	1%	14	7%
No Cover	859	37%	45	23%
Greenhouse	3	0.1%	-	-
Shade	1	0.05%	-	-
Other	25	1%	8	4%
Surface Treatments in Production Areas				
Bare Soil	1,397	60%	93	48%
Cover Crop	359	15%	16	8%
Plastic	105	4%	19	10%
Weed Cloth	0.15	0.06%	-	-
Mulch	763	33%	77	40%
Gravel	4	0.2%	1	1%
Other	20	1%	-	-
Irrigation Systems in Production Areas				
Drip Only	361	15%	47	25%
Microsprinkler/Drip	1	0.1%	-	-
Microsprinkler	1,635	70%	142	74%
Overhead Sprinkler	57	2%	6	3%
Overhead/Drip	182	8%	-	-
Furrow Flood	124	5%	8	4%
Hand Watering	5	0.2%	-	-
Other	-	-	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 152. Bardsdale Responsibility Area Grower MPs

Survey Question	Units	Bardsdale Responsibility Area		S03D_BARDS Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	1,173	54%	42	26%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	2,639	113%	28	15%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	99	5%	12	7%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	1,182	51%	41	22%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	1,027	87%	13	32%
Q5a: Are soil residual nitrate tests done? [a]	Acres	1,535	66%	74	39%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	1,491	97%	74	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	1,592	69%	132	69%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	1,318	56%	41	22%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	1,105	84%	41	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	323		10	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	270	84%	2	21%
Q10a: How many non-cropped acres exist?	Acres	1,465		25	
Q10b: How much non-cropped area is bare soil? [c]	Acres	233	16%	8	31%

Survey Question	Units	Bardsdale Responsibility Area		S03D_BARDS Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	156,624		15,004	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	37,312	24%	3,544	24%
Q12a: Are grassed waterways present? [e]	Acres	5	4%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	99	4%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	58	2%	9	4%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	2,188	94%	152	80%
Q15: Is an IPM Plan being implemented? [a]	Acres	1,943	83%	107	56%
Q16a: How many acres are organically farmed? [a]	Acres	189	8%	50	26%
Q16b: How many acres are conventionally farmed? [a]	Acres	2,178	93%	146	76%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	382	16%	20	11%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	144	6%	13	7%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	1	0.03%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 153. Summary of Benchmark Exceedance Evaluation for Bardsdale Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	●		☑	●	●	☑
Nutrients						
Nitrate-N	●		☑	●		☑
Ammonia-N + Nitrate-N					●	☑
OC Pesticides (Legacy)						
DDE	●		☑	●		☑
DDT	●		☑	●		☑
Chlordane				●		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

Table 154. MPs for Additional Implementation in the Bardsdale Responsibility Area

Exceedance Condition							Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Nutrients		Legacy Pesticides		Current Pesticides				
Dry	Wet	Dry	Wet	Dry	Wet	Wet			Bardsdale Responsibility Area	Additional Implementation of Pertinent MP Needed?
		X	X	X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	53%	Y
X		X		X			Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	85%	Y
		X		X			1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	54%	Y
		X					2	Irrigation practices are based on soil moisture measurements and/or crop evapotranspiration	113%	N
		X					3	Soil solution electrical conductivity measurements are used to determine when salt leaching is necessary	5%	Y
		X	X				4b	Certified nutrient management plan has been prepared for the property	87%	Y
		X	X				5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	97%	Y
		X	X				6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	69%	Y
		X	X				7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	84%	Y
		X	X	X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	84%	Y
			X		X	X	10b	How much non-cropped area is bare soil	16%	Y
X	X	X	X	X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	24%	Y

Exceedance Condition									% of Total Applicable Surveyed Units	
Bacteria		Nutrients		Legacy Pesticides		Current Pesticides	Survey Responses			
Dry	Wet	Dry	Wet	Dry	Wet	Wet			Bardsdale Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	X	12a	Grassed waterways are used	4%	Y
X	X	X	X	X	X	X	13	Vegetated filter strips are used	2%	Y
						X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	94%	Y
						X	15	An integrated pest management plan is implemented	83%	Y
						X	16a	How many acres are organically farmed	8%	N/A [1]
						X	16b	How many acres are conventionally farmed	93%	N/A [1]
						X	16c	How many acres are farmed using regenerative methods	16%	N/A [1]
X		X		X			17	How many acres produce irrigation runoff	6%	Y
X	X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	X	X	X	X	18b	Property is treated with retention basins	<1%	Y
X	X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.

Table 155. Proposed Management Practices for the Bardsdale Responsibility Area

Water Quality Issues							MPs
Bacteria		Nutrients		Legacy Pesticides		Current Use Pesticides	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	
							Source Control MPs
X		X		X			Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)
		X		X			Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.
		X					Use soil solution electrical conductivity measurements to determine when salt leaching is necessary
		X	X				Prepare a certified nutrient management plan for the property
		X	X				Conduct soil residual nitrate tests and use results to adjust fertilizer application
		X	X				Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
		X	X				Analyze irrigation water nitrate and use results to adjust fertilizer application
		X	X				Adjust fertilizer application to account for nutrients provided by cover crops
						X	Use a pest control advisor (PCA) or certified qualified applicator for pesticide management decisions
						X	Implement an integrated pest management plan
X		X		X			Avoid/prevent irrigation runoff
							Structural MPs
		X	X	X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
		X	X	X	X	X	Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)
			X		X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X	X	X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals

Water Quality Issues							MPs
Bacteria		Nutrients		Legacy Pesticides		Current Use Pesticides	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	
X	X	X	X	X	X	X	Use grassed waterways
X	X	X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	X	X	Runoff is treated with constructed wetlands

SATICOY

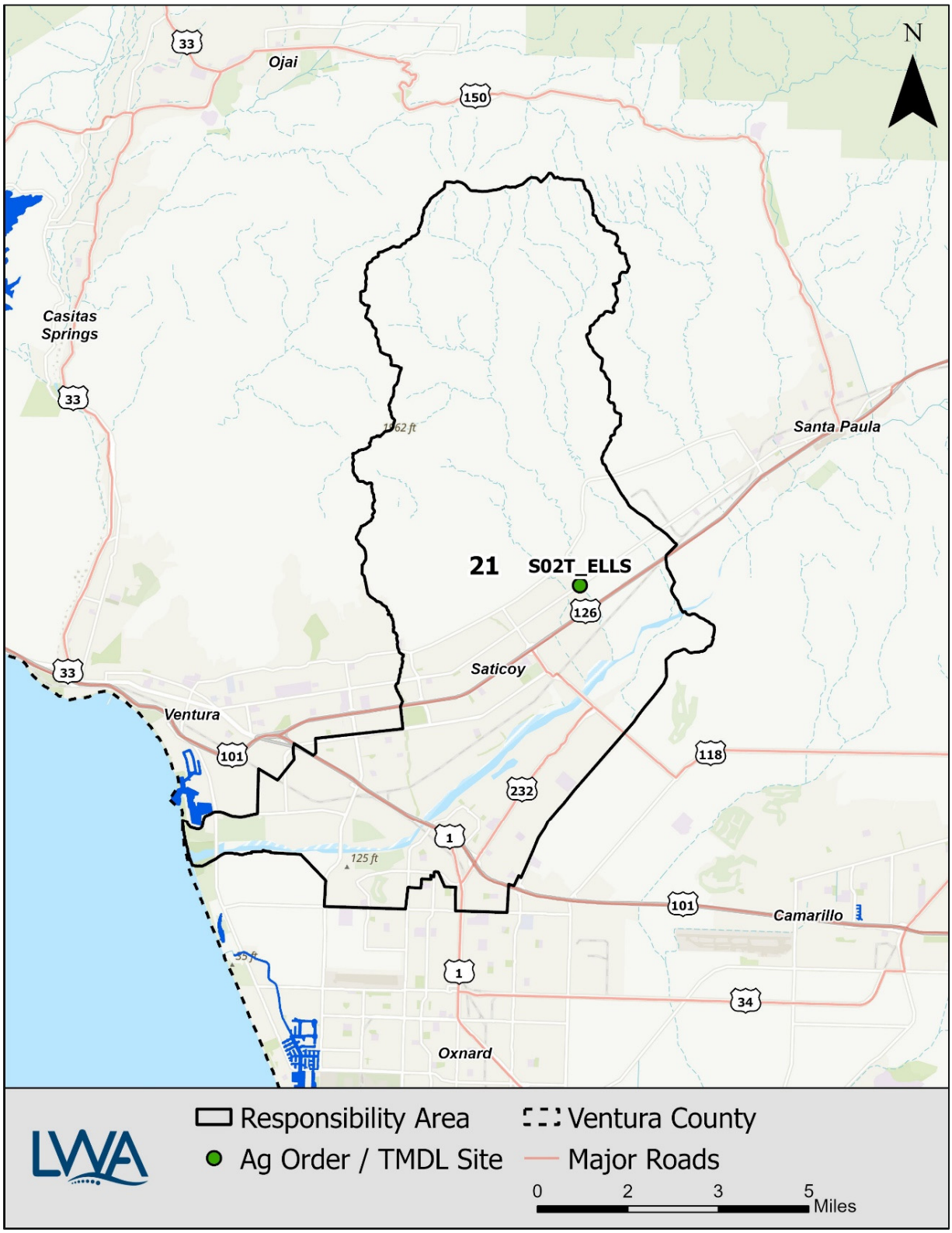


Figure 28. Saticoy Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Saticoy responsibility area are illustrated in **Figure 28** and outlined in **Table 156**.

Table 156. Saticoy Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
S02T_ELLS	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		SCR Nitrogen TMDL
		SCR Toxaphene TMDL

Table 157. Saticoy Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site S02T_ELLS
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	12,420	2,793
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	118	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	11,936	2,724
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	485	69
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	7,074	932
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.59	0.34
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	287	20
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	7,362	952
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	96%	94%
Survey Response Information		
Sum Surveyed Irrigated Acres	5,925	845
Percent of Total Estimated Irrigated Acres that were Surveyed	80%	89%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	84%	91%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 158. Saticoy Responsibility Area Crop Types and General Production Practices

Crop or Practice	Saticoy Responsibility Area		S02T_ELLS Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	1,088	18%	-	-
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	736	12%	45	5%
Orchard	3,975	67%	800	95%
Nursery	51	1%	-	-
Flowers	82	1%	-	-
Sod	-	-	-	-
Other	-	-	-	-
Overhead Cover in Production Areas				
Hoop House	48	1%	-	-
No Cover	2,314	39%	158	19%
Greenhouse	12	0.2%	-	-
Shade	31	1%	-	-
Other	22	0.4%	-	-
Surface Treatments in Production Areas				
Bare Soil	2,106	36%	374	44%
Cover Crop	387	7%	50	6%
Plastic	976	16%	-	-
Weed Cloth	8	0.1%	-	-
Mulch	2,912	49%	448	53%
Gravel	13	0.2%	-	-
Other	36	1%	7	1%
Irrigation Systems in Production Areas				
Drip Only	1,268	21%	211	25%
Microsprinkler/Drip	668	11%	-	-
Microsprinkler	2,875	48%	614	73%
Overhead Sprinkler	4	0.1%	-	-
Overhead/Drip	1,127	19%	45	5%
Furrow Flood	66	1%	-	-
Hand Watering	8	0.1%	-	-
Other	-	-	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 159. Saticoy Responsibility Area Grower MPs

Survey Question	Units	Saticoy Responsibility Area		S02T_ELLS Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	5,316	90%	647	65%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	3,250	55%	467	47%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	2,918	50%	279	32%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	2,697	46%	828	83%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	1,845	68%	793	96%
Q5a: Are soil residual nitrate tests done? [a]	Acres	4,762	80%	978	98%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	4,674	98%	935	96%
Q6: Are leaf/petiole tests conducted? [a]	Acres	5,053	88%	925	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	3,946	67%	935	93%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	3,940	100%	907	97%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	1,353		554	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	1,044	77%	259	47%
Q10a: How many non-cropped acres exist?	Acres	4,097		808	
Q10b: How much non-cropped area is bare soil? [c]	Acres	896	22%	443	55%

Survey Question	Units	Saticoy Responsibility Area		S02T_ELLS Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	139,959		18,490	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	76,844	55%	15,590	84%
Q12a: Are grassed waterways present? [e]	Acres	7	4%	1	6%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	431	7%	5	0.5%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	232	4%	197	20%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	5,862	99%	1,003	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	5,317	90%	1,003	100%
Q16a: How many acres are organically farmed? [a]	Acres	153	3%	16	2%
Q16b: How many acres are conventionally farmed? [a]	Acres	5,717	96%	987	98%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	2,012	34%	175	17%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	798	13%	135	13%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	18	0.2%	135	8%
Q18b: How many acres drain to a retention basin? [f]	Acres	205	2%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	1	0.01%	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 160. Summary of Benchmark Exceedance Evaluation for Saticoy Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	●		☑	●		☑
Nutrients						
Ammonia-N + Nitrate-N					●	☑
Nitrate-N				●		☑
Salts						
TDS				●		☑
Chloride				●		☑
Sulfate				●		☑
OC Pesticides (Legacy)						
DDD				●		☑
DDE	●		☑	●		☑
DDT				●		☑
Chlordane				●		☑
Toxaphene					● [1]	☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				●		☑

1 - Exceedance was only observed in suspended sediment.

Table 161. MPs for Additional Implementation in the Saticoy Responsibility Area

Exceedance Condition							Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Nutrients	Salts	Legacy Pesticides		Current Pesticides				
Dry	Wet	Wet	Wet	Dry	Wet	Wet			Saticoy Responsibility Area	Additional Implementation of Pertinent MP Needed?
		X		X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	73%	Y
X				X			Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	80%	Y
				X			1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	90%	Y
		X					4b	Certified nutrient management plan has been prepared for the property	68%	Y
		X					5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	98%	N
		X					6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	88%	Y
		X					7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	100%	N
		X		X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	77%	Y
		X			X	X	10b	How much non-cropped area is bare soil	22%	Y
X	X	X		X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	55%	Y
X	X	X	X	X	X	X	12a	Grassed waterways are used	4%	Y
X	X	X	X	X	X	X	13	Vegetated filter strips are used	4%	Y
						X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	99%	N
						X	15	An integrated pest management plan is implemented	90%	Y
						X	16a	How many acres are organically farmed	3%	N/A [1]
						X	16b	How many acres are conventionally farmed	96%	N/A [1]
						X	16c	How many acres are farmed using regenerative methods	34%	N/A [1]
X				X			17	How many acres produce irrigation runoff	13%	Y

Exceedance Condition							Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Nutrients	Salts	Legacy Pesticides		Current Pesticides				
Dry	Wet	Wet	Wet	Dry	Wet	Wet			Saticoy Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	<1%	Y
X	X	X	X	X	X	X	18b	Property is treated with retention basins	2%	Y
X	X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	X	X	18d	Property is treated with constructed wetlands	<1%	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices.

Table 162. Proposed Management Practices for the Saticoy Responsibility Area

Water Quality Issues							MPs
Bacteria		Nutrients	Salts	Legacy Pesticides		Current Use Pesticides	
Dry Weather	Wet Weather	Dry Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	
							Source Control MPs
X		X		X			**Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)**
X		X		X			**Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.**
		X					Prepare a certified nutrient management plan for the property
		X					Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
						X	Implement an integrated pest management plan
X		X		X			**Avoid/prevent irrigation runoff**
							Structural MPs
		X		X	X	X	**Reduce bare soil in production area with cover crops, gravel, mulch, etc.**
		X		X	X	X	**Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)**
		X			X	X	**Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel**
X	X	X		X	X	X	**Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals**
X	X	X	X	X	X	X	**Use grassed waterways**
X	X	X	X	X	X	X	**Use vegetated filter strips**
X	X	X	X	X	X	X	**Runoff is treated with detention/sediment basins**
X	X	X	X	X	X	X	**Runoff is treated with retention basins**
X	X	X	X	X	X	X	**Runoff is treated with bioreactor**
X	X	X	X	X	X	X	**Runoff is treated with constructed wetlands**

Bolded MPs are required by the Ag Order to the degree appropriate for achieving compliance with the Santa Clara River Estuary Toxaphene TMDL

LOWER SANTA CLARA RIVER

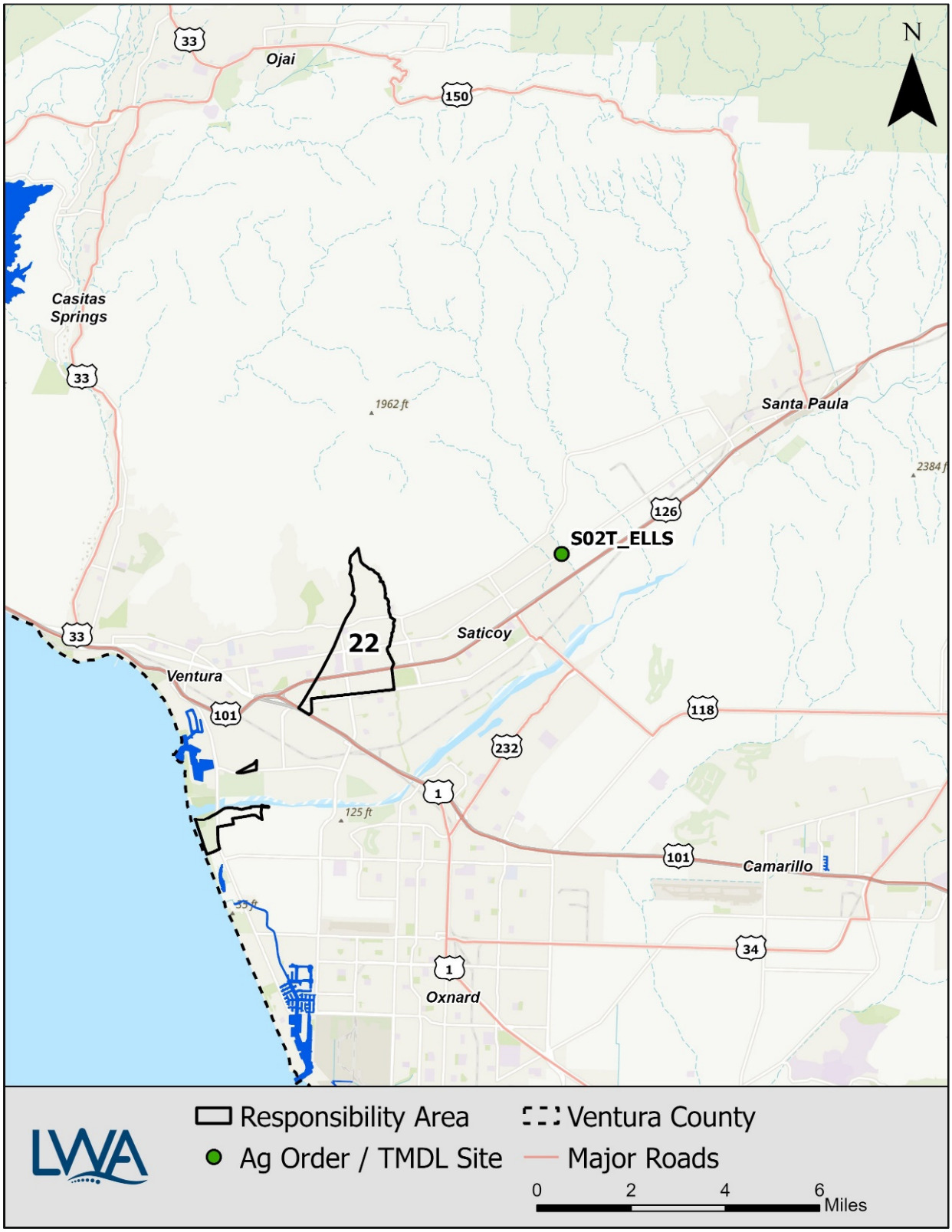


Figure 29. Lower Santa Clara River Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Lower Santa Clara River responsibility area are illustrated in **Figure 29** and outlined in **Table 163**.

Table 163. Lower Santa Clara River Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
S02T_ELLS	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		SCR Nitrogen TMDL

Table 164. Lower Santa Clara River Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	720
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	44
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	706
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	14
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	504
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.71
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	10
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	514
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	98%
Survey Response Information	
Sum Surveyed Irrigated Acres	198
Percent of Total Estimated Irrigated Acres that were Surveyed	39%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	39%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 165. Lower Santa Clara River Responsibility Area Crop Types and General Production Practices

Crop or Practice	Lower Santa Clara River Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	170	85%
Blueberries	-	-
Raspberries	-	-
Row Crop	-	-
Orchard	6	3%
Nursery	-	-
Flowers	-	-
Sod	-	-
Other	23	11%
Overhead Cover in Production Area		
Hoop House	-	-
No Cover	192	97%
Greenhouse	-	-
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	6	3%
Cover Crop	23	11%
Plastic	170	85%
Weed Cloth	-	-
Mulch	-	-
Gravel	-	-
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	-	-
Microsprinkler/Drip	170	85%
Microsprinkler	6	3%
Overhead Sprinkler	23	11%
Overhead/Drip	-	-
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 166. Lower Santa Clara River Responsibility Area Grower MPs

Survey Question	Units	Lower Santa Clara River Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	29	15%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	29	15%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	198	100%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	23	11%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	23	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	198	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	198	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	198	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	198	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	198	100%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	23	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	23	100%
Q10a: How many non-cropped acres exist?	Acres	143	
Q10b: How much non-cropped area is bare soil? [c]	Acres	-	-
Q11a: How many feet of ditches exist?	Feet	3,700	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	-	-
Q12a: Are grassed waterways present? [e]	Acres	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	-
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	198	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	198	100%
Q16a: How many acres are organically farmed? [a]	Acres	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	198	100%

Survey Question	Units	Lower Santa Clara River Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	6	3%
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 167. Summary of Benchmark Exceedance Evaluation for Lower Santa Clara River Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Bacteria						
E. coli	•		☑	•		☑
Salts						
TDS				•		☑
Chloride				•		☑
Sulfate				•		☑
Nutrients						
Ammonia-N + Nitrate-N					•	☑
Nitrate-N				•		☑
OC Pesticides (Legacy)						
DDD				•		☑
DDE	•		☑	•		☑
DDT				•		☑
Chlordane				•		☑
OP and Pyrethroid Pesticides (Current)						
Bifenthrin				•		☑

Table 168. MPs for Additional Implementation in the Lower Santa Clara River Responsibility Area

Exceedance Condition							Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Nutrients	Salts	Legacy Pesticides		Current Pesticides				
Dry	Wet	Wet	Wet	Dry	Wet	Wet			Lower Santa Clara River Responsibility Area	Additional Implementation of Pertinent MP Needed?
		X		X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	96%	Y
X				X			Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	88%	Y
				X			1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	15%	Y
		X					4b	Certified nutrient management plan has been prepared for the property	100%	N
		X					5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	100%	N
		X					6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	100%	N
		X					7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	100%	N
		X		X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	100%	N
		X			X	X	10b	How much non-cropped area is bare soil	-	Y
X	X	X		X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	-	Y
X	X	X	X	X	X	X	12a	Grassed waterways are used	-	Y
X	X	X	X	X	X	X	13	Vegetated filter strips are used	-	Y
						X	14	Pesticide management decisions are made by a pest control advisor (PCA) or certified qualified applicator	100%	N
						X	15	An integrated pest management plan is implemented	100%	N
						X	16a	How many acres are organically farmed	-	N/A [1]
						X	16b	How many acres are conventionally farmed	100%	N/A [1]
						X	16c	How many acres are farmed using regenerative methods	3%	N/A [1]
X				X			17	How many acres produce irrigation runoff	-	Y

Exceedance Condition							Survey Responses		% of Total Applicable Surveyed Units	
Bacteria		Nutrients	Salts	Legacy Pesticides		Current Pesticides				
Dry	Wet	Wet	Wet	Dry	Wet	Wet			Lower Santa Clara River Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	X	X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	X	X	X	X	18b	Property is treated with retention basins	-	Y
X	X	X	X	X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	X	X	X	X	18d	Property is treated with constructed wetlands	-	Y

1. VCAILG does not provide recommendations for farming methods, as each method can be protective of water quality through appropriate on-field management practices

Table 169. Proposed Management Practices for the Lower Santa Clara River Responsibility Area

Water Quality Issues							MPs
Bacteria		Nutrients	Salts	Legacy Pesticides		Current Use Pesticides	
Dry Weather	Wet Weather	Wet Weather	Wet Weather	Dry Weather	Wet Weather	Wet Weather	
							Source Control MPs
X				X			Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)
				X			Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.
X				X			Avoid/prevent irrigation runoff
							Structural MPs
		X		X	X	X	Reduce bare soil in production area with cover crops, gravel, mulch, etc.
		X			X	X	Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel
X	X	X		X	X	X	Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals
X	X	X	X	X	X	X	Use grassed waterways
X	X	X	X	X	X	X	Use vegetated filter strips
X	X	X	X	X	X	X	Runoff is treated with detention/sediment basins
X	X	X	X	X	X	X	Runoff is treated with retention basins
X	X	X	X	X	X	X	Runoff is treated with bioreactor
X	X	X	X	X	X	X	Runoff is treated with constructed wetlands

MCGRATH CENTRAL DITCH

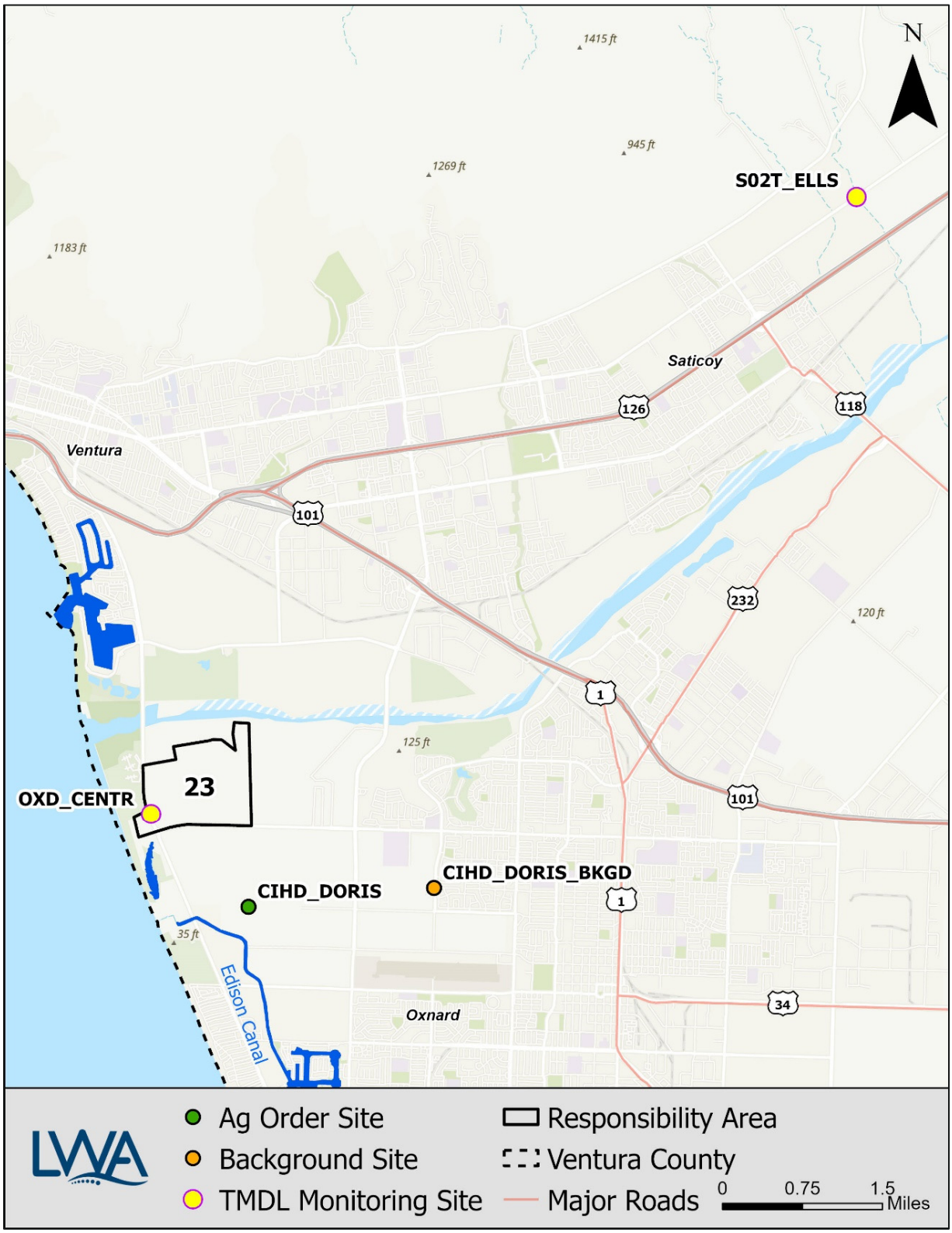


Figure 30. McGrath Central Ditch Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the McGrath Central Ditch responsibility area are illustrated in **Figure 30** and outlined in **Table 170**. CIHD_DORIS_BKGD characterizes urban runoff inputs upstream of the CIHD_DORIS monitoring site.

Table 170. McGrath Central Ditch Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
CIHD_DORIS	VCAILG Monitoring Site	Standard Ag Order Benchmarks
CIHD_DORIS_BKGD	Background Site	Evaluate urban inputs upstream of VCAILG monitoring site
S02T_ELLS	TMDL Monitoring Site	SCR Nitrogen TMDL
OXD_CENTR		McGrath Lake OC Pesticides, PCBs, and Sediment Toxicity TMDL

Table 171. McGrath Central Ditch Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site OXD_CENTR
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	356	1,049
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	0	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	356	1,049
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	0	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	304	849
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.85	0.81
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	0	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	304	849
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	100%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	299	849
Percent of Total Estimated Irrigated Acres that were Surveyed	98%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	98%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 172. McGrath Central Ditch Responsibility Area Crop Types and General Production Practices

Crop or Practice	McGrath Central Ditch Responsibility Area		OXD_CENTR Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	299	100%	703	83%
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	-	-	68	8%
Orchard	-	-	-	-
Nursery	-	-	19	2%
Flowers	-	-	59	7%
Sod	-	-	-	-
Other	-	-	-	-
Overhead Cover in Production Areas				
Hoop House	-	-	16	2%
No Cover	299	100%	794	94%
Greenhouse	-	-	37	4%
Shade	-	-	2	0.2%
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	-	-	123	15%
Cover Crop	-	-	-	-
Plastic	229	77%	633	75%
Weed Cloth	-	-	13	2%
Mulch	70	23%	70	8%
Gravel	-	-	-	-
Other	-	-	1	0.1%
Irrigation Systems in Production Areas				
Drip Only	-	-	76	9%
Microsprinkler/Drip	299	100%	668	79%
Microsprinkler	-	-	25	3%
Overhead Sprinkler	-	-	15	2%
Overhead/Drip	-	-	63	7%
Furrow Flood	-	-	-	-
Hand Watering	-	-	-	-
Other	-	-	2	0.2%

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 173. McGrath Central Ditch Responsibility Area Grower MPs

Survey Question	Units	McGrath Central Ditch Responsibility Area		OXD_CENTR Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	-	-	465	55%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	-	-	63	7%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	229	77%	427	50%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	-	0%	384	45%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	-	-	369	96%
Q5a: Are soil residual nitrate tests done? [a]	Acres	299	100%	812	96%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	299	100%	812	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	299	100%	758	91%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	299	100%	497	59%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	299	100%	478	96%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	-		19	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	-	-	-	-
Q10a: How many non-cropped acres exist?	Acres	52		200	
Q10b: How much non-cropped area is bare soil? [c]	Acres	-	-	13	6%

Survey Question	Units	McGrath Central Ditch Responsibility Area		OXD_CENTR Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	10,700		25,850	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	-	-	5,000	19%
Q12a: Are grassed waterways present? [e]	Acres	-	-	4	27%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-	220	26%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	-	0.01	0.001%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	299	100%	849	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	299	100%	497	59%
Q16a: How many acres are organically farmed? [a]	Acres	-	-	10	1%
Q16b: How many acres are conventionally farmed? [a]	Acres	299	100%	839	99%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	70	23%	182	21%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 174.Summary of Benchmark Exceedance Evaluation for McGrath Central Ditch Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Ammonia-N + Nitrate-N					●	☑
OC Pesticides (Legacy)						
DDD		●	☑		● [1]	☑
DDE		●	☑		● [1]	☑
DDT		●	☑		● [1]	☑
Chlordane					● [1]	☑
Total DDT					● [2]	☑

1. Exceedances of OC pesticides observed in sample water and suspended sediment.
2. Exceedance of Total DDT was only observed in suspended sediment.

Table 175. MPs for Additional Implementation in the McGrath Central Ditch Responsibility Area

Exceedance Condition			Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Legacy Pesticides					
Wet	Dry	Wet			McGrath Central Ditch Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	100%	N
	X		Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	100%	N
	X		1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	-	Y
X			4b	Certified nutrient management plan has been prepared for the property	-	Y
X			5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	100%	N
X			6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	100%	N
X			7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	100%	N
X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	-	Y
X		X	10b	How much non-cropped area is bare soil	-	Y
X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	-	Y
X	X	X	12a	Grassed waterways are used	-	Y
X	X	X	13	Vegetated filter strips are used	-	Y
	X		17	How many acres produce irrigation runoff	23%	Y
X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	18b	Property is treated with retention basins	-	Y
X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	18d	Property is treated with constructed wetlands	-	Y

Table 176. Proposed Management Practices for the McGrath Central Ditch Responsibility Area

Water Quality Issues			MPs
Nutrients	Legacy Pesticides		
Wet Weather	Dry Weather	Wet Weather	
			Source Control MPs
	X		**Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)**
	X		**Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.**
X			Prepare a certified nutrient management plan for the property
	X		**Avoid/prevent irrigation runoff**
			Structural MPs
X	X	X	**Reduce bare soil in production area with cover crops, gravel, mulch, etc.**
X	X	X	**Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)**
X		X	**Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel**
X	X	X	**Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals**
X	X	X	**Use grassed waterways**
X	X	X	**Use vegetated filter strips**
X	X	X	**Runoff is treated with detention/sediment basins**
X	X	X	**Runoff is treated with retention basins**
X	X	X	**Runoff is treated with bioreactor**
X	X	X	**Runoff is treated with constructed wetlands**

Bolded MPs are required by the Ag Order to the degree appropriate for achieving compliance with the McGrath Lake OC Pesticides and PCBs TMDL.

MCGRATH LAKE ADJACENT

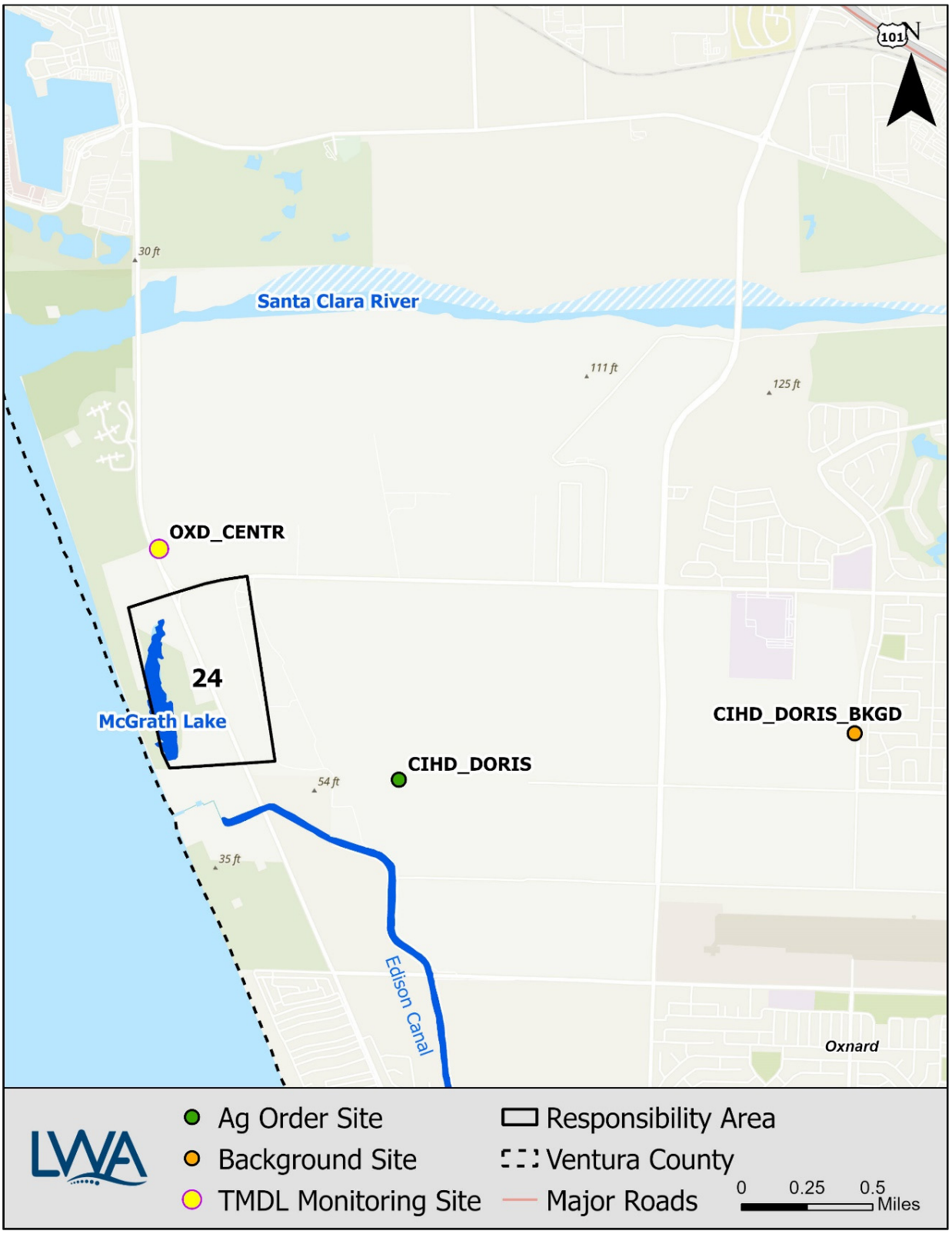


Figure 31. McGrath Lake Adjacent Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the McGrath Lake Adjacent responsibility area are illustrated in **Figure 31** and outlined in **Table 177**. CIHD_DORIS_BKGD characterizes urban runoff inputs upstream of the CIHD_DORIS monitoring site.

Table 177. McGrath Lake Adjacent Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
CIHD_DORIS	VCAILG Monitoring Site	Standard Ag Order Benchmarks
CIHD_DORIS_BKGD	Background Site	Evaluate urban inputs upstream of VCAILG monitoring site
OXD_CENTR	TMDL Monitoring Site	McGrath Lake OC Pesticides, PCBs, and Sediment Toxicity TMDL

Table 178. McGrath Lake Adjacent Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	131
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	131
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	0
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	40
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.31
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	40
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	100%
Survey Response Information	
Sum Surveyed Irrigated Acres	40
Percent of Total Estimated Irrigated Acres that were Surveyed	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 179. McGrath Lake Adjacent Responsibility Area Crop Types and General Production Practices

Crop or Practice	McGrath Lake Adjacent Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	40	100%
Blueberries	-	-
Raspberries	-	-
Row Crop	-	-
Orchard	-	-
Nursery	-	-
Flowers	-	-
Sod	-	-
Other	-	-
Overhead Cover in Production Area		
Hoop House	-	-
No Cover	40	100%
Greenhouse	-	-
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	-	-
Cover Crop	-	-
Plastic	40	100%
Weed Cloth	-	-
Mulch	-	-
Gravel	-	-
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	-	-
Microsprinkler/Drip	40	100%
Microsprinkler	-	-
Overhead Sprinkler	-	-
Overhead/Drip	-	-
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 180. McGrath Lake Adjacent Responsibility Area Grower MPs

Survey Question	Units	McGrath Lake Adjacent Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	40	100%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	-	-
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	-	-
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	40	100%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	40	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	40	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	40	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	40	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	40	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	40	100%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	-	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	-	-
Q10a: How many non-cropped acres exist?	Acres	91	
Q10b: How much non-cropped area is bare soil? [c]	Acres	13	28%
Q11a: How many feet of ditches exist?	Feet	-	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	-	-
Q12a: Are grassed waterways present? [e]	Acres	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	-	-
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	40	100%

Survey Question	Units	McGrath Lake Adjacent Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q15: Is an IPM Plan being implemented? [a]	Acres	40	100%
Q16a: How many acres are organically farmed? [a]	Acres	-	-
Q16b: How many acres are conventionally farmed? [a]	Acres	40	100%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	40	31%
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 181. Summary of Benchmark Exceedance Evaluation for McGrath Lake Adjacent Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
OC Pesticides (Legacy)						
DDD		●	☑		● [1]	☑
DDE		●	☑		● [1]	☑
DDT		●	☑		● [1]	☑
Chlordane					● [1]	☑
Total DDT					● [2]	☑

1. Exceedances of OC pesticides observed in sample water and suspended sediment.
2. Exceedance of Total DDT was only observed in suspended sediment.

Table 182. MPs for Additional Implementation in the McGrath Lake Adjacent Responsibility Area

Exceedance Condition		Survey Responses		% of Total Applicable Surveyed Units	
Legacy Pesticides					
Dry	Wet			McGrath Lake Adjacent Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	100%	N
X		Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	100%	N
X		1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	100%	N
X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	-	Y
	X	10b	How much non-cropped area is bare soil	28%	Y
X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	-	Y
X	X	12a	Grassed waterways are used	-	Y
X	X	13	Vegetated filter strips are used	-	Y
X		17	How many acres produce irrigation runoff	-	Y
X	X	18a	Property is treated with detention/sediment basins	31%	Y
X	X	18b	Property is treated with retention basins	-	Y
X	X	18c	Property is treated with bioreactor	-	Y
X	X	18d	Property is treated with constructed wetlands	-	Y

Table 183. Proposed Management Practices for the McGrath Lake Adjacent Responsibility Area

Water Quality Issues		
Legacy Pesticides		
Dry Weather	Wet Weather	MPs
		Source Control MPs
X		**Use efficient irrigation system (drip only, micro-sprinkler then drip, and micro-sprinkler)**
X		**Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.**
X		**Avoid/prevent irrigation runoff**
		Structural MPs
X	X	**Reduce bare soil in production area with cover crops, gravel, mulch, etc.**
X	X	**Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)**
	X	**Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel**
X	X	**Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals**
X	X	**Use grassed waterways**
X	X	**Use vegetated filter strips**
X	X	**Runoff is treated with detention/sediment basins**
X	X	**Runoff is treated with retention basins**
X	X	**Runoff is treated with bioreactor**
X	X	**Runoff is treated with constructed wetlands**

Bolded MPs are required by the Ag Order to the degree appropriate for achieving compliance with the McGrath Lake OC Pesticides and PCBs TMDL.

SANTA CLARA RIVER – VICTORIA AND GONZALES

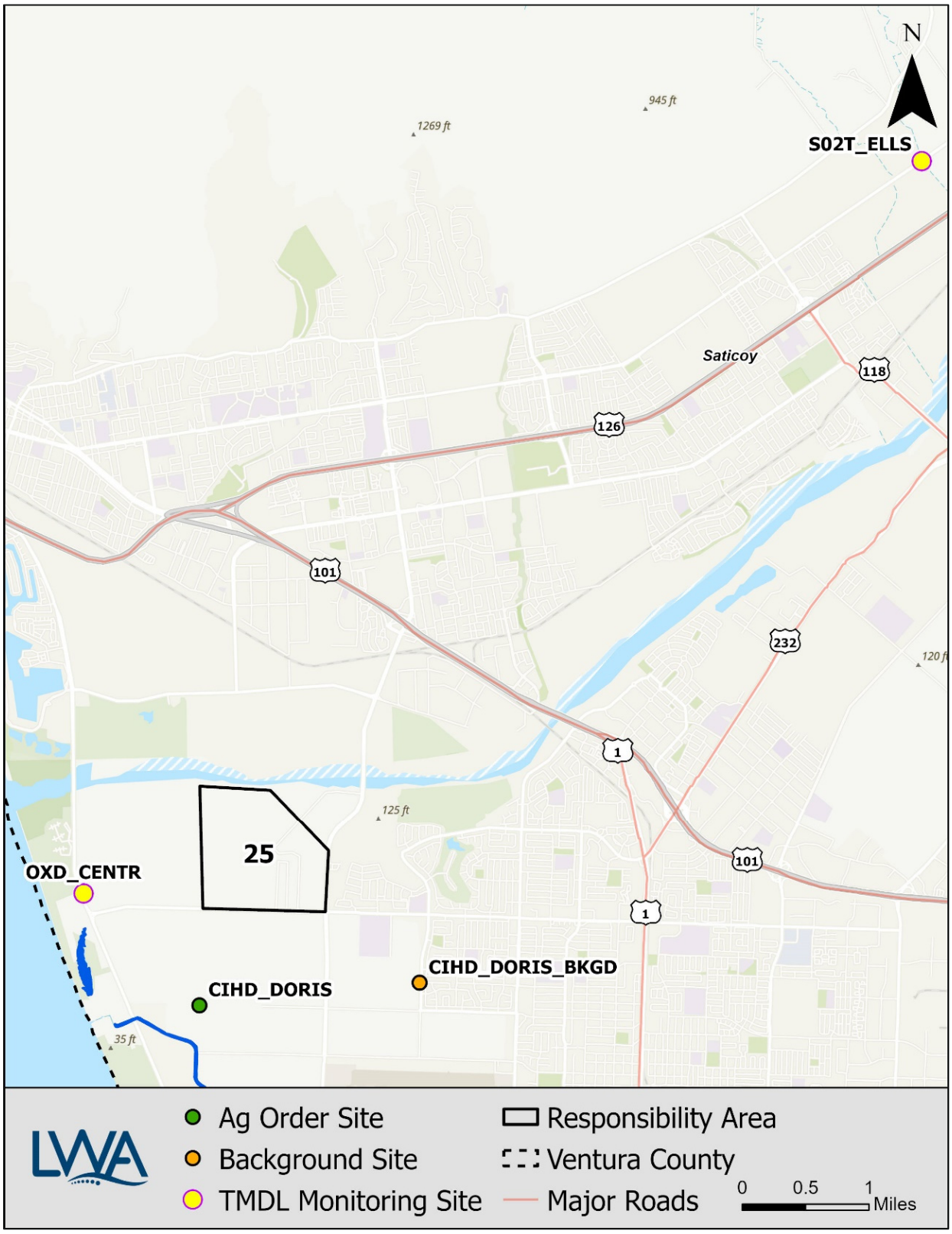


Figure 32. Santa Clara River – Victoria and Gonzales Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Santa Clara River – Victoria and Gonzales responsibility area are illustrated in **Figure 32** and outlined in **Table 184**. CIHD_DORIS_BKGD characterizes urban runoff inputs upstream of the CIHD_DORIS monitoring site.

Table 184. Santa Clara River – Victoria and Gonzales Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
CIHD_DORIS	VCAILG Monitoring Site	Standard Ag Order Benchmarks
S02T_ELLS	TMDL Monitoring Site	SCR Nitrogen TMDL
		SCR Toxaphene TMDL
OXD_CENTR		McGrath Lake Pesticides, PCBs, and Sediment Toxicity TMDL

Table 185. Santa Clara River – Victoria and Gonzales Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site OXD_CENTR [c]
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	613	1,049
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	0	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	613	1,049
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	0	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	465	849
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.76	0.81
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	0	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	465	849
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	100%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	465	849
Percent of Total Estimated Irrigated Acres that were Surveyed	100%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.
[c] OXD_CENTR monitoring site drainage area resides within this RA and the McGrath Lake Central Ditch RA.

Table 186. Santa Clara River – Victoria and Gonzales Responsibility Area Crop Types and General Production Practices

Crop or Practice	Santa Clara River – Victoria and Gonzales Responsibility Area		OXD_CENTR Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	319	69%	703	83%
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	68	15%	68	8%
Orchard	-	-	-	-
Nursery	19	4%	19	2%
Flowers	59	13%	59	7%
Sod	-	-	-	-
Other	-	-	-	-
Overhead Cover in Production Areas				
Hoop House	16	3%	16	2%
No Cover	410	88%	794	94%
Greenhouse	37	8%	37	4%
Shade	2	0.4%	2	0.2%
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	123	26%	123	15%
Cover Crop	-	-	-	-
Plastic	319	69%	633	75%
Weed Cloth	13	3%	13	2%
Mulch	-	-	70	8%
Gravel	-	-	-	-
Other	1	0.2%	1	0.1%
Irrigation Systems in Production Areas				
Drip Only	76	16%	76	9%
Microsprinkler/Drip	284	61%	668	79%
Microsprinkler	25	5%	25	3%
Overhead Sprinkler	15	3%	15	2%
Overhead/Drip	63	14%	63	7%
Furrow Flood	-	-	-	-
Hand Watering	-	-	-	-
Other	2	0.3%	2	0.2%

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 187. Santa Clara River – Victoria and Gonzales Responsibility Area Grower MPs

Survey Question	Units	Santa Clara River – Victoria and Gonzales Responsibility Area		OXD_CENTR Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	465	100%	465	55%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	63	14%	63	7%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	113	24%	427	50%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	384	83%	384	45%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	369	96%	369	96%
Q5a: Are soil residual nitrate tests done? [a]	Acres	428	92%	812	96%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	428	100%	812	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	374	84%	758	91%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	113	24%	497	59%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	94	83%	478	96%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	19		19	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	-	-	-	-
Q10a: How many non-cropped acres exist?	Acres	148		200	

Survey Question	Units	Santa Clara River – Victoria and Gonzales Responsibility Area		OXD_CENTR Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q10b: How much non-cropped area is bare soil? [c]	Acres	13	9%	13	6%
Q11a: How many feet of ditches exist?	Feet	15,150		25,850	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	5,000	33%	5,000	19%
Q12a: Are grassed waterways present? [e]	Acres	4	36%	4	27%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	220	47%	220	26%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	0.01	0.002%	0.01	0.001%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	465	100%	849	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	113	24%	497	59%
Q16a: How many acres are organically farmed? [a]	Acres	10	2%	10	1%
Q16b: How many acres are conventionally farmed? [a]	Acres	455	98%	839	99%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-	-	-
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	112	24%	182	21%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-

Survey Question	Units	Santa Clara River – Victoria and Gonzales Responsibility Area		OXD_CENTR Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

Table 188. Summary of Benchmark Exceedance Evaluation for Santa Clara River – Victoria and Gonzales Responsibility Area

Constituents for Considering Additional Management Practices Based on Monitoring Data	Dry Weather			Wet Weather		
	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs	Order Benchmark Site Exceedances	TMDL LA Site Exceedances	Review Implementation and Plan MPs
Nutrients						
Ammonia-N + Nitrate-N					●	☑
OC Pesticides (Legacy)						
DDD		●	☑		● [1]	☑
DDE		●	☑		● [1]	☑
DDT		●	☑		● [1]	☑
Chlordane					● [1]	☑
Total DDT					● [2]	☑
Toxaphene					● [2]	☑

1. Exceedances of OC pesticides in sample water and suspended sediment.
2. Exceedance was only observed in suspended sediment.

Table 189. MPs for Additional Implementation in the Santa Clara River – Victoria and Gonzales Responsibility Area

Exceedance Condition			Survey Responses		% of Total Applicable Surveyed Units	
Nutrients	Legacy Pesticides					
Wet	Dry	Wet			Santa Clara River – Victoria and Gonzales Responsibility Area	Additional Implementation of Pertinent MP Needed?
X	X	X	Crop management	Reduce bare soil in production areas with cover crops, gravel, mulch, etc. (sum of all cover types, except bare soil)	72%	Y
	X		Irrigation system type	Efficient irrigation system (sum of drip only, microsprinkler then drip, and micro-sprinkler)	82%	Y
	X		1	Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.	100%	N
X			4b	Certified nutrient management plan has been prepared for the property	83%	Y
X			5b	Soil residual nitrate tests are conducted and used to adjust fertilizer applications	100%	N
X			6	Leaf/petiole tests are conducted and used to apply the minimum necessary amount of fertilizer	84%	Y
X			7b	Irrigation water nitrate is analyzed and the results are used to adjust fertilizer applications.	83%	Y
X	X	X	9	Erosion on sloped areas is minimized with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)	-	Y
X		X	10b	How much non-cropped area is bare soil	9%	Y
X	X	X	11b	Ditches are protected from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals	33%	Y
X	X	X	12a	Grassed waterways are used	36%	Y
X	X	X	13	Vegetated filter strips are used	<1%	Y
	X		17	How many acres produce irrigation runoff	24%	Y
X	X	X	18a	Property is treated with detention/sediment basins	-	Y
X	X	X	18b	Property is treated with retention basins	-	Y
X	X	X	18c	Property is treated with bioreactor	-	Y
X	X	X	18d	Property is treated with constructed wetlands	-	Y

Table 190. Proposed Management Practices for the Santa Clara River – Victoria and Gonzales Responsibility Area

Water Quality Issues			MPs
Nutrients	Legacy Pesticides		
Wet Weather	Dry Weather	Wet Weather	
			Source Control MPs
	X		**Use efficient irrigation system (sum of drip only, micro-sprinkler then drip, and micro-sprinkler)**
	X		**Test irrigation system for distribution uniformity by monitoring water delivery or pressure differences by block at least every 3 years.**
X			Prepare a certified nutrient management plan for the property
X			Conduct leaf/petiole tests and use results to apply the minimum necessary amount of fertilizer
X			Analyze irrigation water nitrate and use results to adjust fertilizer application
	X		**Avoid/prevent irrigation runoff**
			Structural MPs
X	X	X	**Reduce bare soil in production area with cover crops, gravel, mulch, etc.**
X	X	X	**Minimize erosion on sloped areas with contour farming, contoured buffer strips, or terracing (sloped acres with erosion control/total sloped acres)**
X		X	**Minimize bare soil in non-cropped areas by using vegetation, mulch, or gravel**
X	X	X	**Protect ditches from erosion using vegetation, rock placement or geotextiles, or wattles placed at intervals**
X	X	X	**Use grassed waterways**
X	X	X	**Use vegetated filter strips**
X	X	X	**Runoff is treated with detention/sediment basins**
X	X	X	**Runoff is treated with retention basins**
X	X	X	**Runoff is treated with bioreactor**
X	X	X	**Runoff is treated with constructed wetlands**

Bolded MPs are required by the Ag Order to the degree appropriate for achieving compliance with the McGrath Lake OC Pesticides and PCBs TMDL and Santa Clara River Estuary Toxaphene TMDL

LOWER VENTURA RIVER

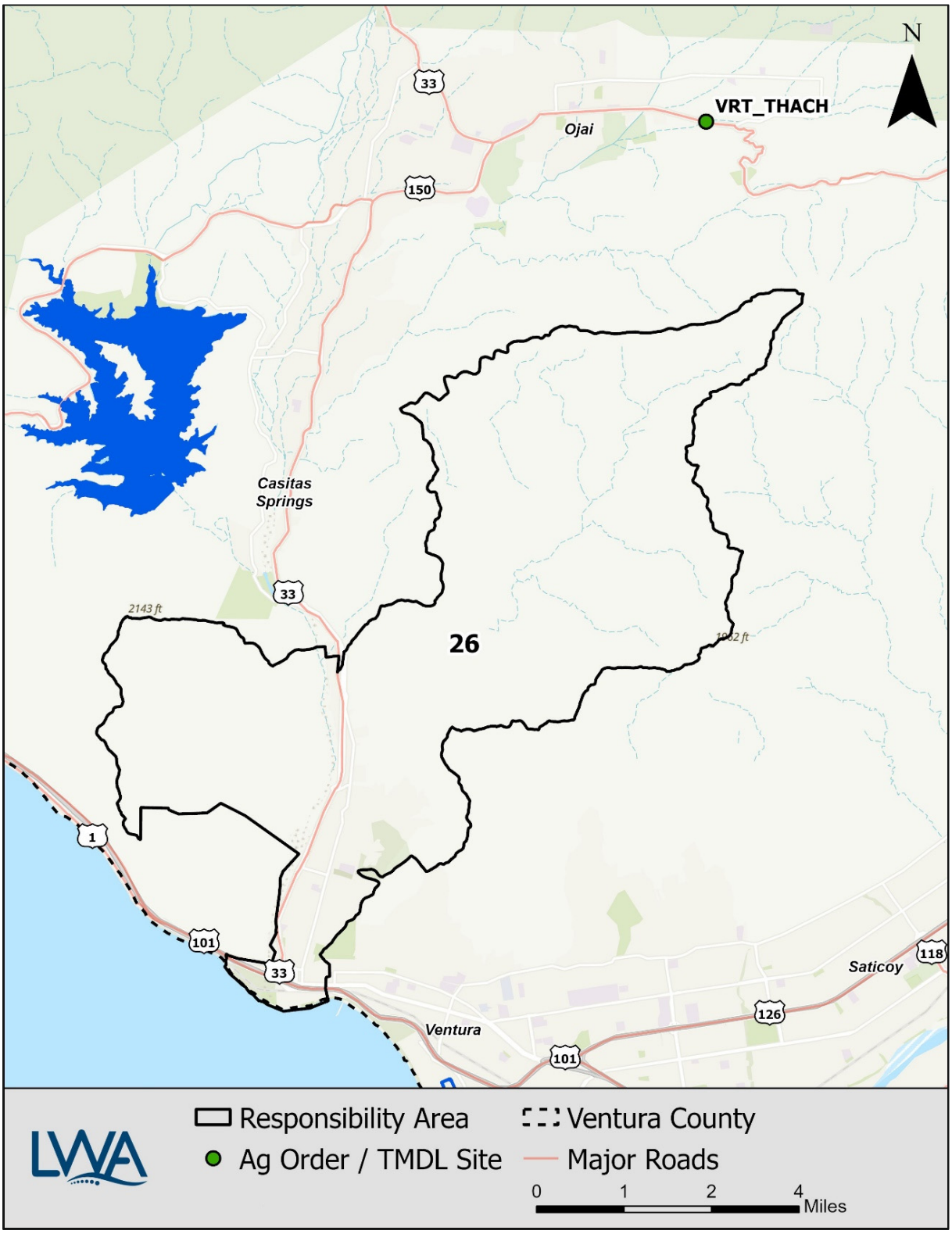


Figure 33. Lower Ventura River Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Lower Ventura River responsibility area are illustrated in **Figure 33** and outlined in **Table 191**.

Table 191. Lower Ventura River Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
VRT_THACH	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		VR Algae TMDL

Table 192. Lower Ventura River Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	942
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	39
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	935
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels [b]	7
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	209
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.22
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [c]	2
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	211
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	99%
Survey Response Information	
Sum Surveyed Irrigated Acres	209
Percent of Total Estimated Irrigated Acres that were Surveyed	99%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] 3,976 acres owned by the Shull Bonsall Family Trust were omitted from the enrollment analysis to avoid skewing percentages. While not confirmed by the landowner, VCAILG believes these parcels are unlikely to contain significant, if any, irrigated agricultural production.
[c] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 193. Lower Ventura River Responsibility Area Crop Types and General Production Practices

Crop or Practice	Lower Ventura River Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	-	-
Blueberries	-	-
Raspberries	-	-
Row Crop	-	-
Orchard	193	93%
Nursery	-	-
Flowers	-	-
Sod	-	-
Other	15	7%
Overhead Cover in Production Area		
Hoop House	-	-
No Cover	21	10%
Greenhouse	-	-
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	16	8%
Cover Crop	60	29%
Plastic	-	-
Weed Cloth	-	-
Mulch	180	86%
Gravel	-	-
Other	-	-
Irrigation Systems in Production Areas		
Drip Only	12	6%
Microsprinkler/Drip	-	-
Microsprinkler	166	80%
Overhead Sprinkler	15	7%
Overhead/Drip	-	-
Furrow Flood	-	-
Hand Watering	-	-
Other	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 194. Lower Ventura River Responsibility Area Grower MPs

Survey Question	Units	Lower Ventura River Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	156	80%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	141	68%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	141	73%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	161	77%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	161	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	161	77%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	161	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	161	90%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	179	86%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	179	100%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	150	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	142	95%
Q10a: How many non-cropped acres exist?	Acres	726	
Q10b: How much non-cropped area is bare soil? [c]	Acres	15	2%
Q11a: How many feet of ditches exist?	Feet	5,000	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	5,000	100%
Q12a: Are grassed waterways present? [e]	Acres	1	11%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	75	36%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	140	67%
Pest Management			
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	162	77%
Q15: Is an IPM Plan being implemented? [a]	Acres	162	77%
Q16a: How many acres are organically farmed? [a]	Acres	14	7%

Survey Question	Units	Lower Ventura River Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q16b: How many acres are conventionally farmed? [a]	Acres	180	86%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	0%
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	140	15%
Q18b: How many acres drain to a retention basin? [f]	Acres	140	15%
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. The Ventura River Algae TMDL applies to this RA, therefore the Ag Order Compliance Summary (Appendix E) will include nutrient related MPs to consider adding or expanding to ensure continued attainment of the TMDL.

VENTURA RIVER INLAND

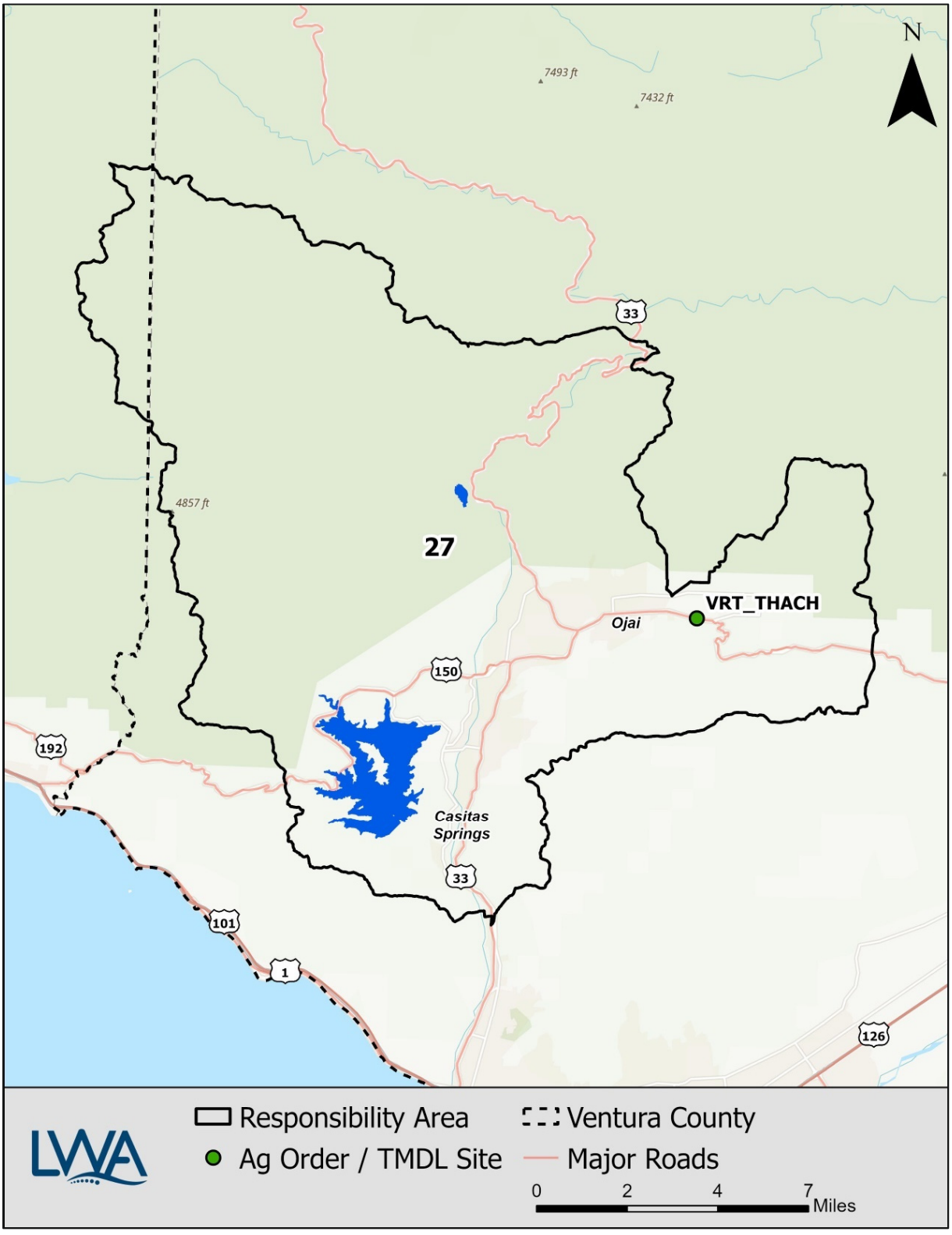


Figure 34. Ventura River Inland Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Ventura River Inland responsibility area are illustrated in **Figure 34** and outlined in **Table 195**.

Table 195. Ventura River Inland Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
VRT_THACH	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		VR Algae TMDL

Table 196. Ventura River Inland Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site VRT_THACH
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	6,077	1,254
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	1,811	120
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	3,797	880
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels [b]	4,842	374
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	1,741	393
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.46	0.45
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [c]	1,045	14
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	2,786	407
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	62%	97%
Survey Response Information		
Sum Surveyed Irrigated Acres	1,463	287
Percent of Total Estimated Irrigated Acres that were Surveyed	53%	71%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	84%	73%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] 2,562 acres owned by the Shull Bonsall Family Trust were omitted from the enrollment analysis to avoid skewing percentages. While not confirmed by the landowner, VCAILG believes these parcels are unlikely to contain significant, if any, irrigated agricultural production.
[c] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 197. Ventura River Inland Responsibility Area Crop Types and General Production Practices

Crop or Practice	Ventura River Inland Responsibility Area		VRT_THACH Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	-	-	-
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	8	1%	-	-
Orchard	1,377	93%	302	99%
Nursery	2	0.1%	-	-
Flowers	3	0.2%	-	-
Sod	-	-	-	-
Other	94	6%	2	1%
Overhead Cover in Production Areas				
Hoop House	25	2%	-	-
No Cover	165	11%	19	6%
Greenhouse	-	-	-	-
Shade	1	0.04%	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	646	44%	131	43%
Cover Crop	77	5%	2	1%
Plastic	-	-	-	-
Weed Cloth	3	0.2%	-	-
Mulch	673	45%	141	47%
Gravel	1	0.1%	-	-
Other	32	2%	25	8%
Irrigation Systems in Production Areas				
Drip Only	192	13%	-	-
Microsprinkler/Drip	65	4%	65	21%
Microsprinkler	1,199	81%	235	77%
Overhead Sprinkler	10	1%	2	1%
Overhead/Drip	-	-	-	-
Furrow Flood	-	-	-	-
Hand Watering	1	0.04%	-	-
Other	62	4%	62	20%

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 198. Ventura River Inland Responsibility Area Grower MPs

Survey Question	Units	Ventura River Inland Responsibility Area		VRT_THACH Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	1,079	77%	196	85%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	755	52%	156	54%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	198	15%	23	12%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	1,005	69%	196	68%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	957	95%	196	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	843	58%	168	58%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	841	100%	168	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	1,333	92%	225	83%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	866	59%	163	57%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	852	98%	163	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	809		100	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	651	80%	78	78%
Q10a: How many non-cropped acres exist?	Acres	1,755		353	
Q10b: How much non-cropped area is bare soil? [c]	Acres	536	31%	70	20%

Survey Question	Units	Ventura River Inland Responsibility Area		VRT_THACH Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	53,379		8,465	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	42,184	79%	6,940	82%
Q12a: Are grassed waterways present? [e]	Acres	5	5%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	43	3%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	40	3%	2	1%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	1,290	88%	194	68%
Q15: Is an IPM Plan being implemented? [a]	Acres	1,387	95%	265	92%
Q16a: How many acres are organically farmed? [a]	Acres	229	16%	97	34%
Q16b: How many acres are conventionally farmed? [a]	Acres	1,163	80%	193	67%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	133	9%	90	31%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	76	5%	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	52	2%	1	0.2%
Q18b: How many acres drain to a retention basin? [f]	Acres	21	1%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	1	0.03%	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	2	0.1%	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. The Ventura River Algae TMDL applies to this RA, therefore the Ag Order Compliance Summary (Appendix E) will include nutrient related MPs to consider adding or expanding to ensure continued attainment of the TMDL.

VENTURA COASTAL

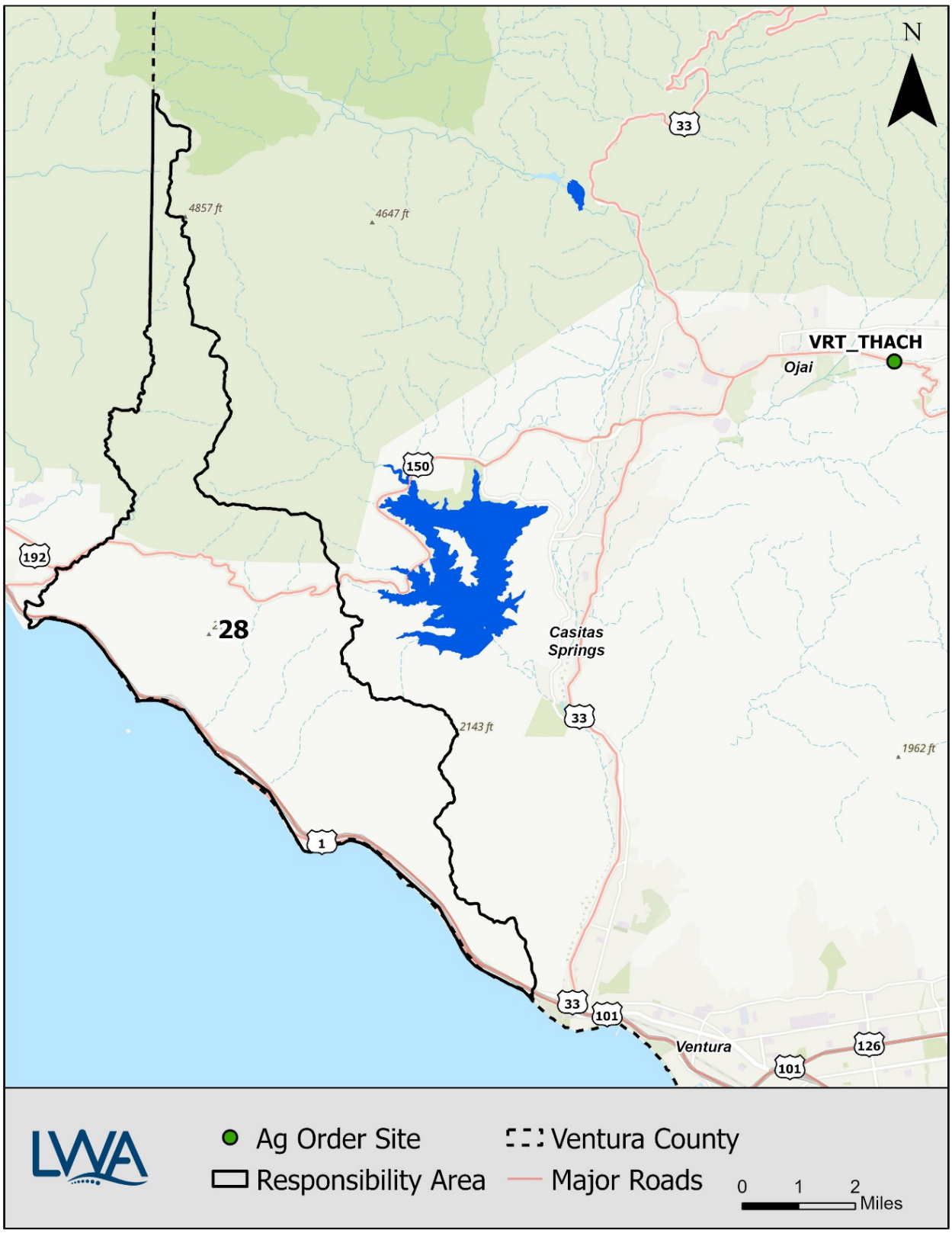


Figure 35. Ventura Coastal Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks for the Ventura Coastal responsibility area are illustrated in **Figure 35**. The responsibility area has no applicable TMDLs.

Table 199. Ventura Coastal Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
VRT_THACH	VCAILG Monitoring Site	Standard Ag Order Benchmarks

Table 200. Ventura Coastal Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area
Assessed Acreage Information	
Total Assessed Acres from Agricultural Parcel List	3,207
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	360
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	2,968
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	239
Irrigated Acreage Information	
VCAILG Enrolled Parcel Acreage Reported as Irrigated	990
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.33
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	80
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	1,070
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	93%
Survey Response Information	
Sum Surveyed Irrigated Acres	969
Percent of Total Estimated Irrigated Acres that were Surveyed	91%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	98%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 201. Ventura Coastal Responsibility Area Crop Types and General Production Practices

Crop or Practice	Ventura Coastal Responsibility Area	
	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024
Crop Type		
Strawberries	141	14%
Blueberries	-	-
Raspberries	-	-
Row Crop	-	-
Orchard	824	84%
Nursery	16	2%
Flowers	-	-
Sod	-	-
Other	-	-
Overhead Cover in Production Area		
Hoop House	-	-
No Cover	500	51%
Greenhouse	0	0.02%
Shade	-	-
Other	-	-
Surface Treatments in Production Area		
Bare Soil	183	19%
Cover Crop	286	29%
Plastic	141	14%
Weed Cloth	1	0.1%
Mulch	419	43%
Gravel	-	-
Other	15	2%
Irrigation Systems in Production Areas		
Drip Only	265	27%
Microsprinkler/Drip	141	14%
Microsprinkler	561	57%
Overhead Sprinkler	-	-
Overhead/Drip	-	-
Furrow Flood	-	-
Hand Watering	-	-
Other	15	2%

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 202. Ventura Coastal Responsibility Area Grower MPs

Survey Question	Units	Ventura Coastal Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Irrigation and Salinity Management			
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	691	71%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	322	33%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	662	68%
Nutrient Management			
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	340	35%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	340	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	883	91%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	883	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	945	97%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	496	51%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	496	100%
Sediment Management			
Q8: How many cropped acres have a slope greater than 2%?	Acres	861	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	847	98%
Q10a: How many non-cropped acres exist?	Acres	1,640	
Q10b: How much non-cropped area is bare soil? [c]	Acres	35	2%
Q11a: How many feet of ditches exist?	Feet	66,850	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	59,050	88%
Q12a: Are grassed waterways present? [e]	Acres	4	15%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	36	4%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	440	45%
Pest Management			

Survey Question	Units	Ventura Coastal Responsibility Area	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	920	95%
Q15: Is an IPM Plan being implemented? [a]	Acres	693	71%
Q16a: How many acres are organically farmed? [a]	Acres	369	38%
Q16b: How many acres are conventionally farmed? [a]	Acres	613	63%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	648	67%
Runoff Management/Treatment			
Q17: How many acres produce irrigation runoff? [a]	Acres	199	20%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	100	4%
Q18b: How many acres drain to a retention basin? [f]	Acres	100	4%
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.
[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA.

SAN ANTONIO CREEK

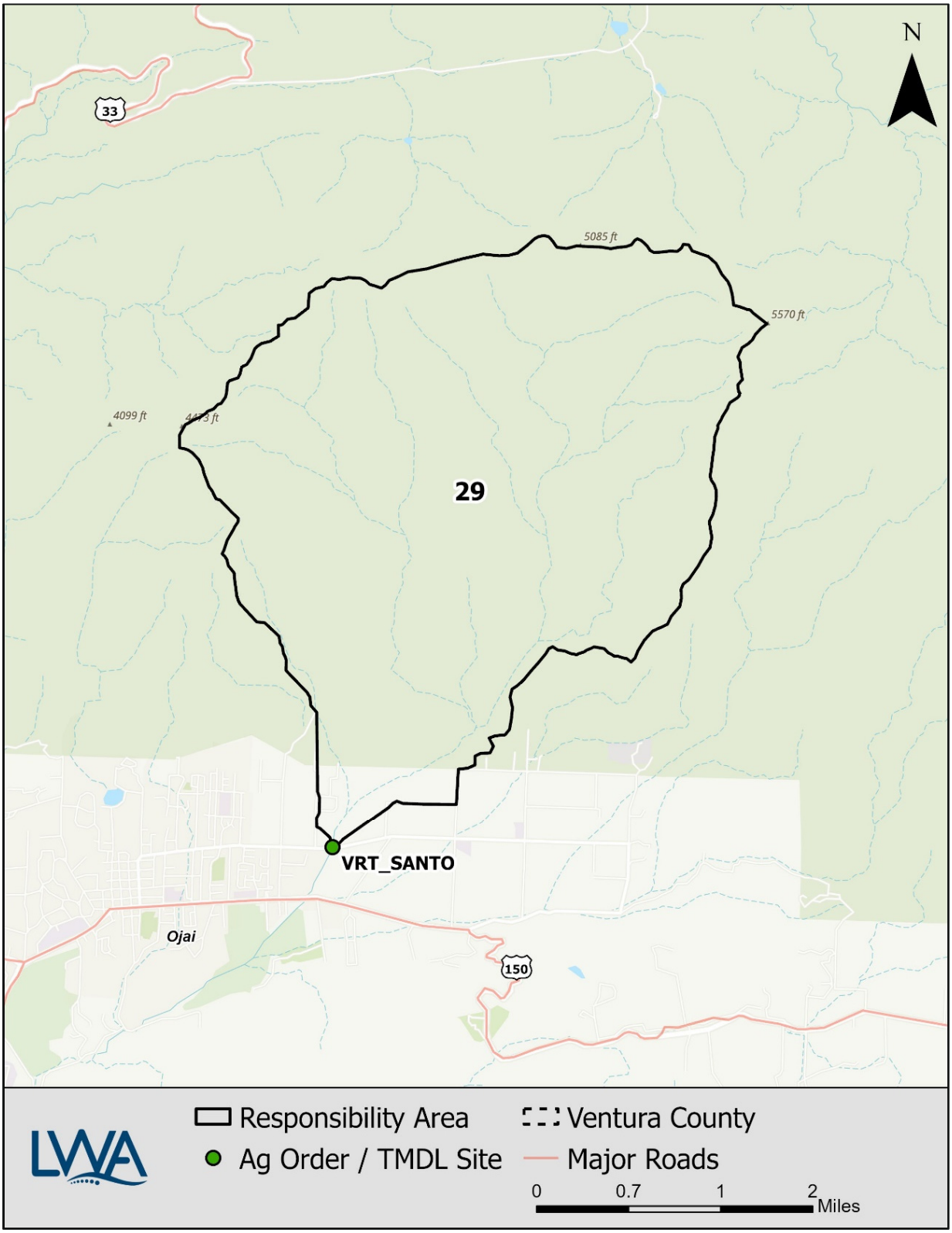


Figure 36. San Antonio Creek Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the San Antonio Creek responsibility area are illustrated in **Figure 36** and outlined in **Table 203**.

Table 203. San Antonio Creek Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
VRT_SANTO	VCAILG Monitoring Site	Standard Ag Order Benchmarks
		VR Algae TMDL

Table 204. San Antonio Creek Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site VRT_SANTO
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	959	986
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	62	62
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	702	729
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	257	257
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	299	335
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.43	0.46
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	110	118
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	409	511
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	73%	77%
Survey Response Information		
Sum Surveyed Irrigated Acres	167	226
Percent of Total Estimated Irrigated Acres that were Surveyed	41%	44%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	56%	67%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 205. San Antonio Creek Responsibility Area Crop Types and General Production Practices

Crop or Practice	San Antonio Creek Responsibility Area		VRT_SANTO Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	-	-	-
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	-	-	-	-
Orchard	167	100%	226	100%
Nursery	-	-	-	-
Flowers	-	-	-	-
Sod	-	-	-	-
Other	-	-	-	-
Overhead Cover in Production Areas				
Hoop House	-	-	-	-
No Cover	38	23%	38	17%
Greenhouse	-	-	-	-
Shade	-	-	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	83	50%	145	64%
Cover Crop	4	2%	4	2%
Plastic	-	-	-	-
Weed Cloth	-	-	-	-
Mulch	70	42%	67	30%
Gravel	-	-	-	-
Other	-	-	-	-
Irrigation Systems in Production Areas				
Drip Only	12	7%	12	5%
Microsprinkler/Drip	1	0.3%	1	0.2%
Microsprinkler	161	96%	220	97%
Overhead Sprinkler	-	-	-	-
Overhead/Drip	-	-	-	-
Furrow Flood	-	-	-	-
Hand Watering	2	1%	2	1%
Other	-	-	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 206. San Antonio Creek Responsibility Area Grower MPs

Survey Question	Units	San Antonio Creek Responsibility Area		VRT_SANTO Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	105	63%	163	72%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	103	61%	161	71%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	62	41%	62	29%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	152	91%	211	93%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	152	100%	211	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	93	56%	155	69%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	91	98%	153	99%
Q6: Are leaf/petiole tests conducted? [a]	Acres	152	91%	211	93%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	150	90%	209	92%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	150	100%	209	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	152		176	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	32	-	32	18%
Q10a: How many non-cropped acres exist?	Acres	173		170	
Q10b: How much non-cropped area is bare soil? [c]	Acres	16	8%	18	10%

Survey Question	Units	San Antonio Creek Responsibility Area		VRT_SANTO Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	6,145		8,445	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	5,435	4%	7,735	92%
Q12a: Are grassed waterways present? [e]	Acres	1	-	1	5%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	0.4	0.2%	0.4	0.2%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	2	-	2	1%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	150	90%	209	92%
Q15: Is an IPM Plan being implemented? [a]	Acres	144	86%	203	90%
Q16a: How many acres are organically farmed? [a]	Acres	33	20%	33	15%
Q16b: How many acres are conventionally farmed? [a]	Acres	134	80%	193	85%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	12	7%	12	5%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	-	-	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. The Ventura River Algae TMDL applies to this RA, therefore the Ag Order Compliance Summary (Appendix E) will include nutrient related MPs to consider adding or expanding to ensure continued attainment of the TMDL.

VENTURA RIVER MILLING RD.

Figure 37. Ventura River Milling Rd. Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks and/or TMDL LAs for the Ventura River Milling Rd. responsibility area are illustrated in **Figure 37** and outlined in **Table 207**.

Table 207. Ventura River Milling Rd. Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
VRT_THACH	VCAILG Monitoring Site	Standard Ag Order Benchmarks
V02D_SPM	TMDL Monitoring Site	VR Algae TMDL

Table 208. Ventura River Milling Rd. Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site V02D_SPM [c]
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	1,302	965
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	0	0
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	1,302	965
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	0	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	278	404
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.21	0.42
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	0	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	278	404
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	100%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	278	404
Percent of Total Estimated Irrigated Acres that were Surveyed	100%	100%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	100%	100%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.
[c] Agricultural parcels defined as draining to monitoring site extend beyond the actual monitoring site drainage area. Acreage values are consequently overestimated.

Table 209. Ventura River Milling Rd. Responsibility Area Crop Types and General Production Practices

Crop or Practice	Ventura River Milling Rd. Responsibility Area		V02D_SPM Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	-	-	173	43%
Blueberries	-	-	-	-
Raspberries	-	-	-	-
Row Crop	8	1%	-	-
Orchard	1,377	93%	231	57%
Nursery	2	0.1%	-	-
Flowers	3	0.2%	-	-
Sod	-	-	-	-
Other	94	6%	-	-
Overhead Cover in Production Areas				
Hoop House	25	2%	-	-
No Cover	165	11%	379	94%
Greenhouse	-	-	-	-
Shade	1	0.04%	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	646	44%	-	-
Cover Crop	77	5%	-	-
Plastic	-	-	173	43%
Weed Cloth	3	0.2%	-	-
Mulch	673	45%	231	57%
Gravel	1	0.1%	-	-
Other	32	2%	-	-
Irrigation Systems in Production Areas				
Drip Only	192	13%	23	6%
Microsprinkler/Drip	65	4%	173	43%
Microsprinkler	1,199	81%	208	52%
Overhead Sprinkler	10	1%	-	-
Overhead/Drip	-	-	-	-
Furrow Flood	-	-	-	-
Hand Watering	1	0.04%	-	-
Other	62	4%	-	-

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 210. Ventura River Milling Rd. Responsibility Area Grower MPs

Survey Question	Units	Ventura River Milling Rd. Responsibility Area		V02D_SPM Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	-	-	-	-
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	-	-	-	-
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	-	-	-	-
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	211	76%	208	52%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	211	100%	208	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	278	100%	404	100%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	278	100%	404	100%
Q6: Are leaf/petiole tests conducted? [a]	Acres	278	100%	404	100%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	278	100%	404	100%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	278	100%	404	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	183		211	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	183	100%	211	100%
Q10a: How many non-cropped acres exist?	Acres	1,024		562	
Q10b: How much non-cropped area is bare soil? [c]	Acres	5	0.5%	5	1%

Survey Question	Units	Ventura River Milling Rd. Responsibility Area		V02D_SPM Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	11,500		17,100	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	3,000	26%	7,800	46%
Q12a: Are grassed waterways present? [e]	Acres	1	33%	1	33%
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	120	43%	120	30%
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	120	43%	120	30%
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	278	100%	194	68%
Q15: Is an IPM Plan being implemented? [a]	Acres	211	76%	265	92%
Q16a: How many acres are organically farmed? [a]	Acres	-	-	97	34%
Q16b: How many acres are conventionally farmed? [a]	Acres	278	100%	193	67%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	-	-	90	31%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	-	-	-	-
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	72	6%	1	0.2%
Q18b: How many acres drain to a retention basin? [f]	Acres	5	0.4%	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. The Ventura River Algae TMDL applies to this RA, therefore the Ag Order Compliance Summary (Appendix E) will include nutrient related MPs to consider adding or expanding to ensure continued attainment of the TMDL.

OXNARD COASTAL

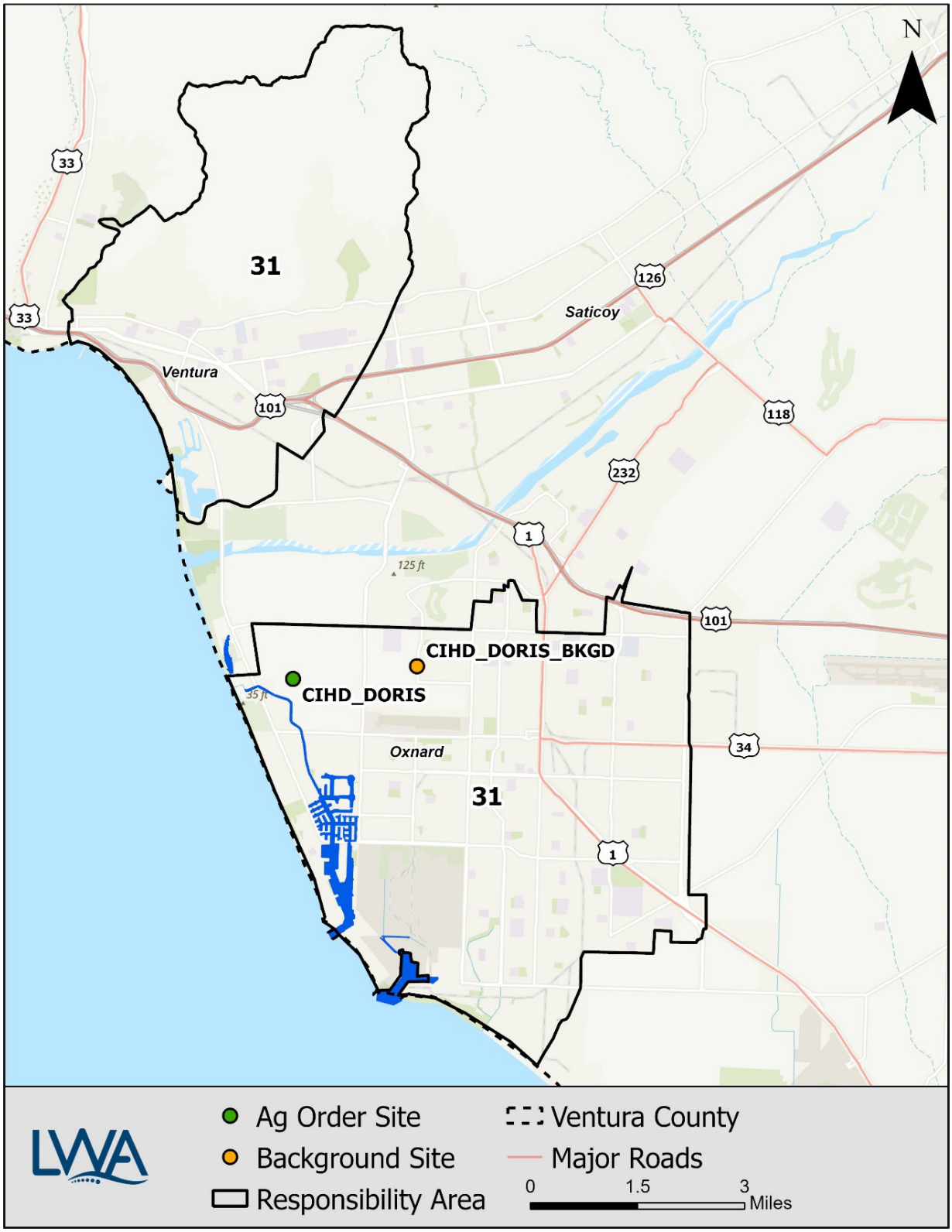


Figure 38. Oxnard Coastal Responsibility Area Map

The monitoring sites used to evaluate attainment of Ag Order benchmarks for the Oxnard Coastal responsibility area are illustrated in **Figure 38**. The responsibility area has no applicable TMDLs. CIHD_DORIS_BKGD will characterize urban runoff inputs upstream of the CIHD_DORIS monitoring site.

Table 211. Oxnard Coastal Monitoring Sites

Monitoring Site	Site Type	Applicable Benchmarks / TMDLs
CIHD_DORIS	VCAILG Monitoring Site	Standard Ag Order Benchmarks
CIHD_DORIS_BKGD	Background Site	Evaluate urban inputs upstream of VCAILG monitoring site

Table 212. Oxnard Coastal Responsibility Area Enrollment and Survey Acreage Summary

Enrollment and Survey Information	Entire Responsibility Area	Drainage Area of Monitoring Site CIHD_DORIS
Assessed Acreage Information		
Total Assessed Acres from Agricultural Parcel List	4,836	762
Assessed Acres from Agricultural Parcel List Identified as Exempt from Waiver [a]	639	1
Total Assessed Acres from Agricultural Parcel List belonging to VCAILG Enrolled Parcel	4,469	762
Assessed Acres from Agricultural Parcel List belonging to Non-Enrolled Parcels	367	0
Irrigated Acreage Information		
VCAILG Enrolled Parcel Acreage Reported as Irrigated	3,026	614
Ratio (VCAILG Enrolled Parcel Irrigated Acres/VCAILG Enrolled Parcel Assessed Acres)	0.68	0.81
Estimated Irrigated Acres in Non-Enrolled Parcel Agricultural Parcels [b]	249	0
Total Estimated Irrigated Acres (Member plus Non-Enrolled Parcel)	3,275	614
Percent of Total Estimated Irrigated Acres Enrolled in VCAILG	92%	100%
Survey Response Information		
Sum Surveyed Irrigated Acres	2,738	389
Percent of Total Estimated Irrigated Acres that were Surveyed	84%	63%
Percent of VCAILG Enrolled Parcel Irrigated Acres that were Surveyed	90%	63%

[a] Exempt from *Ag Order* because owner has reported that no crops are irrigated.
[b] Derived using ratio of Irrigated Acres/Assessed Acres for Member Acreage.

Table 213. Oxnard Coastal Responsibility Area Crop Types and General Production Practices

Crop or Practice	Oxnard Coastal Responsibility Area		CIHD_DORIS Site Drainage Only	
	Acres with Crop or Practice	% of Surveyed Acres [a]	Acres with Crop or Practice	% of Surveyed Acres [a]
	2024	2024	2024	2024
Crop Type				
Strawberries	2,028	73%	366	84%
Blueberries	-	-	-	-
Raspberries	159	6%	-	-
Row Crop	479	17%	5	1%
Orchard	14	1%	-	-
Nursery	57	2%	34	8%
Flowers	53	2%	29	7%
Sod	-	-	-	-
Other	-	-	-	-
Overhead Cover in Production Areas				
Hoop House	259	9%	31	7%
No Cover	2,446	88%	364	84%
Greenhouse	45	2%	32	7%
Shade	-	-	-	-
Other	-	-	-	-
Surface Treatments in Production Areas				
Bare Soil	836	30%	85	20%
Cover Crop	249	9%	53	12%
Plastic	1,349	48%	227	52%
Weed Cloth	76	3%	7	2%
Mulch	390	14%	33	8%
Gravel	37	1%	22	5%
Other	48	2%	-	-
Irrigation Systems in Production Areas				
Drip Only	464	17%	47	11%
Microsprinkler/Drip	1,746	63%	364	84%
Microsprinkler	14	1%	-	-
Overhead Sprinkler	12	0.4%	5	1%
Overhead/Drip	559	20%	-	-
Furrow Flood	-	-	-	-
Hand Watering	12	0.4%	7	2%
Other	4	0.1%	4	1%

[a] Percent is based on total Cropped Acres reported for parcels for which complete surveys had been submitted by Nov. 5, 2024. Surveys were considered complete if answers had been provided for Crop Types and General Production Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

Table 214. Oxnard Coastal Responsibility Area Grower MPs

Survey Question	Units	Oxnard Coastal Responsibility Area		CIHD_DORIS Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Irrigation and Salinity Management					
Q1: Is the irrigation system tested for distribution uniformity at least once every 3 years? [a]	Acres	1,561	57%	152	41%
Q2: Is soil moisture used as determinant of irrigation practices? [a]	Acres	1,158	42%	81	21%
Q3: Is soil EC used to determine when salt leaching is necessary? [a]	Acres	2,047	76%	355	96%
Nutrient Management					
Q4a: Is there a Nutrient Management Plan for the parcel? [a]	Acres	498	18%	71	18%
Q4b: Is it a Certified Nutrient Management Plan? [a]	Acres	498	100%	71	100%
Q5a: Are soil residual nitrate tests done? [a]	Acres	2,561	94%	355	91%
Q5b: Is fertilizer adjusted using residual soil nitrate? [a]	Acres	2,482	97%	321	90%
Q6: Are leaf/petiole tests conducted? [a]	Acres	2,248	94%	275	95%
Q7a: Is nitrate measured in fertigation water? [a]	Acres	2,612	95%	355	91%
Q7b: Is fertilizer adjusted using fertigation water nitrate levels? [a]	Acres	2,394	92%	354	100%
Sediment Management					
Q8: How many cropped acres have a slope greater than 2%?	Acres	733		181	
Q9: Erosion control is used on how many of the sloped cropped acres? [b]	Acres	65	9%	-	-
Q10a: How many non-cropped acres exist?	Acres	408		87	
Q10b: How much non-cropped area is bare soil? [c]	Acres	193	47%	19	22%

Survey Question	Units	Oxnard Coastal Responsibility Area		CIHD_DORIS Site Drainage Only	
		Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units	Surveyed Units Meeting Criterion	% of Total Applicable Surveyed Units
		2024	2024	2024	2024
Q11a: How many feet of ditches exist?	Feet	144,432		18,420	
Q11b: How many feet of ditches are protected from erosion? [d]	Feet	40,220	28%	3,800	21%
Q12a: Are grassed waterways present? [e]	Acres	3	3%	-	-
Q12b: How many acres drain to grassed waterways? [a]	# Parcels	105	4%	-	-
Q13: How many acres are treated by vegetated filter strips? [a]	Acres	100	4%	-	-
Pest Management					
Q14: Are PCAs used for pesticide management decisions? [a]	Acres	2,713	99%	389	100%
Q15: Is an IPM Plan being implemented? [a]	Acres	2,716	99%	389	100%
Q16a: How many acres are organically farmed? [a]	Acres	243	9%	85	22%
Q16b: How many acres are conventionally farmed? [a]	Acres	2,495	91%	304	78%
Q16c: How many acres are farmed using regenerative methods? [a]	Acres	390	14%	80	21%
Runoff Management/Treatment					
Q17: How many acres produce irrigation runoff? [a]	Acres	1,127	41%	120	31%
Q18a: How many acres drain to a detention or sediment basin? [f]	Acres	270	9%	-	-
Q18b: How many acres drain to a retention basin? [f]	Acres	-	-	-	-
Q18c: How many acres drain to and are treated with a bioreactor? [f]	Acres	-	-	-	-
Q18d: How many acres drain to constructed wetlands? [f]	Acres	-	-	-	-

[a] Percent is based on total Irrigated Acres for parcels with complete surveys. Surveys were only considered complete if answers had been provided for Crop Types and Practices for all reported Irrigated acres and answers provided to all numbered survey questions.

[b] Percent is based on Cropped Acres with Slope > 2% reported in Q9b for parcels with complete surveys.
[c] Percent is based on Uncropped Acres reported in Q10a for parcels with complete surveys.
[d] Percent is based on total feet of ditches reported in Q11a for parcels with complete surveys.
[e] Percent is based on number of parcels with complete surveys.
[f] Percent is based on total Assessed Acres for parcels with complete surveys.

There were no benchmark exceedances triggering graphs for this RA, as water quality data has not yet been collected for this new site under the pending 2024 MRP. Therefore, tables noting exceedance categories, levels of applicable MP implementation, and recommendations for MPs to address any exceedances are not included for this RA. However, due to concerns related to nutrient discharges to Edison Canal, MPs related to nutrients will be included in the Ag Order Compliance Summary (Appendix E).

PESTICIDE USE EVALUATION

In 1990, California became the first state to require full reporting of agricultural pesticide use in response to demands for more realistic and comprehensive pesticide use data. Under the program, all agricultural pesticide use must be reported monthly to county agricultural commissioners, who in turn, report the data to the Department of Pesticide Regulation (DPR). California has a broad legal definition of "agricultural use", so the reporting requirements include pesticide applications to parks, golf courses, cemeteries, rangeland, pastures, and along roadside and railroad rights-of-way. In addition, all post-harvest pesticide treatments of agricultural commodities must be reported along with all pesticide treatments in poultry and fish production as well as some livestock applications. Only agricultural applications, as noted by the specific commodity treated, are summarized in this document.

Section 2.1.d of Appendix 3 of the Ag Order requires “a pesticide use evaluation assessment, including the timing of pesticide applications, the application rates, the amounts of pesticides applied, and the points of application”. In addition, Section 2.1.d requires a comparison of changes in pesticide concentrations at specific monitoring sites to pesticide use patterns for land areas draining to the monitoring site (i.e., a monitoring site’s drainage area). To accomplish this, pesticide use records obtained from the Ventura County Agricultural Commissioner’s office were compared to VCAILG monitoring data. The timeframe for the analysis is July 1, 2020 through June 30, 2023; which begins where the last WQMP pesticide use evaluation ended through the end of the final monitoring year considered for water quality benchmark exceedances in this WQMP.

The evaluation included diazinon, chlorpyrifos, and bifenthrin since those are the three presently (or at least recently) permitted pesticides with water quality benchmarks under the Ag Order. To conduct the comparison between the pesticide use records and the VCAILG monitoring data, pesticide application locations had to be linked to the appropriate monitoring site drainage, as not all pesticide applications within Ventura County occurred within a VCAILG monitoring site drainage area.

Additional manipulation of the pesticide use data included multiplying the percent concentration of the active ingredient (i.e., the percent of diazinon, chlorpyrifos, of bifenthrin within the specific product used) by the total volume or weight of the specific product applied. Depending on the product formulation, the calculated amount of pesticide used was either in gallons or pounds of active ingredient. The dates and amounts of pesticides applied were then compared to the VCAILG monitoring data and benchmark exceedances. Table 215 to Table 217 include July 1, 2020 – June 30, 2023 chlorpyrifos, diazinon, and bifenthrin application information by crop type as well as a comparison to water quality data from associated VCAILG monitoring sites.

Chlorpyrifos

For agricultural application, chlorpyrifos is the active ingredient in several products including Lorsban, Dursban, Nufos, and Warhawk. The California Department of Pesticide Regulation (CA DPR) announced on October 9, 2019, the end of practically all agricultural uses of chlorpyrifos by December 31, 2020. The use of chlorpyrifos was common on lemons, oranges, and onions in Ventura County before this announcement. There were no water quality benchmark exceedances of chlorpyrifos at any monitoring sites during the analysis timeframe.

Chlorpyrifos was applied within the drainage areas of 3 VCAILG monitoring sites during the analysis timeframe. Chlorpyrifos was applied within drainage areas 7 times, with the last occurrence being on October 1, 2020. Again, there were no instances of exceedances, even at the 3 monitoring sites where chlorpyrifos was applied within the drainage area.

Diazinon

There were 4 applications of diazinon within the S03D_BARDS monitoring site drainage during the analysis timeframe. No diazinon benchmark exceedances occurred in association with those diazinon applications.

There were five exceedances of the diazinon water quality benchmark (4 during storm events and 1 during dry weather) where no reports of diazinon application occurred within the data evaluation period.

Bifenthrin

Bifenthrin was applied 288 times within 9 of the VCAILG monitoring site drainage areas during the analysis timeframe. The observed exceedances and applications are summarized below:

- There were 8 exceedances at 4 of the monitoring sites where bifenthrin was applied; all during wet weather with the exception of one dry weather exceedance.
- There were no exceedances at 5 of the monitoring sites where bifenthrin was applied.
- There were 32 exceedances of bifenthrin in 9 drainages where bifenthrin was not applied; 28 wet weather exceedances and 4 dry weather exceedances.

Summary

Based on the results of the analysis that compared water quality data from the VCAILG sites and the agricultural pesticide use within the associated site drainage areas, it is difficult to discern any patterns between water quality benchmark exceedances and agricultural pesticide use. However, no exceedances were observed for chlorpyrifos during the analysis period following the ban on most agricultural uses. While the VCAILG monitoring sites' drainage areas aim to include predominantly agricultural land use, none of the drainage areas are completely comprised of agriculture. Applications of pesticides often occur outside the agricultural land use areas and are not reflected in the pesticide use records used for the analysis. In addition, pesticide use is variable and performed in response to a variety of factors such as pest pressures, sudden outbreaks of latent diseases and/or pathogens, cropping patterns, variation in neighboring crops that may have incompatible maximum residue limits, etc. Also, the use of a specific pesticide on a particular crop varies from year to year. To mitigate this variability and the changing landscape of pesticide use, all pesticide use decisions are based on farmer and pest control advisor (PCA) expertise, and applied under the authority of the local Agricultural Commissioner's office and CA DPR. Additionally, pesticide-applicable management practices (MPs) are included in the suite of MPs identified in the WQMP when triggered by exceedances of the pesticide benchmarks.

Table 215. Chlorpyrifos[1] Applications and Benchmark Exceedances by Monitoring Site, July 1, 2020 – June 30, 2023

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
OXD_CENTR	8/2/20	Nursery	0.23	--	N/A	N/A	N/A	N/A	985
	9/23/20		0.23	--	N/A	N/A	N/A	N/A	
	10/1/20		0.23	--	N/A	N/A	N/A	N/A	
CIHD_DORIS	9/2/20	Nursery	0.23	--	N/A	N/A	N/A	N/A	829
	9/5/20		0.28	--	N/A	N/A	N/A	N/A	
S03D_BARDS	7/4/20	Kale	0.17	--	N/A	N/A	N/A	N/A	585
	8/8/20		0.1	--	N/A	N/A	N/A	N/A	

1. There were no exceedances at monitoring sites where chlorpyrifos was applied within the associated drainage area. Chlorpyrifos was banned for most agricultural uses as of the end of 2020.

Table 216. Diazinon[1] Applications and Benchmark Exceedances by Monitoring Site, July 1, 2020 – June 30, 2023

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
S03D_BARDS	5/13/21	Mustard Greens	0.54	--	N/A	N/A	0.1	N/A	585
	6/3/21	Mustard Greens	0.24	--	N/A	N/A		N/A	
	6/10/21	Kale	0.3	--	N/A	N/A		N/A	
	7/22/21	Kale	0.42	--	N/A	N/A		N/A	
04D_LAS[2]	N/A	N/A	N/A	N/A	10/26/21	Wet	0.1	0.116	1,339
					5/30/23	Dry		0.286	
05D_LAVD	N/A	N/A	N/A	N/A	10/25/21	Wet	0.1	0.225	952
06T_LONG2[2]	N/A	N/A	N/A	N/A	12/28/20	Wet	0.1	3.19	2,813
					12/14/21	Wet		1.74	

1. There were exceedances at monitoring sites where no diazinon application occurred in the associated drainage area and no exceedances at monitoring sites where diazinon was applied within the associated drainage area.
2. This site is no longer part of the VCAILG monitoring program per the 2024 VCAILG MRP/QAPP.

Table 217. Bifenthrin[1] Applications and Benchmark Exceedances by Monitoring Site, June 4, 2018 – June 30, 2020

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
05D_LAVD	8/8/2020	Tomato	--	1.5	12/28/20	Wet	0.0006	0.0237	952
	N/A	N/A	N/A	N/A	1/29/21	Wet		0.00126	
	9/9/21	Tomato	--	1.576	N/A	N/A		N/A	
	9/13/21			0.86	N/A	N/A		N/A	
	10/3/21			1.576	N/A	N/A		N/A	
	10/24/21			0.985	10/25/21	Wet		0.00626	
	10/31/21			1.576	N/A	N/A		N/A	
	11/6/21			0.355	N/A	N/A		N/A	
	8/6/22			0.529	N/A	N/A		N/A	
	9/2/22			0.529	N/A	N/A		N/A	
	9/8/22			0.529	N/A	N/A		N/A	
	9/17/22			0.529	N/A	N/A		N/A	
	9/29/22			0.846	N/A	N/A		N/A	
	10/13/22			1.171	N/A	N/A		N/A	
	10/21/22			0.397	N/A	N/A		N/A	
	10/29/22			0.697	N/A	N/A		N/A	
	11/4/2022			0.634	12/11/22	Wet		0.00198	
OXD_CENTR	N/A	N/A	N/A	N/A	8/7/20	Dry	0.0006	0.000608	985
	9/9/20	Strawberry	--	1.326	N/A	N/A		N/A	
	9/23/20		3.516	--	N/A	N/A		N/A	
	9/24/20		2.989	--	N/A	N/A		N/A	
	9/26/20		--	2.652	N/A	N/A		N/A	
	10/9/20		--	1.504	N/A	N/A		N/A	
	10/10/20		--	1.148	N/A	N/A		N/A	
	10/24/20		--	1.504	N/A	N/A		N/A	
	10/28/20		--	1.148	N/A	N/A		N/A	
	11/25/20			2.652	12/28/20	Wet		0.21	

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
OXD_CENTR	N/A	N/A	N/A	N/A	1/29/21	Wet	0.0006	0.0516	985
	N/A	N/A	N/A	N/A	8/5/21	Dry		0.00451	
	9/12/21	Strawberry	--	2.671	N/A	N/A		N/A	
	10/2/21		--	2.671	N/A	N/A		N/A	
	10/22/21		--	2.671	10/25/21	Wet		0.024	
	11/6/2021		--	2.671	N/A	N/A		N/A	
	12/3/2021		--	2.671	N/A	N/A		N/A	
	12/13/2021	Brussel Sprout	--	0.120	N/A	N/A		N/A	
	3/31/2022	Nursery Flowers	--	0.079	N/A	N/A		N/A	
	N/A	N/A	N/A	N/A	5/30/23	Dry		0.000871	
S03D_BARDS	11/30/20	Cabbage	--	2.3	12/28/2020	Wet	0.0006	0.000768	585
	N/A	N/A	N/A	N/A	10/25/2021	Wet		0.0157	
	7/1/22	Pepper Fruiting	0.27	--	8/9/2022	Dry		0.00197	
	N/A	N/A	N/A	N/A	12/11/2022	Wet		0.00784	
	N/A	N/A	N/A	N/A	5/30/2023	Dry		0.000977	
S03T_BOULD	N/A	N/A	N/A	N/A	12/28/20	Wet	0.0006	0.0235	3,574
	7/24/21	Nursery	0.01	--	10/25/21	Wet		0.0024	
	7/13/2022		0.037	--	N/A	N/A		N/A	
	7/14/2022		0.037	--	N/A	N/A		N/A	
	7/19/2022		0.030	--	N/A	N/A		N/A	
	9/12/2022		0.031	--	N/A	N/A		N/A	
	9/15/2022		0.037	--	N/A	N/A		N/A	
	9/16/2022		0.015	--	N/A	N/A		N/A	
	10/22/2022		0.015	--	N/A	N/A		N/A	
	1/26/2023		0.044	--	N/A	N/A		N/A	

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	2/17/2023		0.022	--	N/A	N/A		N/A	
	3/17/2023		0.007	--	N/A	N/A		N/A	
	4/5/2023		0.007	--	N/A	N/A		N/A	
S03T_BOULD	4/7/2023	Nursery	0.015	--	N/A	N/A	0.0006	N/A	3,574
	4/10/2023		0.030	--	N/A	N/A		N/A	
	4/11/2023		0.015	--	N/A	N/A		N/A	
	6/1/2023		0.015	--	N/A	N/A		N/A	
	6/12/2023		0.030	--	N/A	N/A		N/A	
	6/13/2023		0.030	--	N/A	N/A		N/A	
	6/20/2023		0.015	--	N/A	N/A		N/A	
	6/21/2023		0.030	--	N/A	N/A		N/A	
	6/22/2023		0.030	--	N/A	N/A		N/A	
01T_ODD2_DCH	7/24/20	Blackberry	--	0.259	N/A	N/A	0.0006	N/A	741
	8/14/20	Blackberry	--	0.2	N/A	N/A		N/A	
	9/4/20	Blackberry	--	0.25	N/A	N/A		N/A	
	9/11/20	Raspberry	--	0.05	N/A	N/A		N/A	
	9/25/20	Blueberry	--	0.3	N/A	N/A		N/A	
	10/2/20	Blackberry	--	0.251	N/A	N/A		N/A	
	10/10/20	Blackberry	--	0.0014	N/A	N/A		N/A	
	10/30/20	Raspberry	--	0.051	N/A	N/A		N/A	
	11/5/20	Strawberry	--	0.049	N/A	N/A		N/A	
	11/13/20	Blackberry	--	0.017	N/A	N/A		N/A	
	11/28/20	Strawberry	--	0.049	N/A	N/A		N/A	
	2/12/21	Raspberry	--	0.05	N/A	N/A		N/A	
	2/26/21	Strawberry	0.003	--	N/A	N/A		N/A	
	4/27/21	Blackberry	0.278	--	N/A	N/A		N/A	
	5/7/21	Raspberry		0.136	N/A	N/A		N/A	

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	5/8/21	Strawberry & Blueberry		8.883	N/A	N/A		N/A	
	5/22/21	Strawberry		8.5	N/A	N/A		N/A	
	5/27/21	Strawberry		1.423	N/A	N/A		N/A	
01T_ODD2_DCH	5/28/21	Blueberry		0.383	N/A	N/A	0.0006	N/A	741
	6/1/21	Strawberry	--	3.651	N/A	N/A		N/A	
	6/4/21	Strawberry	0.084	--	N/A	N/A		N/A	
	6/12/21	Strawberry	--	17	N/A	N/A		N/A	
	6/18/21	Raspberry	0.002	--	N/A	N/A		N/A	
	7/2/21	Blueberry	--	0.383	N/A	N/A		N/A	
	7/16/21	Raspberry	0.006	--	N/A	N/A		N/A	
	7/21/21	Raspberry	--	0.249	N/A	N/A		N/A	
	8/13/21	Blueberry	0.05	--	N/A	N/A		N/A	
	8/13/21	Raspberry	--	0.17	N/A	N/A		N/A	
	8/20/21	Raspberry	--	0.153	N/A	N/A		N/A	
	8/27/21	Blackberry	0.002	--	N/A	N/A		N/A	
	9/22/21	Blackberry	0.211	--	N/A	N/A		N/A	
	10/22/21	Strawberry	--	0.617	N/A	N/A		N/A	
	10/23/21	Strawberry	--	0.056	N/A	N/A		N/A	
	11/5/21	Strawberry	--	0.6	N/A	N/A		N/A	
	5/5/22	Strawberry	--	2.574	N/A	N/A		N/A	
	5/7/22	Strawberry	--	11.012	N/A	N/A		N/A	
	5/11/22	Blackberry	--	0.294	N/A	N/A		N/A	
	5/18/22	Raspberry	--	0.015	N/A	N/A		N/A	
	5/21/22	Strawberry	--	0.75	N/A	N/A		N/A	
	5/21/22	Strawberry	0.833	--	N/A	N/A		N/A	
	5/24/22	Strawberry	--	1.731	N/A	N/A		N/A	
	5/27/22	Strawberry	0.419	--	N/A	N/A		N/A	

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	5/27/22	Strawberry	--	22.086	N/A	N/A		N/A	
	7/13/22	Blackberry	0.048	--	N/A	N/A		N/A	
	9/29/22	Blackberry	--	0.273	N/A	N/A		N/A	
	5/13/23	Strawberry	--	12.75	N/A	N/A		N/A	
01T_ODD2_DCH	6/1/23	Strawberry	--	1.436	N/A	N/A	0.0006	N/A	741
	6/2/23	Strawberry	--	12.75	N/A	N/A		N/A	
	6/3/23	Strawberry	--	4.3441	N/A	N/A		N/A	
	6/15/23	Blackberry	0.093	--	N/A	N/A		N/A	
	6/16/23	Blackberry	0.063	--	N/A	N/A		N/A	
	6/17/23	Strawberry	--	0.665	N/A	N/A		N/A	
04D_WOOD	8/1/20	Blackberry	0.065	--	N/A	N/A	0.0006	N/A	385
	8/4/20	Raspberry	0.094	--	N/A	N/A		N/A	
	8/25/20		0.053	--	N/A	N/A		N/A	
	9/14/20		0.085	--	N/A	N/A		N/A	
	9/20/20		0.122	--	N/A	N/A		N/A	
	2/4/21	Celery	0.410	--	N/A	N/A		N/A	
	12/7/21		0.190	--	N/A	N/A		N/A	
	12/21/21		0.210	--	N/A	N/A		N/A	
	1/11/22		0.210	--	N/A	N/A		N/A	
	1/12/22		0.203	--	N/A	N/A		N/A	
09AD_HOWARD	9/2/20	Raspberry	0.085	--	N/A	N/A	0.0006	N/A	92
9BD_GERRY	5/29/21	Strawberry	--	6.100	N/A	N/A	0.0006	N/A	467
	6/18/21		--	6.100	N/A	N/A		N/A	
	6/4/22		--	7.200	N/A	N/A		N/A	
	6/18/22		--	7.200	N/A	N/A		N/A	
	5/20/23		--	7.200	N/A	N/A		N/A	
	6/17/23		--	7.200	N/A	N/A		N/A	
CIHD_DORIS	7/1/20	Nursery	0.017	--	N/A	N/A	0.0006	N/A	829

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	7/7/20		0.04	--	N/A	N/A		N/A	
	7/11/20		0.059	--	N/A	N/A		N/A	
	7/28/20		0.019	--	N/A	N/A		N/A	
	7/30/20		0.04	--	N/A	N/A		N/A	
CIHD_DORIS	8/12/20	Nursery	0.02	--	N/A	N/A	0.0006	N/A	829
	8/20/20		0.014	--	N/A	N/A		N/A	
	8/21/20		0.04	--	N/A	N/A		N/A	
	9/3/20		0.02	--	N/A	N/A		N/A	
	9/17/20	Strawberry	--	6.43	N/A	N/A		N/A	
	6/18/20	Strawberry	--	14.4	N/A	N/A		N/A	
	10/1/20	Nursery	0.04	--	N/A	N/A		N/A	
	10/6/20		0.02	--	N/A	N/A		N/A	
	10/8/20		0.099	--	N/A	N/A		N/A	
	10/29/20		0.026	--	N/A	N/A		N/A	
	11/5/20		0.02	--	N/A	N/A		N/A	
	11/8/20		0.013	--	N/A	N/A		N/A	
	11/10/20		0.158	--	N/A	N/A		N/A	
	11/16/20		0.38	--	N/A	N/A		N/A	
	12/16/20		0.04	--	N/A	N/A		N/A	
	12/18/20		0.04	--	N/A	N/A		N/A	
	12/27/20		0.079	--	N/A	N/A		N/A	
	12/29/20		0.079	--	N/A	N/A		N/A	
	12/30/20		0.04	--	N/A	N/A		N/A	
	1/12/21		0.04	--	N/A	N/A		N/A	
	2/19/21		0.04	--	N/A	N/A		N/A	
	3/7/21		0.0001	--	N/A	N/A		N/A	
	3/30/21		0.0001	--	N/A	N/A		N/A	
	4/27/21		0.020	--	N/A	N/A		N/A	

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	5/11/21		0.020	--	N/A	N/A		N/A	
	8/18/21		0.273	--	N/A	N/A		N/A	
	8/28/21		0.250	--	N/A	N/A		N/A	
	9/21/21		0.273	--	N/A	N/A		N/A	
CIHD_DORIS	9/24/21	Nursery	0.040	--	N/A	N/A	0.0006	N/A	829
	9/29/21		0.175	--	N/A	N/A		N/A	
	9/30/21		0.04	--	N/A	N/A		N/A	
	10/23/21		0.01	--	N/A	N/A		N/A	
	11/1/21	Artichoke	0.315	--	N/A	N/A		N/A	
	11/10/21	Strawberry	--	14.492	N/A	N/A		N/A	
	11/11/21	Nursery	0.02	--	N/A	N/A		N/A	
	11/30/21	Artichoke	0.175	--	N/A	N/A		N/A	
	12/4/21	Strawberry	--	14.492	N/A	N/A		N/A	
	12/21/21	Artichoke	0.273	--	N/A	N/A		N/A	
	2/21/22	Artichoke	0.370	--	N/A	N/A		N/A	
	2/22/22	Nurser	0.099	--	N/A	N/A		N/A	
	4/9/22		0.059	--	N/A	N/A		N/A	
	4/21/22		0.047	--	N/A	N/A		N/A	
	4/22/22		0.04	--	N/A	N/A		N/A	
	5/5/222	Strawberry	--	2.574	N/A	N/A		N/A	
	5/7/22	Strawberry	--	11.012	N/A	N/A		N/A	
	5/11/22	Blackberry	0.294	--	N/A	N/A		N/A	
	5/18/22	Raspberry	--	0.015	N/A	N/A		N/A	
	5/21/22	Strawberry	0.083	--	N/A	N/A		N/A	
	5/21/22		--	0.75	N/A	N/A		N/A	
	5/24/22		--	1.731	N/A	N/A		N/A	
	5/27/22		0.419	--	N/A	N/A		N/A	
	5/27/22		--	22.086	N/A	N/A		N/A	

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	5/30/22	Nurser	0.119	--	N/A	N/A		N/A	
	6/20/22		0.079	--	N/A	N/A		N/A	
	6/27/22		0.079	--	N/A	N/A		N/A	
	7/11/22		0.079	--	N/A	N/A		N/A	
CIHD_DORIS	7/13/22	Blackberry	0.048	--	N/A	N/A	0.0006	N/A	829
	8/1/22	Nursery	0.059	--	N/A	N/A		N/A	
	8/44/22		0.059	--	N/A	N/A		N/A	
	8/26/22		0.059	--	N/A	N/A		N/A	
	8/29/22		0.020	--	N/A	N/A		N/A	
	9/29/22	Blackberry	--	0.237	N/A	N/A		N/A	
	10/2/22	Nursery	0.059	--	N/A	N/A		N/A	
	10/22/22	Strawberry	--	3.300	N/A	N/A		N/A	
	10/27/22	Nursery	0.020	--	N/A	N/A		N/A	
	11/23/22	Strawberry	--	21.15	N/A	N/A		N/A	
	12/22/22	Nursery	0.040	--	N/A	N/A		N/A	
	12/25/22		0.020	--	N/A	N/A		N/A	
	1/26/23		0.059	--	N/A	N/A		N/A	
	1/28/23		0.040	--	N/A	N/A		N/A	
	2/6/23	Strawberry	--	3.3	N/A	N/A		N/A	
	2/18/23	Nursery	0.079	--	N/A	N/A		N/A	
	3/17/23		0.0001	--	N/A	N/A		N/A	
	4/6/23		0.079	--	N/A	N/A		N/A	
	4/11/23		0.040	--	N/A	N/A		N/A	
	5/13/23	Strawberry	--	12.75	N/A	N/A		N/A	
	5/18/23	Nursery	0.020	--	N/A	N/A		N/A	
	6/1/23	Strawberry	--	1.436	N/A	N/A		N/A	
	6/2/23	Strawberry	--	12.75	N/A	N/A		N/A	
	6/3/23	Strawberry	--	4.341	N/A	N/A		N/A	

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	6/15/23	Blackberry	0.093	--	N/A	N/A		N/A	
	6/16/23	Blackberry	0.063	--	N/A	N/A		N/A	
	6/17/23	Strawberry	--	0.665	N/A	N/A		N/A	
05T_HONDO[2]	N/A	N/A	N/A	N/A	12/28/20	Wet	0.0006	0.0229	3,927
	N/A	N/A	N/A	N/A	12/11/22	Wet		0.0034	
04D_ETTG[2]	N/A	N/A	N/A	N/A	12/28/20	Wet	0.0006	0.00496	3,376
	N/A	N/A	N/A	N/A	1/29/21	Wet		0.00476	
	N/A	N/A	N/A	N/A	10/26/21	Wet		0.00268	
	N/A	N/A	N/A	N/A	12/14/21	Wet		0.154	
	N/A	N/A	N/A	N/A	11/9/22	Wet		0.00144	
	N/A	N/A	N/A	N/A	12/11/22	Wet		0.00992	
	N/A	N/A	N/A	N/A	5/30/23	Dry		0.000758	
01T_ODD3_EDI	N/A	N/A	N/A	N/A	12/28/20	Wet	0.0006	0.00692	643
	N/A	N/A	N/A	N/A	1/29/21	Wet		0.00253	
	N/A	N/A	N/A	N/A	11/9/22	Wet		0.000783	
	N/A	N/A	N/A	N/A	12/11/22	Wet		0.00453	
	N/A	N/A	N/A	N/A	5/30/23	Dry		0.00064	
04D_LAS[2]	N/A	N/A	N/A	N/A	12/28/20	Wet		0.00237	1,339
	N/A	N/A	N/A	N/A	12/11/22	Wet		0.00396	
	N/A	N/A	N/A	N/A	5/30/23	Dry		0.00274	
06T_LONG2[2]	N/A	N/A	N/A	N/A	12/28/20	Wet	0.0006	0.00296	2,813
	N/A	N/A	N/A	N/A	12/1122	Wet		0.00152	
S02T_ELLS	N/A	N/A	N/A	N/A	12/28/2020	Wet	0.0006	0.00238	9,027
	N/A	N/A	N/A	N/A	1/29/2021	Wet		0.0122	
	N/A	N/A	N/A	N/A	10/25/2021	Wet		0.00714	
	N/A	N/A	N/A	N/A	12/11/2022	Wet		0.0222	
S02T_TODD[2]	N/A	N/A	N/A	N/A	1/29/221	Wet	0.0006	0.00107	5,747

Site Application Information					Site Exceedance Information				
Site	Date	Crop	Active Ingredient (gal)	Active Ingredient (lbs)	Date Benchmark Exceeded	Event Type	Benchmark (µg/L)	Exceedance Conc. (µg/L)	Drainage Area (acres)
	N/A	N/A	N/A	N/A	12/11/22	Wet		0.0808	
S03T_TIMB[2]	N/A	N/A	N/A	N/A	12/28/20	Wet	0.0006	0.000885	2,183
S04T_TAPO	N/A	N/A	N/A	N/A	1/29/2021	Wet	0.0006	0.00341	3,654
	N/A	N/A	N/A	N/A	12/11/22	Wet		0.0228	

1. Bifenthrin applications within a drainage area is not indicative of an exceedance. There were many instances where bifenthrin was applied in the drainage area with no exceedance.
2. This site is no longer part of the VCAILG monitoring program per the 2024 VCAILG MRP/QAPP.

Schedule

In the previous section, an analysis of exceedances, associated MPs and current adoption rates were used to assess whether additional implementation of specific MPs is needed. TMDL-specific MPs specified in the Ag Order were also added, where appropriate. However, TMDLs serve as the main driver of near-term MP implementation, as most TMDL compliance dates have passed. Regional Board confirmed exceedances of TMDL-associated water quality benchmarks trigger discharge limitations for those properties in the RA(s) represented by the monitoring site where the exceedance occurred. When discharge limitations are triggered, compliance is achieved through either Track 1 – individual Monitoring and Reporting Plans or Track 2 – on-farm Management Practice Plans. Both tracks necessitate MP implementation to the degree necessary to meet water quality benchmarks (or confirmation through monitoring that a property is achieving benchmarks). The following table, organized by RA, lists the applicable TMDL constituent categories, each TMDL compliance date, and due dates for Track 2 MPPs. Due dates for Track 1 MRPs are dependent upon when VCAILG members are notified that discharge limitations are triggered. Following Table 218 is a summary table of the RAs that have received TMDL discharge limitation notifications and are in the process of implementing Track 1 or Track 2 compliance pathways. The information provided also includes detailed timelines based on the notification dates, which will drive MP implementation in the near-term.

Table 218. Responsibility Areas with Constituent Categories Addressed by a TMDL and Associated Deadlines

Watershed	Responsibility Area	TMDL Constituent Category [1]	TMDL Compliance Date	MPP Due Date (per VCAILG 2024 MRP using new RAs) [2]	Diversified Socially Disadvantaged Grower MPP Due Date (per VCAILG 2024 MRP using new RAs)
Calleguas Creek	**Lower Revolon**	Nutrients	06/16/2010	01/15/2028	01/15/2029
		Toxicity & Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Legacy Pesticides and PCBs	03/24/2026		
	Lower Calleguas Creek	Nutrients	06/16/2010	01/15/2028	01/15/2029
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Legacy Pesticides and PCBs	03/24/2026		
	Mugu Lagoon	Nutrients	06/16/2010	01/15/2028	01/15/2029
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se [6]	03/26/2022		
		Legacy Pesticides and PCBs	03/24/2026		
	Oxnard Drain #3	Nutrients	06/16/2010	05/15/2028	05/15/2029
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se [6]	03/26/2022		
		Legacy Pesticides and PCBs	04/14/2026		
	Arroyo Simi	Nutrients	06/16/2010	09/15/2025	09/15/2025
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se [6]	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		
	Upper Conejo	Nutrients	06/16/2010	01/15/2026	01/15/2027
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		

Watershed	Responsibility Area	TMDL Constituent Category [1]	TMDL Compliance Date	MPP Due Date (per VCAILG 2024 MRP using new RAs) [2]	Diversified Socially Disadvantaged Grower MPP Due Date (per VCAILG 2024 MRP using new RAs)
Calleguas Creek	**Lower Las Posas**	Nutrients	06/16/2010	05/15/2027	05/15/2028
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		
	Calleguas-Howard	Nutrients	06/16/2010	01/15/2028	01/15/2029
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		
	Calleguas-CSU	Nutrients	06/16/2010	01/15/2028	01/15/2029
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		
	Upper Las Posas	Nutrients	06/16/2010	09/15/2026	09/15/2027
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se [6]	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		
	Lower Conejo	Nutrients	06/16/2010	01/15/2026	01/15/2027
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		
	Beardsley Wash	Nutrients	06/16/2010	05/15/2026	05/15/2027
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		
	East Camarillo Hills	Nutrients	06/16/2010	05/15/2026	05/15/2027
		Toxicity and Current Pesticides	03/24/2016		
		Metals and Se	03/26/2022		
		Salts	12/23/2023		
		Legacy Pesticides and PCBs	03/24/2026		

Watershed	Responsibility Area	TMDL Constituent Category [1]	TMDL Compliance Date	MPP Due Date (per VCAILG 2024 MRP using new RAs) [2]	Diversified Socially Disadvantaged Grower MPP Due Date (per VCAILG 2024 MRP using new RAs)
Santa Clara River	**SCR Reach 5**	Nutrients	03/23/2004	05/15/2025	05/15/2026
		Bacteria	03/21/2023 (dry) 03/21/2029 (wet)		
		Chloride [3]	10/14/2020		
	Tapo Canyon	Nutrients	03/23/2004	09/15/2024	09/15/2025
		Chloride [3]	10/14/2020		
	Santa Paula-Fillmore	Nutrients	03/23/2004	01/15/2025	01/15/2026
		Bacteria	03/21/2023 (dry) 03/21/2029 (wet)		
	Bardsdale	Nutrients	03/23/2004	05/15/2025	05/15/2026
		Bacteria	03/21/2023 (dry) 03/21/2029 (wet)		
	Saticoy	Nutrients	03/23/2004	01/15/2028	01/15/2029
		Legacy Pesticides	10/07/2025		
	Lower Santa Clara River	Nutrients	03/23/2004	09/15/2027	09/15/2028
	McGrath Central Ditch	Nutrients	03/23/2004	05/15/2024	05/15/2025
		Legacy Pesticides and PCBs	06/30/2021		
	SCR-Victoria and Gonzales	Nutrients	03/23/2004	05/15/2024	05/15/2025
		Legacy Pesticides and PCBs [4]	06/30/2021 10/07/2025		
	McGrath Lake Adjacent	Legacy Pesticides and PCBs	06/30/2021	05/15/2024	05/15/2025
Ventura River	**Ventura River Milling Rd.**	Nutrients	06/28/2019	09/15/2024	09/15/2025
	Lower Ventura River	Nutrients	06/28/2019	01/15/2027	01/15/2028
	Ventura River Inland	Nutrients	06/28/2019	01/15/2027	01/15/2028
	San Antonio Creek	Nutrients	06/28/2019	05/15/2027	05/15/2028
Malibu Creek	**Malibu**	Nutrients	10/14/2022	05/15/2026	05/15/2027
	Malibu-Las Virgenes	Nutrients and Sedimentation [5]	10/14/2022	05/15/2026	05/15/2027
Ventura Coastal	**Ventura Coastal**	NA	NA	NA	NA
Oxnard Coastal	**Oxnard Coastal-Oxnard Drain #3**	Legacy Pesticides and PCBs	04/14/2026	05/15/2028	05/15/2029
	Oxnard Coastal	NA	NA	NA	NA

1. Trash TMDLs are not included in this table because compliance is demonstrated a Minimum Frequency of Assessment and Collection (MFAC) Program. On-farm trash management MPs are discussed at outreach and education trainings that include water quality results and MP topics.
2. If landowners are notified that discharge limitations have been triggered less than six months before the listed MPP due date, the due date will be extended to six months from the date that the member notified the Los Angeles Water Board that they will comply through Track 2.
3. In the 2020 Annual Monitoring Report, VCAILG submitted evidence of chloride at the S04T_TAPO monitoring site being from natural sources and not the result of agricultural discharges. This has been accepted by the Regional Board and additional MPs are not required to address chloride in the SCR Reach 5 and Tapo Canyon RAs.
4. Both the McGrath Lake OC Pesticides and PCBs TMDL (06/30/2021 compliance date) and the Santa Clara River Estuary Toxaphene TMDL (10/07/2025 compliance date) apply to this RA.
5. Both the Malibu Creek Watershed Sedimentation and Nutrients TMDL and Malibu Creek Nutrients TMDL apply to this RA; they have the same compliance date.
6. CCW Metals TMDL is applicable, but Ag load allocations are not identified for this subwatershed/RA.

Table 219. Responsibility Areas with Effective Discharge Limitations and their Implementation Timelines

Responsibility Area	# of Landowners (enrolled and non-enrolled) Notified	# of Enrolled Growers Notified	NOI Due Date	Track 1 MRP Due Date	Track 2 MPP Due Date	Diversified Socially Disadvantaged Grower Track 2 MPP Due Date
McGrath Central Ditch	1	1	4/12/2024	8/12/2024	5/15/2024	5/15/2025
SCR – Victoria and Gonzales	6	4	4/12/2024	8/12/2024	5/15/2024	5/15/2025
McGrath Lake Adjacent	1	1	4/12/2024	8/12/2024	5/15/2024	5/15/2025
Ventura River Milling Rd.	1	2	12/23/2024	4/23/2025	6/23/2025	6/23/2026
Arroyo Simi	88	9	4/24/2025	8/24/2025	10/24/2025	10/24/2026
Lower Revolon	39	14	4/24/2025	8/24/2025	1/15/2028	1/15/2029
Mugu Lagoon	56	25	4/24/2025	8/24/2025	1/15/2028	1/15/2029
Oxnard Drain #3	15	9	4/24/2025	8/24/2025	5/15/2028	5/15/2029
Upper Conejo	104	21	4/24/2025	8/24/2025	1/15/2026	1/15/2027
Lower Conejo	21	3	4/24/2025	8/24/2025	1/15/2026	1/15/2027
Total	***332***	***89***	-	-	-	-

The following table provides proposed additional or updated management practices consistent with Section 2.2d. of Ag Order Appendix 3. Specifically, 2.2.d states "…A time-certain schedule that is as short as possible, but in no case more than 10 years, for implementation of additional or upgraded management practices to ultimately attain water quality benchmarks, unless otherwise specified in Table 3." Table 3 refers to the TMDL compliance dates, which can also be found in the table above. This table is meant to be an abbreviated reference for all RAs, whereas the RA specific tables of MPs for additional implementation are specific as to which MPs could be expanded to improve water quality. To convey this information to VCAILG members, Ag Order Compliance Summaries have been developed for each RA that provide an overall explanation and summary of the actions necessary for compliance with the *Ag Order* including TMDL discharge limitations, where applicable, and MP implementation. The Compliance Summaries are included in this WQMP as Appendix E.

The target adoption rates for MPs are provided in the following table and the MPs are grouped into two broad categories:

1. Source control MPs (survey questions in the irrigation and salinity management, nutrient management, and pest management categories)
2. Structural MPs (survey questions in the sediment management and runoff management/treatment categories)

While there is wide adoption of most source control MPs, implementation goals for these types of practices are still included since maintaining very high implementation rates of source control are a first line of defense in preventing pollutant transport and they minimize the need for structural or more costly practices. However, even with high reported adoption, there is still opportunity to improve the effectiveness of source control practices. The binary nature of certain Farm Evaluation Survey questions can capture whether a practice is in place, but not how well it is being implemented or its relative effectiveness. Structural MPs are required to be part of both the WQMP and farm-level MPPs produced under Track 2. With a number of TMDLs being past their compliance date and notifications of discharge limitations being in effect for eleven RAs[5], we expect to see implementation of structural MPs increase significantly within the next five years. For RAs that require additional MP implementation, in this WQMP we are setting the target adoption rate for structural MPs at 50% when there is a TMDL that is being exceeded. These implementation goals may be adjusted in future WQMPs as we receive updated Farm Evaluation data, which will capture Track 2 farm-level MPP implementation and compare that to changes in water quality monitoring results. Structural MP implementation goals for standard water quality benchmark exceedances (denoted by having a 2035 compliance date in the table below to align with the ten-year implementation strategy) are variable by RA and explained in corresponding table footnotes.

The table below summarizes the exceedance categories requiring MPs for each responsibility area along with the compliance date and adoption rates for source control and structural MPs. This table considers the "Summary of Benchmark Exceedance Evaluation" table produced for each RA; additional TMDL specific MP implementation may be necessary per the previous table and any TMDL discharge limitation notifications.

For completeness and reference, the *Ag Order* specified MPs in Appendix 3, Section 2.2.a are as follows:

"For exceedances of water quality benchmarks for nutrients, the WQMP must specify the following types of management practices:

- *Improved irrigation efficiency to reduce runoff*
- *Treatment systems or control systems, such as bioreactors, to remove nitrogen from discharges*
- *Practices to reduce erosion and sediment in runoff*
- *Vegetated practices, such as riparian buffers and vegetated channels*

For exceedances of water quality benchmarks for historic pesticides and their degradation products, such as DDT, DDE, chlordane, and dieldrin, the WQMP must specify the following types of management practices:

- *Improved irrigation efficiency to reduce runoff*
- *Practices to reduce erosion and sediment in runoff*
- *Stormwater runoff filtration and/or infiltration*
- *Vegetated practices, such as riparian buffers and vegetated channels*

For exceedances of water quality benchmarks for copper and current use pesticides, such as diazinon, and pyrethroids the WQMP must specify the following types of management practices:

[5] At this time TMDL exceedance notifications that discharge limitations are in effect and VCAILG members must select to comply via Track 1 or 2 have gone out to the following RAs: McGrath Central Ditch, SCR-Victoria and Gonzales, McGrath Lake Adjacent, Ventura River Milling Rd., Arroyo Simi, Lower Revolon, Mugu Lagoon, Oxnard Drain #3, Upper Conejo, and Lower Conejo. Discharge limitations were also triggered for Malibu-Las Virgenes, however at this time there are no VCAILG members operating within that RA.

- *Pesticide management plans*
- *Improved irrigation efficiency to reduce runoff*
- *Practices to reduce erosion and sediment in runoff*
- *Stormwater runoff filtration and/or infiltration*
- *Vegetated practices, such as riparian buffers and vegetated channels*
- *Because source reduction and non-structural management practices have already been fully or nearly fully implemented by all members in the land area draining to the monitoring site, the WQMP must specify implementation of structural/treatment management practices."*

Additional TMDL-specific management practices are included in *Ag Order* Appendix 3, Section 2.2.b. to be implemented to the degree appropriate to achieve the LAs and a general directive is contained in the following Section 2.2.c; both are as follows:

- *"For the McGrath Lake OC Pesticides and PCBs TMDL, practices to reduce sediment runoff and improve irrigation efficiency on individual farms and reduce sediment runoff in the Central Ditch*
- *For the Santa Clara River Estuary Toxaphene TMDL, practices to reduce sediment runoff and improved irrigation efficiency*

c. For irrigated agricultural areas that are subject to erosion and may discharge sediment that may degrade surface waters, the WQMP must specify sediment and erosion control management practices."

Table 220. MP Implementation Schedule for Responsibility Areas with Water Quality Benchmark Exceedances

Responsibility Area	Constituent Category for Benchmark Exceedance(s)	Compliance Date	MP Adoption Rate Goals for Source Control MPs	MP Adoption Rate Goals for Structural MPs
Arroyo Simi	Nutrients	7/16/2010	98%	50%
	Legacy Pesticides	3/24/2026	NA	50%
	Current Pesticides	3/24/2016	98%	50%
Upper Conejo	Nutrients	7/16/2010	98%	50%
	Legacy Pesticides	3/24/2026	NA	50%
	Current Pesticides	3/24/2016	98%	50%
Lower Conejo	Nutrients	7/16/2010	98%	50%
	Legacy Pesticides	3/24/2026	NA	50%
	Current Pesticides	3/24/2016	98%	50%
Calleguas-Howard [1]	NA	NA	NA	NA
Lower Las Posas	Nutrients	7/16/2010	98%	50%
	Legacy Pesticides	3/24/2026	NA	50%
Calleguas-CSU [1]	NA	NA	NA	NA
Upper Las Posas	Nutrients	7/16/2010	98%	50%
	Legacy Pesticides	3/24/2026	NA	50%
East Camarillo Hills	Bacteria	2035	98%	[3]
	Metals	3/26/2022	98%	50%
	Legacy Pesticides	3/24/2026	98%	50%
	Current Pesticides	3/24/2016	98%	50%
Lower Revolon	Metals	3/26/2022	98%	50%
	Legacy Pesticides	3/24/2026	98%	50%
	Current Pesticides	3/24/2016	98%	50%
Beardsley Wash	Bacteria	2035	98%	[3]
	Metals	3/26/2022	98%	50%

Responsibility Area	Constituent Category for Benchmark Exceedance(s)	Compliance Date	MP Adoption Rate Goals for Source Control MPs	MP Adoption Rate Goals for Structural MPs
	Legacy Pesticides	3/24/2026	98%	50%
	Current Pesticides	3/24/2016	98%	50%
Lower Calleguas Creek [1]	NA	NA	NA	NA
Mugu Lagoon	Nutrients	7/16/2010	98%	50%
	Metals	2035	98%	[3]
	Legacy Pesticides	3/24/2026	98%	50%
	Current Pesticides	3/24/2016	98%	50%
Oxnard Drain #3	Metals	2035	98%	[3]
	Nutrients	2035	98%	[3]
	Legacy Pesticides	4/14/2026	98%	50%
	Current Pesticides	2035	98%	[3]
	Sediment Toxicity	4/14/2026	98%	50%
Oxnard Coastal-Oxnard Drain #3	Metals	2035	98%	[3]
	Nutrients	2035	98%	[3]
	Legacy Pesticides	4/14/2026	98%	50%
	Current Pesticides	2035	98%	[3]
	Sediment Toxicity	2035	98%	[3]
Malibu	Bacteria	2035	98%	35% [4]
	Metals	2035	98%	35% [4]
	Legacy Pesticides	2035	98%	35% [4]
	Current Pesticides	2035	98%	35% [4]
Malibu-Las Virgenes	Bacteria	2035	98%	[3]
	Metals	2035	98%	[3]
	Nutrients	10/14/2022	98%	50%

Responsibility Area	Constituent Category for Benchmark Exceedance(s)	Compliance Date	MP Adoption Rate Goals for Source Control MPs	MP Adoption Rate Goals for Structural MPs
	Legacy Pesticides	2035	98%	[3]
	Current Pesticides	2035	98%	[3]
Santa Clara River Reach 5	Bacteria	3/21/2023 dry 3/21/2029 wet	98%	50%
	Salts [2]	-	-	-
	Legacy Pesticides	2035	98%	[3]
	Current Pesticides	2035	98%	[3]
Tapo Canyon	Bacteria	2035	98%	35% [4]
	Salts [2]	-	-	-
	Legacy Pesticides	2035	98%	35% [4]
	Current Pesticides	2035	98%	35% [4]
Santa Paula-Fillmore	Nutrients	3/23/2004	98%	50%
	Salts	2035	98%	[3]
	Current Pesticides	2035	98%	[3]
Bardsdale	Bacteria	3/21/2023 dry 3/21/2029 wet	98%	50%
	Nutrients	3/23/2004	98%	50%
	Legacy Pesticides	2035	98%	[3]
	Current Pesticides	2035	98%	[3]
Saticoy	Bacteria	2035	98%	[3]
	Nutrients	3/23/2004	98%	50%
	Salts	2035	98%	[3]
	Legacy Pesticides	10/7/2025	98%	50%
	Current Pesticides	2035	98%	[3]
Lower Santa Clara River	Bacteria	2035	98%	[3]
	Salts	2035	98%	[3]

Responsibility Area	Constituent Category for Benchmark Exceedance(s)	Compliance Date	MP Adoption Rate Goals for Source Control MPs	MP Adoption Rate Goals for Structural MPs
	Nutrients	3/23/2004	98%	50%
	Legacy Pesticides	2035	98%	[3]
	Current Pesticides	2035	98%	[3]
McGrath Central Ditch	Nutrients	3/23/2004	98%	50%
	Legacy Pesticides	6/30/2021	98%	50%
McGrath Lake Adjacent	Legacy Pesticides	6/30/2021	98%	50%
Santa Clara River-Victoria and Gonzales	Nutrients	3/23/2004	98%	50%
	Legacy Pesticides	6/30/2021 and 10/7/2025	98%	50%
Lower Ventura River [1]	NA	NA	NA	NA
Ventura River Inland [1]	NA	NA	NA	NA
Ventura Coastal	NA	NA	NA	NA
San Antonio Creek [1]	NA	NA	NA	NA
Ventura River Milling Rd. [1]	NA	NA	NA	NA
Oxnard Coastal	NA	NA	NA	NA

1. There were no benchmark exceedances triggering graphs for this RA. However, there are effective TMDLs that apply and VCAILG members should consider MPs to ensure TMDL compliance.
2. Chloride exceedances are due to natural sources and do not TMDL discharge limitations. Ag Order benchmark exceedances were found for TDS and sulfate in addition to chloride. However, these are also likely due to the geology of the area.
3. Structural MPs implemented for TMDLs with exceedances in this RA will also address this constituent category. No additional goal needed.
4. A lower structural MP adoption rate goal is set for this RA due to the later compliance date. Adjustments may be made in future WQMPs.

Outreach Plan

A comprehensive outreach strategy for VCAILG members is key to greater implementation and adoption of management practices (MPs) throughout Ventura County. Ag Order, Appendix 3, section 2.3 states that the "WQMP shall include a strategy for communicating to members the need to implement additional or upgraded management practices. The outreach shall be culturally relevant and offered in appropriate languages. For each monitoring site:

- Provide regular communication (a minimum of twice per year) to members alerting them of additional and upgraded management practice requirements specific to their monitoring site/responsibility area or TMDL watershed as specified in Section 2.2.
- Provide education classes, referrals to technical assistance providers, and notices of available funding to members, targeting the constituents specific to their monitoring site/responsibility area or TMDL watershed as specified in Section 2.2."

COMMUNICATIONS

A variety of communication methods will be utilized to educate members about the water quality conditions specific to their areas, targeted MPs needed to meet benchmarks, TMDL compliance requirements, and other Ag Order requirements to maintain compliance (e.g. irrigation and nutrient management planning). Outreach materials, where possible, will be either crop or location-specific in nature and prepared in electronic, paper and Spanish versions to reach the widest range of members.

- VCAILG e-Mail News and Announcements: Electronic communications is the most efficient method to keep members well informed. With a distribution list of over 1,400 emails, the VCAILG e-Mail News and Announcements will be sent bi-monthly, at a minimum, and cover current topics important to the program including upcoming educational sessions, MP technical and funding resources, general upcoming deadlines, and recent program activities. This method of communication will be used when the content is broadly applicable to VCAILG members.
- Traditional Avenues: An annual newsletter will also be published to engage membership without access to electronic media.
- Website: VCAILG will continue to update, link and expand information, reports and resources on the Farm Bureau of Ventura County website, which was recently enhanced to include a mobile-friendly version. The VCAILG section of the Farm Bureau website is located here: https://www.farmbureauvc.com/vcailg/ and includes information related to VCAILG and Ag Order compliance.
- Targeted e-Mails: Subsets of the VCAILG membership will be emailed directly, particularly when conveying specific information pertaining to reporting obligations and deadlines and RA-specific TMDL compliance obligations.
- Clearwater by VCAILG: This is the membership management platform VCAILG developed to manage VCAILG membership, assign responsibilities between landowners and growers, support Irrigation and Nutrient Management Plan/Report data, receive Farm Evaluation Survey data, and provide resources for TMDL discharge limitation compliance (e.g. electronic Track 1 or 2 NOI selection forms, compliance dates, document repository, etc.).
- Outreach and Education Meetings: Outreach and education meetings are required to provide opportunities for VCAILG members to complete the requisite 2-hours of education training per year. In many cases, these meetings are recorded and can be found linked on the Farm Bureau of Ventura County website or on the Farm Bureau of Ventura County YouTube channel.

Combinations of all of the afore-mentioned communication approaches will be used as part of the VCAILG outreach program, however emphasis will be placed on the VCAILG webpage and

Clearwater, as all forms of communication will direct farmers to these locations for more detailed information. The VCAILG webpage can be found here: https://www.farmbureauvc.com/vcailg/ and contains the following:

- A landing page with Conditional Waiver/Ag Order background information, information and link to Clearwater, link to the WQMP webpage, VCAILG enrollment information, VCAILG contact information, links to relevant program documents and reports, and a compilation of FAQs.
- Additional pages that are linked to from the VCAILG main page include:
    - Water Quality Management Plan – this summarizes the WQMP and includes resources and materials developed as part of the currently approved WQMP (updated upon approval of subsequent plans).
    - Nitrogen Management Planning – this page summarizes the INMP and INMR requirements and links to the templates, documents, training resources, and tools in Spanish and English.
    - Education – list of education opportunities.
    - TMDLs – overview of TMDLs and includes related documents/reports.
    - MP Resources – video resources in Spanish and English as well as links and contacts to assisting agencies and MP information.
    - Grant Funding – links to contacts and grant webpages that offer assistance to Ventura County growers.

EDUCATION

Workshop and other educational opportunities will be conducted to provide sufficient opportunities for all members to fulfill their requirements and gain greater understanding of water quality goals in their specific areas. Educational opportunities with a focus on the following areas:

- **MP Implementation** – The focus of these workshops includes a summary of Ag Order requirements, a review of water quality impairments specific to each watershed or responsibility area, an overview of the RA handouts and other resources available to VCAILG members, a review of RA-specific MPs and how best to implement them in the field. These workshops are typically offered in-person and virtual. The resources available to VCAILG members are also available online for future reference. In addition, technical resources and funding opportunities will be covered.
- **Nutrient Management** – This second category of education will emphasize nutrient management, including both self-certification workshops to assist members in developing nutrient management plans and refresher trainings for those who are already self-certified. The self-certification workshops will continue to follow the CDFA FREP program guidelines. This robust program is offered in English and Spanish as well as in-person and online.
- **Ongoing Education Partnerships** - VCAILG will continue to partner with the Ventura County Resource Conservation District, the USDA Natural Resources Conservation Service, the University of California Cooperative Extension, California Department of Food and Agriculture Fertilizer Research and Education Program (CDFA FREP), and other related organizations to provide ongoing and more specialized opportunities to educate members about a wide range of relevant topics.

TARGETED OUTREACH

Targeted outreach is especially important when notifying VCAILG members that TMDL discharge limitations have been triggered and they are required to comply via either Track 1 – individual Monitoring and Report Plans (MRP) or Track 2 – farm-level Management Practice Plans (MPP). Upon discharge limitation confirmation from the Regional Board, VCAILG will notify both landowners and growers in the affected RAs of these requirements along with the triggering monitoring data, milestones for compliance, and related resources. Notifications will be sent via mail and email. VCAILG members can then log into Clearwater to electronically complete a Notice of Intent (NOI) with their selection of either Track 1 or

Track 2 and track their progress in meeting the compliance milestones for either their MRP or MPP. An example discharge limitation notification package is included as Appendix F.

In addition, targeted outreach will be used to remind growers to complete their annual Farm Evaluation Survey and INMP Reporting (INMR). Reminders will be sent as deadlines approach when a submission has yet been received. These reminders will be delivered through email, mail, and phone calls, as appropriate, to help ensure compliance with Ag Order requirements.