CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

2375 Northside Drive, Suite 100, San Diego, CA 92108
Phone (619) 516-1990 • Fax (619) 516-1994
https://www.waterboards.ca.gov/sandiego/

ORDER NO. R9-2024-0029

GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM COMMERCIAL AGRICULTURAL OPERATIONS IN THE SAN DIEGO REGION

This Order applies to any person, firm, associate, organization, partnership, business trust, corporation, limited liability company, or company (collectively referred to as "Dischargers") that own an irrigated commercial agricultural operation (Operation). This Order provides Dischargers with criteria to voluntarily determine whether they must enroll their Operation(s) in this Order. Dischargers may enroll in and comply with requirements of this Order as either individuals or as members of a group, referred to as "Third-Party Groups."

This Order establishes requirements to protect water quality from waste that is found or may be found in non-stormwater runoff released (referred to as a "discharge" of waste) from eligible Operations.

This Order was adopted on: **TENTATIVE**

This Order will become effective on: **TENTATIVE**

I, Dave Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, San Diego Region, on **TENTATIVE**.

TENTATIVE
Dave Gibson, Executive Officer

TABLE OF CONTENTS

I. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), finds:

A. Legal Authorities. The San Diego Water Board is a state agency responsible for protecting surface waters and groundwaters in the San Diego Region from wastes that could affect their quality and beneficial uses. This Order serves as waste discharge requirements (WDRs), consistent with the California Water Code (Water Code) starting with section 13000. Water Code section 13263 allows the San Diego Water Board to issue WDRs without receiving a report of waste discharge and issue general WDRs for a category of wastes, if appropriate. The Fact Sheet (Attachment C) for this Order contains additional information regarding the San Deigo Water Board's legal authorities. The Fact Sheet is incorporated into and constitutes Findings for this Order.

B. Background and Rationale for Requirements. The San Diego Water Board developed the requirements in this Order because the production of crops requires disturbance of the soil and the use of various agricultural chemicals which can generate discharges of waste, such as nutrients, pesticides, herbicides, fumigants, pathogens, and sediment. If not properly managed, these discharges can degrade water quality, cause or contribute to pollution and nuisance conditions, and adversely affect beneficial uses in surface waters and/or groundwaters[1] in the San Diego Region. The prohibitions and requirements of this Order are intended to ensure the discharge of wastes from Operations are properly managed to protect, maintain, and improve water quality and prevent impairment of beneficial uses in surface waters and/or groundwaters within the San Diego Region. The Fact Sheet for this Order contains additional information regarding the background and rationale for the requirements in this Order.

C. Eastern San Joaquin Precedential Order. The State Water Resources Control Board (State Water Board) adopted Order WQ 2018-0002, *In the Matter of Review of Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin River Watershed that are Members of*

[1] This Order uses the term "surface waters and/or groundwaters" when referring to waters of the State, which is defined in Water Code, section 13050(e).

the Third-Party Group (ESJ Order)[2] at a public hearing, on February 7, 2018. The ESJ Order establishes guidance to all regional water boards to reduce pollutants from irrigated agriculture around the state. The ESJ Order directs the regional water boards to revise their respective irrigated lands regulatory program (ILRP) orders to be consistent with certain precedential requirements in the ESJ Order. This Order complies with the State Water Board's directives. The Fact Sheet for this Order contains additional information on how this Order incorporates the ESJ Order requirements.

D. Environmental Justice. Dischargers regulated by this Order may be in or upstream of one or more disadvantaged communities and could potentially discharge waste that could impact those communities. The San Diego Water Board considered environmental justice, tribal impacts, and racial equity during the development and adoption of this Order, in accordance with Water Code section 13149.2 and Assembly Bill No. 2108 (AB 2108). The main impacts from irrigated agriculture in the San Diego Region that may affect disadvantaged communities and Tribal Nations are: (1) nitrate discharges to groundwater and associated drinking water impacts, (2) nutrient discharges (including nitrogen and phosphorus) to surface waters which may lead to harmful algal blooms, (3) pesticide discharges to surface waters that may lead to toxicity issues, and (4) sediment discharges to surface waters that may negatively impact aquatic life. This Order addresses the health, environmental, and social costs associated with the discharge of agricultural waste by: (1) prohibiting non-stormwater discharges that may cause or contribute to a condition of pollution or nuisance in surface waters and/or groundwaters, and (2) establishing best management practice (BMP) requirements that Dischargers must implement at their Operation(s) to prevent the discharge of waste.

The San Diego Water Board will work with the State Water Board's Office of Public Participation's Translation Services to translate this Order into Spanish after adoption to improve regulatory accessibility and address racial inequities. This action supports the goals of the State Water Board's Resolution No. 2021-0050, *Condemning Racism, Xenophobia, Bigotry, and Racial Injustice and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and*

[2] The ESJ Order can be found at the following link: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2018/wqo2018_0002_with_data_fig1_2_appendix_a.pdf.

Anti-Racism (Racial Equity Resolution)[3] and Chapter 4 - *Implement Racial Equity and Environmental Justice Measures* of the San Diego Water Board Practical Vision.[4]

E. Climate Change. Research indicates that the main cause of climate change is human emissions of greenhouse gases (GHGs), typically carbon dioxide, methane, and nitrous oxide. These GHGs come from a variety of human activities, including burning fossil fuels for heat and energy, clearing forests, fertilizing crops, storing waste in landfills, raising livestock, and producing some industrial products. Increased carbon dioxide in the atmosphere may lead to more erratic rainfall and longer periods of drought. The increased rainfall and compacted soil caused by drought may increase the potential for waste, including sediment and chemicals, to discharge off agricultural operations due to the greater amount of stormwater runoff.

Trees, plants, and other photosynthetic organisms mitigate human emissions by using carbon dioxide in photosynthesis to produce biomass. Larger plants will not only store more carbon due to their greater biomass, but also sequester it into a form that is harder to breakdown.[5] These same plants can also mitigate runoff from larger storm events by decreasing rainfall intensity through canopy covers, holding soils in place with root systems, and taking up water as part of photosynthesis. The grounds of agricultural operations also provide an opportunity to manage climate change impacts. Soil carbon provides a source of nutrients through mineralization, helps to prevent erosion by holding the soil in place, increases microbial activity, and increases water storage and availability to plants. Ultimately, increasing soil carbon levels can lead to better plant establishment and growth. Agricultural practices that increase soil organic matter are supportive of enhanced food production, increased biodiversity, enhanced water retention and drought resistance, and other important ecosystem services.

---

[3] Link to the State Water Board's Racial Equity Resolution: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2021/rs2021_0050.pdf.

[4] Link to the San Diego Water Board Practical Vision: https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision/docs/practicalvision_2021_final_09082021.pdf

[5] Putting Carbon back where it belongs – the potential of carbon sequestration in the soil: https://wedocs.unep.org/bitstream/handle/20.500.11822/28453/Foresight013.pdf?sequence=1&isAllowed=y.

This Order addresses the impact of climate change by requiring Dischargers to implement BMPs at their agricultural operations to prevent the discharge of waste with stormwater runoff.

F. Notification of Interested Parties. The San Diego Water Board notified Dischargers, interested agencies, and other persons of the release of this Order for public review and comment. Details of the notification are provided in the Fact Sheet.

G. Consideration of Public Comment. The San Diego Water Board, in a public hearing, heard and considered all comments related to this Order. Details of the public hearing are provided in the Fact Sheet.

THEREFORE, IT IS ORDERED, that Order Nos. R9-2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of a Third-Party Group in the San Diego Region*, and R9-2016-0005, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers Not Participating in a Third-Party Group in the San Diego Region* are rescinded upon the effective date of this Order except for enforcement purposes.[6] Dischargers must comply with Water Code sections 13260, 13263, and 13267 to meet the provisions of division 7 of the Water Code (commencing with section 13000) and any regulations and guidelines adopted under the authority of those provisions.

II. ELIGIBILITY, ENROLLMENT, AND FEES

A. Eligibility
(Does my agricultural operation need to be enrolled?)

A Discharger must enroll in this Order if they can answer "yes" to both of the following questions and their Operation(s) is not described in Table 1 below:

1. Do you irrigate your crop(s)?

2. Do you sell your crop(s) commercially (i.e., to wholesalers, industry cooperatives, harvest crews/companies, direct marketing locations, etc.)?

[6] The action to adopt this Order and rescind Order Nos. R9-2016-0004 and R9-2016-0005 in no way prevents the San Diego Water Board from taking enforcement actions for violations against Order Nos. R9-2016-0004 and R9-2016-0005.

Table 1: Ineligible Operations/Activities

EXCLUDED	
1	Operations cultivating cannabis.
2	Operations associated with industrial or domestic waste disposal regulated under WDRs or a National Pollutant Discharge Elimination System (NDPES) permit.
3	Operations within Areas of Biological Significance designated by the State Water Board.
4	Operations issued individual WDRs by the San Diego Water Board or enrolled in applicable statewide or regional general WDRs.
5	Operations subject to NPDES permit requirements, as provided in the Clean Water Act (CWA) section 402[7] and regulations and guidelines adopted under the authority of the CWA.
6	Operations subject to CWA sections 401[8] and 404[9], and the Water Code.
EXEMPT	
1	Agricultural activities not engaged in commercial agriculture, such as hobby growing or gardening.
2	Agricultural operations that do not use irrigation, such as dryland farming.
3	Agricultural operations where no aspects of the growing operations have the potential to discharge waste to surface waters and/or groundwaters.
4	Land used solely as an animal feeding operation, such as grazing operations.

[7] Link to section 402 of the CWA: https://www.epa.gov/cwa-404/clean-water-act-section-402-national-pollutant-discharge-elimination-system.

[8] Link to section 401 of the CWA: https://www.epa.gov/cwa-401/clean-water-act-section-401-state-certification-water-quality.

[9] Link to section 404 of the CWA: https://www.epa.gov/cwa-404/overview-clean-water-act-section-404.

B. Enrollment
(How do I enroll my agricultural operation?)

This Order allows Dischargers to enroll as an individual or as a member of a Third-Party Group. Dischargers required to enroll in this Order must submit a complete Notice of Intent (NOI) as described below and must remain enrolled or (1) submit a report of waste discharge for the development of individual WDRs or (2) submit a Notice of Termination (NOT) to the San Diego Water Board.

1. Notice of Intent

a. Dischargers with eligible Operations must submit a complete electronic Notice of Intent (eNOI) to the San Diego Water Board through the GeoTracker website.[10]

b. Dischargers choosing to become a member of a Third-Party Group must:

i. Identify which Third-Party Group services the area where their Operation is located, contact the Third-Party Group, and complete the Third-Party Group's requirements to become a member.

ii. Provide the Third-Party Group with a copy of the Notice of Applicability (NOA) provided by the San Diego Water Board, as described in section II.B.2.

c. Dischargers unable to submit the eNOI electronically must submit a complete NOI form to the San Diego Water Board. A copy of the NOI form is provided in Attachment F of this Order. Dischargers may either email the form to RB9_Ag_Order@waterboards.ca.gov or mail the NOI form to the address below:

San Diego Regional Water Quality Control Board
Attn: Ag NOI
2375 Northside Drive, Suite 100
San Diego, CA 92108

[10] The eNOI can be accessed at the following link: https://geotracker.waterboards.ca.gov/agland/default.asp.

d. Dischargers must submit a Change of Information (COI) form to the San Diego Water Board if the information provided in the Discharger's eNOI changes. Dischargers must submit the COI form to the San Diego Water Board within thirty (30) days of the change. A copy of the COI form is provided in Attachment H of this Order.

2. Notice of Applicability

San Diego Water Board staff will review and evaluate the information provided in the Dischargers' eNOI. The San Diego Water Board will issue a NOA to the Discharger if the eNOI is deemed complete and the Discharger meets the requirements for enrollment in this Order.

3. Notice of Termination

a. Dischargers who no longer meet the eligibility criteria in section II.A of this Order must submit a complete electronic Notice of Termination (eNOT) to the San Diego Water Board. Dischargers unable to submit the eNOT electronically must submit a complete NOT form to the San Diego Water Board. A copy of the NOT form is provided in Attachment G of this Order. Dischargers may either mail the NOT form to the address above in section II.B.1.c or email the form to RB9_Ag_Order@waterboards.ca.gov. San Diego Water Board staff will review and consider the request for termination of enrollment in this Order.

b. Dischargers who are members of a Third-Party Group must provide their Third-Party Group with a copy of the eNOT.

c. Dischargers who submit an eNOT must continue to comply with the requirements of this Order until they receive an eNOT acceptance letter from the San Diego Water Board. Dischargers must still pay any outstanding fees, submit any outstanding reports as described in this Order, and/or respond to any enforcement actions related to this Order after receiving the eNOT acceptance letter.

d. The San Diego Water Board may terminate a Discharger's enrollment without receiving an eNOT for reasons including but not limited to:

i. The Discharger violated any of the requirements of this Order.

ii. The San Diego Water Board determined that the Discharger is not eligible for enrollment in this Order and must apply for an individual WDR.

C. Fees
(What fees am I required to pay?)

1. Application Fees

Dischargers must submit an application fee to the State Water Board, unless the Discharger has been a member of a Third-Party Group since June 30, 2008. Dischargers who are members of a Third-Party Group must submit the application fee payment to the Third-Party Group. Dischargers enrolled as an individual must submit the application fee payment directly to the State Water Board. The application fee is a one-time fee, due along with the submittal of the eNOI. The application fee amount is established in the State Water Board's *Annual Agricultural and Irrigated Lands Fee Schedule* (Fee Schedule),[11] and can be viewed online at http://www.waterboards.ca.gov/resources/fees/water_quality/.

2. Annual Fees

Dischargers enrolled in this Order are required to pay an annual fee. Dischargers who are members of a Third-Party Group must submit their annual fee payment to the Third-Party Group. Third-Party Groups must manage the collection and payment of annual fees to the State Water Board. Dischargers enrolled as an individual must submit their annual fee payment directly to the State Water Board. The annual fee amount is established in the Fee Schedule[12] linked above.

III. DISCHARGER REQUIREMENTS
(Besides enrolling, what do I need to do?)

A. Reports

1. Water Quality Protection Plan

a. Dischargers must complete a Water Quality Protection Plan (WQPP) to identify management practices currently used at their Operation(s). Dischargers must complete a new WQPP if they change any of their management practices. Dischargers must maintain a paper or electronic copy of the WQPP at the Discharger's main Operation.

---

[11] California Code of Regulations (CCR) title 23, section 2200.6(b).

[12] CCR title 23, section 2200.6(a).

i. New Enrollees: Dischargers not previously enrolled in Order Nos. R9-2016-0004 or R9-2016-0005 must submit their WQPP form (Attachment J) within 30 days of submitting their eNOI.

ii. Existing Enrollees: Dischargers previously enrolled in Order Nos. R9-2016-0004 or R9-2016-0005 must submit a WQPP Supplemental Information form (Attachment K) within 60 days after the adoption of this Order.

b. Dischargers enrolled as a member of a Third-Party Group must submit the WQPP to the Group administrator. Dischargers enrolled as an individual must submit the WQPP to the San Diego Water Board by uploading it to their GeoTracker account.

2. Irrigation and Nitrogen Management Plan Summary Report

a. Dischargers must prepare an annual Irrigation and Nitrogen Management Plan (INMP) Summary Report, as required by the ESJ Order, using the template provided in Attachment I of this Order.

b. Dischargers enrolled as a member of a Third-Party Group must submit the annual INMP Summary Report to their Group on or before **March 1** of each year. Dischargers enrolled as an individual must submit the annual INMP Summary Report to the San Diego Water Board on or before **March 1** of each year by uploading it to their GeoTracker account.

c. Any Discharger may submit a written request to be exempt from the nitrogen reporting requirements for the San Diego Water Board Executive Officer's consideration. The request for exemption must demonstrate that nitrogen applied to the Discharger's agricultural fields does not: (1) percolate below the root zone in an amount that could impact groundwater and (2) run off to surface water through discharges, including drainage, stormwater runoff, or sediment erosion. The San Diego Water Board staff will review and consider the request for exemption. The San Diego Water Board Executive Officer will issue an approval letter if the request is deemed acceptable.

d. Dischargers must have their INMP Summary Report certified when directed by their Third-Party Group or the San Diego Water Board Executive Officer. The Discharger must certify their INMP Summary Report in one of the following ways:

i. Certified by an irrigation and nitrogen management plan specialist as referenced in the INMP Summary Report instruction sheet in Attachment I of this Order. The specialist that certifies the INMP Summary Report must be capable of answering questions relevant

to the INMP Summary Report and must be fully competent and proficient by education and experience in the field(s) relevant to the development of an INMP.

ii. Self-certified by the Discharger who attends a California Department of Food and Agriculture (CDFA) or other Executive Officer approved training program for INMP Summary Report certification. The Discharger must keep written documentation of their attendance in the training program and participate in any continuing education required by CDFA.

iii. Self-certified by the Discharger that the INMP Summary Report adheres to a site-specific recommendation from the Natural Resources Conservation Service (NRCS) or the University of California Cooperative Extension (UCCE). The Discharger must keep written documentation of the recommendation provided.

iv. Self-certified by the Discharger if the Discharger states that the Discharger applies no fertilizer to the field(s).

v. Certified in an alternative manner approved by the San Diego Water Board Executive Officer. Such approval will be provided based on the Executive Officer's determination that the alternative method for preparing the INMP Summary Report meets the requirements of this Order.

e. Additional information regarding the INMP Summary Report can be found in the Fact Sheet.

3. Record Keeping

a. Dischargers must keep records of the following information for a minimum of ten years:

- Proof of completion of annual education requirement
- INMP Summary Reports
- Monitoring results
- Inspection reports
- Soil amendment application rate calculations
- Enforcement documents
- All other relevant reports

b. The San Diego Water Board may require Dischargers to keep records for a longer period of time if the Discharger has an unresolved enforcement case regarding a discharge or if otherwise requested by the San Diego Water Board.

4. Discharge Notification

Dischargers must notify the San Diego Water Board within 24 hours of any discharge of waste from their Operation that may threaten human health or the environment.

B. Education

1. Dischargers must annually complete at least two hours of water quality education by **December 31,** as required by the ESJ Order. The water quality education should focus on water quality impairments from irrigated agricultural discharges, regulatory requirements, and/or management practices to reduce or eliminate discharges of waste to surface waters and/or groundwaters. The water quality education format can be formal classroom training, individual meetings with a qualified trainer, and/or internet-based trainings with the Farm Bureau, UCCE, NRCS, or another similar organization.

2. Dischargers enrolled as a member of a Third-Party Group must provide the Group with documentation that confirms the focus, format, duration and completion date of the annual water quality education requirement. Documentation may include, but is not limited to, certificates of completion or registration confirmation.

3. Dischargers enrolled as an individual must provide documentation to the San Diego Water Board that confirms the focus, format, duration, and completion date of the annual water quality education requirement by uploading the documentation to their GeoTracker account. Documentation may include, but is not limited to, certificates of completion or registration confirmation.

C. Best Management Practices

Dischargers must properly operate and maintain all best management practices (BMPs) and systems (i.e., irrigation systems, wastewater ponds, etc.) implemented at their Operation.

1. Stockpile Management

a. Dischargers must store stockpiled material (i.e., soil, mulch, sand, wood, manure, compost, etc.) out of the stormwater flow path and at least 100 feet away from any surface waters or stormwater channels. If Dischargers do not have space at their Operation(s) to store the stockpiles 100 feet away, then the Dischargers must store the stockpiles the farthest possible distance away from any surface waters or stormwater channels.

b. Dischargers must store stockpiled material in a manner that does not exceed the capacity of the storage area.

c. Dischargers must store stockpiled manure and compost on watertight surfaces (i.e., concrete pad, plastic tarp, etc.).

d. Dischargers must cover and surround stockpiles with BMPs (i.e., tarps, straw wattles, gravel bags, etc.) at least 24 hours prior to a forecasted rain event.

e. Dischargers must cover and surround stockpiles with BMPs when materials are not used or are not planned to be used within 14 calendar days. The San Diego Water Board may require Dischargers to cover stockpiles with BMPs at the end of each workday.

2. Sedimentation and Erosion Control

a. Dischargers must implement BMPs to minimize or eliminate erosion and discharge of sediment to surface waters, as required by the ESJ Order.

b. BMPs for sediment and erosion control include, but are not limited to:

- Cover crops
- Silt fences
- Straw wattles, sandbags, gravel bags, etc.
- Mulch or gravel layer on exposed dirt

3. Soil Amendment Land Application

a. Dischargers must ensure that all soil amendments (i.e., mulch, wood, manure, compost, etc.) are applied to the soil at least 100 feet away from any surface waters and stormwater channels. If Dischargers do not have space at their Operation(s) to ensure that all soil amendments are applied to the soil at least 100 feet away from any surface waters and stormwater channels, then the Dischargers must place BMPs along the downstream side of the area where they applied the soil amendment to ensure the amendment material does not discharge to surface waters or stormwater channels.

b. Dischargers must ensure that all soil amendments are applied in amounts and frequencies that are reasonable for the crop or plant, soil, climate,

seasons, special local situations, management systems, and type of soil amendment.[13]

4. Wastewater Pond Management

a. Dischargers must line existing wastewater ponds within their Operation that capture non-stormwater flows (i.e., irrigation wastewater, brine wastewater, stormwater mixed with irrigation wastewater, etc.) within five (5) years of the adoption date of this Order.

b. Dischargers must line all new wastewater ponds within their Operation that will capture non-stormwater flows prior to use.

c. Dischargers must ensure new or expanding ponds are designed, constructed, and maintained to meet a hydraulic conductivity standard of $1x10^{-6}$ cm/s or less.

d. Dischargers must manage, operate, and maintain all wastewater ponds to prevent discharges of waste to surface waters and/or groundwaters. Dischargers must repair wastewater pond damages as soon as possible.

e. Dischargers must ensure that the pond lining is designed and constructed under the supervision of a California Registered Civil Engineer or Certified Engineering Geologist.

5. Chemical Management

a. Dischargers must implement proper handling, storage, disposal and management of chemicals including, but not limited to, pesticides, herbicides, and fertilizers.

b. Dischargers must apply chemicals in accordance with the manufacturer's label and at the agronomic rate.

c. Dischargers must store chemicals on a watertight surface and under roof coverage.

[13] Resources to help Dischargers with the calculation of appropriate soil amendment application rates are available for the NRCS, UCCE, and other similar organizations.

d. The San Diego Water Board may require Dischargers to have a secondary containment structure that is watertight and able to capture the total volume of the chemical stored in the primary containment structure.

6. Waste Management

a. Dischargers must cover all trash bins (i.e., dumpster with lid closed).

b. Dischargers must keep surface waters and stormwater channels located within their Operation clear of trash and debris.

c. Dischargers must ensure that all chemical toilets and/or holding tanks at their Operation are:

i. Placed on level ground.

ii. Equipped with secondary containment to capture any potential leaks or spills.

iii. Placed at least 100 feet away from surface waters and stormwater channels. If the Discharger does not have enough space within their Operation to do this, then the Discharger must place the chemical toilets/holding tanks at the farthest possible distance away from any surface waters or stormwater channels.

D. Monitoring

a. Dischargers must comply with the attached Monitoring and Reporting Program (MRP) (Attachment B).

b. Dischargers enrolled as an individual must submit a Monitoring Program Plan to the San Diego Water Board, as described in section II of Attachment B, within **270 days** of receiving their NOA.

c. Dischargers enrolled as an individual must implement their Monitoring Program Plan within **90 days** of receiving approval by the San Diego Water Board Executive Officer.

d. Dischargers previously enrolled in Order No. R9-2016-0005 must submit a revised Monitoring Program Plan that complies with the requirements of this Order by August 1, 2025, and must implement the revised Monitoring Program Plan for this Order on January 1, 2026.

IV. THIRD-PARTY GROUP REQUIREMENTS

A. Application

1. Prospective Third-Party Groups must submit a complete letter of application to the San Diego Water Board that includes the following information:

    a. Name of the prospective Third-Party Group, mailing address, phone number, e-mail address, and primary contact person.

    b. The geographic area and crop type(s) that the prospective Third-Party Group will represent.

    c. A brief description of the prospective Third-Party Group's commitment, ability, and staff resources that enable it to comply with the requirements of this Order.

    d. Documentation of the prospective Third-Party Group's organization, including a certificate of incorporation or a similar document, governing documents (bylaws, operating agreements, etc.), and any binding agreements with subsidiary groups to handle third-party responsibilities.

    e. A statement certifying that the Third-Party Group applicant is not owned or managed by a Member.

    f. A signature and certification in accordance with Signatory and Certification Requirements in section VII.C.3 of this Order.

2. San Diego Water Board staff will review the letter of application and determine whether to recommend approval. The San Diego Water Board Executive Officer will issue an approval letter to the authorized Third-Party Group if the San Diego Water Board Executive Officer deems the letter of application acceptable.

B. Disbandment

1. A Third-Party Group must provide a letter of disbandment to the San Diego Water Board and its Members at least 30 days before disbanding. The letter of disbandment must include the following information:

    a. Statement of intent to disband and the reason for disbandment.

    b. Summary of how the Third-Party Group notified its Members of its intent to disband and options available to its Members to maintain enrollment in this Order, either as a member of a different Third-Party Group or as an individual.

2. A Third-Party Group's letter of disbandment to the San Diego Water Board may include a request to name a successor organization and transfer membership. This request must provide a detailed summary that:

a. Explains the rationale and merits of the request.

b. Describes the actions taken to notify the Third-Party Group membership.

c. Includes a list of responses from the Third-Party Group's membership indicating their intent to:

   i. Transfer to the successor organization,

   ii. Apply for membership in a different Third-Party Group, or

   iii. Enroll as an individual Discharger.

Any successor organizations must be an approved Third-Party Group, in accordance with section IV.A of this Order. San Diego Water Board staff will review and consider the request and the successor organization's Third-Party Group application. The San Diego Water Board Executive Officer will issue an approval letter to the disbanding Third-Party Group if the San Diego Water Board Executive Officer deems the letter of disbandment acceptable.

3. The San Diego Water Board may revoke a Third-Party Group's authorization to act as a Third-Party Group for reasons including, but not limited to: (1) violating any requirements of this Order, or (2) obtaining approval to act as a Third-Party Group by the San Diego Water Board by misrepresentation or failure to disclose all relevant facts.

C. Reports

1. INMP Summary Report

a. Third-Party Groups must annually submit a report summarizing the data collected in each Member's INMP Summary Report for the previous reporting year (January 1 to December 31) to the San Diego Water Board by **June 30**. The report must include the following information:

   i. A narrative detailing the aggregated information and data collected from the Member's individual INMP Summary Reports. The narrative must identify ratios of nitrogen applied to nitrogen removed (A/R) and the differences of nitrogen applied to nitrogen removed (A-R) for each crop type within a hydrologic unit, as defined in the *Water Quality Control Plan for the San Diego Basin*

(Basin Plan).[14] The narrative must also include a description of the most common irrigation and nitrogen efficiency practices used by the Group's members within each hydrologic unit in the San Diego Region.

ii. A summary table reporting the following information for each Member:

1) Permanent Identification Number (PID). Third-Party Group administrators must assign a PID to each Member. The administrator must use this PID to ensure INMP Summary Reports submitted to the San Diego Water Board remain anonymous, unless an administrator determines the Member's Operation(s) is a statistical outlier compared to Operations with similar crop types, irrigation systems, and methods of applying fertilizers.

2) Field Location Number (FLN). Third-Party Group administrators must assign a unique FLN to each accessor's parcel number (APN) identified in the Member's individual INMP Summary Reports. The administrator must indicate which field(s) are associated with each FLN, as identified by the Members in their individual INMP Summary Reports. Each field may have one or more associated FLN depending on how many parcels the field has. Likewise, each FLN might apply to multiple fields.

3) A list of the crop types grown per field.

4) The amount of nitrogen applied in pounds per acre for each field.

5) The amount of nitrogen removed in pounds per acre for each field calculated by the Third-Party Group's Members or a statement indicating that the Member meets one of the exemption criteria, as described in the instruction sheet for the INMP Summary Report (Attachment I).

[14] A list of the hydrologic units in the San Diego Region can be found in chapter 1 of the Basin Plan in table 1-2: https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/chapter_1.pdf.

6) The annual ratio of nitrogen applied to nitrogen removed per field calculated by the Members on their individual INMP Summary Reports, unless the Member is exempt from reporting the nitrogen removed.

7) The annual difference between nitrogen applied to nitrogen removed per field calculated by the Members on their individual INMP Summary Reports, unless the Member is exempt from reporting the nitrogen removed.

8) The three-year ratio of nitrogen applied to nitrogen removed per field calculated by the Members on their individual INMP Summary Reports, unless the Member is exempt from reporting the nitrogen removed.

9) The three-year difference of nitrogen applied to nitrogen removed per field as calculated by the Members on their individual INMP Summary Reports, unless the Member is exempt from reporting the nitrogen removed.

10) Crop yield per field, unless the Member is exempt from reporting the nitrogen removed.

iii. Copies of the INMP Summary Reports received from its Members. Third-Party Groups must redact the APN information provided by its Members on their individual INMP Summary Reports.

iv. San Diego Water Board staff will request Third-Party Groups to provide a list of members identified by the Group administrator as being a repeated statistical outlier.

2. Annual Membership Report

a. Third-Party Groups must submit an Annual Membership Report for the previous reporting year (January 1 to December 31) to the San Diego Water Board by **January 31**.

b. Third-Party Group Annual Membership Reports must include the following information:

i. A table listing the following information for each Member:

1) Name and mailing address.

2) Enrolled APN(s).

3) The address(es) of the Operation.

4) The county of the Operation.

5) The watershed of the Operation.

6) Number of irrigated and non-irrigated acres per physical address associated with the Operation.

7) Contact name and phone number of the individual(s) authorized to provide access to the Operation.

8) Name of the operator for each physical address associated with the Operation, if different from the Member.

9) Confirmation that the Member completed the annual two-hour water quality education requirement.

10) Member status (i.e., new, dropped, terminated) and date of status change in the reporting year.

ii. An updated location map of the Third-Party Group's Member's Operations.

3. Summary of Expenditures of Fees and Revenue

Third-Party Groups must prepare and submit to the San Diego Water Board an annual summary of expenditures of fees used to comply with the requirements of this Order and revenue generated during the previous reporting year (January 1 to December 31) on or by **January 31**. Third-Party Group administrators must provide a copy of any and/or all expenditure summaries to its Members, if requested.

4. Record Keeping

a. Third-Party Groups must keep a paper or digital copy of all reports and records for a minimum of ten years, as required by the ESJ Order.

b. Third-Party Groups must back up its Members INMP Summary Reports in a secure offsite location managed by an independent entity for a minimum of ten years, as required by the ESJ Order.

c. Third-Party Groups must allow the San Diego Water Board to access and copy any records required by this Order. Third-Party Group administrators must provide copies of any and/or all reports to its Members, if requested.

D. Education

The Third-Party Group must provide training and education for Members that the Group administrator identifies as having an Operation that is a statistical outlier, as required by the ESJ Order.

E. Monitoring

1. Third-Party Groups must comply with the attached Monitoring and Reporting Program (MRP) (Attachment B) and submit a Monitoring Program Plan to the San Diego Water Board, as described in section II of Attachment B, within **270 days** of receiving its letter of approval to act as a Third-Party Group.

2. Third-Party Groups must implement its Monitoring Program Plan within **90 days** of receiving approval by the San Diego Water Board Executive Officer.

3. Third-Party Groups approved to act as a Third-Party Group by the San Diego Water Board under Order No. R9-2016-0004 must submit a revised Monitoring Program Plan that complies with the requirements of this Order by **August 1, 2025**, and must implement the revised Monitoring Program Plan for this Order on **January 1, 2026**.

V. PROHIBITIONS

I. Dischargers must comply with the Discharge Prohibitions contained in chapter 4 of the Basin Plan and any other applicable statewide water quality control plan.

II. Dischargers must prohibit the discharge of:

1. Waste at a location or in manner different from that described in the eNOI.

2. Hazardous wastes, as defined in CCR title 22, section 66261.3.

3. Oil, trash, rubbish, refuse, or other solid wastes directly into surface waters, or in a way that may allow the wastes to be washed or transported into the surface waters.

4. Residual pesticides, algaecides, herbicides and/or fumigants, in a manner other than prescribed by the manufacturer.

5. Wastes directly (i.e., down a groundwater well casing) or indirectly (i.e., percolation) into groundwater.

6. Chemicals, including those used to control wildlife (i.e., bait traps or poison), directly into surface waters or groundwater.

III. Dischargers must prohibit the placement of chemicals in locations where the chemicals may be released to surface waters or groundwater.

VI. DISCHARGE SPECIFICATIONS AND WASTE DISCHARGE CONTROL REQUIREMENTS

A. Discharge Specifications

1. Dischargers must manage their waste discharges in a manner that does not:

   a. Cause or contribute to surface erosion of aquatic substrates.

   b. Adversely affect any applicable beneficial reuse.

   c. Contain material or substances that cause or contribute to:

      i. An exceedance of any applicable water quality standard in any surface waters and/or groundwaters.

      ii. A condition of pollution or nuisance in surface waters and/or groundwaters.

      iii. The presence of disease-causing organisms or viruses in surface waters and/or groundwaters.

      iv. Foul tastes or odors in surface waters and/or groundwaters.

      v. Foaming in surface waters and/or groundwaters.

      vi. Increased toxicity in surface waters, sediments, wildlife, or groundwaters.

      vii. Cause receiving water pH to:

         1) Fall below 6.5 or rise above 8.5 in inland surface waters.

         2) Fall below 7.0 or rise above 9.0 in bays and estuaries.

         3) Change at any time more than 0.2 units from that which occurs naturally in ocean waters; or

         4) Fall below 6.5 or rise above 9.0 in groundwater.

      viii. Results in flying insects (i.e., flies, mosquitos) or other nuisances in surface waters.

ix. Changing the color of surface waters and/or groundwaters.

x. The accumulation of sediment that may harm benthic communities or other aquatic life in surface waters.

xi. The reduction of natural light to benthic communities and other aquatic life in surface waters.

B. Waste Discharge Control Requirements

1. To prevent the discharge of waste to surface waters and/or groundwaters Dischargers must:

   a. Avoid the application of fertilizers, pesticides, herbicides, algaecides, or fumigants within three days prior to a forecasted rain event, to the best of their ability.

   b. Ensure that soil amendments used at their Operation(s) do not contain any of the following:

      i. Municipal solid waste (except compost).

      ii. Septage, liquid waste, oil, or grease.

      iii. Any other waste determined by the San Diego Water Board to pose a potential threat to water quality.

   c. Implement the management practices described in their WQPP.

   d. Properly operate and maintain any facility, unit, system, or monitoring device installed to achieve compliance with this Order.

VII. PROVISIONS

A. Compliance Provisions

1. Dischargers must comply with all applicable federal, state, and local laws and regulations for handling, transport, treatment, or disposal of waste or the discharge of waste to surface waters and/or groundwaters.

2. Dischargers must comply with all applicable provisions of the Water Code, the Basin Plan, and other State Water Board water quality control plans and policies.

3. Dischargers must comply with the requirements of this Order and any future revisions. Any noncompliance with this Order is a violation of the Water Code and may result in, but is not limited to, the following actions:

    - Enforcement
    - Termination of enrollment

B. Order Action Provisions

1. The San Diego Water Board may modify, revoke and reissue, or terminate this Order for reasons including, but not limited to:

    a. Adoption of this Order by misrepresentation or failure to fully disclose all relevant facts.

    b. Adoption of a Total Maximum Daily Load (TMDL) amendment, new TMDL, or TMDL alternative.

    c. The State Water Board directs the regional water boards to revise their respective ILRP orders to be consistent with certain precedential requirements.

2. Dischargers must comply with the requirements in this Order, regardless of the status of a filed request for modification, reissuance, or termination of this Order.

C. Reporting Provisions

1. Duty to Provide Information

Dischargers must provide the San Diego Water Board with any requested information to allow staff to determine if there is reason to: (1) modify the Discharger's enrollment status or (2) terminate the Discharger's enrollment in this Order.

2. Request for Confidentiality

a. All documents prepared and submitted to the San Diego Water Board are subject to public disclosure in accordance with California law and

regulations.[15] If Dischargers and/or Third-Party Groups presume that a document or a portion of a document is exempt from public disclosure, they must:

i. Identify the basis for the exemption.

ii. Clearly indicate on the cover of the document that all or a portion of the document is exempt from public disclosure.

iii. Submit the complete document with the portions that are asserted to be exempt in redacted form.

iv. Submit separately bound unredacted pages (to be maintained separately by San Diego Water Board).

b. The San Diego Water Board Executive Officer will notify the Discharger and/or Third-Party Group if the request for exemption is accepted or denied. If the request for exemption is denied, the document will be subject to public disclosure. The Discharger and/or Third-Party Group will have ten (10) calendar days after the denial notification to provide the San Diego Water Board with additional information supporting the request. Documents not typically eligible for exemption include, but are not limited to:

- NOIs
- WQPPs
- Water quality monitoring data
- Other data related to waste discharges

3. Signature Requirements

a. Legally responsible persons must sign NOIs, WQPPs, COIs, and NOTs. A legally responsible person is:

i. Corporations: a responsible corporate officer such as a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function.

[15] Laws and regulations include the Public Records Act, Water Code section 13267(b)(2), and the California Food and Agriculture Code.

ii. Partnerships and Sole Proprietors: by a general partner or proprietor, respectively.

iii. Municipalities and Public Agency: by either a principal executive officer or ranking elected official.

b. A legally responsible person may delegate a duly authorized representative to sign all plans and reports by submitting a written authorization to the San Diego Water Board. The written authorization must provide a statement that either an individual or a specified job position is responsible for either (1) the overall management or (2) the environmental matters of the Third-Party Group or Operation. The legally responsible person must submit a new written authorization to the San Diego Water Board if the prior authorization is no longer accurate. The legally responsible person must submit the new written authorization prior to or together with any reports, information, or applications that require a signature from an authorized representative.

c. Legally responsible persons or their duly authorized representatives may sign and certify reports and information required by this Order either electronically or in writing. Electronic signatures will have the same legal effect as written signatures. Any person signing a document, plan, or report required by this Order must make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

4. Reporting

a. Third-Party Groups and/or Dischargers must submit reports and information required by this Order via e-mail to RB9_Ag_Order@waterboards.ca.gov unless the documents are over 50 megabytes. Third-Party Groups and/or Dischargers must upload

documents over 50 megabytes to the San Diego Water Board FTP site.[16] The Board will provide the username and password to the FTP site upon request.

b. Third-Party Groups and/or Dischargers may also submit reports and information required by this Order on a flash drive or disc delivered to:

California Regional Water Quality Control Board, San Diego Region
Attn: Irrigated Lands Regulatory Program
2375 Northside Drive, Suite 100
San Diego, California 92108

c. Third-Party Groups and/or Dischargers must submit each electronic document as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition. Third-Party Groups and/or Dischargers must submit electronic documents with the Global ID (AGL number) associated with their GeoTracker account.

IV. Enforcement Provisions

1. Enforcement Authority

The San Diego Water Board reserves the right to take enforcement action authorized by law for violations of this Order. Enrolled Dischargers are responsible for meeting the requirements of this Order. However, landowners that are not enrolled may be held responsible for the conduct of operations on the Discharger's enrolled parcel. Dischargers and/or landowners will be subject to any remedies, penalties, process, or sanctions as provided for under State law in the event of any violation or threatened violation of this Order.

2. Provision Severability

The provisions of this Order are severable. The remainder of this Order and the application of any provisions in this Order will not be affected if any

[16] The FTP site can be accessed using the following link (as of March 29, 2024): https://ftp.waterboards.ca.gov.

provision of this Order or the application of any provision of this Order is deemed invalid.

3. Investigation of Violations

The San Diego Water Board may, pursuant to Water Code section 13267, require Third-Party Groups and/or Dischargers to investigate, monitor, and report information in response to a suspected violation of the requirements of this Order. The burden, including the costs of preparing the reports, must bear a reasonable relationship to the need for and the benefits to be obtained from the reports.

4. Need to Stop or Reduce Activity Not a Defense

Dischargers cannot claim that they would need to stop or reduce work at their Operation(s) to maintain compliance with this Order as a defense against an enforcement action.

ATTACHMENT A – DEFINITIONS

1. Best Management Practices (BMPs): Scheduling of activities, banning of specific practices, maintenance procedures, and other management practices to prevent or eliminate discharges that cause pollution of surface waters and/or groundwaters. Examples of BMPs can include but are not limited to:

    - Covering stockpiled material prior to rain events
    - Installing silt fences around the perimeter of the property
    - Not irrigating crops during rain events
    - Adding gravel or woodchips on dirt roads to prevent erosion

2. Compost: The material created through the breakdown of organic materials by microorganisms under controlled conditions, and that has completed the curing phase. Residual substances originally present in the compost pile are consumed after proper curing. Many materials are compostable such as: grass, leaves, branches, pruning stumps, wood waste, agricultural materials, manure, food, and biosolids.

3. Discharger: Any person, firm, associate, organization, partnership, business trust, corporation, limited liability company, or company that owns an irrigated commercial agricultural operation that discharges, or threatens to discharge, waste into surface waters and/or groundwaters in the San Diego Region.

4. Dryland Farming: A type of farming practice where irrigation is not used. This technique relies on the efficient storage and use of soil moisture rather than using regular irrigation methods to maximize crop yield.

5. Erosion: When wind, water, precipitation, or other natural agents diminishes or wears away land. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.

6. Member: A Member is the owner of a commercial irrigated agricultural operation who is a part of a Third-Party Group.

7. Non-Stormwater: All discharges that do not originate from rain events (i.e., all discharges other than stormwater). Non-stormwater discharges include but are not limited to:

    - Irrigation tailwater
    - Sediment
    - Brine waste

8. Operation: An Operation is any irrigated commercial agricultural operation owned by a Discharger.

9. Receiving Waters: All inland surface waters, including enclosed bays and estuaries, coastal ocean waters, wetlands, and groundwaters of the San Diego Region.

10. Stormwater: Runoff and drainage resulting from rain events, including snowmelt runoff.

11. Third-Party Group: A Third-Party Group is any organization approved by the San Diego Water Board to assist Members in carrying out the requirements of this Order.

12. Total Acres: The cumulative number of irrigated and non-irrigated acres at a Dischargers Operation. Cumulative acres account for multiple parcels and/or addresses that are owned by a Discharger.

13. Total Maximum Daily Load (TMDL): The maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards.

14. Waste: Includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human activity, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal (Wat. Code § 13050, subd. (d).).

15. Water Quality Benchmarks: Established based off the water quality objectives in the Basin Plan. The water quality objectives are the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area. (Wat. Code, § 13050, subd. (h).)

16. Waters of the State: Any surface water or groundwater, including saline waters, within the boundaries of the state. (Wat. Code, § 13050, subd. (e).)

17. Waters of the United States: As defined in the 40 CFR 120.2, the Waters of the U.S. are defined as: “(a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate “wetlands;” (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition: (e) Tributaries of waters identified in paragraphs (a) through (d) of this

definition; (f) The territorial seas; and (g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.”

ATTACHMENT B – MONITORING AND REPORTING PROGRAM

TABLE OF CONTENTS

TABLE OF TABLES

I. FINDINGS

A. MRP Purpose. This monitoring and reporting program (MRP) establishes requirements in Order No. R9-2024-0029 (Order) for Third-Party Groups, on the behalf of its Members, and Dischargers enrolled as an individual to conduct monitoring activities and submit technical and monitoring reports. The purpose of the MRP is to (1) determine compliance with discharge specifications and waste discharge control requirements, (2) assess the effectiveness of management practices required by the Order, and (3) characterize the effects of discharges from Operations on surface waters and/or groundwaters.

B. Monitoring Framework. The framework for this MRP is divided into three monitoring components: (1) surface water, (2) groundwater, and (3) bioassessment.

1. **Surface Water Monitoring**. Surface water monitoring is needed to determine: (1) how effective management practices are at preventing or reducing discharges of waste from Operations that may be causing or contributing to exceedances of applicable Water Quality Benchmarks[17] in surface waters, (2) if Operations have any impact on the quality of surface waters in the San Diego Region, and (3) the potential source(s) of the Water Quality Benchmark exceedance(s).

2. **Groundwater Monitoring.** Groundwater monitoring is needed to assess groundwater quality trends in the area of the Operations and to confirm that management practices implemented to protect and improve groundwater quality are effective.

3. **Bioassessment Monitoring.** Bioassessment monitoring is needed to evaluate cumulative effects of all anthropogenic inputs, including irrigated commercial agriculture, on the ecological health of surface water bodies in the San Diego Region.

C. MRP Modifications. The San Diego Water Board Executive Officer may modify this MRP as needed. One of the changes the San Diego Water Board Executive

[17] "Water Quality Benchmarks" means discharge prohibitions and narrative or numeric water quality objectives, a water quality objective established by an applicable Statewide plan or policy, criteria established by USEPA (including those in the California Toxics Rule and the applicable portions of the National Toxics Rule), and load allocations established with a total maximum daily load (TMDL) (whether established in the Basin Plan or other lawful means).

Officer may consider is an increase in the frequency of surface water and/or groundwater monitoring. Factors that may result in an increased sampling frequency include, but are not limited to:

1. The results of water quality monitoring indicate a need for more frequent monitoring

2. The best management practices (BMPs) implemented at the Operations in the area do not appear sufficient to prevent discharges of waste to surface waters and/or groundwaters

3. Trends of water quality degradation

D. MRP Compliance. Dischargers must comply with the requirements in this MRP. Third-Party Groups, approved by the San Diego Water Board, are responsible for assisting its Members to comply with the requirements of the Order, including this MRP. While the requirements established in this MRP refer to "Third Party Groups," it is the responsibility of the Dischargers enrolled as Members of a Third-Party Group to ensure the Group's compliance with the requirements of this MRP. Members of a Third-Party Group may be subject to enforcement action(s) if their Third-Party Group fails to comply with any of the requirements in this MRP.

II. MONITORING AND REPORTING PROGRAM REQUIREMENTS

A. General Monitoring and Reporting Requirements

Third-Party Groups and Dischargers must ensure that:

1. (1) All monitoring instruments and devices are properly maintained and calibrated for accuracy, (2) flow measurement devices are calibrated at least once a year, and (3) multi-parameter water quality self-contained transmitters (i.e., sondes for pH and DO) are calibrated daily.

2. Monitoring is done according to the U.S. Environmental Protection Agency (USEPA) test procedures approved under title 40 of the Code of Federal Regulations (40 CFR) part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*.[18] The San Diego Water Board may approve other test procedures at its discretion.

[18] Unless another method is required under 40 CFR subchapters N or O or is specified in the Order.

3. Groundwater samples are collected using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols. Third-Party Groups and Dischargers enrolled as an individual must collect the groundwater samples at or near the well head before the pressure tank and prior to any well head treatment, when possible. If that is not possible, the water sample must be collected from a sampling point as close to the pressure tank as possible, or from a cold-water spigot located before any filters or water treatment systems.

4. Groundwater monitoring, sample preservation, and sample analyses are conducted according to the latest edition of Test Methods for Evaluating Solid Waste, SW-846, USEPA.

5. All analyses are performed in a certified laboratory or a laboratory approved by the San Diego Water Board. The certified laboratory must be accredited under the State Water Resources Control Board's (State Water Board) Division of Drinking Water (DDW) Environmental Laboratory Accreditation Program (ELAP). Dischargers may access additional information on ELAP at the following link: https://www.waterboards.ca.gov/drinking_water/certlic/labs/index.html

6. All plans and reports required by this MRP are prepared by qualified professionals. Qualified professionals must be licensed, where necessary, and proficient in the fields related to the required activities.[19] Third-Party Groups and Dischargers enrolled as an individual must include a statement of qualifications of the responsible lead professionals in all plans and reports.

7. Monitoring samples and measurements must accurately represent the volume and nature of the discharge. Third-Party Groups and Dischargers enrolled as an individual must collect the monitoring samples at locations approved by the San Diego Water Board.

B. Monitoring Program Plan

Third-Party Groups and Dischargers enrolled as an individual without an existing Monitoring Program Plan approved by the San Diego Water Board must prepare and submit a detailed Monitoring Program Plan that describes the plan to conduct the surface water, groundwater (if applicable), and bioassessment

[19] California Business and Professions Code sections 6735, 7835, 7835.1 require that engineering and geologic evaluations and judgements must be performed by or under the direction of registered professionals.

(Third-Party Groups only) monitoring requirements described below to the San Diego Water Board within 270 days of receiving their Notice of Applicability (NOA) or other letter of approval. Third-Party Groups and Dischargers enrolled as an individual with an existing Monitoring Program Plan approved by the San Diego Water Board must submit a revised Monitoring Program Plan that complies with the requirements of the Order to the San Diego Water Board by August 1, 2025. Third-Party Groups and Dischargers enrolled as an individual may submit a written request to the San Diego Water Board Executive Officer requesting an extension of the prescribed due dates for the Monitoring Program Plan for the Executive Officer's consideration.

San Diego Water Board staff will review and evaluate the information provided in the Monitoring Program Plan. The San Diego Water Board Executive Officer will issue an approval letter to the Third-Party Group or to the Discharger enrolled as an individual if the Monitoring Program Plan is acceptable.

Third-Party Groups or Dischargers enrolled as an individual must evaluate their Monitoring Program Plan annually and amend it as needed to ensure accuracy. Third-Party Groups and Dischargers enrolled as an individual must submit an amended Monitoring Program Plan to the San Diego Water Board 90 days prior to implementing the change(s).

The Monitoring Program Plan must contain the following:

1. **Monitoring Event Preparation and Protocols**
   A description of the monitoring event preparation, (2) field protocols for sample collection and sample handling, including chain of custody requirements, and (3) a description of the protocols for calibrating and maintaining the monitoring instruments and devices used for the monitoring and sampling collection to ensure proper working conditions and continued accuracy.

2. **Monitoring Team**
   A description of the monitoring team and analytical laboratories, including names, titles, qualifications, and contact information of key personnel. Changes to the monitoring team must be included in the Annual Monitoring Report (section III.B.13 of the MRP).

3. **Quality Assurance Project Plan (QAPP)**
   A QAPP describing the quality assurance/quality control measures that the Third-Party Group or Discharger enrolled as an individual will conduct. The purpose of the QAPP is to ensure that the data collection and analysis is consistent with the type and quality of data needed to meet the San Diego Water Board's monitoring goals and objectives. The QAPP must meet the State Water Resources Control Board (State Water Board) Surface Water

Ambient Monitoring Program (SWAMP) requirements and must include the following four sections:

- Project Management
- Data Generation and Acquisition
- Assessment and Oversight
- Data Validation and Usability

Third-Party Groups and Dischargers enrolled as an individual must include laboratory analytical methods as an appendix of the QAPP. Tools to help Third-Party Groups and Dischargers enrolled as an individual develop a QAPP are available at: https://www.waterboards.ca.gov/water_issues/programs/swamp/quality_assurance.html

4. Surface Water Monitoring Requirements

a. Location Requirements

i. Monitoring Program Plan Requirements
Third-Party Groups and Dischargers enrolled as an individual must propose surface water monitoring locations in the Monitoring Program Plan that meet the requirements described below. The surface water monitoring location(s) proposed by the Third-Party Groups and Dischargers enrolled as an individual must be approved by the San Diego Water Board.

ii. Location Requirements for Third-Party Groups
Third-Party Groups must conduct surface water monitoring in surface waters that may receive direct or indirect discharges from its Member's Operations. Third-Party Groups must:

1) Select surface water monitoring location(s) at a sub-watershed level (i.e., Hydrologic Unit Code 12) that adequately characterizes most of the discharges from its Member's Operations based on typical discharge patterns, including irrigation tailwater discharges and stormwater runoff, when possible. It may be feasible to combine sub-watersheds to establish the surface water monitoring locations based on the location and density of the Member's Operations.

2) Include a description of the characteristics of each surface water monitoring location, including: (1) the number of Operations that may directly or indirectly affect the monitoring results from the monitoring location, (2) the crop type(s) grown at the Operations

identified in (1), and (3) the watershed each monitoring location is located in.

3) Include an appropriately scaled map of the surface water monitoring location(s) and GPS coordinates for each surface water monitoring location.

4) Demonstrate that the proposed number and locations of the surface water monitoring locations are based on site-specific characteristics and supported with scientific rationale (i.e., the drainage characteristics of its Member's Operations).

5) Select surface water monitoring location(s) in areas that can be safely reached.

6) Ensure surface water monitoring locations are in a surface water body that is less than one meter deep for at least 50% of its length during the sampling period, if possible.

iii. Location Requirements for Dischargers Enrolled as an Individual
Dischargers enrolled as an individual must conduct site-specific stormwater runoff monitoring. Dischargers must:

1) Select site-specific monitoring location(s) on their Operation that adequately characterize a majority of stormwater discharges that flow off the Discharger's Operation or that flow from their Operation into a surface water body based on typical discharge patterns, including irrigation tailwater discharges and stormwater runoff.

2) Demonstrate that the proposed site-specific monitoring location(s) is based on site-specific characteristics and supported by scientific rationale (i.e., the drainage characteristics of the Operation).

b. Monitoring Requirements

i. Monitoring Program Plan Requirements
Third-Party Groups and Dischargers enrolled as an individual must describe how they will comply with the surface water monitoring requirements described below in the Monitoring Program Plan.

ii. Third-Party Group Monitoring Requirements

1) Third-Party Groups must conduct surface water monitoring at the approved surface water monitoring locations for the parameters and at the monitoring frequency listed in Table B-1.

Table B-1. Surface Water Monitoring Parameters and Sampling Frequency for the Surface Water Monitoring Locations

Parameter	Units	Frequency
Stream Width	ft	Twice a year, once during the dry season (May 1 – September 30) and once during the first qualifying storm event of the wet season (October 1 – April 30)
Stream Depth	ft	
Stream Cross Sectional Area	ft^2	
Stream Velocity	ft/sec	
Stream Flow[20]	ft^3/sec	
pH	Standard units	
Temperature	˚F	
Dissolved Oxygen	mg/L	
Turbidity	NTU	
Total Dissolved Solids	mg/L	
Total Suspended Solids	mg/L	
Hardness (as $CaCO_3$)	mg/L	
Ammonia	mg/L	
Nitrate-Nitrite as Nitrogen	mg/L	
Total Nitrogen	mg/L	
Orthophosphate	mg/L	
Total Phosphorus	mg/L	
Sulfate	mg/L	
Potassium	mg/L	
E. coli – Freshwater	MPN/100 mL	
Chronic Toxicity	TUc	

2) Third-Party Groups must collect samples from each of the surface water monitoring locations during the dry season (May 1 – September 30) and within the first qualifying storm event of the wet season (October 1 – April 30). The first qualifying storm event

[20] Third-Party Groups may wish to consult the State Water Board's website for guidance on how to measure stream flows at: https://www.waterboards.ca.gov/water_issues/programs/swamp/docs/cwt/guidance/4113.pdf (as of March 29, 2024).

of the wet season is a storm event with equal to or greater than 0.5-inch rain as measured by the nearest National Weather Service rain gauge, to the extent practicable. Practical constraints on collecting samples during the first storm event of the wet season include, but are not limited to:

- Sample holding times
- Safety of the monitoring team

3) If Third-Party Groups are unable to collect a sample from any of the established surface water monitoring location(s) during: the first qualifying storm event of the wet season, the Third-Party Group must return to the surface water monitoring location during the subsequent qualifying storm event(s) of the wet season until the Third-Party Group is able to collect a sample from each established surface water monitoring location. Third-Party Groups must document, with photos, when the surface water body did not have enough water to collect samples at a surface water monitoring location and must include the observation and photos in the Annual Monitoring Report.

4) If Third-Party Groups are unable to collect a sample from any of the established surface water monitoring location(s) during the dry season because the surface water body does not have enough water, the Third-Party Group must: (1) document, with photos, that the surface water body does not have enough water to collect samples, (2) include the observation in the Annual Monitoring Report and (3) return to surface water monitoring location(s) a second time to attempt to collect a sample. If Third-Party Groups are still unable to collect a sample due to the lack of water, Third-Party Groups must: (1) document, with photos, that the surface water body does not have enough water to collect samples and (2) include the observation in the Annual Monitoring Report. Third-Party Groups are only required to attempt to collect samples from each surface water monitoring location twice during the dry season.

5) Third-Party Groups must develop a Contingency Work Plan as described in this MRP if the surface water monitoring results show a Water Quality Benchmark exceedance(s), as described in Table B-7, for one or more of the constituents listed in Table B-1 to determine the source of the exceedance. For the purposes of the Order, an exceedance occurs when a monitoring result for a constituent at a surface water monitoring location exceeds the Water Quality Benchmark three out of four consecutive sampling events for the same constituent.

iii. Dischargers Enrolled as an Individual Monitoring Requirements

1) Dischargers enrolled as an individual must conduct site-specific stormwater discharge monitoring for the parameters and at the sampling frequency listed in Table B-2.

Table B-2. Site-Specific Stormwater Discharge Monitoring Parameters and Sampling Frequency

Parameter	Units	Frequency
Total Dissolved Solids	mg/L	Once a year during the first qualifying storm event of the wet season
Ammonia	mg/L	
Nitrate-Nitrite as Nitrogen	mg/L	
Total Nitrogen	mg/L	
Orthophosphate	mg/L	
Total Phosphorus	mg/L	
Sulfate	mg/L	
Potassium	mg/L	
E. coli – Freshwater	MPN/100 mL	

2) Dischargers enrolled as an individual must collect a stormwater discharge sample from the approved location(s) within the first qualifying storm event of the wet season (October 1 – April 30). The first qualifying storm event of the wet season is a storm event with equal to or greater than 0.5-inch rain as measured by the nearest National Weather Service rain gauge, to the extent practicable. Practical constraints on collecting samples during the first storm event of the wet season include, but are not limited to:

   - Sample holding times
   - Safety of the monitoring team

3) Dischargers enrolled as an individual must send the samples to a certified laboratory, or to a laboratory approved by the San Diego Water Board as described in Attachment B, section II.A.5.

4) Dischargers enrolled as an individual must develop a Contingency Work Plan as described in this MRP if the surface water monitoring results show a Water Quality Benchmark exceedance(s), as described in Table B-7, for one or more of the constituents listed in Table B-2 to determine the source of the exceedance. For the purposes of the Order, an exceedance occurs when a monitoring result for a constituent at a surface water monitoring location exceeds the Water Quality Benchmark three out of four consecutive sampling events for the same

constituent.

c. Contingency Work Plan Requirements

i. Third-Party Groups and Dischargers enrolled as an individual must develop and submit, to the San Diego Water Board, a Contingency Work Plan as an addendum to the Monitoring Program Plan, if the surface water monitoring data indicates a Water Quality Benchmark exceedance(s) for any constituent(s) identified in Table B-1 (for Third-Party Groups) or Table B-2 (for Dischargers enrolled as an individual). Third-Party Groups and Dischargers enrolled as an individual must submit the Contingency Work Plan to the San Diego Water Board within 90 days of any exceedance(s) of the Water Quality Benchmarks.

The Contingency Work Plan must propose an expanded monitoring and analysis program to investigate the source(s) of the exceedance(s). The additional monitoring must be: (1) conducted concurrently with the approved surface water monitoring described in section II.B.4.b.ii (for Third-Party Groups) or section II.B.4.b.iii (for Dischargers enrolled as an individual), and (2) consistent with the parameters and frequency described in Table B-1 (for Third-Party Groups) or Table B-2 (for Dischargers enrolled as an individual).

A Contingency Work Plan developed by a Third-Party Group must propose actions to fully answer the following study questions:

- Where is the source location(s) within the watershed causing and/or contributing to the exceedance(s) of Water Quality Benchmarks?
- What is the identified land use associated with the source location(s)?
- If the source location(s) is owned/operated by a Member of a Third-Party Group, what actions will the Third-Party Group take to support the Member's compliance with the Order?

A Contingency Work Plan developed by a Discharger enrolled as an individual must propose actions to fully answer the following study questions:

- Is the source(s) causing and/or contributing to the exceedance(s) of Water Quality Benchmarks located within the Operation? If yes, where is the source(s) located?
- What actions will the Discharger take to comply with the Order?

ii. All Contingency Work Plans must also include the following information:

1) A table identifying the surface water monitoring constituent(s) that exceeded the Water Quality Benchmarks, the measured concentration(s) of the constituent(s), and the monitoring location(s) where each exceedance was detected.

2) A narrative description of the rationale and actions a Third-Party Group or Discharger enrolled as an individual will take to establish additional monitoring locations.

3) A map showing the location of the proposed additional monitoring location(s) and their relation to the established surface water monitoring locations described in section II.B.4.a.ii (for Third-Party Groups) or section II.B.4.a.iii (for Dischargers enrolled as an individual).

4) A table of the GPS coordinates for each proposed additional monitoring location.

5) A schedule for the implementation of the Contingency Work Plan to identify the source of the exceedance(s).

iii. The Contingency Work Plan is an iterative plan. Third-Party Groups and Dischargers enrolled as an individual must continue to amend their Contingency Work Plan as appropriate. Factors that may require Third-Party Groups and Dischargers enrolled as an individual to amend their Contingency Work Plan include, but are not limited to:

- Monitoring data that indicates additional exceedance(s) of Water Quality Benchmarks
- The plan to address the source(s) of the exceedance(s) changes

iv. Third-Party Groups and Dischargers enrolled as an individual must report all findings and results of the Contingency Work Plan in the Annual Monitoring Report, as described in section III.B.9.

v. Third-Party Groups and Dischargers enrolled as an individual must implement the Contingency Work Plan, as amended, until: (1) the surface water monitoring data does not indicate any exceedance(s) of Water Quality Benchmarks, or (2) either Third-Party Groups determine that the source of the Water Quality Benchmark exceedance(s) is not associated with its Members Operations, or(3) Dischargers enrolled as an individual determine the source of the exceedance(s) of Water Quality Benchmarks is not from their Operation.

vi. Third-Party Groups that previously submitted a Water Quality Restoration Plan (WQRP) in compliance with Order No. R9-2016-0004 must submit a revised Monitoring Program Plan that includes a Contingency Work Plan that complies with the requirements described in this section. The Third-Party Groups must submit the revised Monitoring Program Plan to the San Diego Water Board on or before August 1, 2025.

5. Groundwater Monitoring Requirements (if applicable)

a. Drinking Water Supply Well Monitoring

i. Monitoring Program Plan Requirements
Third-Party Groups and Dischargers enrolled as an individual must include the following in the Monitoring Program Plan: (1) an explanation of how they will comply with the drinking water supply well monitoring requirements described below, and (2) a table that includes the following:

- Name of Discharger/Member
- Address of Operation that has a drinking water supply well(s)
- Number of drinking water supply well(s) for each address
- Depth of each drinking water supply well(s)

ii. Monitoring Requirements
Third-Party Groups and Dischargers enrolled as an individual that have a drinking water supply well(s) at its Member's Operations (Third-Party Groups) or at their Operation(s) (Dischargers enrolled as an individual) must sample the well(s) for nitrate as NO3—N annually. If three years of consecutive monitoring data show the nitrate concentration is less than 36 mg/L as NO3--N, then Third-Party Groups and Dischargers enrolled as an individual can reduce the drinking water supply well sampling frequency to once every five years.

If the monitoring data shows the nitrate concentration is equal to or greater than 45 mg/L as NO3--N, then Third-Party Groups and Dischargers enrolled as an individual must (1) notify the San Diego Water Board within 24 hours of receiving the monitoring results, (2) notify all individuals that use the water supply well for drinking water of the nitrate test results within 10 days of receiving the monitoring

results[21], and (3) provide a copy of the notice sent to users of the water supply well to the San Diego Water Board.

Third-Party Groups and Dischargers enrolled as an individual must submit drinking water supply well monitoring data for the wells within the first year of receiving their NOA. Third-Party Groups and Dischargers enrolled as an individual may submit existing sampling data instead of sampling the well again provided the sampling and testing for nitrates was completed within the last five years using USEPA approved methods.

b. Non-Drinking Water Supply Well Monitoring

i. Monitoring Program Plan Requirements

1) Third-Party Groups

Third-Party Groups that have Members with active, non-drinking water supply wells screened in an unconfined aquifer at their Operations must include a table in the Monitoring Program Plan that includes the following information for each active, non-drinking water supply well screened in an unconfined aquifer:

- Depth
- Screening interval(s)
- Watershed

Third-Party Groups must identify which of its Member's active, non-drinking water supply well(s) will be sampled each year of the five-year sampling period. Third-Party Groups must sample an approximately equal number of wells each year of the five-year sampling period.

2) Dischargers Enrolled as an Individual

[21] The notification must include all the information provided on the State Water Board's Nitrate MCL Exceedance template which is available at this link: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Notices.html (as of March 29, 2024).

Dischargers enrolled as an individual that have any active, non-drinking water supply wells screened in an unconfined aquifer at their Operation must include a table in the Monitoring Program Plan that includes the following information for each active, non-drinking water supply well that is screened in an unconfined aquifer at their Operation:

- Physical address
- Depth
- Screening interval(s)

Dischargers enrolled as an individual must identify which active, non-drinking water supply well that is screened in an unconfined aquifer at their Operation will be sampled each year during the five-year sampling period.

ii. Monitoring Requirements

Third-Party Groups and Dischargers enrolled as an individual that have a non-drinking water supply well(s) at its Members Operation (Third-Party Groups) or at their Operation (Dischargers enrolled as an individual) must sample all active, non-drinking water supply wells screened in an unconfined aquifer once every five years. Third-Party Groups and Dischargers enrolled as an individual must analyze the samples for the parameters listed in Table B-3 using USEPA approved methods. Third-Party Groups and Dischargers enrolled as an individual may submit well sampling data they have already collected provided the sampling and testing of the well samples included the parameters listed in Table B-3 and was completed within the last five years using USEPA approved methods.

Table B-3. Non-Drinking Water Supply Well Parameters and Sampling Frequency

Parameter	Units	Frequency
Total Dissolved Solids	mg/L	Once every five years
Ammonia	mg/L	
Nitrate as NO_3	mg/L	
Total Nitrogen	mg/L	
Total Phosphorus	mg/L	
Sulfate	mg/L	
Potassium	mg/L	

6. Bioassessment Monitoring Requirements (Third-Party Groups only)

Dischargers enrolled as an individual do not need to conduct bioassessment monitoring and do not need to include the following requirements in their Monitoring Program Plan.

a. Location Requirements

i. Monitoring Program Plan Requirements
Third-Party Groups are required to conduct bioassessment monitoring and must describe in their Monitoring Program Plan which of the established bioassessment monitoring locations they will monitor based on the requirements described below.

ii. Bioassessment Monitoring Location Requirements
Third-Party Groups must conduct bioassessment monitoring at the locations identified in Table B-4 and shown in Figure B-1.[22] If more than one Third-Party Group is active, the Third-Party Groups must work collaboratively to assign responsibility for conducting bioassessment monitoring at the locations established in Table B-4. Third-Party Groups must choose bioassessment monitoring locations based on the distribution and number of its Members. Third-Party Groups must identify which bioassessment monitoring locations they will monitor in the Monitoring Program Plan.

Table B-4. Bioassessment Monitoring Locations

Map Location	Monitoring Station Name	Latitude	Longitude	Watershed
A	903S01717	33.233704	-117.093917	San Luis Rey
B	903S02457	33.296406	-117.085561	San Luis Rey
C	903S02933	33.340147	-117.132327	San Luis Rey
D	903S01909	33.311289	-117.138853	San Luis Rey
E	903S00693	33.269344	-117.031468	San Luis Rey
F	903S02145	33.255783	-117.250061	San Luis Rey
G	903S00457	33.319562	-117.165622	San Luis Rey
H	905S01174	33.016775	-117.01646	San Dieguito
I	902S03401	33.487242	-117.255378	Santa Margarita
J	902S01161	33.446616	-117.255324	Santa Margarita
K	902S11593	33.450428	-117.311695	Santa Margarita
L	902S01097	33.464602	-117.277966	Santa Margarita
M	902E00888	33.45407	-117.30182	Santa Margarita

[22] Bioassessment monitoring locations may be changed if approved by the San Diego Water Board's Executive Officer.

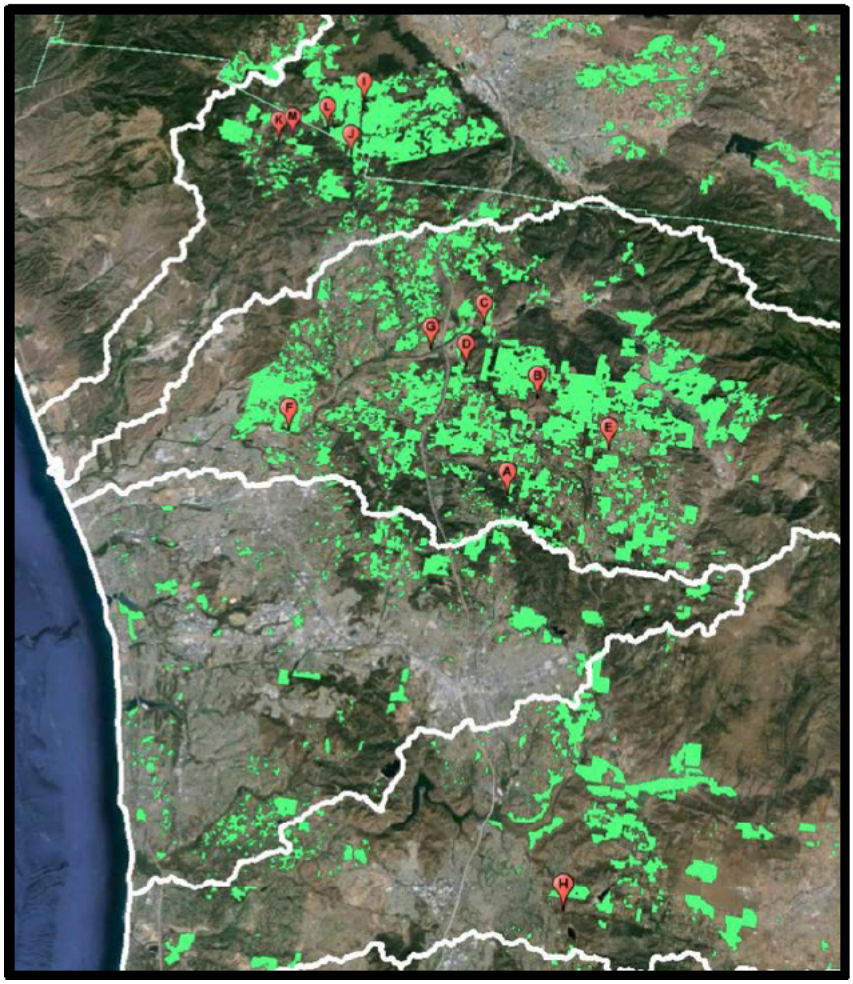


Figure B-1. Bioassessment Monitoring Locations

b. Monitoring Requirements

i. Monitoring Program Plan Requirements
Third-Party Groups must describe how they will comply with the bioassessment monitoring requirements described below in the Monitoring Program Plan.

ii. Monitoring Requirements for Third-Party Groups

1) Third-Party Groups must conduct bioassessment monitoring at the approved monitoring locations for the parameters, at the sampling frequency listed in Table B-5, and during the appropriate sampling period as described in Table B-6.

Table B-5. Bioassessment Monitoring Requirements

Parameter	Units	Frequency
Temperature	˚F	Once every five years during the appropriate sampling period.
Dissolved Oxygen	mg/L	
Conductivity	mS/cm	
pH	Standard units	
Turbidity	NTU	
Stream Velocity	ft/sec	
Stream Flow	ft^3/sec	
Total Dissolved Solids	mg/L	
Total Suspended Solids	mg/L	
Nitrate as N (NO_3)	mg/L	
Nitrite as N (NO_2)	mg/L	
Total Nitrogen as N	mg/L	
Chloride	mg/L	
Sulfate	mg/L	
Ammonium as N	mg/L	
Particulate Nitrogen	mg/kg	
Soluble Reactive Phosphorus	mg/L	
Particulate Phosphorus	mg/kg	
Total Phosphorus	mg/L	
Particulate Organic Carbon	mg/L	
Dissolved Organic Carbon	mg/L	
Chlorophyll-A	g/L	
Algae Ash Free Dry Mass	µg/m^2	
Silica	mg/L	
Soft Algae Community Assessment		
Diatoms Community Assessment		
Macroinvertebrate Bioassessment		

2) Third-Party Group bioassessment sampling of benthic macroinvertebrates and algae must be conducted in accordance with the latest State Water Board SWAMP Standard Operating

Procedures (SOPs) for wadeable streams.[23] Third-Party Groups must also conduct all the physical habitat characterization measurements specified in the SOPs during the bioassessment sampling.

Third-Party Groups must ensure all field sampling for bioassessment is conducted by properly trained personnel and is in accordance with the SOPs in an unbiased manner representative of stream reach condition. Field sampling must be consistent with the SWAMP QAPP guidelines and requirements or must have a project specific QAPP that meets these minimum guidelines and requirements, such as the *Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, 2009*.[24]

Field sampling must occur during baseflow conditions and must be conducted during the typical sampling periods described in Table B-6.

Table B-6. Bioassessment Scenarios and Sampling Periods

Scenario	Typical sampling period
Nonperennial stream in a typical year	March 1 through May 1
Nonperennial stream in a dry year	February 15 through April 15
Nonperennial stream in a wet year	April 15 through July 15
Perennial stream in a typical year	May 15 through July 15
Perennial stream in a dry year	April 15 through June 15
Perennial or high-elevation stream in wet year*	June 15 through August 15

* (where snow or meltwater is a concern)

3) Laboratory analysis of benthic macroinvertebrates for taxonomic identifications must be conducted at a Southwest Association of

[23] See State Water Board's website at https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/sops.html (as of March 29, 2024).

[24] The 2009 *Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan* can be viewed at the following link: https://www.waterboards.ca.gov/water_issues/programs/swamp/docs/smcqappfinal.pdf.

Freshwater Invertebrate Taxonomists (SAFIT) level of II or IIa level (midges to subfamily) in accordance with the most recent State Water Board SOPs for *Laboratory Processing and Identification of Benthic Macroinvertebrates in California* (Woodward et al. 2012).[25] Laboratory identification and quantification of specimens in the benthic stream algal communities sampled must follow the SOP developed for California's SWAMP Program (Stancheva et al. 2015)[26], which prescribes methods for separate analysis of (1) diatoms and (2) soft algae (including cyanobacteria).

Though not developed at this time, future laboratory identifications using genetic methods may be used if consistent with laboratory results and conducted using methods approved by the State Water Board's SWAMP and San Diego Water Board Executive Officer.

4) Benthic macroinvertebrate data collected and identified to SAFIT Level II or II.a must be used for calculating California Stream Condition Index (CSCI) scores on a per sample basis (one reach, one sampling event). Scores are calculated using the most recent version of The California Stream Condition Index (CSCI): Guidance for calculating scores using GIS and R (current version: Boyle et al. 2020).[27] Benthic algal data collected must be used for calculating Algal Stream Condition Index scores (ASCI, Theroux

---

[25] The 2012 SOPs for *Laboratory Processing and Identification of Benthic Macroinvertebrates in California* can be viewed at the following link: https://www.waterboards.ca.gov/water_issues/programs/swamp/docs/cabw2012/eight_bmi_laboratory_sop.pdf.

[26] The 2015 SOP for laboratory identification and quantification of specimens in the benthic stream algal communities can be viewed at the following link: https://sciencetracker.deltacouncil.ca.gov/sites/default/files/sop_algae_lab_101315_6.pdf.

[27] The 2020 guidance on calculating CSCI scores can be viewed by visiting the following link: https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/docs/20201220_consolidated_sop.pdf.

et al. 2020).[28] Physical habitat data collected must be used for calculating Index of Physical Habitat Integrity (IPI, Rehn et al. 2018) scores on a per sample basis (one reach, one sampling event).[29]

Though not developed at this time, future scoring calculations using genetic taxonomic results may be used if consistent with existing scoring metrics and conducted using methods approved by the State of California SWAMP and San Diego Water Board Executive Officer.

5) Third-Party Groups must confer with the Southern California Stormwater Monitoring Coalition (SMC) to schedule and coordinate monitoring activities prior to sampling.[30] Bioassessment monitoring may be satisfied through Third-Party fungible participation in a regional monitoring program.

6) Third-Party Groups must document any observations of insufficient water to collect samples.

III. Annual Monitoring Report

A. Third-Party Groups and Dischargers enrolled as an individual must submit an Annual Monitoring Report (AMR) to the San Diego Water Board by **June 30** of every year as described in Table B-8. The San Diego Water Board staff will review and evaluate the information provided in the AMR to determine compliance with the Order and MRP.

B. The AMR must include the results of the monitoring conducted by the Third-Party Groups and Dischargers enrolled as an individual from January 1 to December

---

[28] The 2020 guidance on calculating ASCI scores can be viewed by visiting the following link: https://www.sciencedirect.com/science/article/pii/S1470160X20303587.

[29] The 2018 guidance on calculating IPI scores can be viewed by visiting the following link: https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/docs/physical_habitat_index_technical_memo.pdf.

[30] See Southern California Stormwater Monitoring Coalition website at https://socalsmc.org/ (as of March 29, 2024).

31 of the year prior to the submittal of the AMR. The AMR must include the following information:

1. **Title Page and Table of Contents**

2. **Summary**
   The summary section of the AMR must include a: (1) brief outline what surface water, groundwater (if applicable), and bioassessment (Third-Party Groups only) monitoring the Third-Party Group or Discharger enrolled as an individual completed in the prior year, (2) description of the significant key findings from the monitoring results, and (3) list of important recommendations (if any).

3. **Monitoring Area Description**
   The monitoring area description section of the AMR must include:

   a. A summary of:

      i. The monitoring area geography
      ii. The monitoring area hydrology
      iii. The location of the Third-Party Group's Member's, or the Discharger enrolled as an individual's, Operation(s)
      iv. The size of the Operation(s)
      v. The crop type(s) grown at the Operation(s)
      vi. The irrigation method(s) used at the Operation(s)
      vii. The other potential waste discharge sources in the monitoring areas

   b. An appropriately scaled map that shows the Operation(s) property boundaries, surface waters, groundwater wells, and other features which may affect water quality.

4. **Monitoring Methods**
   The monitoring methods section must include details on the methods and procedures the Third-Party Group or Discharger enrolled as an individual used for conducting the surface water, groundwater (if applicable), and bioassessment (Third-Party Group's only) monitoring, including a summary of the procedures followed for quality assurance.

5. **Monitoring Results**
   The monitoring results section of the AMR must include the monitoring results for all surface water, groundwater (if applicable), and bioassessment (Third-Party Groups only) samples collected by the Third-Party Group or Discharger enrolled as an individual during January 1 through December 31 of the year prior to the submittal of the AMR. Third-Party Groups and Dischargers enrolled as an individual must submit the monitoring results, including calculated bioassessment scores, in electronic format using available data

submission templates for the California Environmental Data Exchange Network (CEDEN).[31] Third-Party Groups and Dischargers enrolled as an individual must attach laboratory data sheets and completed chain of custody forms to the AMR.

Third-Party Groups and Dischargers enrolled as an individual must include the results of any monitoring that they conducted in addition to the monitoring required by this MRP in the AMR.[32]

6. **Surface Water Monitoring Data Analysis**
The surface water monitoring data analysis section of the AMR must include an analysis of the following:

   a. Interpretations and conclusions as to whether applicable Water Quality Benchmarks, as listed in Table B-7 of this MRP, were exceeded during the monitoring period at each monitoring location.

   b. Interpretations and conclusions regarding any change in surface water quality related to agricultural activities at the Third-Party Group's Member's Operations or at the Discharger enrolled as an individual's Operation (i.e., a comparison of water quality at upstream and downstream monitoring locations).

   c. Identification of all exceedances of applicable Water Quality Benchmarks contained in Table B-7 of this MRP at each monitoring location. For the purposes of the Order, an exceedance occurs when a monitoring result for a constituent at a surface water monitoring location exceeds the Water Quality Benchmark three out of four consecutive sampling events for the same constituent. If surface water quality monitoring data indicates exceedances of applicable Water Quality Benchmarks, then the Third-Party Group or Discharger must develop a Contingency Work Plan implement additional monitoring as described in section II.B.4.c of this MRP.

---

[31] CEDEN data submission templates are provided in Microsoft Excel (version 97-2003) to facilitate submission of data and can be accessed on the CEDEN website at: http://www.ceden.org/ceden_datatemplates.shtml (as of March 29, 2024).

[32] Applies only if the Third-Party Group or Discharger enrolled as an individual conducts the additional monitoring using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O.

7. **Groundwater Monitoring Data Analysis (if applicable)**
   The groundwater monitoring data analysis section in the AMR must include an analysis of the following:

   a. Interpretations and conclusions regarding any change in groundwater quality related to agricultural activities at the Third-Party Group's Member's Operations, or the Discharger enrolled as an individual's Operation, including a trend analysis comparing the groundwater quality data over time for the same constituent.

8. **Bioassessment Monitoring Data Analysis (Third-Party Groups only)**
   The bioassessment monitoring data analysis section in the AMR must include interpretations and conclusions regarding any change in water quality at the bioassessment monitoring stations related to agricultural activities at the Third-Party Group's Member's Operations, or the Discharger enrolled as an individual's Operation.

9. **Contingency Work Plan Progress Report (if applicable)**
   Third-Party Groups and Dischargers enrolled as an individual are only required to provide progress reports on the implementation of the Contingency Work Plan in their AMR, if the surface water monitoring results indicate an exceedance(s) of one or more Water Quality Benchmarks. The Continency Work Plan Progress Report must include:

   a. A table and/or graph of the surface water monitoring results for each surface water monitoring location proposed in the Contingency Work Plan.

   b. An analysis of the data collected from each surface water monitoring location proposed in the Contingency Work Plan. The analysis must include interpretations and conclusions as to whether there is enough data to identify the source(s) of the exceedance(s).

   c. A response to the study questions described in section II.B.4.c of this MRP or a narrative describing the progress towards answering the study questions.

   d. An update to the milestones described in the Contingency Work Plan schedule identified in the Monitoring Program Plan.

10. **CEDEN Data Submission**
    The AMR must include documentation that the Third-Party Group or Discharger enrolled as an individual successfully uploaded all surface water quality monitoring data and bioassessment monitoring data (if applicable, including scores) to CEDEN or a database linked to CEDEN and approved for use by the San Diego Water Board Executive Officer.

11. GeoTracker Data Submission

The AMR must include documentation that the Third-Party Group or Discharger enrolled as an individual successfully uploaded all groundwater quality data to GeoTracker by June 30 of each year.[33] For Third-Party Groups, the Member's groundwater quality data must be uploaded to the Third-Party Group's GeoTracker page with anonymous identifiers, organized by hydrologic location (i.e., watershed). For Dischargers enrolled as an individual, the groundwater quality data must be uploaded directly to the Discharger's GeoTracker page.

12. Recommendations

The AMR must include recommendations for proposed future monitoring activities listed in order of priority.

13. Monitoring Team

The Monitoring Team section of the AMR must include a description of the monitoring team and analytical laboratories, including names, titles, qualifications, and contact information. The AMR must also include an explanation if the monitoring team described in the Annual Monitoring Report is different from the monitoring team described in the QAPP.

14. Identification of Discharger

The AMR must include the Third-Party Group's or Discharger enrolled as an individual's contact information.

15. Certification

The AMR must be signed and certified according to the Signatory and Certification Requirements contained in section VII.C.3 of the Order.

IV. Water Quality Benchmarks

Table B-7 lists the Water Quality Benchmarks for the monitoring parameters in this AMR.

[33] GeoTracker is the State Water Board statewide database and geographic information system that provides online access to environmental data. The GeoTracker electronic submittal of information (ESI) database is accessible at the following link: https://geotracker.waterboards.ca.gov/esi/login.asp (as of March 29, 2024).

Table B-7. Water Quality Benchmarks

Parameter	Units	Water Quality Benchmark
pH	standard units	The pH should not change more than 0.2 units from what occurs naturally.
Temperature	˚F	See Note 11
Dissolved Oxygen	mg/L	Less than 5.0 or 6.0, Note 1
Turbidity – Surface water	NTU	20, Note 2
Turbidity - Groundwater	NTU	5.0, Note 3
Total Dissolved Solids	mg/L	Note 4
Total Suspended Solids	mg/L	Cannot be in an amount that causes nuisance or adversely affects beneficial uses.
Ammonia	mg/L	0.025, Note 5
Nitrate (as NO_3) - Groundwater	mg/L	45 mg/L in groundwaters. 5 mg/L for Warner Valley hydrologic area. Notes 6 and 7
Nitrate + Nitrite (as N)	mg/L	10, Notes 6 and 8
Nitrite (as N)	mg/L	1.0, Note 6
Total Nitrogen	mg/L	1.0, Notes 5 and 8
Total Phosphorus	mg/L	0.1, Notes 5 and 8
Sulfate – Surface water	mg/L	Note 4
Sulfate – Groundwater	mg/L	Note 4
E. coli	MPN/100 mL	Statistical threshold value of 320 MPN/100 mL that cannot be exceeded more than 10% of the time in the month. Note 5
Chronic Toxicity	TUc	1.0, Note 10

Table B-7 Notes:

Note 1. 5.0 mg/L for waters designated with MAR and WARM beneficial uses. 6.0 mg/L for waters designated with COLD beneficial use.

Note 2. Does not apply to Coronado hydrologic area.

Note 3. Does not apply to the following hydrologic areas: Domenigoni, Loma Alta, Scripps, Tecolote, Point Loma, San Diego Mesa, Coronado, Otay Valley, and Tijuana Valley.

Note 4. Water Quality Benchmarks are based on designated water quality objectives for a) inland surface waters, enclosed bays and estuaries, coastal lagoons contained in Chapter 3, Table 3-2 of the *Water Quality Control Plan for the San Diego Basin* (9) (Basin Plan), b) groundwater in Chapter 3, Table 3-3 of the Basin Plan, c) ocean waters contained in the California Ocean Plan, or d) other applicable water quality standards for the San Diego Region.

Note 5. Water Quality Benchmarks are based on designated water quality objectives for a) inland surface waters, enclosed bays and estuaries,

coastal lagoons and groundwater contained in Chapter 3 of the Basin Plan, b) ocean waters contained in the California Ocean Plan, or c) other applicable water quality standards for the San Diego Region.

Note 6. Water Quality Benchmarks are based on designated water quality objectives for inland surface waters and groundwaters in Chapter 3, Table 3-4 of the Basin Plan.

Note 7. Does not apply to the following hydrologic areas: Domenigoni, Loma Alta, Scripps, Tecolote, Point Loma, San Diego Mesa, Coronado, Otay Valley, and Tijuana Valley.

Note 8. For Operations located within the Rainbow Creek Watershed, the Water Quality Benchmarks shall be the numeric targets established for the Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed, San Diego County, Resolution No. R9-2005-0036 (see Table 7-11 in Chapter 7 of the Basin Plan).

Note 9. For Operations located in watersheds included in the Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek), Resolution No. R9-2010-0001, the Water Quality Benchmarks shall be the numeric targets established for the Bacteria TMDL (see Tables 7-24 and 7-25 in Chapter 7 of the Basin Plan.

Note 10. TUc, or Toxic Unit – Chronic, is the reciprocal of the effluent concentration that causes no observable effects (i.e., no mortality) on the test organisms by the end of a chronic toxicity.

Note 11. The natural receiving water temperature of intrastate waters must not be altered unless it can be demonstrated to the satisfaction of the San Diego Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any cold water be increased more than 5°F above the natural receiving water temperature.

V. MRP Report Due Dates

Table B-8 identifies the due dates for the Monitoring Program Plan and the Annual Monitoring Report.

Table B-8. MRP Report Due Dates

Report Name		Due Date
Monitoring Program Plan	Third-Party Groups and Dischargers enrolled as an individual with an existing Monitoring Program Plan approved by the San Diego Water Board	Submit a revised Monitoring Program Plan that complies with the requirements of the Order to the San Diego Water Board by August 1, 2025.
	New Third-Party Groups and Dischargers enrolled as an individual without an existing Monitoring Program Plan approved by the San Diego Water Board	Submit the Monitoring Program Plan within 270 days of receiving an NOA or other letter of approval by the San Diego Water Board.
Monitoring Program Plan Update	Third-Party Groups and Dischargers enrolled as an individual with an existing Monitoring Program Plan approved by the San Diego Water Board	After August 1, 2025, Third-Party Groups and Dischargers enrolled as an individual must submit an updated Monitoring Program Plan to the San Diego Water Board 90 days prior to implementing the change(s).
Annual Monitoring Report (AMR)	2024 AMR 2025 AMR	April 30, 2025* April 30, 2026*
	AMR's (excluding the 2024 and 2025 AMR)	June 30 of each year

* Existing Monitoring Program Plans, approved by the San Diego Water Board under Order Nos. R9-2016-0004 and R9-2016-0005, will continue to be implemented through December 31, 2025.

ATTACHMENT C – FACT SHEET

TABLE OF CONTENTS

TABLE OF TABLES

I. Background

A. Applicability

Order No. R9-2024-0029 (Order) applies to any person, firm, associate, organization, partnership, business trust, corporation, limited liability company, or company (collectively referred to as “Dischargers”) that own an irrigated commercial agricultural operation (Operation) that discharges, or threatens to discharge, wastes associated with agricultural activities into surface and/or groundwaters in the San Diego Region. Dischargers may enroll in the Order either as an individual or as a member of a group, referred to as “Third-Party Groups.” Dischargers required to enroll in the Order must submit a completed electronic Notice of Intent (eNOI) and a Water Quality Protection Plan (WQPP) to the San Diego Water Board. San Diego Water Board staff will review and evaluate the information provided in the Dischargers’ eNOI. The San Diego Water Board Executive Officer will issue a Notice of Applicability (NOA) to the Discharger if the eNOI is deemed complete and the Operation qualifies for enrollment. Coverage under the Order is not effective until an NOA is issued to the Discharger.

The San Diego Water Board will verify if a Discharger must enroll in the Order by collecting the following information:

- Operator Identification Number obtained from County Agricultural Commissioners.
- Agriculture water use rates obtained from water agencies.
- Certificates, licenses, or permits related to agriculture from the California Department of Food and Agriculture (CDFA), or the United States Department of Agriculture (USDA), or county-specific agricultural departments, such as:

    - Certified Producer’s certificate (CDFA, county)
    - Organic certificate (CDFA)
    - Integrated Pest Management license (CDFA)
    - Pest Prevention and Plant Regulation license (CDFA)
    - Pesticide Regulation license (CDFA)
    - Commodity Regulation license (CDFA)
    - Phytosanitary certificate (USDA)
    - Plant Export certificates (USDA**)**
    - Plants and Plant Products permits (USDA)
    - Verification of Commercial Agriculture permit (county)

The Order does not apply to Operations that are regulated under other waste discharge requirements (WDRs) or conditional waiver of WDRs (Waivers) for discharges or threaten to discharges of wastes associated with agricultural activities into surface and/or groundwaters. If the other WDRs/Waivers only

regulate some of the waste discharge activities at the regulated site, the Discharger must obtain regulatory coverage for any discharges of waste that are not regulated by the other WDRs/Waivers.

For example, Dischargers who own or operate both a winery and a vineyard may be required to enroll the winery into the State Water Resources Control Board Order WQ 2021-0002-DWQ -- *General Waste Discharge Requirements for Winery Process Water* and enroll the vineyard into the Order. Dischargers may also request the Board consider amending existing WDRs/Waivers to incorporate requirements for all collocated discharges of waste at a site.

B. Agricultural Activities in the San Diego Region

The San Diego Water Board Region jurisdictional area forms the southwest corner of California and occupies approximately 3,900 square miles of surface area. The western boundary of the Region consists of the Pacific Ocean coastline which extends approximately 85 miles north from the U.S. and Mexico international border. The northern boundary of the San Diego Region is formed by the hydrologic divide starting near Laguna Beach and extending inland through El Toro and easterly along the ridge of the Elsinore Mountains into the Cleveland National Forest. The eastern boundary of the San Diego Region is formed by the Laguna Mountains and other lesser-known mountains located in the Cleveland National Forest. The southern boundary of the San Diego Region is formed by the U.S. and Mexico international border.

The San Diego Region consists of portions of San Diego, Riverside, and Orange Counties. Below is a brief description of the types of Operations enrolled in the Order for each county:

1. Operations in San Diego County

Operations in San Diego County specialize in producing a variety of crops, including cut flowers, fruit, vegetables, and nuts. San Diego County is the leader in California for nursery products, cut flower products, and the number of organic producers, according to San Diego County's 2022 Crop Report.[34] Operations in San Diego County represent approximately 84-percent of the total number of Operations regulated by the San Diego Water Board. The majority of these Operations are located within the San Luis Rey watershed and the Santa Margarita watershed.

[34] A copy of San Diego County's 2022 crop report is available at the following link (as of March 29, 2024): https://awmsdcropreport.com/.

2. Operations in Riverside County

Operations in Riverside County specialize in producing fruit and wine grapes. Operations in Riverside County represent approximately 15-percent of the total number of Operations regulated by the San Diego Water Board. The majority of these Operations are located within the Santa Margarita watershed.

3. Operations in Orange County

Most of southwestern Orange County is classified as urban and built-up land within the jurisdictional boundaries of the San Diego Water Board. There are few remaining farms, orchards, and nurseries in Orange County within the jurisdictional boundaries of the San Diego Water Board. Operations in Orange County represent approximately 1-percent of the total number of Operations regulated by the San Diego Water Board.

Unlike other areas of the State, the majority of the Operations within the jurisdictional boundaries of the San Diego Water Board are relatively small, with the median size being approximately four acres. Additionally, the San Diego Region's climate and hydrogeology are unique and allow for certain types of crops to be grown successfully using methods that take these considerations into account. The San Diego Water Board considered these differences when developing the requirements of the Order.

C. Agricultural Activities and Water Quality

1. Pollutants associated with agricultural activities

Agricultural discharges, including both irrigation water and storm water running off agricultural fields into surface waters or percolating to groundwater, carry constituents considered to be waste as defined under California Water Code (Water Code) section 13050(d). These discharges can affect water quality by transporting agricultural waste constituents such as pesticides, fertilizers, sediment, and salts from growing areas into surface and/or groundwaters. The following is a discussion of pollutants typically associated with Operation discharges.

a. Nutrients

Agricultural fertilizers applied to produce crops may contain nitrogen and phosphorus in multiple chemical forms (nitrogen, nitrite, nitrate, ammonia, etc.). Nitrogen helps plants make the proteins needed to produce new tissue. Phosphorus stimulates root growth, helps plants set buds and flowers, improves vitality, and increases seed size. However, nutrients in

surface waters can cause algal growth which in turn may reduce the dissolved oxygen available to support aquatic life. Excess nitrate in drinking water is known to cause methemoglobinemia, commonly called blue baby syndrome, in infants and is characterized by reduced ability of the blood to carry oxygen because of reduced levels of normal hemoglobin.

The Total Maximum Daily Load for Total Nitrogen and Total Phosphorus in Rainbow Creek watershed (Rainbow Creek TMDL) was adopted to address excessive nitrogen and phosphorus concentrations in the Rainbow Creek watershed.

b. Agricultural Chemicals

Some Dischargers apply pesticides, herbicides, algaecides, and fumigants to their crops located at their Operations to control pests, weeds, and fungus. If not properly managed, these chemicals can migrate into surface and/or groundwaters and cause toxic conditions that threaten the ability of the water bodies to support aquatic life.

The Department of Pesticide Regulation (DPR) collected a list of the top five pesticides used in San Diego County in 2021. The ranking of pesticides is determined by total cumulative acres treated by the active ingredient used. The acres treated are mostly agricultural. Because most of the Operations in the San Diego Region are located within the San Diego County and the types of agricultural operations in San Diego County are similar throughout the San Diego Region, the top five pesticides used in San Diego County provides an indication of the pesticide use within the San Diego Region. Table C-1 lists the top five pesticides used in San Diego County in 2021.

Table C-1. Top Five Pesticides Used in San Diego Region in 2021

Pesticide	Commodity	Pounds Applied	Acres Treated
Sulfuryl fluoride	Structural Pest Control	445,384	<0.01
Mineral oil	Avocado, lemon, orange, grapefruit, landscape maintenance	200,296	12,448
Glyphosate, Isopropylamine salt	Rights of way, landscape maintenance, nursery outdoor plants, avocado, lemon	113,862	12,604
Chloropicrin	Tomato, strawberry, nursery outdoor plants, soil fumigation/preplant, structural pest control	68,992	609
1,3-dichloropropene	Tomato, strawberry	65,147	565

c. Pathogens

Compost and manure are applied to crop land to improve soil texture and to add organic matter and nutrients to the soil. If not properly managed, these materials can migrate into surface and/or groundwaters and pose a public health risk if ingested.

d. Sediments

Agricultural operation activities like tilling and grading can lead to excess sediment discharges to surface waters that would violate the turbidity water quality objective causing impacts to wildlife and aquatic habitat.

2. Water Quality Impacts Associated with Agricultural Activities in the San Diego Region

a. Surface water quality impacts associated with agriculture in the San Diego Region:

i. *Nutrient Loading into the Santa Margarita Estuary*

A study conducted to support the development of a TMDL for Santa Margarita River Estuary (SMRE)[35] concluded that 55% of the total nitrogen and 26% of the total phosphorus entering the SMRE originated from agricultural operations. The SMRE and various tributaries within the Santa Margarita Watershed are listed on the 303(d) List of water quality limited segments as impaired due to nutrients and eutrophication.

A watershed loading model (Hydrologic Simulation Program Fortran-HSPF) and receiving water model (Environmental Fluid Dynamics Code-EFDC and Water Quality Simulation Program-WASP) were used to understand the hydrodynamic and nutrient loading within the Santa Margarita River Watershed. Model development included the use of surface and groundwater monitoring data to calibrate the model.

[35] Sutula, M., Butcher, J. and Boschen, J, DRAFT - Application of Watershed Loading and Estuary Water Quality Models to Inform Nutrient Management in the Santa Margarita River Watershed, Southern California Coastal Water Research Project Technical Report No. XXX, dated April 2016

The model estimated the “source load,” the loading in pounds per year from specific land uses within each of the 77 sub-basins in the Santa Margarita River Watershed, and estimated delivered load, each sub-basin’s and land use’s contribution of nutrients in pounds per year entering the SMRE. The study found that of the yearly nitrogen load of 201,352 pounds into the SMRE, 110,457 pounds, or 55% originated from agricultural land uses. The study also found that of the yearly phosphorus load of 350,734 pounds, 89,583 pounds, or 26% originated from agricultural land uses.

ii. *Surface Water Monitoring Conducted Pursuant to Order No. R9-2016-0004, General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of a Third-Party Group in the San Diego Region*

Order No. R9-2016-0004 required Third-Party Groups to conduct surface water monitoring at approved monitoring locations for certain constituents twice a year (once during the dry season and once during the wet season). The San Diego Region Irrigated Lands Group (SDRILG) and the Upper Santa Margarita Irrigated Lands Group (USMILG) conducted surface water monitoring from 2019 to 2022. FROG Environmental Group conducted surface water monitoring from 2019 to 2021. The purpose of the surface water monitoring was to determine how effective the management practices were at preventing or reducing discharge of waste from Discharger’s Operations that are causing or contributing to exceedances of applicable water quality benchmarks and to determine what effect, if any, have the Dischargers had on surface water quality. In 2022, the SDRILG submitted a Water Quality Restoration Plan (WQRP) due to the monitoring results showing consistent exceedances of five constituents. Table C-2 summarizes the results of surface water monitoring for all Third-Party Groups, by watershed, conducted from 2019-2023 for the five constituents that triggered the SDRILG’s WQRP.

Table C-2. Surface Water Monitoring Results

Watershed	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Nitrate + Nitrite (mg/L)	TDS (mg/L	Sulfate (mg/L)
San Luis Rey	<0.5-24.79	<0.018-5.8	0.07-23.19	72-3,100	4.9-1,200
Carlsbad	7.6-8.4	1.06-1.6	5.06-5.3	250-274	43-50
San Dieguito	2.3	0.94	0.86	120	13
Santa Margarita	0.61-24.2	0.02-13.4	0.059-31	321-10800	0.951-450
Benchmark	1.0	0.1	10	500-750[1]	250

Note 1. TDS benchmark varies across hydrologic units. The benchmark is 750 in Santa Margarita watershed.

iii. *Bioassessment*

Biological assessment, or "bioassessment," is a way to measure the ecosystem health of a stream based on the living organisms at a specific location by examining communities of organisms such as invertebrates (i.e., insects, crustaceans), fish, algae, and plants. Based on several factors, including the types and numbers of identified species, the presence and abundance of algae, physical conditions of the water such as temperature, and the physical habitat, such as types of vegetation, the waterbody is assigned a California Stream Condition Index (CSCI) score, an Algal Stream Condition Index (ASCI) score, and an Index of Physical Integrity (IPI) score.

Table C-3 summarizes the results of bioassessment monitoring performed by the SDRILG in 2019-2023 in surface waters that are in the vicinity of its Members Operations.

Table C-3. Bioassessment Monitoring Results

Monitoring Station	CSCI Score	CSCI Rank	Hybrid ASCI Score	Hybrid ASCI Rank	IPI Score	IPI Rank
San Luis Rey Watershed						
B-Keys Creek	0.94	Likely Intact	0.66	Very Likely Altered	0.81	Likely Altered
D-Moosa Canyon Creek	0.88	Maybe Altered	0.41	Very Likely Altered	0.74	Likely Altered
F-San Luis Rey River	0.36	Very Likely Altered	0.32	Very Likely Altered	0.66	Very Likely Altered
G-San Luis Rey River	0.53	Very Likely Altered	0.62	Very Likely Altered	0.89	Maybe Altered
Santa Margarita Watershed						
K-Santa Margarita River	0.78	Likely Altered	0.85	Likely Altered	1.08	Likely Intact
J-Sandia Creek	0.91	Maybe Altered	0.71	Very Likely Altered	0.79	Likely Altered
M-De Luz Creek	0.93	Likely Intact	0.65	Very Likely Altered	0.63	Very Likely Altered

b. Groundwater Monitoring conducted pursuant to Order No. R9-2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of a Third-Party Group in the San Diego Region* (Order No. R9-2016-0004)

Order No. R9-2016-0004 required the Third-Party Groups to conduct groundwater monitoring for nitrate in drinking water wells located at the Discharger's Operations. The SDRILG conducted groundwater sampling from 2019-2023. In 2019, the SDRILG sampled 73 Members' wells, of which 9 had nitrate concentrations above 36 mg/L. In 2022, only five Members required annual testing with three Members having wells with nitrate concentrations above 45 mg/L. Two of the Members' wells had the nitrate concentration drop below 36 mg/L and no longer require monitoring, and the other two Members stopped using their wells to supply drinking water and no longer require monitoring.

D. State Water Resource Control Board Irrigated Lands Program (ILRP) and San Diego Water Board Commercial Agriculture Regulatory Program

1. State Water Resources Control Board (State Water Board) ILRP

A range of pollutants can be found in runoff from agricultural lands, such as pesticides, fertilizers, salts, pathogens, and sediment. At high enough concentrations, these pollutants can harm aquatic life and can make water undrinkable and unusable for agricultural uses. Across the nine Regional Water Quality Control Boards (Regional Boards), there are significant differences in the approaches used to regulate irrigated agriculture. Some of these differences can be attributed to varying water quality threats posed by the disparate agricultural operations around the State. Other differences are related to the need for more stringent requirements to protect vulnerable or impaired receiving waters.

Currently, the State Water Board coordinates with the nine Regional Boards in developing WDRs or Waivers to regulate discharges from agricultural lands. The State Water Board supports the Regional Boards in the following programmatic activities:

- Program coordination
- Public outreach
- Multi-agency coordination with agricultural agencies/entities/academia/coalitions and third-party groups
- Information management
- Fee development and collection
- Petitions and enforcement
- Adaptive management – Team Concept Demonstration Projects

The State Water Board adopted Order WQ 2018-0002, *In the Matter of Review of Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group* (ESJ Order) on February 7, 2018, which modified the Central Valley Water Board's Order No. R5-2012-0116 for irrigated agricultural discharges in the Eastern San Joaquin River Watershed. The ESJ Order concluded that many of the findings and directions in the Order were appropriate for ILRPs statewide. To that end, the State Water Board identified several requirements of the ESJ Order as precedential for all ILRPs throughout the state and directed all regional water boards to revise their irrigated lands permits to be consistent with the ESJ Order. The San Diego Water Board incorporated requirements consistent with the ESJ Order to the extent these recommendations were applicable to regional conditions.

2. San Diego Water Board's Commercial Agriculture Regulatory Program

The San Diego Water Board's Commercial Agriculture Regulatory Program commenced with the adoption of a Waiver for agricultural lands in 1983 (1983

Waiver). The 1983 Waiver, in accordance with Water Code section 13269, conditionally waived the requirement for submittal of a report of waste discharge (ROWD) for irrigation return water flows as long as the discharger implemented effective management practices, and the discharge did not cause exceedances of applicable water quality objectives or nuisance conditions in the receiving waters or contain any substance toxic to animal or plant life.

In response to revisions to Water Code section 13269, the San Diego Water Board re-examined and revised its original waiver in 2007. The 2007 Waiver restructured the San Diego Water Board's regulatory approach to take advantage of local knowledge and resources, leverage limited regulatory resources, and minimize costs. The 2007 Waiver allowed growers to form discharger coalitions with a third-party representative responsible for outreach, education, and implementation of some the requirements of the regulatory program, including monitoring.

Prior to the expiration of the 2007 Waiver on February 13, 2014, the San Diego Water Board directed staff to develop general WDRs rather than extending the 2007 Waiver or issuing a new waiver. The development of general WDRs and the associated California Environmental Quality Act (CEQA) analysis commenced in 2014. The San Diego Water Board adopted Order No. R9-2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of a Third-Party Group in the San Diego Region* (Order No. R9-2016-0004), and Order No. R9-2016-0005, *General Waste Discharge Requirements for Dischargers from Commercial Agricultural Operations for Dischargers Not Participating in a Third-Party Group in the San Diego Region* (Order No. R9-2016-0005), on November 15, 2016. Order Nos. R9-2016-0004 and R9-2016-0005 extended regulatory coverage to irrigated Operations, set forth conditions that required dischargers to implement management practices to protect water quality, and ensured through monitoring and reporting that these practices were sufficiently protective of water quality. The State Water Board directed the Regional Water Boards to revise their WDRs to incorporate the precedential ESJ Order requirements by 2021. The San Diego Water Board did not revise Order Nos. R9-2016-0004 and R9-2016-0005 by 2021 due to delays related to the COVID-19 pandemic and staff turnover in the program.

E. Rationale for WDRs

The San Diego Water Board developed the Order to regulate discharges from many Operations within the San Diego Region. Agricultural discharges, including both irrigation water and storm water running off agricultural fields into surface waters or percolating to groundwater, may carry constituents considered to be

waste as defined under Water Code section 13050(d).[36] Water Code section 13260 requires persons "discharging or proposing to discharge waste" to file a ROWD with the appropriate Regional Board. Water Code section 13263 in turn requires the San Diego Water Board to prescribe WDRs for those discharges that implement relevant water quality control plans. The Order must primarily implement the *Water Quality Control Plan for the San Diego Basin* (Basin Plan)[37] which sets the beneficial uses of the surface water bodies and groundwater in the region and sets water quality objectives to be achieved in those waters. The Order must also conform to State Water Board Policies including the *Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (Nonpoint Source Policy)[38] and the *Statement of Policy with Respect to Maintaining High Quality Waters, State Water Board Resolution No. 68-16* (Antidegradation Policy).[39] Water Code section 13264 prohibits persons from initiating any new discharge of waste or making any material changes in any discharge prior to the filing of a ROWD and being issued WDRs by the appropriate Regional Board. Water Code section 13263(d) allows the San Diego Water Board to prescribe WDRs even though no ROWD has been filed.

Water Code section 13263(i) provides that the Regional Boards may prescribe general WDRs to a category of discharges, such as agricultural operation discharges, rather than issue individual WDRs to separate operations. Issuance of the Order complies with Water Code section 13263(i) criteria for the issuance of General WDRs which allows the San Diego Water Board to prescribe General

---

[36] Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes, of disposal." (Wat. Code section 13050, subdivision (b).

[37] The Basin Plan can be found at the following website: https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/#:~:text=The%20Water%20Quality%20Control%20Plan,available%20in%20electronic%20format%20only (as of March 29, 2024).

[38] The Non-Point Source Policy is available on the State Water Board website at: https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf (as of March 29, 2024).

[39] The Antidegradation Policy is available on the State Water Board website at https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf (as of March 29, 2024).

WDRs if:

- The discharges are produced by the same or similar operations.
- The discharges involve the same or similar types of waste.
- The discharges require the same or similar treatment standards.
- The discharges are more appropriately regulated under general WDRs than individual requirements.

General WDRs are an effective and efficient method to regulate the Operations that meet the enrollment criteria because the discharges regulated by the Order meet all four elements above.

While WDRs require compliance with the water quality objectives specified in the water quality control plans, such compliance need not be achieved immediately. A time schedule for compliance with water quality requirements is explicitly permitted by Water Code section 13263(c), which states that WDRs "may contain a time schedule subject to revision in the discretion of the Regional Board."

1. ESJ Order

The Central Valley Water Board issued Waste Discharge Requirements Order No. R5-2012-0116 to all growers within the Eastern San Joaquin River Watershed that are members of a third-party group on December 7, 2012. In response to the Central Valley Water Board's adoption of the Eastern San Joaquin Agricultural General WDRs, three timely petitions for review were filed with the State Water Resources Control Board (State Water Board) by Asociación de Gente Unida por el Agua, et al. (AGUA), by the California Sportfishing Alliance and California Water Impact Network (CSPA), and by San Joaquin County Resource Conservation District, et al. (SJCRCD) (collectively "Petitioners"). After deeming the petitions complete, consolidating them for review, receiving a response to the petitions and the administrative record from the Central Valley Water Board, and responses to the petitions from interested persons, the State Water Board adopted Order WQ 2014-0135[40] on August 5, 2014, taking this matter up on their own motion.

The State Water Board granted its own motion review in order to have sufficient time to adequately review the submissions and to allow for

[40] Order WQ 2014-0135 can be found at the following link: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0135.pdf

completion of a report by the Agricultural Expert Panel (Agricultural Expert Panel Report) prior to making decisions on related issues raised in the petitions. The State Water Board adopted the ESJ Order on February 7, 2018, following a lengthy public hearing. The State Water Board found that many of the findings and directions of the ESJ Order are appropriate not only for the Eastern San Joaquin Agricultural General WDRs, but also for the subsequent generations of regional water board ILRPs statewide.

The State Water Board precedential direction is intended to guide all ILRP, including programs that directly regulate growers as individuals without a third-party intermediary and programs that regulate growers that are members of a third-party intermediary. The State Water Board directed the regional water boards to revise their ILRP within the next five years to be consistent with the precedential direction in the ESJ Order.

Due to the significant variation in agricultural practices statewide, automatic application of *all* requirements endorsed in the ESJ Order to all the agricultural discharge programs statewide is inappropriate and not required. The Order only includes the precedential requirements required by the ESJ Order. The San Diego Water Board exercised its discretion provided by the ESJ Order when implementing these requirements into the Order. Table C-4 lists the sections of the Order where the San Diego Water Board incorporated the precedential ESJ Order requirements:

Table C-4. Sections in the Order that Comply with ESJ Order Requirements

ESJ Order Requirement	Compliance Section
Participation in outreach events by all growers shall be precedential for irrigated lands regulatory programs statewide.	Section III.B
Submission of management practice implementation information by all growers shall be precedential for irrigated lands regulatory programs statewide.	Section III.A.1
Submission of grower-specific field-level management practice implementation data to the regional water board shall be precedential statewide. For third-party programs only, the data shall be submitted with Anonymous Member IDs.	Sections III.A.2 and IV.C.1
Implementation of sediment and erosion control practices by growers with the potential to cause erosion and discharge sediment that may degrade surface waters shall be precedential for irrigated lands regulatory programs statewide.	Section III.C.2
Incorporation of irrigation management elements into nitrogen management planning shall be precedential for irrigated lands regulatory programs statewide.	Section III.A.2

Table C-4 – *continued*. Sections in the Order that Comply with ESJ Order Requirements

ESJ Order Requirement	Compliance Section
Submission of summary data from the plans by all growers shall be precedential for irrigated lands regulatory programs statewide.	Section III.A.2
The regional water boards have discretion whether to require certification of all growers or just a subset of growers based on a risk categorization. At a minimum, the certification requirement for all low-vulnerability growers that are determined to be outliers consistent with the additional certification requirements stated in section II.A.5.f [of the ESJ Order, discussing AR Outlier Follow Up] is precedential statewide. For those INMPs that the regional water boards require to be certified, the certification language [that the ESJ Order specifies] shall be precedential for irrigated lands regulatory programs statewide.	Section III.A.2.d
Field-level AR data submission to the regional water board consistent with the data sets and analysis of those data sets described in this section shall be precedential for irrigated lands regulatory programs statewide. For third-party programs only, the AR data shall be submitted with anonymous identifiers.	Section IV.C.1.a
Calculation of annual and multi-year A/R ratio and A-R difference parameters for each grower by field shall be precedential for irrigated lands regulatory programs statewide.	Section III.A.2 and section 4 of Attachment I
Use of coefficients for conversion of yield to nitrogen removed values by the growers shall be precedential for irrigated lands regulatory programs statewide.	Section III.A.2 and section 4 of Attachment I
Third parties requirement to follow up with and provide training for AR data outliers and identification of repeated outliers as set out above shall be precedential for irrigated lands regulatory programs statewide, except that the regional water boards will be responsible for the follow up and training for irrigated lands regulatory programs that directly regulate growers without a third-party intermediary.	Section IV.D

Table C-4 – *continued*. Sections in the Order that Comply with ESJ Order Requirements

ESJ Order Requirement	Compliance Section
Any category of Members (such as growers of a particular crop or growers in a particular area) seeking to be exempted from the precedential nitrogen management requirements in the following sections of the order shall make a demonstration, for approval by the relevant regional water board, that nitrogen applied to the fields does not percolate below the root zone in an amount that could impact groundwater and does not migrate to surface water through discharges, including drainage, runoff, or sediment erosion. These criteria for determining categories of growers that may be exempted from the nitrogen management requirements shall also be precedential for irrigated lands regulatory programs statewide.	Section III.a.2.c
Third-Party Groups must maintain required reports and records for ten years and to back up certain information in a secure offsite location managed by an independent entity shall be precedential for irrigated lands regulatory programs statewide.	Section IV.C.4
On-farm drinking water supply well monitoring, in accordance with the provisions described above, shall be precedential for irrigated lands regulatory programs statewide.	Section II.B.5.a of the MRP
Groundwater quality trend monitoring shall be precedential for irrigated lands regulatory programs statewide.	Sections II.B.5 and III. B.7 of the MRP
The development of the Groundwater Protection Formula, Values, and Targets shall be precedential for the third parties that proposed the methodology. Even if the programs do not require [groundwater quality monitoring plans], all of the regional water boards shall apply this methodology or a similar methodology, designed to determine targets for nitrogen loading within high priority townships or other geographic areas, for the remaining irrigated lands regulatory programs in the state.	Section II.B.5 of the MRP

2. Climate Change

Climate change is impacting infrastructure and beneficial uses along the southern California coast. The San Diego Water Board adopted Resolution No. R9-2018-0051, *Addressing Threats to Beneficial Uses from Climate Change,*[41] to implement actions to address the effects of climate change. This Resolution builds upon and advances previous work by the State Water Board and the State of California Legislature. California first started requiring the monitoring of greenhouse gas emissions with the passage of the California Global Warming Solutions Act of 2006 (aka AB 32) that also required the development of emission limits for greenhouse gases. The State Water Board adopted Resolution No. 2007-005915, *Comprehensive Response to Climate Change*,[42] in 2007 which set forth initial actions in response to climate change and to support AB 32. Resolution No. 2017-0012 was adopted in February 2017 to update priority topics and provided direction to support implementation of AB 32, the Safeguarding California Plan[43] and the Water Action Plan.[44]

Findings in Resolution No. 2017-0012 state that human activity has led to an increase in greenhouse gases causing increases in global average temperature and associated climate change. Examples of water quality impacts include dry periods and drought, harmful algal blooms, reduced dissolved oxygen, nutrient pollution, more erosion and sedimentation, more

---

[41] San Diego Water Board Resolution No. R9-2018-0051 can be found at the following link: https://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2018/R9-2018-0051.pdf.

[42] State Water Resources Control Board Resolution No. 2007-005915 can be found at the following link: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf.

[43] The Safeguarding California Plan, updated in 2018, can be found at the following link: resources.ca.gov/CNRALegacyFiles/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf.

[44] The California Water Action Plan can be found at the following link: https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/cwap_enhancing/docs/cwap_final.pdf.

intense rainfall, increased stream flows, rising sea levels and increased absorption of carbon dioxide creating coastal zone hotspots of acidification and hypoxia. A summary can be found in California's Fourth Climate Change Assessment,[45] which predicts increasing temperatures, higher sea levels, heavier precipitation events, more drought, more area burned by wildfire, and air temperatures to rise between 2.5 to 2.7 ˚F. This will increase human mortality, cause damage to coastal properties, and increase droughts and floods which may cost California an estimated tens of billions of dollars by mid-century. All of these impacts are additional stressors to coastal and inland waters that serve as part of and/or receive discharges from the agricultural operations. Considering these changing conditions is critical to understanding potential additional impacts from both pollutants and hydromodification from sites regulated by the Order. It is therefore appropriate for the Dischargers to consider the impacts of climate change when managing their Operations and conducting monitoring.

Changing weather patterns triggered by global climate change will alter the timing, magnitude, and duration of water flows across landscapes.[46] Generally, storms will be flashier, with longer dry periods between more intense periods of heavier rainfall. These hydrologic changes will increase runoff, challenging existing best management practices (BMP) design standards for flow, pollutant, and sediment management. Increased fire frequency, due to higher temperature and more drought, may amplify runoff and sediment management challenges.

There are ways to increase soil carbon while also increasing productivity, water holding capacity, and nutrient cycling. This will reduce input costs and produce wider natural resource management benefits.

Recommendation 1: Consider monitoring soil nutrient levels:[47]

- Test soil to check the nutrient status and structure of the soil and develop a plan to improve constraints to nutrient and water access. For

[45] California's Fourth Climate Change Assessment can be found at the following link: https://www.climateassessment.ca.gov/.

[46] Link to the effects of climate change to the San Diego Region's ecosystem: https://www.climatesciencealliance.org/sdc-ecosystems-assessment.

[47] The San Diego Water Board has included this information as a helpful tip for ways growers can increase soil health to address climate change impacts. These are not requirements and failure to implement these recommendations is not enforceable.

example: physical (structure, compaction, drainage), chemical (pH, salinity, toxicities/deficiencies), biological (micro-organisms).
- Monitor soil organic matter/soil organic carbon over time.
- Complete a nutrient balance/budget to match fertilizer requirements to crop/pasture demand.
- Manage soil structure to maximize water infiltration and retention for plant uptake and aeration.

Recommendation 2: Consider application of soil amendments:[48]
- Add organic amendments (manure, crop residues) where practical and economically viable. Know the quality of any products, have them tested and ensure any claimed benefits are supported by sound evidence and research.
- Manage application of gypsum on soils to maintain/improve soil structure.
- Manage livestock manure (dung and urine) to minimize nitrous oxide emissions.

F. Applicable Plans, Policies, and Regulations

Water quality standards are set forth in state and federal plans, policies, and regulations. The San Diego Water Board's Basin Plan contains specific water quality objectives, beneficial uses, and implementation plans that are applicable to surface waters or groundwaters that receive discharges of waste from agricultural lands. The State Water Board has adopted water quality control plans and policies that are also applicable to discharges of waste from agricultural lands. The USEPA has adopted the *National Toxics Rule*[49] and the *California*

[48] The San Diego Water Board has included this information as a helpful tip for ways growers can increase soil health to address climate change impacts. These are not requirements and failure to implement these recommendations is not enforceable.

[49] The National Toxics Rule can be found at the following link beginning on page 142 of the pdf: https://tile.loc.gov/storage-services/service/ll/fedreg/fr057/fr057246/fr057246.pdf.

Toxics Rule[50] which constitute water quality criteria that apply to waters of the United States.

1. Basin Plan

The Basin Plan is the San Diego Water Board's master water quality control planning document. It designates beneficial uses, establishes water quality objectives, and contains programs of implementation needed to achieve water quality standards.

Pursuant to the Basin Plan and State Water Board plans and policies, including State Water Board Resolution 2015-0002, *Revisions to the Sources of Drinking Water Policy to Establish a Site-Specific Exception for the Royal Mountain King Mine Site, Calaveras County* (Sources of Drinking Water Policy),[51] and consistent with the CWA, existing and potential uses of waters in the San Diego Region have been identified in Table C-5.

Table C-5. Beneficial Uses Which May be Affected by Operations

Surface Waters	
Beneficial Use	**Abbreviation**
Groundwater Recharge	GWR
Industrial Process Supply	PROC
Industrial Service Supply	IND
Municipal and Domestic Supply	MUN
Noncontact Recreation	REC-2
Preservation of Biological Habitats of Special Significance	BIOL
Rare, Threatened, or Endangered Species	RARE
Spawning, Reproduction, and/or Early Development	SPWN
Warm Freshwater Habitat	WARM
Wildlife Habitat	WILD

[50] The California Toxics Rule can be found at the following link: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-131/subpart-D/section-131.38

[51] The Sources of Drinking Water Policy can be found at the following link: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/rs2015_0002.pdf.

Groundwaters	
Beneficial Use	**Abbreviation**
Municipal and Domestic Supply	MUN
Agricultural Supply	AGR
Industrial Service Supply	IND
Industrial Process Supply	PROC
Freshwater Replenishment	FRSH

The Order implements the Basin Plan and other applicable statewide water quality control plans and policies by requiring compliance with receiving water limitations that prohibit discharges from causing or contributing to an exceedance of applicable water quality objectives, unreasonably affecting applicable beneficial uses, or causing or contributing to a condition of pollution or nuisance.

2. Impaired Water Bodies and TMDLs

Pursuant to CWA section 303(d), States, territories, and authorized tribes are required to develop lists of water quality limited segments that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. This list is referred to as the 303(d) List. Federal regulations require that a TMDL be developed for waterbodies on the 303(d) List for each pollutant of concern. TMDLs are regulatory tools that provide the maximum amount of a pollutant from potential sources that a waterbody can receive while still meeting water quality standards. A TMDL can be compared to a pollution budget. It includes a calculation of the maximum amount of a pollutant that can occur in a waterbody and allocates the necessary reductions to one or more pollutant sources. For point sources these allocations are called waste load allocations. For nonpoint sources these allocations are called load allocations. Discharges from agriculture are considered nonpoint sources. The following is a list of the TMDLs with load allocations applicable to agricultural activities in the San Diego Region:

- Total Maximum Daily Load for Total Nitrogen and Phosphorus in Rainbow Creek Watershed (Rainbow Creek TMDL)
- Bacteria TMDL Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region Including Tecolote Creek (Bacteria TMDL)

The Order implements these TMDLs. Like all other water quality standards in the Order, if TMDL load allocation is exceeded, improved management practices must be used to address these exceedances. Additional information regarding the TMDLs can be found in Attachment E of the Order. In some cases, other regulatory programs can be used to address 303(d) List

impairments instead of a TMDL. The requirements, prohibitions, and provisions of the Order may serve as an alternative, non-TMDL solution to address other water bodies on the 303(d) List. The intent of the Order is to reduce the loading of nutrients, agricultural chemicals, bacteria, and sediment from discharging to the surface waters and/or groundwaters from Operations. Not only will the installation and maintenance of effective management practices reduce the loading of pollutants from Operations to the surface waters and/or groundwaters, but they also incorporate the same types of implementation measures that would be required under a TMDL to reduce the loading of pollutants to the surface waters and/or groundwaters.

3. Nonpoint Source Policy

The State of California's principal strategy for addressing nonpoint source pollution is contained in the State Water Board's *California Nonpoint Source Program Implementation Plan* (Nonpoint Source Program Plan).[52] The primary objective of the Nonpoint Source Program Plan is to reduce and prevent nonpoint source pollution so that the waters of the State support a diversity of biological, educational, recreational, and other beneficial uses. Towards this end, the Nonpoint Source Program Plan focuses on implementation of 61 management measures and related management practices in six land use categories: 1) agriculture, 2) forestry (silviculture), 3) urban runoff, (e.g., from construction sites, roads and highways, septic systems), 4) marinas and boats, 5) hydromodification activities, and 6) resource extraction.

In May 2004, pursuant to Water Code section 13369, the State Water Board adopted the Nonpoint Source Policy, setting forth how the Nonpoint Source Program Plan should be implemented and enforced to control nonpoint source pollution. The Nonpoint Source Policy provides guidance on the statutory and regulatory authorities of the State Water Board and the Regional Boards to prevent and control nonpoint source pollution. The Nonpoint Source Policy also provides guidance on the structure of nonpoint source control implementation programs, including third-party implementation programs, and the mandatory five-key elements applicable to all nonpoint source implementation programs.

---

[52] The State Water Board's Nonpoint Source Program Plan for 2020-2025 can be found at the following link: https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/NPS%202020-25%20Accessible%20MH%203.9.21.pdf.

The Nonpoint Source Policy emphasizes the fact that the Regional Boards have primary responsibility for ensuring that appropriate nonpoint source control implementation programs are in place throughout the State. Regional Boards' responsibilities include, but are not limited to, regulating all current and proposed nonpoint source discharges under WDRs, Waivers, or basin plan prohibitions, or some combination of these administrative tools. The Nonpoint Source Policy further recognizes that, "given the extent and diversity" of nonpoint source discharges, the Regional Boards must be creative and efficient in addressing nonpoint source pollution and may rely on third-party programs that are effective in reaching a large number of dischargers.

The Order regulates waste discharges from Operations to waters of the State as a nonpoint source program consistent with the State Water Board's Nonpoint Source Program Plan and the Nonpoint Source Policy. The Nonpoint Source Policy requires that any nonpoint source pollution control implementation program, including one primarily administered by a third-party group, incorporate five key elements of the Nonpoint Source Policy. The Order incorporates all five key elements of the Nonpoint Source Policy:

- *Key Element 1: The nonpoint source control implementation program's ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address nonpoint source pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.*

  The purpose of the Order is to minimize or eliminate waste discharges from Operations into surface and/or groundwaters that may be causing or contributing to exceedances of applicable federal, State, and local water quality standards. In compliance with Water Code section 13263 and with key element 1, the Order sets out its ultimate purpose by establishing water quality requirements in section VI of the Order. To ensure that receiving water limitations are achieved and maintained, the Order requires Dischargers to (1) implement best management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and (2) to the extent reporting, monitoring data, or inspections indicate that the implemented management practices have not been effective in preventing the discharges from causing or contributing to exceedances of water quality standards, Dischargers must implement improved best management practices.

- *Key Element 2: The nonpoint source control implementation program shall include a description of the management measures and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose(s), the*

process to be used to select or develop management measures, and the process to be used to ensure and verify proper management measures implementation. The RWQCB must be able to determine that there is a high likelihood that the program will attain water quality requirements. This will include consideration of the management practices to be used and the process for ensuring their proper implementation.

As part of California's Nonpoint Source Pollution Control Program, the State Water Board, California Coastal Commission, and other State agencies have identified five management measures relevant to nonpoint source of pollution from commercial agriculture (California's Management Measures for Polluted Runoff),[53] including: (1) erosion and sediment control, (2) nutrient management, (3) pesticide management, (4) irrigation water management, and (5) education and outreach. Although the San Diego Water Board is prevented by Water Code section 13360 from prescribing specific management practices to be implemented, it may set forth performance standards and require Dischargers to report on what practices they have or will implement to meet those standards.

The Order requires Dischargers to implement management practices that (1) minimize waste discharge offsite in surface water; (2) minimize percolation of waste to groundwater; and (3) protect wellheads from surface water intrusion. To that end, the Order requires Dischargers to develop and implement a WQPP (Section III.A.1 of the Order) to describe and document implemented and planned best management practices to protect surface water and groundwater quality. Dischargers must implement management practices in accordance with their WQPP's. The Order requires Dischargers to amend their WQPP's if the management practices they implement at their Operations are ineffective. The San Diego Water Board will determine the effectiveness of best management practices by conducting inspections and by analyzing the monitoring data.

- *Key Element 3: Where a Regional Board determines it is necessary to allow time to achieve water quality requirements, the nonpoint source*

[53] California's Management Measures for Polluted Runoff can be accessed on the State Water Board website at https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_progplan_vii.pdf (as of March 29, 2024).

control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.

The Order requires Third-Party Groups and Dischargers to conduct surface water monitoring as described in the MRP (Attachment B). If the surface water monitoring results show continuous exceedances of the water quality benchmarks identified in Attachment B, then the Third-Party Group and/or Dischargers enrolled as an individual must develop a Contingency Work Plan to propose measures they will take to identify the source(s) of the pollution. The Order requires Dischargers enrolled as an individual to conduct site-specific stormwater runoff monitoring. The Order includes specific time schedules to comply with the requirements of the Rainbow Creek TMDL and the Bacteria TMDL through the incorporation of those TMDLs into the Order.

- *Key Element 4: The nonpoint source control implementation program shall include sufficient feedback mechanisms so that the Regional Board, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different management measures or other actions are required.*

  The Order requires sufficient monitoring and reporting to determine if existing best management practices are leading to compliance with water quality requirements and requires implementation of improved water quality practices where they are not. Additionally, the Order requires Third-Party Groups and Dischargers enrolled as an individual to develop and implement a Contingency Work Plan that proposes additional monitoring to determine the source(s) of the exceedance(s) of any Water Quality Benchmark(s). Water Code section 13267 authorizes the San Diego Water Board to establish monitoring, reporting, and recordkeeping requirements. The MRP requires surface water monitoring, groundwater monitoring, and bioassessment monitoring. The surface water and groundwater monitoring requirements are at a scale to characterize the effect of best management practice implementation on trends in water quality. The bioassessment monitoring requirements are at a scale to assist Third-Party Groups and Dischargers in the interpretation of surface water monitoring data by providing a more complete picture of natural variability and cumulative impacts in surface waters. This assessment in turn allows Dischargers to more effectively use surface water and groundwater data in prioritizing actions targeting pollutants and pollutant sources. Sampling done in accordance with the MRP provides feedback on the effectiveness of management practices and tracks trends in water quality in surface and ground waters influenced

by Operations by comparing water quality at the monitoring sites against water quality benchmarks.

The Order requires Third-Party Groups and Dischargers to report all data to the San Diego Water Board and to electronically upload specified monitoring reports to databases which may be accessed by the public either through a public records request, GeoTracker, and/or the California Environmental Data Exchange Network (CEDEN).

- *Key Element 5: Each Regional Board shall make clear, in advance, the potential consequences for failure to achieve the nonpoint source control implementation program's stated purposes.*

  Pursuant to Section VII.D.1 of the Order, The San Diego Water Board will take progressive enforcement actions against Dischargers for violations of the Order.

4. California Environmental Quality Act (CEQA)

The San Diego Water Board is the lead agency for the development of the Order. In accordance with CEQA, the San Diego Water Board conducted an initial study to evaluate the potential environmental effects of the adoption and implementation of the Order. The San Diego Water Board adopted a Negative Declaration, Order No. R9-2016-0136, because it concluded that this project would have less than significant impacts on the environment. The Negative Declaration, and the Initial Study, as adopted is incorporated by reference into this Fact Sheet.

5. Right to Safe Drinking Water

Water Code section 106.3 requires all relevant State agencies, including the San Diego Water Board, when revising or adopting polices, regulations, and criteria, to consider "that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Water Code section 106.3, by its terms, does not apply to the issuance of WDRS. The San Diego Water Board did however consider the human right to water established by section 106.3 in adopting the Order. The Order advances the human right expressed in Water Code section 106.3 because it (1) requires implementation of best management practices to reduce discharge of waste to groundwater and to assess the effectiveness of such practices for the purposes of protecting beneficial uses, including drinking water supplies; (2) requires monitoring of all on-site, active water supply wells (drinking and non-drinking water; and (3) requires Dischargers, or Third-Party Groups on behalf of its Members, to report any exceedances or threatened exceedances of the MCL for nitrate to well users, to local officials, and to the San Diego Water Board.

6. State Antidegradation Policy

Issuance of the Order complies with the requirements of State Water Board Resolution 68-16 *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Antidegradation Policy). The Antidegradation Policy requires the San Diego Water Board to maintain high quality waters of the State unless the Board determines that any authorized degradation is consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Board's policies (i.e., quality that exceeds applicable water quality objectives).

a. Background

Basin Plan water quality objectives are developed to ensure that ground and surface water beneficial uses are protected. The quality of some State surface waters and groundwater is higher than established in Basin Plan water quality objectives. In such waters, some degradation of water quality may occur without compromising protection of beneficial uses. The Antidegradation Policy was adopted in October 1968 to address high quality waters in the State. Title 40 of the Code of Federal Regulations (40 CFR) section 131.12, the federal Antidegradation Policy, was developed in 1975 to ensure water quality necessary to protect existing uses in waters of the U.S. The Antidegradation Policy applies to discharges to all high-quality waters of the State, including groundwater (Water Code section 13050[e]); the federal Antidegradation Policy (40 CFR section 131.12) applies only to surface waters. The State Water Board has interpreted the Antidegradation Policy to incorporate the federal Antidegradation Policy in situations where the federal policy is applicable (State Water Board Order WQ 86-17). The application of the federal Antidegradation Policy to nonpoint source discharges (including discharges from agriculture) is limited. A number of key terms are relevant to the application of the Antidegradation Policy. These terms are described below:

i. High Quality Waters

High quality waters are those surface waters or areas of groundwater that have a baseline water quality better than required by water quality control plans and policies. The baseline quality considered in making the appropriate findings is the best quality of the water since 1968, the year of the adoption of the Antidegradation Policy, or a lower level if that lower level was allowed through a permitting action that was consistent with the federal and State antidegradation policies.

ii. Best Practicable Treatment or Control

The Antidegradation Policy requires that, where degradation of high quality waters is permitted, best practicable treatment or control (BPTC) limits the amount of degradation that may occur. Neither the Water Code nor the Antidegradation Policy defines the term "best practicable treatment or control." The State Water Board has provided some direction on the interpretation of BPTC, stating: "one factor to be considered in determining BPTC would be the water quality achieved by other similarly situated dischargers, and the methods used to achieve that water quality." (See State Water Board Order WQ 2000-07, at pp. 10-11) Similarly, in a "Questions and Answers" document for the Antidegradation Policy[54] BPTC is interpreted to additionally include a comparison of the proposed method to existing proven technology; evaluation of performance data (through treatability studies); comparison of alternative methods of treatment or control, and consideration of methods currently used by the discharger or similarly situated dischargers. The costs of the treatment or control should also be considered.

iii. Maximum Benefit to People of the State

The Antidegradation Policy requires that where degradation of water quality is permitted, such degradation must be consistent with the "maximum benefit to people of the State." Only after "intergovernmental coordination and public participation" and a determination that "allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located" does 40 CFR section 131.12 allow for degradation.

iv. Waters that are Not High Quality

Where a waterbody is at or exceeding water quality objectives, it is not a high quality water and is not subject to the requirements of the Antidegradation policy. As stated previously, data collected by the San Diego Water Board, dischargers, educational institutions, and others

[54] See Questions and Answers, State Water Resources Control Board, Resolution 68-16 (February 16, 1995) https://www.waterboards.ca.gov/water_issues/programs/dept_of_defense/docs/5g.pdf (as of March 29, 2024).

demonstrate that many water bodies in the San Diego Water Board are already impaired for various constituents associated with irrigated agricultural activities. The Order is intended to improve the quality of existing waters by establishing conditions on discharges from commercial agricultural lands in order to restore impaired waters.

b. Application of the Antidegradation Policy Requirements to the Order

The determination of high-quality water within the meaning of the antidegradation policies is waterbody and constituent-specific. Very little guidance has been provided in State or federal law with respect to applying the Antidegradation Policy to a program or general permit where multiple water bodies are affected by various discharges, some of which may be high quality waters and some of which may, by contrast, have constituents at levels that already exceed water quality objectives. There is no comprehensive, waste constituent–specific information available for all surface waters and groundwater accepting agricultural operation waste discharges that would allow site-specific assessment of current conditions in the San Diego Region. Likewise, there is no comprehensive historic data of conditions prior to 1968.

However, data collected by the San Diego Water Board, dischargers, regional monitoring groups, and others demonstrate that water bodies within the San Diego Region are already impaired for various constituents that are or could be associated with agricultural operation activities. The constituents include but are not limited to: nutrients, agriculture chemicals, pathogens, and sediment (see Section I.C.1 of this Fact Sheet discussing pollutants associated with agricultural activities in the San Diego Region). Those same data collection efforts also indicate that some surface water bodies within the watershed meet objectives for these constituents and would likely be considered “high quality waters” with respect to those constituents (see Section I.C.2.a of this Fact sheet discussing surface water impacts associated with agricultural activities).

Available data shows that currently existing quality of certain water bodies is better than the water quality objectives; for example, deeper groundwaters, represented by municipal supply wells, are generally high quality with respect to pesticides and nitrates.

Given the significant variation in conditions over the broad areas covered by the Order, any application of the antidegradation requirements must account for the fact that at least some of the waters into which agricultural discharges will occur are high quality waters (for some constituents).

Adoption of the Order is consistent with the Antidegradation Policy because it does not authorize any further degradation of surface waters

and/or groundwaters or require the change of any water quality standard. Dischargers who enroll in the Order are required to protect beneficial uses and prevent nuisance by implementing management practices. Any degradation of an existing high-quality water to water with a quality that still achieves water quality objectives and beneficial uses will provide maximum benefit to the people of the State because it supports economic development and is consistent with BPTC as discussed below.

c. Consistency with BPTC

Due to the numerous commodities being grown on agricultural lands and varying geological conditions within the San Diego Region, identification of a specific technology or treatment device as BPTC is not feasible. The San Diego Water Board recognizes that various factors including site-specific, crop-specific, and regional variability affects the selection of appropriate management practices, as well as design constraints and pollution-control effectiveness of various practices. The San Diego Water Board also recognizes that Dischargers need the flexibility to choose what type of best management practices are appropriate to implement at their Operations based on the varying site-specific conditions.

There is no specific set of technologies, practices, or treatment devices that can be described as achieving BPTC universally in the San Diego Region. Best management practices developed for agriculture are to be used as an overall system of measures to address nonpoint source pollution sources on any given site. In most cases, not all of the practices will be needed to address the nonpoint source at a specific site. Operations may have more than one constituent of concern to address and may need to employ two or more of the practices to address the multiple sources. Where more than one source exists, the application of the practices should be coordinated to produce an overall system that adequately addresses all sources for the site in a cost-effective manner.

The Order, therefore, establishes a set of performance standards that must be achieved and an iterative planning approach that will lead to implementation of BPTC. The iterative planning approach will be implemented as two distinct processes: 1) upfront evaluation, planning and implementation of best management practices to attain compliance with applicable water quality standards; and 2) additional planning and implementation measures where degradation trends are observed that threaten to impair a beneficial use or where beneficial uses are impaired (i.e., water quality standards are not being met). Taken together, these processes are considered BPTC. To ensure that the planning and implementation processes leads to the on-the-ground implementation of the optimal practices and control measures to address waste discharges from agricultural operations, the San Diego Water Board has established

performance standards discussed below.

d. Operation Performance Standards

The Order establishes water quality benchmarks for implementation of best management practices that all Dischargers must achieve. The selection of appropriate best management practices must include analysis of site-specific conditions, waste types, discharge mechanisms, and crop types. Considering this, as well as the Water Code 13360 mandate that the San Diego Water Board does not specify the manner of compliance with its requirements, the selection of the best management practice must be done by the Discharger for the Operation. The following are the performance standards that Dischargers must achieve:

- Minimize or eliminate waste discharge offsite into surface water.
- Minimize or eliminate the discharge of sediment above background levels.
- Minimize percolation of waste to groundwater.
- Minimize excess nutrient application relative to crop need.
- Prevent pollution and nuisance conditions in surface and groundwaters.
- Achieve and maintain water quality objectives and beneficial uses.
- Protect wellheads from surface water intrusion.

e. Additional Planning and Implementation Measures

The Order is designed to achieve site-specific antidegradation and antidegradation-related requirements through implementation of BPTC through planning, monitoring, evaluation, and reporting.

The data and information gathered through the WQPP's and the Annual Monitoring Reports containing the aggregated INMP Summary Report data will result in the identification of management practices that meet the performance standards and represent BPTC. The WQPP's and the Annual Monitoring Reports implement an iterative process whereby the effectiveness of any set of practices in minimizing degradation will be periodically reevaluated as necessary and/or as more recent and detailed water quality data become available. This process of reviewing data and instituting additional practices where necessary will continue to assure that BPTC are implemented and will facilitate the collection of information necessary to demonstrate the performance of the practices. This iterative process will also ensure that the highest water quality consistent with maximum benefit to the people of the State will be maintained.

f. Maximum Benefit to People of the State

The Order allows limited degradation of existing high-quality waters. This limited degradation is consistent with maximum benefit to the people of the State because the continued prosperity of commercial agriculture in the San Diego Region is paramount to the economic vitality of the San Diego Region. The San Diego Region communities depend on agricultural operations for employment.

Agriculture is a key contributor to the economy in the San Diego Region. San Diego County is the thirteen largest agricultural economy in California. According to the 2022 San Diego County Crop Report, agricultural operations produced crops including fruits and vegetables that were exported to 43 nations around the world and generated more than 1.7 billion dollars in annual value to the economy.

The Order includes requirements and performance standards that will work to prevent further degradation of surface and groundwater quality. The discharge specifications (Section VI.A), the waste discharge control requirements (Section VI.B), the WQPP, and the MRP's requirements to track compliance with the Order, are each designed to ensure that any degradation will not cause or contribute to exceedances of water quality standards, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

7. Water Code section 13267(c) - Inspection and Entry

Under the authority of Water Code section 13267(c), the San Diego Water Board, or an authorized representative may inspect the premises of Operations enrolled in the Order. The inspection must be made with the consent of the owner or possessor of the Operation or if consent is withheld, with a duly issued warrant pursuant to the procedure set forth in title 13 Code of Civil Procedure part 3 (commencing with section 1822.50). However, in the event of an emergency affecting the public health or safety, an inspection may be performed without consent or the issuance of a warrant.

Dischargers must allow the San Diego Water Board or its authorized representative(s) to:

a. Enter the Operation or the location where the Discharger keeps records required by the Order.
b. Access and copy any records that the Discharger keeps as required by the Order, at reasonable times.
c. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required by the Order.

d. Sample or monitor any substances or parameters at any location at the Operation for the purposes of assuring compliance with the Order or as otherwise authorized by the Water Code, at reasonable times.

8. Water Code section 13241 - Economic Considerations

Water Code section 13241 requires each regional board to consider certain factors, including economic considerations, when establishing water quality objectives. Water Code section 13263 requires each regional water board to take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. This section provides cost estimates and identifies potential sources of financial assistance to comply with the Order. The San Diego Water Board made several assumptions due to significant uncertainties in several key areas of the program, which prevented the precise estimation of program costs.

Growers located in the San Diego Region incur many costs in producing agricultural commodities, including but not limited to labor, equipment, production, chemicals, (pesticides, fertilizers, etc.), water, and day-to-day maintenance of their operation. Growers are also regulated by numerous agencies and compliance with regulations can add to costs for growers.

a. WDR Fees

Dischargers enrolled in the Order will pay annual WDR fees to the State Water Board. The State Water Board established a fee schedule in the California Code of Regulations (CCR) title 23, section 2200.6, and updates the fee schedule annually. The fees are assessed based on the acreage of the Dischargers Operation. The annual WDR fees for the 2023-24 fiscal year are shown in Table C-6 below.

Table C-6. Discharger Annual State Fees

2023-24 State Water Board Annual Fees	
Discharger enrolled in a Third-Party Group	$1.42 per irrigated acre
Discharger enrolled as an individual	$35.45 per irrigated acre up to 300 irrigated acres plus $17.73 per irrigated acre over 300 irrigated acres with a minimum fee of $673.

Dischargers are required to pay a one-time enrollment fee. The enrollment fee is $200 for Dischargers who receive a written request from the San

Diego Water Board, to submit a Notice of Intent (NOI) to enroll their Operation in the Order. Dischargers who proactively submit a NOI to enroll their Operation in the Order are required to pay an enrollment fee of $50.

b. Third-Party Group Fees

Dischargers who elect to participate in a Third-Party Group will likely pay fees to join and maintain membership in the Third-Party Group. The San Diego Water Board approved the San Diego Region Irrigated Lands Group (SDRILG) and the Upper Santa Margarita Irrigated Lands Group (USMILG) to act as Third-Party Groups. The SDRILG and USMILG's fee schedule includes a one-time enrollment fee, annual fee to cover monitoring and reporting expenses, and an annual farm bureau membership fee. Annual Third-Party fees are based on the compliance costs borne by the Third-Party Group and the number of Members within the Third-Party Group. Table C-7 describes the annual and one-time fees required by the SDRILG and USMILG as of March 29, 2024.

Table C-7. Third-Party Group Fees*

Third-Party Group	Fee Type	Amount	Annual or One-Time Fee
SDRILG	Farm Bureau Fee	$355	Annual
	Administration Fee	$75	Annual
	Irrigated Acre Fee	$9.00 per irrigated acre	Annual
	Enrollment Fee	1 acre - $325 2 acres - $650 3 acres - $975 4 acres - $1,300 5 acres - $1,600 >5-10 acres - $1,700 >10-25 acres - $1,800 25+ acres - $1,900	One-Time
USMILG	Farm Bureau Fee	$230	Annual
	Irrigated Acre Fee	$5-$10[1]	Annual
	Enrollment Fee	$300	One-Time

Note 1. Varies each year based on administration, testing, and acreage fees.

*The fees represented in Table C-7 are subject to change.

c. Discharger Requirement Fees

The Order requires Dischargers to: (1) comply with the statewide precedential requirements from the ESJ Order (2) create a Monitoring Program Plan (if the Discharger enrolls as an individual), and (3) manage their Operation to prevent the discharge of waste to surface waters and/or groundwaters, which may require the Discharger to implement various best management practices. Estimates for the cost of compliance with the discharger requirements are provided in the sections below.

i. ESJ Order Requirements

The ESJ Order includes several requirements for Dischargers including but not limited to the following:

- An annual education requirement.
- An annual Irrigation and Nitrogen Management Plan Summary Report (INMP Summary Report) requirement.
- INMP Summary Report certification requirements for Dischargers identified as outliers.

Complying with these requirements will take time and potentially require Discharger's to pay labor costs. Table C-8 provides estimates on the cost of complying with the ESJ Order requirements. The costs were estimated using California's minimum wage of $16/hour and an average technical consultant fee of $100/hour (for the INMP Summary Report certification only).

Table C-8. Discharger ESJ Order Requirement Fees

ESJ Order Requirement	Cost Amount	Annual or One-Time Cost
Education (2 hours required)	$0 - $32 (per employee)	Annual
INMP Summary Report	$0 - $2,560	Annual
INMP Summary Report Certification	$0 - $8,000	Annual

ii. Monitoring Program Plan

The San Diego Water Board requires Dischargers enrolled as an individual to submit a Monitoring Program Plan to the San Diego Water Board. Dischargers enrolled as an individual must evaluate the Monitoring Program Plan and amend it as necessary based on the results of monitoring data or changes to the membership. The San Diego Water Board estimates that it will cost approximately $0 - $ 46,800 to prepare the Monitoring Program Plan. The costs were estimated using an average technical consultant fee of $100/hour.

iii. Best Management Practices (BMPs)

Many Dischargers have installed relevant BMPs at their Operations, including BMPs for irrigation management, stormwater management, nutrient management, and erosion control. Due to the high cost of water, many Dischargers use low-flow drip or micro-sprinklers to water their crops. Because many Dischargers have already installed appropriate BMPs, the San Diego Water Board anticipates many Dischargers will have relatively minor construction costs associated with BMP implementation.

The cost of construction of new BMPs will only be incurred by a portion of Operations within the San Diego Region. Dischargers will select the most appropriate and cost-effective BMPs and will base this determination on site-specific conditions such as existing BMPs (for example, almost all of the avocado orchards in San Diego County currently use mini-sprinklers irrigation) crop type, site location, slope, soil and geology, and distance to surface water bodies. Furthermore, it is likely that site-specific conditions may not require the construction of BMPs, and that the BMPs have already been deployed, either for compliance with previous Orders or as a normal operating activity. The cost estimates for some BMPs implemented by Dischargers at their Operation are included in Table C-9 below.

The Order requires Dischargers to line all wastewater ponds located within their Operation that capture wastewater. The San Diego Water Board anticipates that this requirement could place a substantial cost burden onto the Dischargers. Therefore, the Order allows Dischargers up to five years to comply with this requirement, to support a Dischargers efforts to plan, prepare, and save money in order to comply with this requirement. Anticipated costs for lining wastewater ponds with compacted soil liner treated with compacted clay, a flexible membrane without liner drainage or venting, and double flexible membrane with geoweb and drain can be found in Table C-9.

Table C-9 lists the anticipated BMPs that may be installed and the cost range for design, implementation, and annual maintenance costs (assumed to be 30% of the implementation cost). The costs were estimated using the U.S. Department of Agriculture Natural

Resources Conservation Service (NRCS), San Diego County, California Field Office Technical Guide[55].

Table C-9. Anticipated Best Management Practices Cost

Best Management Practice	Material Cost	Implementation Cost (includes labor, installation, and mobilization)	Annual Maintenance Cost
Silt Fence with support post (Practice 570 Scenario #1)	$3.59/foot (includes materials, equipment, and labor)	$140.71/acre	$42.21/acre
Straw Wattles (tubes of rice straw, 8-9 inches in diameter, 25 feet long. (Practice 570 Scenario #1)	$1.65/foot	$140.71/acre	$42.21/acre
Geotextile (woven) (Practice 570 Scenario #1)	$1.54/ square yard	$140.71/acre	$42.21/acre
Wood Chips (2-3 inches to reduce soil erosion and water runoff on fields). (Practice 484 Scenario #2)	$61.61/ cubic yard	$459.25/acre	$137.78/acre
Biodegradable or Polyethylene Plastic Mulch (Practice 484 Scenario #5)	$0.42/ square yard	$0.02/square foot	$0.01/square foot

[55] USDA Practice Payment Scenarios, available at: https://www.nrcs.usda.gov/sites/default/files/2022-11/California-Scenarios-23-payment-rates.pdf (as of March 29, 2024).

Table C-9 *continued.* Anticipated Best Management Practices Cost

Pond Lining – Compacted Soil Liner Treated with Compacted Clay (Practice 520 Scenario #24)	$4.39/ cubic yard	$7.16/cubic yard	$2.15/cubic yard
Pond Lining – Flexible Membrane, uncovered, without liner drainage or venting (Practice 521 Scenario #1)	$8.83/ square yard	$2.72/square yard	$0.82/square yard
Pond Lining – Double Flexible Membrane with Geoweb and Drain (Practice 521 Scenario #5)	$18.79/ square yard	$1.45/square yard	$0.43/square yard
High Density Polyethylene Plastic Tank (Practice 436 Scenario #5)	$1.42/ gallon	$1.10/gallon	$0.33/gallon

d. Third-Party Group Requirement Fees

The Order requires active Third-Party Groups to: (1) comply with the statewide requirements from the ESJ Order, (2) create a Monitoring Program Plan, and (3) submit annual reports to the San Diego Water Board. Estimates for the cost of compliance with these requirements are provided in the sections below.

i. ESJ Order Requirements

The ESJ Order includes several requirements for Third-Party Groups including:

- Submit data sets consistent with the data sets and analysis of those data sets described in the ESJ Order with the data collected from its Members INMP Summary Reports.
- Conduct a statistical analysis on the data and information provided from its Members for the nitrogen applied and nitrogen removed (based on yield) to determine statistical outliers.
- Follow up with and provide training for Members that are identified as having AR statistical outliers.

Complying with these requirements will take time and will require Third-Party Groups to pay for labor costs. Table C-10 provides estimates on the cost of complying with the ESJ Order requirements. The San Diego Water Board estimated the minimum costs using the State minimum wage of $16/hour and the maximum costs were estimated using an average technical consultant fee of $100/hour.

Table C-10. Estimated Third-Party Group Costs for Complying with the ESJ Order Requirements

ESJ Order Requirement	Cost Amount
AR Data Sets	$2,560 - $16,000
Statistical Analysis of AR Data	$1,280 - $8,000
AR Outlier Follow-up	$32 - $4,000 per Member

ii. Monitoring Program Plan

The San Diego Water Board requires Third-Party Groups to submit a Monitoring Program Plan to the San Diego Water Board. Third-Party Groups must evaluate the Monitoring Program Plan and amend it as necessary based on the results of monitoring data or changes to the membership. The San Diego Water Board estimates that it will cost approximately $3,510 - $46,800 to prepare the Monitoring Program Plan. The San Diego Water Board estimated the minimum costs using the State minimum wage of $16/hour and the maximum costs were estimated using an average technical consultant fee of $100/hour.

iii. Annual Reports

The San Diego Water Board requires Third-Party Groups to submit an Annual Membership Report, Summary of Expenditures of Fees and Revenue, INMP Summary Report (summarizing the data collected from each of its Members INMP Summary Reports) (see Table C-10 for cost of AR Data Sets), and an Annual Monitoring Report. Table C-11 provides estimates for the cost to create these reports. The San Diego Water Board estimated the minimum costs using the State minimum wage of $16/hour and the maximum costs were estimated using an average technical consultant fee of $100/hour.

Table C-11. Third-Party Group Annual Reports Cost

Report	Cost Amount
Annual Membership Update Report	$128 - $400
Summary of Expenditures of Fees and Revenue	$32 - $800
Annual Monitoring Report	$13,696 – $42,800

e. Monitoring Fees

Third-Party Groups will fulfill the monitoring and the monitoring reporting requirements described in the MRP on behalf of its Members. Members of a Third-Party Group must pay the Third-Party Group's annual monitoring and reporting fee. Dischargers enrolled as an individual are required to conduct site-specific stormwater runoff monitoring in accordance with the requirements described in the MRP. Table C-12 shows the cost associated with the parameters required for the surface water monitoring. The State Water Board established[56] the current market costs identified in Table C-12 through a statewide lab contract.

Table C-12. Surface Water Monitoring Cost

Parameter	Cost per sample
Stream Width	Field Measurement
Stream Depth	Field Measurement
Stream Cross Sectional Area	Field Measurement
Stream Velocity	Field Measurement
Stream Flow	Field Measurement
pH	$24.50 (or Field Measurement)
Temperature	Field Measurement
Dissolved Oxygen	Field Measurement
Turbidity	$57 (or Field Measurement)
Total Dissolved Solids	$30.63
Total Suspended Solids	$30.63
Hardness (as $CaCO_3$)	$30.63
Ammonia	$67.38
Nitrate-Nitrite as Nitrogen	$82.50
Total Nitrogen	$162.13

[56] Current market costs established by the State Water Board, as of March 29, 2024.

Table C-12, *continued*. Surface Water Monitoring Cost.

Orthophosphate	$30.63
Total Phosphorus	$116.38
Sulfate	$24.50
Potassium	$24.50
E. coli – Freshwater	$113
Chronic Toxicity	$1,220
Total Annual Cost (including pH and Turbidity)	**$2,014.41**

Table C-13. Site-Specific Discharge Monitoring Cost

Parameter	Cost per sample
Total Dissolved Solids	$30.63
Ammonia	$67.38
Nitrate-Nitrite as Nitrogen	$82.50
Total Nitrogen	$162.13
Orthophosphate	$30.63
Total Phosphorus	$116.38
Sulfate	$24.50
Potassium	$24.50
Total Annual Cost	**$538.65**

All drinking water supply well(s) and all active non-drinking water supply wells screened in an unconfined aquifer located at their Members Operation (for Third-Party Groups) or on their Operation (for Dischargers enrolled as an individual) are required to be monitored. Third-Party Groups and Dischargers enrolled as an individual only need to test for nitrate in drinking water supply wells on their Members Operation (for Third-Party Groups) or their Operation (for Dischargers enrolled as an individual) for a total cost of $82.50 per sample. Third-Party Groups and Dischargers enrolled as an individual must test for additional parameters in any active non-drinking water supply wells screened in an unconfined aquifer. The cost for monitoring non-drinking water supply wells is shown in Table C-14.

Table C-14. Non-Drinking Water Supply Well Monitoring Cost

Parameter	Cost per sample
Total Dissolved Solids	$30.63
Ammonia	$67.38
Nitrate as NO_3	$82.50
Total Nitrogen	$162.13
Total Phosphorus	$116.38
Sulfate	$24.50
Potassium	$24.50
Total Annual Cost	**$508.02**

f. Opportunities for Cost Reduction

There are several ways to lessen the potential economic burden of complying with the Order.

i. Selection of Cost-Effective BMPs

This analysis includes an array of possible BMPs. The actual cost will be dependent on the selection made by the Discharger using site-specific considerations. Many groups/organizations, such as the University of California Cooperative Extension (UCCE) and the NRCS, can provide assistance with the selection of appropriate, cost-effective BMPs.

ii. Funding Opportunities

The San Diego Water Board and the State Water Board will continue to assist the agricultural community in identifying sources of financial assistance from existing federal, State, or local programs that promote water conservation and improved water quality through increased best management practices. Funding received from grants, cost-sharing, or low-interest loans would offset some of the local growers' expenditures for compliance and implementation of the Order, and likely reduce the estimated losses in farmland. Potential funding sources for this mitigation measure are discussed below. The programs described below are illustrative and are not intended to constitute a comprehensive list of funding sources.

1) State Water Board

The Division of Financial Assistance (DFA) administers water quality improvement programs for the State Water Board. The

programs provide grant and loan funding to reduce nonpoint source discharge to surface waters.

The DFA currently administers two programs that improve water quality – the Agricultural Drainage Management Loan Program and the Agricultural Drainage Loan Program. Both of these programs were implemented to address the management of agricultural drainage into surface water.

The State Water Board's Clean Water State Revolving Fund also has funding authorized through Proposition 84. It provides loan funding to a wide variety of point source and nonpoint source water quality control activities.

2) Other Funding Programs

Other State and federal funding programs have been available in recent years to address agricultural water quality improvements. Integrated Regional Water Management grants were authorized and funded by Proposition 50 and by Proposition 84. These are administered jointly by the State Water Board and the California Department of Water Resources. Other organizations such as the California Department of Food and Agriculture (CDFA)[57] and NRCS[58] also offer grants opportunities.

II. Rationale for Discharger Requirements

A. Reports

1. Water Quality Protection Plan

The Order requires Dischargers to prepare and periodically update (as needed) a WQPP to document the type of management practices implemented or planned to be implemented at their Operation, to prevent

[57] Grant programs at CDFA can be found at the following link: https://www.cdfa.ca.gov/grants/ (as of March 29, 2024).

[58] Conservation Innovation Grants - California can be found at the following link: https://www.nrcs.usda.gov/programs-initiatives/cig-conservation-innovation-grants/california/conservation-innovation-grants (as of March 29, 2024).

discharges of waste to surface and/or groundwaters. Dischargers must identify specific management practices implemented at their Operation in their WQPP. These specific management practices include: sediment and erosion controls (as required by the ESJ Order), stockpile controls, chemicals and hazardous materials controls, compost and manure controls, and any other waste controls.

Dischargers previously enrolled in Order Nos. R9-2016-0004 and R9-2016-0005 submitted a WQPP to the San Diego Water Board as part of the enrollment process. The Order requires these Dischargers to submit a WQPP Supplemental Information form to the San Diego Water Board within sixty (60) days after the adoption of the Order. The Discharger's WQPP Supplemental Information form amends their existing WQPP to identify additional information needed for the San Diego Water Board to ensure Discharger compliance with the Order, including: (1) ESJ Order requirements, (2) wastewater pond-lining requirements, and (3) groundwater monitoring requirements.

2. Irrigation and Nitrogen Management Plan Summary Report

The ESJ Order specifies that regional boards must require Dischargers to submit: (1) field-level management practice implementation data and (2) summary data from an irrigation and nitrogen management plan. Additionally, the ESJ Order requires: (1) the submission of field-level nitrogen applied (A) and nitrogen removed (R) data to the regional boards and (2) the calculation of the annual and multi-year A/R ratio and A-R difference parameters for each grower by field. To comply with this requirement, the San Diego Water Board created an Irrigation and Nitrogen Management Plan (INMP) Summary Report which requires Dischargers to: (1) identify their field-level management practice implementation data, (2) report the AR data by field, and (3) report a summary of their irrigation and nitrogen efficiency practices by field. The ESJ Order further specifies that the data collected from the INMP Summary Reports from Members of a Third-Party Group must be submitted to the regional board with anonymous identifiers. Dischargers enrolled as an individual must disclose their identity on their INMP Summary Report.

The Order requires Third-Party Groups to assign: (1) a Permanent Identification Number (PID) to each Member, and (2) Field Location Number(s) (FLN) to each assessor's parcel number associated with its Member's Operations. Dischargers enrolled as Members of a Third-Party Group must submit the INMP Summary Report to their Third-Party Group using their assigned PID and FLN(s). The Order requires Third-Party Groups to collect and submit the INMP Summary Reports to the San Diego Water Board, ensuring each Member's identity is anonymous.

The Order requires: (1) Members of a Third-Party Group to submit their INMP Summary Report to their Group annually by March 1 and (2) Dischargers enrolled as an individual to submit their INMP Summary Report to the San Diego Water Board annually by March 1. Dischargers must use the INMP Summary Report template provided in Attachment I of the Order. The INMP Summary Report template includes a detailed instruction sheet to assist Dischargers with completing the Report. The INMP Summary Report template asks Dischargers to identify the field(s) at their Operation and asks Dischargers to identify the following for each field: (1) the crop(s) grown, (2) irrigation method(s) used, nitrogen applied, and nitrogen removed, irrigation and nitrogen efficiency practices, and sediment and erosion control management practices. The San Diego Water Board urges Dischargers to be as detailed as possible when completing the INMP Summary Report. However, the San Diego Water Board understands that many agricultural operations in the San Diego Region grow various kinds of crops with unique fertilizer and irrigation needs, making it difficult to complete this detailed report. Therefore, the San Diego Water Board gives Dischargers options throughout the INMP Summary Report to report more generally, if needed.

The ESJ Order gives each regional board the discretion to require certification of all growers or just a subset of growers based on a risk categorization. However, the ESJ Order states, “At a minimum, the certification requirement for all low-vulnerability growers that are determined to be outliers consistent with the additional certification requirements stated in section II.A.5.f [of the ESJ Order discussing AR Outlier Follow Up] is precedential statewide.” To comply with this precedential requirement, the Order requires Dischargers whose Operation, or any field(s) at their Operation, identified as a statistical outlier in the previous reporting year to have their INMP Summary Report certified. The Order requires Third-Party Groups to conduct a statistical analysis on the data and information provided from its Members for the nitrogen applied and nitrogen removed (based on crop yield) to determine statistical outliers. The Order requires Third-Party Groups to provide annual education to its Members whose Operation was identified as a statistical outlier. The San Diego Water Board will require Dischargers enrolled as an individual to participate in additional water quality training if the Board determines they are a statistical outlier.

3. Record Keeping

The ESJ Order requires Third-Party Groups to maintain required reports and records for ten (10) years. The Order requires Dischargers and Third-Party Groups to retain copies of all required reports and records for ten (10) years. Dischargers and their employees can compare past reports and records to determine future activities (such as deciding how much fertilizer to purchase based on previous records) and to determine effective BMPs. It is necessary for Dischargers to retain copies of all required reports and records, whether

electronic or physical, to serve as educational materials and guidance for BMPs and water quality protection.

4. Discharge Notification

The Order requires Dischargers to notify the San Diego Water Board within 24 of any discharge of waste from their Operation that may threaten human health or the environment. This requirement will allow the San Diego Water Board to (1) become aware of a potential discharge that may threaten human health or the environment, and (2) take immediate action to prevent the waste discharge from impacting human health or the environment.

B. Education

The ESJ Order requires all growers to participate in outreach events. The ESJ Order gives the regional boards discretion over the precise form and frequency of the outreach events, as long as they are designed to reach all growers in the ILRP. The Order requires Dischargers to attend two hours of water quality training annually to ensure that the Dischargers are familiar with the most current information regarding management practices to reduce or eliminate discharges of waste to surface and/or groundwaters. Dischargers can also maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional Resource Conversation District's to be informed of any known water quality problems and the management practices that are available to address those problems.

C. Best Management Practices

The Order requires Dischargers to properly operate and maintain all BMPs and systems implemented at their Operation. This requirement helps prevent the discharge of waste to surface and/or groundwaters which may have a negative impact on human health and the environment.

1. Stockpile Management

The Order requires Dischargers to keep stockpiled material out of the stormwater flow path and to maintain a 100-foot buffer between the stockpiled material and any surface water bodies and stormwater channels, if possible. The median size of agricultural operations in the San Diego Region is four acres, so some agricultural operations do not have the space to maintain a 100-foot buffer. Therefore, the Order allows Dischargers who do not have the space to maintain a 100-foot buffer to store the stockpiles the farthest possible distance away from any surface waters and stormwater channels. The Order also requires Dischargers to: (1) store stockpiled material in a manner that does not exceed the capacity of the storage area, (2) store stockpiled manure and compost on watertight surfaces, (3) cover and surround stockpiled material with BMPs at least 24 hours prior to a forecasted

rain event, and (4) cover and surround stockpiles with BMPs when materials are not used or are not planned to be used within 14 calendar days. These requirements are designed to prevent the discharge of the stockpiled material into surface waters and/or groundwaters where the material could potentially degrade water quality.

2. Sedimentation and Erosion Control

The ESJ Order requires Dischargers whose Operations have the potential to cause erosion and discharge sediment to surface waters to implement sediment and erosion control practices. The Order requires Dischargers to implement BMPs to prevent the discharge of sediment into surface waters which may result in the degradation of water quality and aquatic life, to comply with this ESJ Order requirement. Dischargers are required to identify, in their WQPP, what management practices they implement at their Operation to limit and prevent erosion and for sedimentation control.

3. Soil Amendment Land Application

The Order requires Dischargers to: (1) ensure that all soil amendments are applied to the soil at least 100 feet away from any surface waters and stormwater channels, if possible, and (2) ensure that the soil amendment is applied in amounts and frequencies that are reasonable for the crop or plant, soil, climate, seasons, special local situations, management systems, and type of soil amendment. The Order allows Dischargers to place BMPs along the downstream side of the area where they applied the soil amendment if they do not have the space at their Operation to ensure that the soil amendment(s) are applied to the soil at least 100 feet away from any surface waters and stormwater channels. These requirements are designed to prevent the discharge of waste into surface waters and/or groundwaters where the waste could potentially degrade water quality and negatively impact human, ecological, and aquatic health.

4. Wastewater Pond Management

The Order requires Dischargers to line all wastewater ponds within their Operation that capture non-stormwater flows (i.e., irrigation wastewater, brine wastewater, stormwater mixed with irrigation wastewater, etc.). The pond lining must be designed and constructed under the supervision of a California Registered Civil Engineer or Certified Engineering Geologist. This requirement is meant to prevent wastewater from percolating into the groundwater beneath the ponds and to ensure the ponds are sized appropriately to prevent wastewater from overflowing into surface waters.

5. Chemical Management

The Order requires Dischargers to: (1) implement proper handling, storage, disposal and management of chemicals, (2) apply chemicals in accordance with the manufacturer's label and at the agronomic rate, and (3) store chemicals on a watertight surface. The San Diego Water Board may also require Dischargers to have a secondary containment structure that is watertight and able to capture the total volume of the chemical stored in the primary containment structure. These requirements are designed to: (1) prevent the contact of the chemicals with stormwater which could transport the chemicals to downstream surface waters and (2) prevent the contact of the chemicals with the ground where it may percolate into the groundwater.

6. Waste Management

The Order requires Dischargers to: (1) cover all trash bins located at their Operation, (2) keep surface waters and stormwater channels located at their Operation clear of trash, and (3) ensure all chemical toilets and/or holding tanks are placed on level ground, contain secondary containment, and placed at least 100 feet away from surface waters and stormwater channels, if possible. The Order allows Dischargers to place the chemical toilets/holding tanks at the farthest possible distance away from any surface waters and stormwater channels if they do not have the space on their Operation to place the chemical toilets/holding tanks 100 feet away. These requirements are designed to prevent the contact of trash and human waste with: (1) stormwater that can carry the waste to downstream surface waters and (2) the ground where it can percolate into the groundwater.

III. Rationale for Third-Party Group Requirements

A. Application

The Order requires prospective Third-Party Groups to submit a letter of application to the San Diego Water Board demonstrating that the Third-Party Group has the ability to carry out designated responsibilities in the Order. Third-Party Groups assist Dischargers that enroll in the Order as Members of the Group in attaining and maintaining compliance with the requirements of the Order.

Under the terms of the Nonpoint Source Policy, the Third-Party Group role is restricted to entities that are not actual dischargers. These Third-Party Groups may include non-governmental organizations (NGOs), citizen groups, industry groups (including discharger groups represented by entities that are not dischargers), watershed coalitions, government agencies (i.e., cities or counties), or other non-discharger groups.

B. Disbandment

If a Third-Party Group wishes to disband, the Group must provide a letter of disbandment to the San Diego Water Board and its Members at least 30 days prior to disbanding. The letter of disbandment provides the Members of the Third-Party Group time to either: (1) apply for membership in another active Third-Party Group, (2) enroll as an individual, or (3) enroll in other applicable separate WDRs such as individual WDRs.

C. Reports

1. INMP Summary Report

The ESJ Order requires: (1) field-level AR data submission to the regional water board consistent with the data sets and analysis of those data sets described in the ESJ Order, and (2) the AR data to be submitted with anonymous identifiers for third-party programs only. To comply with this requirement, the Order requires Third-Party Groups to submit an annual report summarizing the data collected from its Members INMP Summary Reports, consistent with the data set requirements described in the ESJ Order. Additionally, the Order requires Third-Party Groups to assign: (1) a Permanent Identification Number (PID) to each Member, and (2) Field Location Number(s) (FLN) to each assessor's parcel number associated with its Member's Operations. Dischargers enrolled as Members of a Third-Party Group must submit the INMP Summary Report to their Third-Party Group using their assigned PID and FLN(s). The Order requires Third-Party Groups to collect and submit the INMP Summary Reports to the San Diego Water Board, ensuring each Member's identity is anonymous.

2. Annual Membership Report

The Order requires Third-Party Groups to submit an Annual Membership Report for the previous reporting year (January 1 to December 31) to the San Diego Water Board by January 31 of each year. The Annual Membership Report provides the San Diego Water Board with updated information about the Third-Party Groups Members including: (1) Members who have joined the Third-Party Group and (2) Members who have terminated their enrollment. The San Diego Water Board uses the total irrigated acreage listed in the Annual Membership Report to bill the Third-Party Group for the annual fee required in the Order.

3. Summary of Expenditures of Fees and Revenue

The Order requires Third-Party Groups to submit a Summary of Expenditures of Fees and Revenue to the San Diego Water Board by January 31 of each year to increase transparency within the program for its Members and the public.

4. Record Keeping

The ESJ Order requires Third-Party Groups to: (1) maintain required reports and records for ten years, and (2) back up certain information in a secure offsite location managed by an independent entity. The Order requires Third-Party Groups to: (1) retain copies of reports and records for ten years and (2) back up certain information in a secure offsite location managed by an independent entity.

D. Education

The ESJ Order requires Third-Party Groups to follow up with and provide training for AR data outliers and to identify repeated outliers. To comply with this requirement, the Order requires Third-Party Groups to follow up with and provide training for Members they have identified as an outlier. Additionally, the Order requires Third-Party Groups to identify repeated statistical outliers to the San Diego Water Board.

IV. Rationale for Prohibitions

The prohibitions in the Order are based on Water Code section 13243 and implement all waste discharge prohibitions contained in the Basin Plan, and State Water Board plans and policies. The Order does not authorize any discharges not covered under this Order or other WDRs

V. Rationale for Discharge Specifications and Waste Discharge Control Requirements

A. General Discharge Specifications

The Discharge Specifications in the Order are based on existing water quality standards requirements found in the following water quality control plans and policies and federal regulations:

1. The Basin Plan, including beneficial uses, water quality objectives, and implementation plans.

2. The *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan) including beneficial uses, water quality objective, and implementation plans.

3. The *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* (Bays and Estuaries Policy).[59]

4. The *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Part 1 Sediment Quality*[60] including beneficial uses, water quality objective, and implementation plans.

5. The *Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP).[61]

6. The *National Toxics Rule* (NTR).

7. The *California Toxics Rule* (CTR).

8. The Water Code.

The Discharge Specifications in the Order prohibit discharges from causing or contributing to an exceedance of applicable water quality standards, unreasonably affecting applicable beneficial uses, or causing or contributing to a condition of pollution or nuisance. Dischargers must show immediate compliance with the Discharge Specifications.

Water Code section 13263(a) provides that WDRs "shall implement any relevant water quality control plans that have been adopted and shall take into consideration the beneficial uses to be protected, [and] the water quality objectives reasonably required for that purpose…" The Order protects the beneficial uses of receiving waters in part through the requirements of section VI

---

[59] The Bays and Estuaries Policy can be found at the following link: https://www.epa.gov/sites/default/files/2015-03/documents/ca-policy-enclosed-bays.pdf (as of March 29, 2024).

[60] The Water Quality Control Plan for Enclosed Bays and Estuaries of California – Part 1 Sediment Quality can be found at the following link: https://www.waterboards.ca.gov/water_issues/programs/bptcp/docs/sediment/sed_qlty_part1.pdf (as of March 29, 2024).

[61] The State Implementation Policy can be found at the following link: https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf (as of March 29, 2024).

of this Order to comply with applicable water quality standards contained in the water quality control plans and policies and federal regulations listed above.

The San Diego Water Board established Water Quality Benchmarks in Table B-7 of the MRP for specific waste constituents required to be monitored. The Water Quality Benchmarks provide a measurable and reliable indicator for determining compliance with applicable water quality standards. The water quality benchmarks in the Order come from the water quality objectives in the Basin Plan.

B. Waste Discharge Control Requirements

The waste discharge control requirements in the Order require Dischargers to prevent the discharge of waste to surface waters and/or groundwaters by: (1) avoiding the application of fertilizers, pesticides, herbicides, algaecides, and fumigants within three days of a forecasted rain event, (2) ensuring soil amendments do not contain municipal solid waste (except compost), septage, liquid waste, oil, grease, or any other waste determined by the San Diego Water Board to pose a potential threat to water quality, (3) implementing the management practices described in their WQPP, and (4) properly operating and maintaining any facility, unit, system, or monitoring device installed to achieve compliance with the Order.

VI. Rationale for Monitoring and Reporting Program (MRP)

Water Code section 13267 authorizes the San Diego Water Board to require technical and monitoring program reports. The MRP for the Order provides the San Diego Water Board information to determine the effectiveness of the management practices and the effect on the quality of the surface and groundwaters in the San Diego Region. The MRP requires Dischargers enrolled as an individual to conduct surface and groundwater (if applicable) monitoring. The MRP requires Third-Party Groups on behalf of its Members to conduct surface water, groundwater (if applicable), and bioassessment monitoring.

The technical and monitoring reports required by the Order are necessary to ensure that the prior harm and future threat to water quality created by discharges from Operations (as discussed in section I.C of this Fact Sheet) are controlled, minimized and eliminated.

A. Rationale for Surface Water Monitoring

1. Third-Party Groups

The MRP requires Third-Party Groups to establish surface water monitoring locations in surface waters that receive direct or indirect discharges from its Member’s Operations. The MRP requires Third-Party Groups to collect

samples from each surface water monitoring location once during the dry season and once during the wet season. The parameters required to be monitored are representative of typical discharges from Operations and will provide an evaluation of the effectiveness of the employed best management practices. The MRP requires Third-Party Groups to compare the surface water monitoring results against Water Quality Benchmarks. Water Quality Benchmarks are pollutant concentration levels and narrative water quality standards used to evaluate if management practices are effective and if additional measures are necessary to control pollutants.

If the monitoring results indicate an exceedance(s) of any of the Water Quality Benchmarks, in addition to collecting a sample from each surface water monitoring location twice a year, the Third-Party Group must modify its Monitoring Program Plan to include a Contingency Work Plan. The Contingency Work Plan requires Third-Party Groups to propose an expanded monitoring and analysis program to investigate the source(s) of the exceedance(s). If the monitoring results from the Contingency Work Plan identify that the source of the exceedance(s) is a Third-Party Group's Member(s), the Third-Party Group must assist the Member(s) with compliance of the Order.

The San Diego Water Board included the Contingency Work Plan requirements in the MRP to replace the Water Quality Restoration Plan (WQRP) requirements that was required by Order Nos. R9-2016-0004. The San Diego Water Board determined, based on surface water monitoring results, that the WQRP was not an effective way to protect water quality. The WQRP did not require Third-Party Groups to investigate the source(s) of the exceedance(s). The Contingency Work Plan requires Third-Party Groups to not only investigate the source(s) of the exceedance(s), but also to propose a plan to control the source if the source is identified as being a Group's Member(s).

2. Dischargers Enrolled as an Individual

The MRP requires Dischargers enrolled as an individual to establish site-specific monitoring location(s) on their Operation and to collect stormwater runoff sample(s) from their Operation once a year during the first qualifying storm event of the wet season. This data will provide an indication of the amount of pollutants that have the potential to discharge into downstream surface waters during the first flush of the wet season. The parameters required to be monitored are representative of typical discharges from Operations and will provide an evaluation of the effectiveness of the employed best management practices. The MRP requires Dischargers enrolled as an individual to compare the surface water monitoring results against Water Quality Benchmarks. Water Quality Benchmarks are pollutant concentration levels and narrative water quality standards used to evaluate if

management practices are effective and if additional measures are necessary to control pollutants.

If the monitoring results indicate an exceedance(s) of any of the Water Quality Benchmarks, in addition to collecting a sample from each site-specific monitoring location(s) once a year, Dischargers enrolled as an individual must modify their Monitoring Program Plan to include a Contingency Work Plan. The Contingency Work Plan requires Dischargers enrolled as an individual to propose an expanded monitoring and analysis program to investigate the source(s) of the exceedance(s). If the monitoring results from the Contingency Work Plan identify that the source of the exceedance(s) is the Discharger's Operation, the Discharger must propose what actions they will take to comply with the Order.

The San Diego Water Board included the Contingency Work Plan requirements in the MRP to replace the Water Quality Restoration Plan (WQRP) requirements that was required by Order Nos. R9-2016-0005. The San Diego Water Board determined, based on surface water monitoring results, that the WQRP was not an effective way to protect water quality. The WQRP did not require Dischargers enrolled as an individual to identify the source(s) of the exceedance(s). The Contingency Work Plan requires Dischargers enrolled as an individual to not only investigate the source(s) of the exceedance(s), but also to propose a plan to control the source if the source is identified as being the Discharger's Operation.

B. Rationale for Groundwater Monitoring

The ESJ Order states, "The requirement for groundwater quality trend monitoring shall be precedential for ILRPs statewide." To comply with this requirement, the Order requires Third-Party Groups and Dischargers enrolled as an individual to include a trend analysis of the groundwater monitoring results over time in their Annual Monitoring Report.

1. Drinking Water Supply Well Sampling

The ESJ Order states: "The requirement for on-farm drinking water supply well monitoring, in accordance with the provisions described above [in the ESJ Order], shall be precedential for ILRPs statewide." To comply with this requirement and to protect the public from the potential health risks associated with drinking contaminated water, the Order requires:

a. Third-Party Groups and Dischargers enrolled as an individual to sample all drinking water supply wells located at their Member's Operation (for Third-Party Groups) or located at the Discharger's Operation (for Dischargers enrolled as an individual) for nitrate as NO3—N annually. If three years of consecutive monitoring data show the nitrate concentration is less than 36

mg/L as NO3--N, then Third-Party Groups and Dischargers enrolled as an individual can reduce the drinking water supply well sampling frequency to once every five years.

b. Third-Party Groups and Dischargers enrolled as an individual to do the following if the monitoring data shows the nitrate concentration is equal to or greater than 45 mg/L as NO3--N:

   i. Notify the San Diego Water Board within 24 hours of receiving the monitoring results

   ii. Notify all individuals that use the water supply well for drinking water of the nitrate test results within 10 days of receiving the monitoring results

   iii. Provide a copy of the notice sent to users of the water supply well to the San Diego Water Board if the monitoring data shows the nitrate concentration is equal to or greater than 45 mg/L as NO3—N. This requirement is in compliance with the ESJ Order precedential requirement.

2. Non-Drinking Water Supply Well Sampling

The ESJ Order states, “Even if the [third party] programs do not require [groundwater quality monitoring plans], all of the regional boards shall apply this methodology or a similar methodology, designed to determine targets for nitrogen loading within high priority townships or other geographic areas, for the remaining ILRPs in the state.” To comply with this requirement, the Order requires Third-Party Groups and Dischargers enrolled as an individual to monitor all active, non-drinking water supply wells screened in an unconfined aquifer located at its Member’s Operations (for Third-Party Groups) or the Discharger’s Operation (for Dischargers enrolled as an individual) once every five (5) years.

The Order requires Third-Party Groups and Dischargers enrolled as an individual to monitor total dissolved solids, ammonia, nitrate as NO3--N, total nitrogen, total phosphorus, sulfate, and potassium because those constituents are representative of typical discharges from Operations. For Members of Third-Party Groups only, the results of this monitoring will be reported anonymously per watershed. This requirement is designed to: (1) fill in data gaps, (2) to assess the quality of the groundwater in agricultural areas, and (3) determine the impact of the agricultural activities on groundwater quality. The San Diego Water Board will use the monitoring and assessment results to determine high priority geographic areas within in region and develop numeric targets for nitrogen loading as appropriate.

C. Rationale for Bioassessment Monitoring

Bioassessment monitoring allows the San Diego Water Board to understand the biological conditions of surface waters that may be impacted by agricultural activity. In addition to the surface and groundwater monitoring data, the bioassessment monitoring data is expected to provide a holistic picture of the biological, chemical, and physical integrity of surface waters in the San Diego Region.

Bioassessment monitoring also provides a direct measure of the biological condition of a waterbody based on the living organisms at a given location. To achieve this, communities of organisms such as invertebrates (i.e., insects, crustaceans), fish, algae, and plants living in the waterbody at designated monitoring stations are examined to quantify their numbers and species (community data). The summarized community data provides key information about the biological condition of the aquatic ecosystem, which is directly and closely linked to beneficial uses of the waterbody.

The San Diego Water Board encourages the Third-Party Groups to work collaboratively with a regional group (i.e., the Southern California Stormwater Monitoring Coalition) to conduct bioassessment monitoring. Working collaboratively with another regional group may help lower the bioassessment monitoring costs.

VII. Public Participation

A. Notification of Public Comment Period

- On March 11, 2024, the San Diego Water Board provided notice to the public, stakeholders, and interested agencies that the Tentative Order will be released for public comment on March 27, 2024, on the San Diego Water Board website and provided for a period for 45 days for public review and comment.
- On March 28, 2024, the San Diego Water Board provided a revised notice to the public, stakeholders, and interested agencies that the Tentative Order will be released for public comment on March 29, 2024, on the San Diego Water Board website and provided a period of 45 days for public review and comment.

B. Written Comments and Responses

Interested persons were invited to submit written comments concerning the Tentative Order to the San Diego Water Board by 5:00 p.m. on Monday, May 13, 2024. Written comments were required to be received by email at sandiego@waterboards.ca.gov or by mail to the San Diego Water Board Office at:

San Diego Regional Water Quality Control Board
Attn: Abigail Pashina
2375 Northside Drive, Suite 100
San Diego, California 92108-2700

Written comments received by 5:00 p.m. on Monday, May 13, 2024, were provided to the San Diego Water Board members for their review in advance of the public hearing to consider the adoption of the Tentative Order. San Diego Water Board staff prepared written responses to significant comments that were timely received.

C. Public Hearing

The San Diego Water Board held a public hearing on the Tentative Order during its regularly scheduled Board Meeting at the following date and time and at the following location:

- Location: TBD
- Date: TBD
- Time: TBD

D. Public Access to Records

Records pertinent to the San Diego Water Board's proceedings to adopt the Order including but not limited to public notices, draft and finalized versions of the Tentative Order, public comments received, responses to comments received, and other supporting documents are maintained by the San Diego Water Board. These records are available for public access Monday through Friday between the hours of 8:00 a.m. to 5:00 p.m. at the San Diego Water Board office.

To request a file review, please contact the San Diego Water Board by phone at (619) 516-1990 or email Rb9_records@waterboards.ca.gov or fax (619) 516-1994 or mail your request to:

California Regional Water Quality Control Board
Attn: File Review Request
2375 Northside Drive, Suite 100
San Diego, CA 92108

Prior to submitting a request to view public records, visit the San Diego Water Board's website to determine if the information is already publicly available: https://www.waterboards.ca.gov/sandiego/

For more information, visit the Access to Public Records webpage on the San Diego Water Board's website: https://www.waterboards.ca.gov/sandiego/about_us/contact_us/records.html.

E. California Native American Tribe Notification

Public Resources Code section 21080.3.1 requires lead agencies to provide notice and consultation for California Native American Tribes culturally affiliated with a proposed project area (Tribes). On **TBD,** the San Diego Water Board provided written notice of its intent to adopt the Tentative Order to all Tribes in the San Diego Region. The San Diego Water Board sent emails to all Tribes in the San Diego Region informing them about the reissuance of Order Nos. R9-2016-0004 and R9-2016-0005, the public workshops described in section VII.F of this Fact Sheet, the Board workshop, and the Board hearing.

F. Stakeholder Meetings and Public Workshops

The San Diego Water Board conducted extensive outreach efforts to: (1) inform stakeholders of the San Diego Water Board's intent to update and consolidate existing waste discharge requirements, (2) discuss proposed changes to existing waste discharge requirements with stakeholders, and (3) receive feedback from stakeholders on how to improve the requirements in the Tentative Order. Staff met with the following stakeholder groups throughout the renewal process:

- Upper Santa Margarita Irrigated Lands Group
- San Diego Region Irrigated Lands Group
- Southern California Coastal Water Research Project
- San Diego County Water Authority
- Fallbrook Public Utility District
- San Diego County Department of Agriculture/Weights & Measures
- Mission Resource Conservation District
- Resource Conservation District of Greater San Diego
- Gerry Spinelli from University of California Cooperative Extension
- San Diego Coastkeeper
- Orange County Coastkeeper
- National Center for Appropriate Technology
- Mikhail Ogawa Engineering
- Los Angeles Regional Water Quality Control Board irrigated land regulatory program staff

The San Diego Water Board conducted equitable, culturally relevant outreach by holding three public workshops to discuss proposed changes to Order Nos. R9-2016-0004 and R9-2016-0005 prior to adoption of the Order. The San Diego Water Board publicly noticed the workshops via a posting on the San Diego Water Board's webpage on July 14, 2023. The San Diego Water Board notified interested members of the public via email, phone, and through the electronic

mail list for the subscribers of the Commercial Agriculture Regulatory program, which includes disadvantaged communities. The San Diego Water Board also sent email invitations to the Tribal Nations throughout the San Diego Region to provide the opportunity for the public and Tribal Nations to give comments and feedback on the Order. The public workshops were held at the following times and locations:

Table C-15. Dates and Times of Public Workshops

Date	Time	Location
August 15, 2023	9:00 AM – 12:00 PM	Rancho California Water District 42135 Winchester Road Temecula, CA 92590
August 18, 2023	6:00 PM – 9:00 PM	Zoom Meeting
August 22, 2023	2:00 PM – 5:00 PM	San Diego Farm Bureau 420 South Broadway, Suite 200 Escondido, CA 92025

The San Diego Water Board reviewed and considered all verbal and written informal stakeholder comments collected from the workshops and stakeholder meetings when drafting the Order.

The San Diego Water Board also attended the Nitrogen Reporting Regulations for Nurseries and Floriculture roundtable hosted by the UCCE on November 15, 2023, to discuss the ESJ Order nitrogen reporting requirements with growers, other regional boards, and the San Diego Farm Bureau.

The San Diego Water Board held a workshop at the regularly scheduled April 10, 2024, Board meeting to discuss the proposed changes to existing waste discharge requirements and to receive comments from Board members, stakeholders, and interested members of the public.

G. Petition for State Water Board Review

Any aggrieved person may petition the State Water Board to review the decision of the San Diego Water Board regarding the Order in accordance with Water Code section 13320 and CCR title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the adoption date of the Order, except that if the thirtieth day following the adoption date of the Order falls on a Saturday, Sunday, or State holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the State Water Board website at:
https://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.html

For instructions on how to file a petition for review, see the State Water Board's website at:

https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml.

H. Additional Information

Requests for additional information or questions regarding the Order should be directed to San Diego Water Board Agriculture Program staff at RB9_Ag_Order@waterboards.ca.gov

ATTACHMENT D – MAPS

FIGURE D-1

MAP OF THE SAN DIEGO REGION AND WATERSHEDS

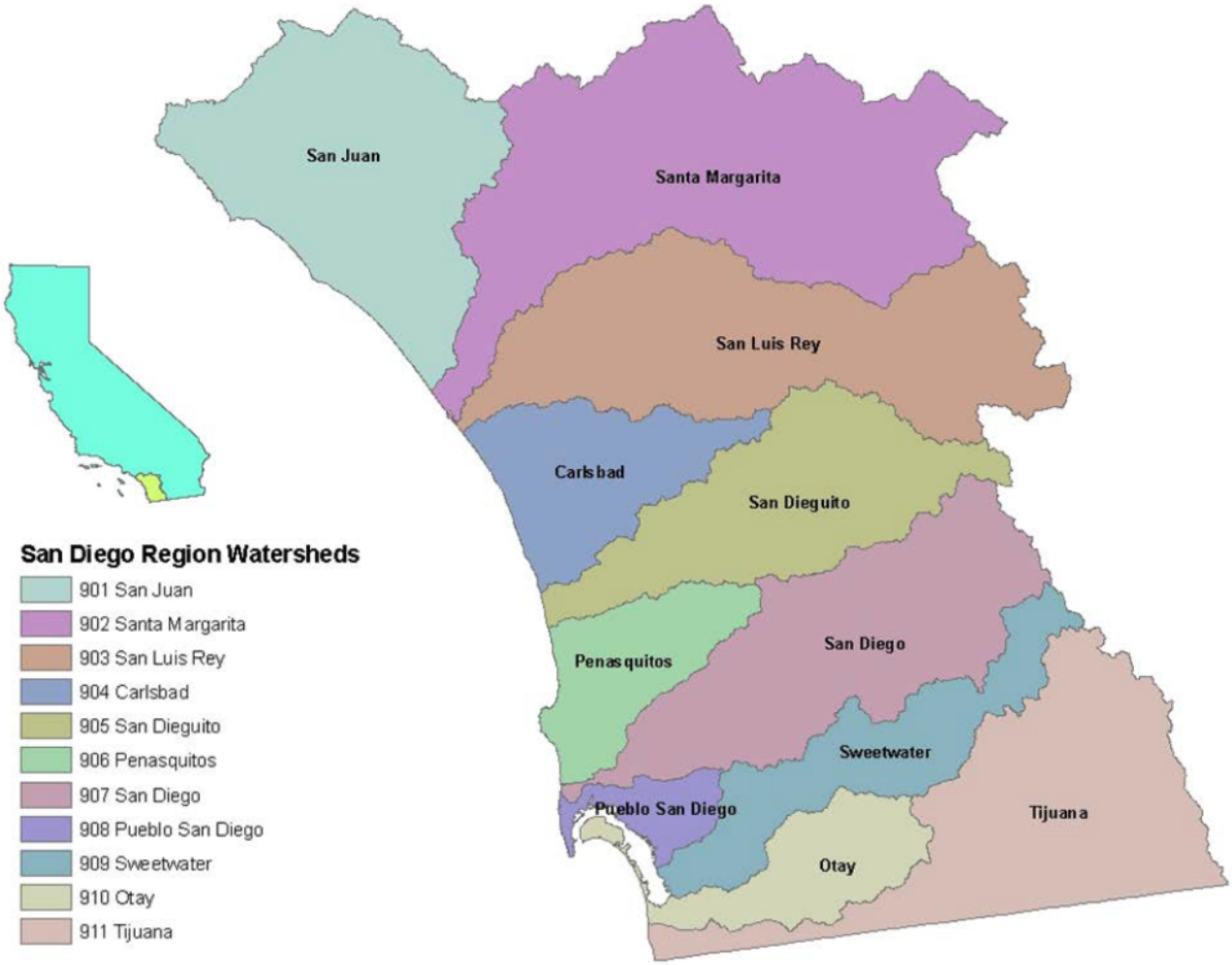
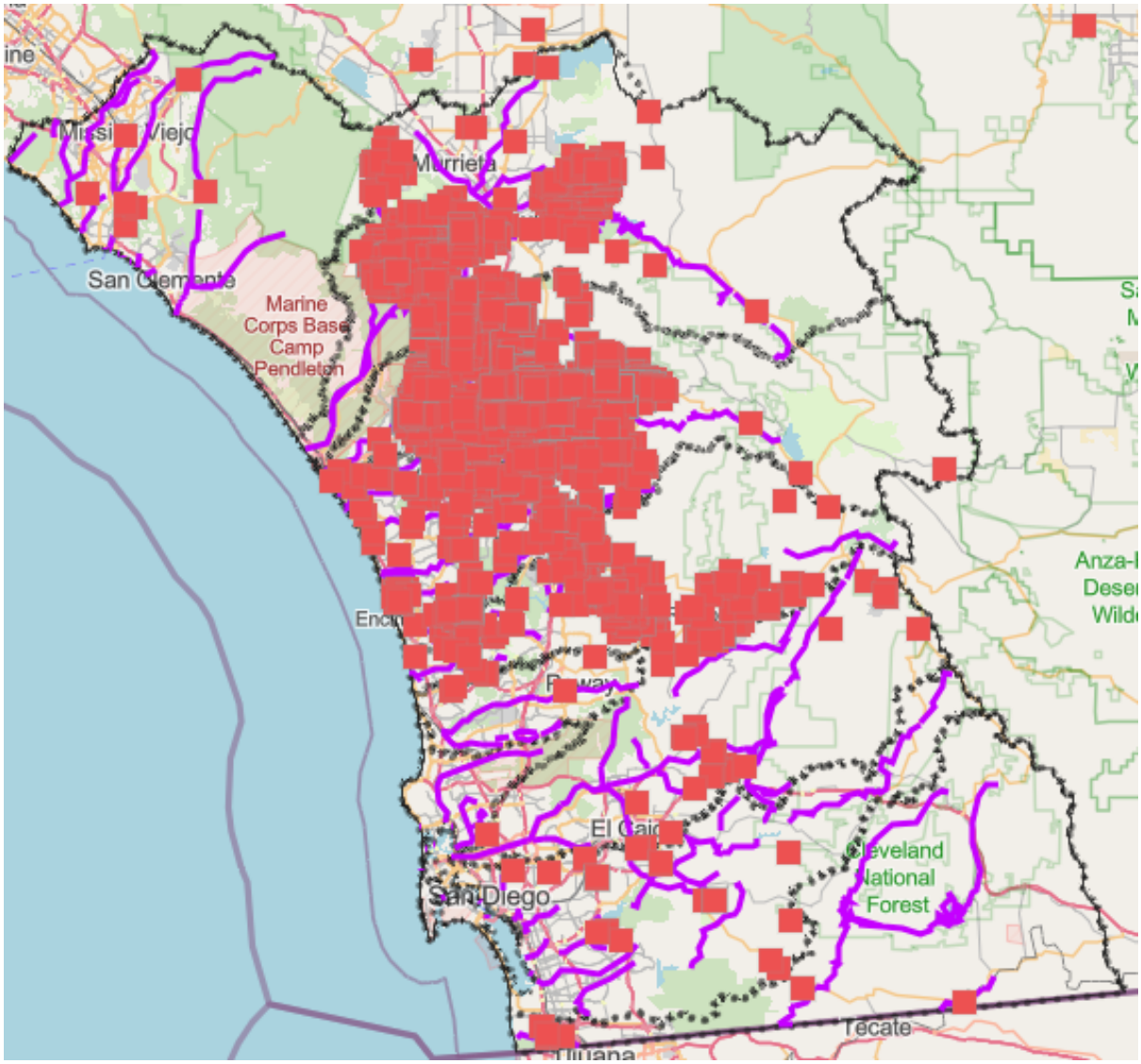


FIGURE D-2

LOCATION OF OPERATIONS AND CLEAN WATER ACT SECTION 303(D) LIST OF WATER BODIES WITHIN THE SAN DIEGO REGION



The red squares indicate the Dischargers that are enrolled in the Order as of March 29, 2024. The purple lines indicate the CWA Section 303(d) Water Bodies. The dotted black lines indicate the watershed boundaries

ATTACHMENT E – IMPAIRED WATERBODIES AND APPLICABLE TOTAL MAXIMUM DAILY LOADS

I. Impaired Waterbodies

The federal Clean Water Act (CWA) gives states the primary responsibility for protecting and restoring water quality. In California, the State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (Regional Water Boards) are the agencies with the primary responsibility for implementing the CWA, including developing and implementing programs to achieve water quality standards. Water quality standards include designated beneficial uses of waterbodies, criteria or objectives (numeric or narrative) which are protective of those beneficial uses, and policies to limit the degradation of water bodies. The *Water Quality Control Plan for the San Diego Basin* (Basin Plan) contains the water quality standards for waterbodies in the San Diego Region.

CWA Section 303(d) requires each state to develop, update, and submit to the U.S. Environmental Protection Agency (USEPA) a list of "impaired or threatened" waterbodies, or waterbody segments, which either do not meet, or are not expected to meet, water quality standards. Impaired waterbodies, or waterbody segments on the 303(d) list, must be addressed through the development of Total Maximum Daily Loads (TMDL) or by other means as described in the *State's Water Quality Control Policy for Addressing Impaired Waters* (Impaired Waters Policy).[62] A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards (numeric targets), and an allocation of that load among the various sources of that pollutant.

The San Diego Water Board adopted the 2018 CWA Section 305(b) "Off-Cycle" Report for the San Diego Region (2018 Report) on February 12, 2020. The final 2018 Report was incorporated into the statewide 2018 Integrated Report that was approved by the State Water Board on October 20, 2020. The USEPA approved the 2018-2020 CWA Section 303(d) List that includes listings for the San Diego Region on June 9, 2021. Table E-1 lists waterbodies on the 303(d) List where agriculture is listed as a pollutant source.

[62] The State Water Board's Impaired Waters Policy is available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/iw_policy.pdf.

Table E-1. 303(d) Waterbodies, Agriculture Identified as a Source of the Pollutant

Watershed	Waterbody Name	Pollutant
San Juan	Pacific Ocean Shoreline at Aliso Beach	Indicator Bacteria
Santa Margarita	Rainbow Creek	Nitrogen
		Phosphorus
	Santa Margarita Lagoon	Eutrophic
San Dieguito	San Dieguito River	Nitrogen

Table E-2 lists waterbodies on the 303(d) List where the pollutant is associated with agricultural activities. Operations are known to near the listed waterbodies, and the source of the pollutant is listed as unknown nonpoint source.

Table E-2. 303(d) Waterbodies, Pollutants Associated with Agricultural Activities

Watershed	Waterbody	Pollutant
San Juan	Aliso Creek	Phosphorus
		Nitrogen
		Malathion
	San Juan Creek	Benthic Community Effects
	Dana Point Harbor	Copper
	Pacific Ocean Shoreline	Indicator Bacteria
	Salt Creek	Benthic Community Effects
	Soledad Canyon	Selenium
Santa Margarita	Oceanside Harbor	Copper
	Sandia Creek	Sulfates
San Luis Rey	San Luis Rey River, Lower	Indicator Bacteria
Carlsbad	San Marcos Creek	Phosphorus
	Pacific Ocean Shoreline	Indicator Bacteria
Peñasquitos	Carroll Canyon	Benthic Community Effects
	Los Peñasquitos Creek	Benthic Community Effects
	Mission Bay at Quivira Basin	Copper
	Mission Bay at Tecolote Shores	Indicator Bacteria
	Rose Creek	Benthic Community Effects
Tijuana	Morena Reservoir	pH
	Pacific Ocean Shoreline	Indicator Bacteria
	Tijuana River	Total Nitrogen as N
San Diego	San Diego Bay Shoreline	Benthic Community Effects
		Zinc
		Sediment Toxicity
	San Diego River (lower)	Benthic Community Effects

Table E-2 - *continued*. 303(d) Waterbodies, Pollutants Associated with Agricultural Activities

Watershed	Waterbody	Pollutant
San Dieguito	San Dieguito River	Benthic Community Effects
	Sutherland Reservoir	Nitrogen
Sweetwater	San Vicente Reservoir	Chloride
	Sweetwater River	Benthic Community Effects

II. TMDLs Applicable to Discharges from Operations in the San Diego Region

A. Rainbow Creek TMDL

Rainbow Creek has a TDML for total nitrogen and total phosphorus due to the high concentrations of those pollutants in the creek. Excessive nutrients in Rainbow Creek promote the growth of algae in localized areas, creating a nuisance condition that threatens aquatic life in the creek as well as creating an undesirable image. Runoff from agriculture, nursery, and residential land uses contribute to increased total nitrogen and total phosphorus concentrations in Rainbow Creek as a result of stormwater runoff, irrigation return flows, and groundwater contributions to the creek. The Rainbow Creek TMDL identifies the County of San Diego as the lead agency responsible for implementing the TMDL. The County of San Diego has developed the Rainbow Creek Nutrient Reduction Management Plan as a response to the TDML, which is incorporated into the Order for reference. [63]

B. Bacteria TMDL

Bacteria in the waters of the beaches and creeks addressed by this TMDL have exceeded numeric water quality objectives for total, fecal, and/or enterococci bacteria (collectively referred to as indicator bacteria). These exceedances of the water quality objective for indicator bacteria are shown in the monitoring data for beach segments where such data exist. Other beaches were consistently posted with health advisories and/or closed. These exceedances and postings threaten and impair the contact recreation (REC-1) and non-water-contact recreation (REC-2) beneficial uses. All inland surface waters and coastal marine waters in the San Diego Region are designated with both REC-1 and REC-2 beneficial uses.

Although water quality objectives for REC-1 and REC-2 beneficial uses are written in terms of density of indicator bacteria colonies, the actual risk to human health is

[63] County of San Diego's Rainbow Creek Nutrient Reduction Management Plan: https://www.waterboards.ca.gov/rwqcb9/water_issues/programs/commercial_agriculture/docs/Rainbow_Creek_Nutrient_Reduction_and_Management_Plan_June_2016.pdf.

caused by the presence of disease-causing pathogens. When the risk to human health from pathogens in the water is so great that beaches are posted with health advisories or closure signs, the quality and beneficial use of the water are impaired. Discharges from Operations can contribute to the concentration of indicator bacteria in the waters of beaches and creeks as a result of stormwater runoff, irrigation return flows, and groundwater contributions.

ATTACHMENT F – NOTICE OF INTENT

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
2375 Northside Drive, Suite 100, San Diego, Ca 92108
Phone (619) 516-1990
Fax (619) 516-1994

Notice of Intent Application Package for Coverage in Order No. R9-2024-0029, General Waste Discharge Requirements for Discharges from Commercial Agriculture Operations in the San Diego Region

This application package constitutes a Notice of Intent (NOI) pursuant to obtain coverage in Order No. R9-2024-0029. You must provide complete factual information for each item requested below and include additional sheets as necessary to provide the information required in section II.B of the Order.

PART A: MEMBER OF A THIRD-PARTY GROUP OR ENROLLING AS AN INDIVIDUAL

MEMBER OF A THIRD-PARTY GROUP OR ENROLLING AS AN INDIVIDUAL
Indicate whether you are enrolling as a Member of a Third-Party Group or enrolling as an individual by checking the correct box. If you are enrolling as a Member of a Third-Party Group, indicate which Third-Party Group you are enrolling through. If the name of the Third-Party Group you are enrolling through is not on the list, write the name next to “Other.”
☐ Member of a Third-Party Group Name of Third-Party Group: ☐ San Diego Region Irrigated Lands Group ☐ Upper Santa Margarita Irrigated Lands Group ☐ Other:
☐ Enrolling as an Individual

PART B: CONTACT INFORMATION

PROPERTY OWNER INFORMATION			
Name:			
Email:			
Phone Number:			
Mailing Address:	City:	State:	Zip Code:

OPERATION OWNER INFORMATION			
Name:			
Email:			
Phone Number:			
Mailing Address:	City:	State:	Zip Code:

OPERATOR INFORMATION			
Name:			
Email:			
Phone Number:			
Mailing Address:	City:	State:	Zip Code:

PART C: OPERATION INFORMATION

Complete this table for each physical address of your Operation. If your Operation has multiple addresses, contact the San Diego Water Board for additional tables.			
Site Address:	City:	State:	Zip Code:
Assessor Parcel Number(s):			
Irrigated acres:	Non-irrigated acres:	Total acres (irrigated + non-irrigated acres):	

PART C - *continued*: OPERATION INFORMATION

Crop Types (check all that apply)

☐ Row Crops
☐ Orchard
☐ Vineyard
☐ Nursery
☐ Greenhouse
☐ Other:

Are pesticides applied to crops at this address?
☐ Yes
☐ No

Is fertilizer applied to crops at this address?
☐ Yes
☐ No

Are there any surface water bodies (i.e., lakes, rivers, streams, creeks, ocean, etc.) located 100 feet of this address?
☐ Yes
☐ No

If yes, what is the name of the surface water body?

Are there any drinking water wells located at this address?
☐ Yes
☐ No

If yes, how many?

Are there any non-drinking water wells (i.e., irrigation water supply wells) screened in an unconfined aquifer located at this address?
☐ Yes
☐ No

If yes, how many?

Are there any ponds that capture wastewater (including irrigation tailwater, stormwater, irrigation tailwater comingled with stormwater, brine waste, etc.) located at this address?
☐ Yes
☐ No

If yes, how many?

PART D: WATER QUALITY PROTECTION PLAN

Dischargers must complete a Water Quality Protection Plan (WQPP) to identify the type and location of management practices currently implemented at their Operation using the template created by the San Diego Water Board (Attachment J). The Discharger must submit the WQPP to their Third-Party Group (if applicable) or to the San Diego Water Board if the Discharger is enrolling as an individual within **30 days** of submitting the NOI.

PART E: CERTIFICATION

<table>
<tr><td colspan="2">I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</td></tr>
<tr><td>Signature:</td><td>Date:</td></tr>
<tr><td>Printed Name:</td><td>Title:</td></tr>
</table>

ATTACHMENT G - NOTICE OF TERMINATION

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
2375 Northside Drive, Suite 100, San Diego, Ca 92108
Phone (619) 516-1990
Fax (619) 516-1994

Notice of Termination Application Package for Termination of Coverage in Order No. R9-2024-0029, General Waste Discharge Requirements for Discharges from Commercial Agriculture Operations in the San Diego Region

Submission of this form constitutes an official notification to the San Diego Water Board that the Discharger has requested to terminate enrollment in Order No. R9-2024-0029. If applicable, the Discharger must notify the next owner of the existence of Order No. R9-2024-0029 and the requirement to enroll.

Note: For Dischargers who wish to remove an Assessor Parcel Number (APN), but keep a growing area enrolled, do not fill out this form. To remove APNs off a growing area, please complete a Change of Information form (Attachment H) and submit to your Third-Party Group (if applicable) and/or to the San Diego Water Board.

REQUEST TO TERMINATE – GENERAL OPERATION INFORMATION AND ALL ASSOCIATED GROWING AREA(S)

Name of Operation:
Owner / Responsible Party:
Business Mailing Address:
City:
State:
Zip Code:
Phone Number:
Email:

List all growing areas you wish to terminate:

Name of Operation:
Growing Area Address:
Growing Area APNs:

REASON FOR GROWING AREA TERMINATION

☐ No longer producing a commercially irrigated crop

- As of (month, day, year):
- Attach photo evidence

☐ Change in owner

- As of (month, day, year):
- Contact information for new owner:
    - Name:
    - Phone Number:
    - Email:

☐ Coverage obtained under another approved Individual Waste Discharge Requirement (WDR)

- Order Number:

☐ Other

- Please explain:

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Responsible Party (or Authorized Responsible Party Agent) Electronic Acknowledgement

Name: Date:

Email Address:

Phone Number:

ATTACHMENT H – CHANGE OF INFORMATION FORM

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
2375 Northside Drive, Suite 100, San Diego, Ca 92108
Phone (619) 516-1990
Fax (619) 516-1994

Change of Information (COI) form for General Waste Discharge Requirements for Discharges from Commercial Agriculture Operations in the San Diego Region

This COI form is for Dischargers to make changes to their previously submitted NOI form. In the tables below, indicate which part of the NOI has changed by following the instructions provided in each table.

PART A: MEMBER OF A THIRD-PARTY GROUP OR ENROLLING AS AN INDIVIDUAL

MEMBER OF A THIRD-PARTY GROUP OR ENROLLING AS AN INDIVIDUAL
If you are changing Third-Party Groups, write the name of your previous Third-Party Group and then select the box for your new Third-Party Group. If you are switching from a Member of a Third-Party Group to enrolling as an individual, write the name of your previous Third-Party Group and then select the box for Enrolling as an Individual. If you are switching from enrolling as an individual to a Member of a Third-Party Group, write “enrolling as an individual” in the space provided and then select the box for your new Third-Party Group.
Previous Third-Party Group/Enrolling as an Individual: Name of Third-Party Group: ☐ San Diego Region Irrigated Lands Group ☐ Upper Santa Margarita Irrigated Lands Group ☐ Other:
☐ Enrolling as an Individual

PART B: CONTACT INFORMATION

PROPERTY OWNER, OPERATION OWNER, AND OPERATOR INFORMATION
If you are changing property owner information, select the box(es) for what information you are changing and then write the new information in the space provided.
Property Owner Information: ☐ Name: ☐ Email: ☐ Phone Number: ☐ Mailing Address:
Operation Owner Information: ☐ Name: ☐ Email: ☐ Phone Number: ☐ Mailing Address:
Operator Information: ☐ Name: ☐ Email: ☐ Phone Number: ☐ Mailing Address:

PART C: OPERATION INFORMATION

OPERATION INFORMATION
Write the address associated with the change of information or select “None” if you are adding a new address: ☐ None
Address (if you are adding or removing an address you must fill out the rest of the cells in the table) ☐ Adding new address ☐ Removing address
APNs ☐ Adding new APN(s): ☐ Removing APN(s):
Acreage ☐ Adding new acreage: Irrigated acres: Non-irrigated acres: Total acres: ☐ Removing acreage: Irrigated acres: Non-irrigated acres: Total acres:
Crop type(s) ☐ Adding crop type(s) ☐ Row crops ☐ Orchard ☐ Vineyard ☐ Nursery ☐ Greenhouse ☐ Other: ☐ Removing crop type(s) ☐ Row crops ☐ Orchard ☐ Vineyard ☐ Nursery ☐ Greenhouse ☐ Other:

PART C - *continued*: OPERATION INFORMATION

Pesticides ☐ Began using pesticides ☐ Stopped using pesticides
Fertilizers ☐ Began using fertilizers ☐ Stopped using fertilizers
Surface waters within 100 feet ☐ Adding surface water(s): ☐ Removing surface water(s):
Drinking water wells ☐ Adding drinking water well(s): ☐ Removing drinking water well(s):
Non-drinking water wells ☐ Adding non-drinking water well(s): ☐ Removing non-drinking water well(s):
Wastewater ponds ☐ Adding wastewater ponds: ☐ Removing wastewater ponds:

PART D: CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	
Signature:	Date:
Printed Name:	Title:

ATTACHMENT I - IRRIGATION AND NITROGEN MANAGEMENT SUMMARY REPORT

Complete the following Irrigation and Nitrogen Management Plan Summary Report (INMP Summary Report) by using the instruction sheet provided in this attachment. Contact your Third-Party Group or the San Diego Water Board if you have questions or need additional assistance completing this report. Contact the San Diego Water Board if you need additional rows to any of the tables provided in this report.

SECTION 1: GENERAL INFORMATION, OUTLIER NOTIFICATION, AND INMP SUMMARY REPORT CERTIFICATION

Step 1: Complete Table 1 **only if you are enrolled as a member of a Third-Party Group** by identifying your Personal Identification Number (PID) and the Reporting Year.

Table 1. PID and the Reporting Year

PID	
Reporting Year	

Step 2: Complete Table 2 **only if you are a Discharger enrolled as an individual** by identifying your Contact Information and the Reporting Year.

Table 2. Contact Information and Reporting Year

Operation Owner Information		
Name		
Email		
Phone Number		
Mailing Address		
City	State	Zip Code
Operation Information		
Operation Name		
GeoTracker Global ID Number(s):		

Table 2 - continued. Contact Information and Reporting Year

Operation Address		
City	State	Zip Code
Assessor Parcel Number(s)		
Reporting Year		

Step 3: Identify (1) if your Operation or any fields at your Operation were identified as a statistical outlier by your Third-Party Group or by the San Diego Water Board in the previous reporting year and (2) the INMP Summary Report Certification Method in Table 3.

Table 3. Outlier Notification Receipt and INMP Summary Report Certification Method

Outlier Notification Receipt	☐ My Operation or one or more of the field(s) at my Operation were identified as a statistical outlier by my Third-Party Group or by the San Diego Water Board in the previous reporting year.
INMP Summary Report Certification Method	☐ Certified INMP Specialist (e.g., certified crop advisor who has completed the CDFA training program) ☐ Self-Certified (CDFA training program) ☐ Self-Certified (follows NRCS or UC Cooperative Extension site-specific recommendations) ☐ Certified in an alternative manner approved by the Executive Officer*

*Indicate the alternative certification method approved by the Executive Officer:

SECTION 2: IDENTIFY FIELD NUMBERS, IRRIGATED ACRES, AND CROP TYPES

Step 1: The INMP Summary Report requires Dischargers to break down their Operation into field(s). Use the definitions of field provided in the instruction sheet to decide which definition best suits your Operation. Indicate which definition of field you used to identify the field(s) at your Operation by selecting the appropriate box below.

A field is:

☐ An area of land at the Operation where all the crops grown have the same irrigation and fertilizer needs/schedule.
☐ Each address of the Operation.
☐ The entire Operation.
☐ Other (please explain below):

If you grow a crop that has an established removal coefficient, you must identify the area of land where that crop is grown as a field, regardless of what definition of field you chose. If you grow more than one crop at your Operation that each has its own established removal coefficient, you must identify each area of land where the crops are grown as individual fields.

Step 2: Identify the field(s) at your Operation, the Field Location Number(s) (FLN) (for Members of a Third-Party Group) or the APN(s) (for Dischargers enrolled as an individual) associated with each field, number of irrigated acres on each field, what type of crop(s) you grew each field, and indicate whether there is an existing removal coefficient for the crop types grown on each field for the reporting year in Table 4.

Table 4: Identify Field Numbers, FLN(s) (for Members of a Third-Party Group) or APN(s) (for Dischargers enrolled as an individual), Irrigated Acres, Crop Types, and Existing Removal Coefficient

Field Number(s)	FLN(s) (Members of a Third-Party Group) or APN(s) (Dischargers enrolled as an individual)	Irrigated Acres	Crop Type(s)	Existing Removal Coefficient? (Yes/No)

Additional comments:

SECTION 3: TOTAL NITROGEN OR TOTAL FERTILIZER APPLIED TO EACH FIELD

Step 1: Review the four exemptions for reporting the total nitrogen removed values and select which exemption you qualify for, if any. **If you qualify for one of the four exemptions below, you do not need to report the total nitrogen *removed* for any of your field(s).** You are required to report the total nitrogen *applied* to each field, regardless if you meet any of the below exemptions.

☐ I (1) operate in an area(s) where evidence of no or very limited nitrogen impacts to surface or groundwater exist, (2) have minimal nitrogen inputs, and (3) have difficulty measuring yield.

☐ I am a diversified socially disadvantaged grower, as defined by the Farmer Equity Act of 2017[64] who has (1) a maximum total acreage of 45 acres, (2) a crop annual sales of less than $350,000, and (3) a crop diversity greater than 0.5 crops per acre (one crop for every two acres).

☐ I have: (1) a maximum total acreage of 20 acres and (2) a crop diversity greater than 0.5 crops per acre (one crop for every two acres).

☐ The coefficient(s) does not exist for the crop(s) that I grow. (To determine if any crop(s) grown at your Operation have existing removal coefficients, visit the CDFA website at the following link: https://www.cdfa.ca.gov/is/ffldrs/frep/FertilizationGuidelines/N_Uptake.html)

Step 2: Identify if you have applied nitrogen to the crops on your field(s) in the reporting year by checking the appropriate box below.

☐ I **did not** apply any nitrogen to my crops in the reporting year (proceed to section 5).
☐ I **did** apply nitrogen to my crops in the reporting year (proceed to step 3).

Step 3: Identify if you are able to report how much nitrogen you applied to your field(s) through raw water, soil amendments, dry/liquid fertilizer, and/or foliar fertilizer in the reporting year by checking the appropriate box below.

☐ I **am able** to report how much nitrogen I applied to my field(s) through raw water, soil amendments, dry/liquid fertilizer, and/or foliar fertilizer (proceed to Table 5 and do not complete Table 6).

---

[64] The Farmer Equity Act of 2017 can be found at the following link: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1348

☐ I am **not able** to report how much nitrogen I applied to my field(s) through raw water, soil amendments, dry/liquid fertilizer, and/or foliar fertilizer (proceed to Table 6 and do not complete Table 5).

Step 4: Identify how much nitrogen you applied to each field(s) in the reporting year, your crop yield, crop yield unit, and crop yield unit weight for each field in Table 5 **or** Table 6, depending on which box you checked in step 3 of this section. **You are only required to complete either Table 5 OR Table 6.**

Table 5: Total Nitrogen (N) Applied to Field(s) (lbs/acre), Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight

Total N Applied to Each Field						
Field Number	**Irrigated Acres**	**N in Raw Water (if known)**	**N in Soil Amendments**	**N in Dry/Liquid Fertilizer**	**N in Foliar Fertilizer**	**Total N Applied**

Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight per Field*			
Field Number	**Crop Yield**	**Crop Yield Unit**	**Crop Yield Unit Weight**

*You are only required to report your crop yield, crop yield unit, and crop yield unit weight if you grow a crop that has an established removal coefficient.

Crop Yield is reported in:

☐ Total units sold

☐ Total production unit

☐ Other: _____

Additional comments:

Table 6: Total Fertilizer Applied to Field(s) (lbs/acre), Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight

Total N Applied to Each Field						
Field Number	**Irrigated Acres**	**N-P-K Ratio in Fertilizer**	**Total Number of Fertilizer Bags Used**	**Weight per Bag of Fertilizer**	**Total Fertilizer Applied**	**Total N Applied**

Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight*			
Field Number	**Crop Yield**	**Crop Yield Unit**	**Crop Yield Unit Weight**

*You are only required to report your crop yield, crop yield unit, and crop yield unit weight if you grow a crop that has an established removal coefficient. See the instructions for more information.

Crop Yield is reported in:

☐ Total units sold

☐ Total production unit

☐ Other: _____

Additional Comments:

SECTION 4: A/R RATIO AND A-R DIFFERENCE CALCULATIONS

Step 1: Complete Table 7 by calculating the A/R ratio and A-R difference values for each field in Table 7 using the equations provided in the instruction sheet, **unless you qualify for an exemption as indicated in section 3.** Proceed to section 5 if you qualify for an exemption.

Table 7: Identify Field Numbers, the A/R Ratio, and A-R Difference

Field Number(s)	Crop Yield	Total N Applied	Removal Coefficient Value	Total N Removed	A/R Ratio	A-R Difference

Step 2: Calculate the multi-year A/R ratio and A-R difference for each field.

Table 8: Multi-Year A/R Ratio and A-R Difference

Field Number	Reporting Year (n)		Previous Reporting Year (n-1)		Year Prior to the Previous Reporting Year (n-2)		A/R Ratio	A/R Difference
	Total N Applied	Total N Removed	Total N Applied	Total N Removed	Total N Applied	Total N Removed		

SECTION 5: IDENTIFY FIELD-LEVEL MANAGEMENT PRACTICES

Step 1: Identify the primary and secondary irrigation method(s) used on each field(s) in the reporting year in Table 9.

Table 9: Irrigation Methods

Primary Irrigation Method(s)						
Field Number	**Drip**	**Micro sprinklers**	**Sprinklers**	**Flood**	**Hand-Water**	**Other***
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
Secondary Irrigation Method(s) (if any)						
Field Number	**Drip**	**Micro sprinklers**	**Sprinklers**	**Flood**	**Hand-water**	**Other***
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐

*Specify other irrigation method type(s):

Step 2: Identify what irrigation efficiency practices you used on each field in the reporting year in Table 10, if any. Check all that apply.

Table 10: Irrigation Efficiency Practices

Field Number	Use of Moisture Probe (i.e., tensiometer, soil moisture neutron probe)	Drip Irrigation	Capture and re-use Irrigation Tailwater	Pressure Compensator	Other*
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

*Specify other irrigation efficiency practice(s):

Step 3: Identify what type(s) of nitrogen efficiency practices you implemented on each field in the reporting year, if any, in Table 11. Check all that apply.

Table 11: Nitrogen Efficiency Practices

Field Number	Irrigation Water Testing	Soil Testing	Fertigation	Cover Crops	Tissue/Petiole Testing	Foliar Application	Other*
	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐

*Specify other nitrogen efficiency practices:

Step 4: Identify what types of sediment and erosion control practices you implemented on each field in the reporting year, if any, in Table 12. Check all that apply.

Table 12: Sediment and Erosion Control Practices

Field Number	Silt Fence, Straw Wattles, and/or Sand Bags	Gravel/Wood chips/Foliage on Exposed Dirt	Planting Vegetation on Steep Slopes	Spray Dirt with Water for Dust Control	Sediment Catchment Basin/ Settling Basin	Other*
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐

*Specify other sediment and erosion control practice(s):

SECTION 6: CERTIFICATION

Complete this step if your Third-Party Group or the San Diego Water Board identified your Operation or any field(s) at your Operation as a statistical outlier in the previous reporting year.

The person signing this INMP Summary Report certifies, under penalty of law, that the INMP Summary Report was prepared under their direction and supervision, that the information and data reported is to the best of their knowledge and belief, true, accurate, and complete, and that they are aware that there are penalties for knowingly submitting false information. Where the person signing the INMP Summary Report is not the Discharger, they may rely on the information and data provided by the Discharger and is not required to independently verify the information and data.

The person signing the INMP Summary Report below further certifies that they used sound irrigation and nitrogen management planning practices to develop irrigation and nitrogen application recommendations and that the recommendations are informed by applicable training for meeting the crop's agronomic needs while minimizing nitrogen loss to surface water and groundwater. Where the person signing the INMP Summary Report is not the Discharger, they are not responsible for any damages, loss, or liability arising from subsequent implementation of the INMP Summary Report by the Discharger in a manner that is inconsistent with the INMP Summary Report's recommendations for nitrogen application. This certification does not create any liability for claims for environmental violations.

Certification:

- ☐ Certified INMP Specialist (e.g. Certified Crop Advisor who has completed the CDFA training program)
- ☐ Self-Certified by Discharger who has completed the CDFA training program
- ☐ Self-Certified by Discharger who follows NRCS or UC site-specific recommendations (documentation required)
- ☐ I do not apply nitrogen

I, _____, certify this INMP in accordance with the statement above.

_____ (Signature) _____ (Date)

If the certifier is not the Discharger, the Discharger additionally agrees as follows:

I, _____, Discharger, have provided information and data to the certifier above that is, to the best of my knowledge and belief, true, accurate, and complete, that I understand that the certifier may rely on the information and data provided by me and is not required to independently verify the information and data, and that I further understand that the certifier is not responsible for any damages, loss, or liability arising from subsequent implementation of the INMP Summary Report by me in a manner that is inconsistent with the INMP Summary Report's recommendations for nitrogen application. I further understand that the certification does not create any liability for claims for environmental violations.

_____ (Signature) _____ (Date)

INMP Summary Report Instruction Sheet

The purpose of the INMP Summary Report instruction sheet is to assist Dischargers in completing the INMP Summary Report. The steps below correspond to each of the six sections in the INMP Summary Report. Contact your Third-Party Group or the San Diego Water Board if you have questions or need additional assistance completing this report. Dischargers only need to complete one INMP Summary Report for their entire Operation, even if the Operation consists of multiple growing areas at different addresses.

SECTION 1: GENERAL INFORMATION, OUTLIER NOTIFICATION, AND INMP SUMMARY REPORT CERTIFICATION

Step 1: Complete Table 1 **only if you are enrolled as a member of a Third-Party Group.**

- **Personal Identification Number (PID):** Dischargers enrolled as a member of a Third-Party Group must indicate their PID in Table 1. If you have any questions about your PID, contact your Third-Party Group representative.

- **Reporting Year:** Enter the reporting year covered in the INMP Summary Report. The INMP Summary Report is due by March 1 of each year. All information in the INMP Summary Report must summarize the irrigation and nitrogen management practices you implemented at your Operation from January 1 to December 31 of the previous year. For example, if you submit your INMP Summary Report on March 1, 2025, the reporting year would be 2024 (summarizing the irrigation and nitrogen management practices you implemented at your Operation from January 1, 2024 – December 31, 2024).

Step 2: Complete Table 2 **only if you are enrolled as an individual.**

- **Operation Owner Information:** Identify the name and contact information for the owner of the Operation.

- **Operation Information:** Identify the name, GeoTracker Global Identification Number(s), address, and APN(s) of your Operation in Table 2. If your Operation consists of more than one physical address, contact the San Diego Water Board for additional rows in this table.

- **Reporting Year:** Enter the reporting year covered in the INMP Summary Report. The INMP Summary Report is due by March 1 of each year. All information in the INMP Summary Report must summarize the irrigation and nitrogen management practices you implemented at your Operation from January 1 to December 31 of the previous year. For example, if you are submitting your INMP Summary Report on March 1, 2025, the reporting year would be 2024 (summarizing the irrigation and nitrogen management practices you implemented at your Operation from January 1, 2024 – December 31, 2024).

Step 3: Complete Table 3 by identifying if your Operation or any field(s) at your Operation were identified as a statistical outlier by your Third-Party Group or the San Diego Water Board.

- **Outlier Notification Receipt**

    - Check the box in this section if your Operation or any field(s) at your Operation were identified as a statistical outlier by your Third-Party Group or by the San Diego Water Board in the previous reporting year.

        - For example, if you are submitting your INMP Summary Report on March 1, 2025, the reporting year would be 2024 and the *previous* reporting year would be 2023. In this example, your Third-Party Group or San Diego Water Board would have notified you that your Operation was a statistical outlier based on the information you included in your INMP Summary Report that you submitted on March 1, 2024, for reporting year 2023.

    - If you are unsure if your Operation or any field(s) at your Operation were identified as a statistical outlier, contact your Third-Party Group or the San Diego Water Board for assistance.

    - If your Third-Party Group or the San Diego Water did not identify your Operation or any of the field(s) at your Operation as a statistical outlier in the previous reporting year, you do not need to complete this table. Proceed to section 2.

- **INMP Summary Report Certification Method**

    - If your Third-Party Group or the San Diego Water Board identified your Operation or any field(s) at your Operation as a statistical outlier in the previous reporting year, your INMP Summary Report must be certified in one of the following ways:

        1. Certified by an irrigation and nitrogen management plan specialist as defined in step 6 of this instruction sheet. The specialist that certifies the INMP Summary Report must be capable of answering questions relevant to the INMP Summary Report and should be fully competent and proficient by education and experience in the field(s) relevant to the development of an INMP Summary Report.

        2. Self-certified by the Discharger who attended a California Department of Food and Agriculture (CDFA), or other Executive Officer approved training program for INMP Summary Report certification. The Discharger must keep written documentation of their attendance in the training program and

participate in any continuing education required by CDFA.

3. Self-certified by the Discharger that the INMP Summary Report adheres to a site-specific recommendation from the Natural Resources Conservation Service (NRCS) or the University of California Cooperative Extension (UCCE). The Discharger must keep written documentation of the recommendation provided.

4. Certified in an alternative manner approved by the Executive Officer. Such approval will be provided based on the Executive Officer's determination that the alternative method for preparing the INMP Summary Report meets the requirements of this Order. Explain what alternative certification method was used below the table.

- Identify which INMP Summary Report Certification Method you used by checking the appropriate box.

  - The person certifying the INMP Summary Report must complete the INMP Certification section in section 6 of the INMP Summary Report that includes a signature, date, and method of certification.

SECTION 2: IDENTIFY FIELD NUMBERS, IRRIGATED ACRES, AND CROP TYPES

Step 1: The INMP Summary Report requires Dischargers to break down their Operation into field(s). To identify the field(s) at your Operation, read through the following definitions and identify which definition works best for you by checking the box next to the definition you chose. When choosing a definition of field, keep in mind that you must be able to report how much nitrogen or fertilizer you applied on each field.

Field is defined as:

1. **Area of land at the Operation where all the crops grown have the same irrigation and fertilizer needs/schedule.**
   Dischargers that grow single crops, like avocados and citrus, or nurseries that grow a small variety of crops may choose this definition. This definition may also apply to Dischargers that have 10 or less sections at their Operation with different fertilizer and irrigation needs. For example:

   - Field 1: mature avocado trees (all mature avocado trees grown on field 1 require the same amount of fertilizer and irrigation but require a different amount of fertilizer and irrigation than the crops grown on fields 2 and 3).
   - Field 2: new avocado trees (all new avocado trees grown on field 2 require the same amount of fertilizer and irrigation but require a different amount of fertilizer and irrigation than the crops grown on fields 1 and 3).

- Field 3: citrus trees (all citrus trees grown on field 3 require the same amount of fertilizer and irrigation but require a different amount of fertilizer and irrigation than the crops grown on fields 1 and 2).

2. **Each address of the Operation.**
   Dischargers that have two or more physical addresses and are able to identify how much nitrogen or fertilizer is applied to each physical address may choose this definition. Each physical address would be considered as one field. For example:

   - Field 1: 123 Main Street.
   - Field 2: 456 Main Street.
   - Field 3: 789 Main Street.

3. **The entire Operation.**
   Dischargers that grow numerous crops with different irrigation and fertilizer needs, such as a specialized nursery, may choose this definition. Dischargers who have multiple physical addresses and are unable to break down how much nitrogen or fertilizer is applied to each address may also choose this definition. If Dischargers have difficulty organizing their Operation into fields based on irrigation and fertilizer needs, the entire Operation can be considered one field.

4. **Other.**
   If none of the definitions work for you, describe how you identified the fields at your Operation in the space provided.

   If you grow a crop that has an established removal coefficient, you must identify the area of land where that crop is grown as a field, regardless of what definition of field you chose. If you grow more than one crop that each has its own established removal coefficient, you must identify each area of land where the crops are grown as individual fields. For example, if you chose to define your entire nursery as one field but in addition to your nursery, you also grow avocados on a small portion of your Operation, you must identify the area where the avocados are grown as a field *because avocados have an established removal coefficient*. In this example, you would have two fields: (1) the area of your Operation where the avocado trees are located and (2) the remainder of your Operation.

   To determine if any crops grown at your Operation have existing removal coefficients, visit the CDFA's website at the following link:
   https://www.cdfa.ca.gov/is/ffldrs/frep/FertilizationGuidelines/N_Uptake.html

Step 2: Complete Table 4 by identifying your field numbers, your Field Location Number(s) (FLN) (for Members of a Third-Party Group) or your APN(s) (for Dischargers enrolled as an individual), total number of irrigated acres per field, crop type(s) grown on each field, and confirm whether each crop type has or does not have an existing removal coefficient value.

- **Field Number(s):** Use the definition of field you chose in section 2, step 1 to determine the field(s) at your Operation.

- **FLN(s) (for Members of a Third-Party Group) or APN(s) (for Dischargers enrolled as an individual):** Identify the FLN(s) that were associated with each field(s) in the reporting year if you are a Member of a Third-Party Group. If you have any questions about your FLN(s), contact your Third-Party Group representative. Identify what APN(s) were associated with each field(s) you identified on your Operation if you are enrolled as an individual.

- **Irrigated Acres:** Identify how many irrigated acres were located on each field in the reporting year.

- **Crop Type(s):** Identify what kind of crops you grew on each field in the reporting year. If you grew a large number of crop types, you can choose to report crop type more generally (i.e., succulents, palms, cut flowers, etc.). You may also choose to report crop types more specifically by listing the species (i.e., palms, including Archontophoenix cunninghamiana, Chamaerops humilis, and Butia odorata).

- **Existing Removal Coefficient:** Review the list of the crops that have an existing removal coefficient value on CDFA's website. Confirm that the crop(s) you grew on each field do or do not have an existing removal coefficient value by writing either "yes" or "no" in this column for each field.

- **Additional Comments:** Provide any additional comments you may have regarding Table 4 in the space provided.

SECTION 3: TOTAL NITROGEN OR TOTAL FERTILIZER APPLIED TO EACH FIELD

Step 1: Review the four exemptions for reporting the total nitrogen removed values to determine if you qualify for any of the exemptions. Indicate which exemption you meet, if any, by checking the correct box and then proceed to step 2. *These four exemptions are only exemptions for reporting the total nitrogen removed, you are required to report the total nitrogen applied regardless if you meet any of the exemptions.* If you do not meet any of these exemptions, do not check any of these boxes and proceed to step 2.

Step 2: Indicate if you **did** or **did not** apply nitrogen to your crops in the reporting year by checking the correct box. If you **did not** apply any nitrogen to your crops, you do not have to complete this section and may proceed to section 5. Sections 3 and 4 only apply to Dischargers who applied nitrogen to their crops in the reporting year. If you **did** apply nitrogen to your crops, you must complete this section and section 4.

Step 3: Indicate if you **are** or **are not** able to identify how much nitrogen you applied to your crops in the reporting year for each field by checking the appropriate box. If you are able to identify how much nitrogen you applied to your crops, proceed to step 4 and complete Table

5. If you are **not able** to identify how much nitrogen you applied to your crops, proceed to step 4 and complete Table 6.

Step 4: Complete Table 5 **or** Table 6.

Complete Table 5 by identifying your field number(s), the irrigated acres per field, how much nitrogen you applied to each field, and the crop yield, crop yield unit, and crop yield unit weight for each field.

- **Field Number:** Use the field number(s) you identified in section 2, step 2, Table 4.

- **Irrigated Acres:** Enter the number of irrigated acres per field that you identified in section 2, step 2, Table 4.

- **N in Raw Water:** Enter the approximate amount of nitrogen applied via raw water (i.e., water from groundwater wells or water provided by your water purveyor before the application or addition of any fertilizer) over the course of the reporting year in lbs/acre. If you do not know approximately how much nitrogen is in your irrigation water, write N/A.

- **N in Soil Amendments:** Enter the approximate amount of nitrogen applied via soil amendments (i.e., compost or manure) to each field during the reporting year in lbs/acre. If you did not apply any soil amendments to your field(s), write N/A.

- **N in Dry/Liquid Fertilizer:** Enter the approximate amount of nitrogen applied via dry or liquid fertilizer (i.e., granular/pellet fertilizer or liquid fertilizer injected into your irrigation system) to each field during the reporting year in lbs/acre. If you did not apply any dry/liquid fertilizer to your field(s), write N/A.

- **N in Foliar Fertilizer:** Enter the approximate amount of nitrogen applied via foliar fertilizer (i.e., any nitrogen-containing product applied to the crop canopy or above ground plant parts) to each field during the reporting year in lbs/acre. If you did not apply any foliar fertilizer to your field(s), write N/A.

- **Total N Applied:** Calculate the total N applied for each field by adding up the total nitrogen applied from the previous columns. All units are required to be reported in lbs/acre.

You are only required to report the crop yield, crop yield unit, and crop yield unit weight if the crop type grown on each field have an existing removal coefficient value. If none of the crop types you grew on your fields in the reporting year have an existing removal coefficient value, proceed to section 5.

- **Crop Yield:** Report your crop yield for each field in the reporting year. The crop yield is the total amount of crop produced, grown, and/or harvested on each field. Indicate

how you report your crop yield (i.e., based on either the total production unit, total units sold, or other) by checking the appropriate box below Table 5.

- **Crop Yield Unit:** Report your crop yield unit (i.e., tons, pounds, bins, cartons, bales, pots, etc.) for each field in the reporting year.

- **Crop Yield Unit Weight:** If you use a crop yield unit that is not pounds or tons, report the weight of the crop yield unit (i.e., "10 lb. pots" instead of "pots").

- **Additional Comments:** Provide any additional comments you may have regarding Table 5 in the space provided.

Example 1: If you grow a crop that has an established removal coefficient:

Total N Applied to Each Field						
Field Number	**Irrigated Acres**	**N in Raw Water (if known)**	**N in Soil Amendments**	**N in Dry/Liquid Fertilizer**	**N in Foliar Fertilizer**	**Total N Applied**
1	4 *(I irrigated 4 acres in field 1).*	N/A *(I do not know how much N was in the raw water).*	N/A *(I did not apply soil amendments to my crops on field 1).*	25 *(I applied 100 lbs. of nitrogen in my fertilizer to all the crops grown on field 1. To report this in lbs/acre, I divided 100 by the number of irrigated acres on field 1. (100/4 = 25 lbs/acre).*	5 *(I applied 20 lbs. of nitrogen in foliar fertilizer to all the crops grown on field 1. To report this in lbs/acre, I divided 20 by the number of irrigated acres on field 1. (20/4 = 5 lbs/acre).*	30 *(The sum of all the N applied to field 1 (25 lbs/acre + 5 lbs/acre = 30 lbs/acre).*

Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight per Field*			
Field Number	**Crop Yield**	**Crop Yield Unit**	**Crop Yield Unit Weight**
1	100 *(I sold 100 10 lb. pots that were located on field 1).*	Pots *(I sell the crops grown on field 1 in pots).*	10 lb. pot *(Each pot grown on field 1 that I sold is about 10 lbs.).*

Crop Yield is reported in:

☒ Total units sold
☐ Total production unit
☐ Other: _____

Example 2: If you grow a crop that does NOT have an existing removal coefficient:

Total N Applied to Each Field						
Field Number	**Irrigated Acres**	**N in Raw Water (if known)**	**N in Soil Amendments**	**N in Dry/Liquid Fertilizer**	**N in Foliar Fertilizer**	**Total N Applied**
1	4	N/A *(I do not know how much N was in the raw water).*	N/A *(I did not apply soil amendments to my crops on field 1).*	25 *(I applied 100 lbs. of nitrogen in my fertilizer to all the crops grown on field 1. To report this in lbs/acre, I divided 100 by the number of irrigated acres on field 1 (100/4 =25 lbs/acre).*	5 *(I applied 20 lbs. of nitrogen in my foliar fertilizer to all the crops grown on field 1. To report this in lbs/acre, I divided 20 by the number of irrigated acres on field 1 (20/4 = 5 lbs/acre).*	*30* *(The sum of all the N applied to field 1 (25 lbs/acre + 5 lbs/acre = 30 lbs/acre).*

Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight per Field*			
Field Number	**Crop Yield**	**Crop Yield Unit**	**Crop Yield Unit Weight**
1	N/A	N/A	N/A

Crop Yield is reported in:

☐ Total units sold
☐ Total production unit
☐ Other: _____

If you did NOT complete Table 5, you are required to complete Table 6. Complete Table 6 by identifying your field number(s), the irrigated acres per field, total fertilizer applied to field(s)

(lbs/acre), crop yield, crop yield unit, and crop yield unit weight.

- **Field Number:** Use the field number(s) you identified in section 2, step 2, Table 4.

- **Irrigated Acres:** Enter the number of irrigated acres per field that you identified in section 2, step 2, Table 4.

- **N-P-K Ratio:** Report the N-P-K ratio of the type of fertilizer you applied to each field. (i.e., 10-20-20). These numbers can be found on the bags of fertilizer you purchased.

- **Total Number of Fertilizer Bags Used:** Report how many bags of fertilizer you applied to each field in the reporting year (i.e., 15 bags of fertilizer were used on field 1 in the reporting year). This value will be used to calculate the total N applied to each field.

- **Weight per Bag of Fertilizer:** Report the weight of the bag(s) of fertilizer applied to each field in the reporting year (i.e., 40 lbs/bag). This number can be found on the bag of fertilizer. This value will be used to calculate the total N applied to each field.

- **Total Fertilizer Applied:** Report the total fertilizer applied to each field by using the following formula:

  (Total number of Fertilizer Bags Used x Weight per Bag of Fertilizer)/Irrigated acres = Total Fertilizer Applied (in lbs/acre).

- **Total N Applied:** Report how much fertilizer you applied to each field(s) at your Operation by multiplying the total fertilizer applied by the ratio of N in (decimal form) from the N-P-K ratio. For example, if the N-P-K ratio is 10-20-20 and your total fertilizer applied value is 600 lbs, you would multiply 600 by 0.10 to calculate the total N applied.

You are only required to report the crop yield, crop yield unit, and crop yield unit weight if the crop type(s) on each field have an existing removal coefficient value. If none of the crop types you grew on your fields in the reporting year have an existing removal coefficient value, proceed to section 5.

- **Crop Yield:** Report your crop yield for each field in the reporting year. The crop yield is the total amount of crop produced, grown, and/or harvested on each field. Indicate how you report your crop yield (i.e., based on either the total production unit, total units sold, or other) by checking the appropriate box below Table 6.

- **Crop Yield Unit:** Report your crop yield unit (i.e., tons, pounds, bins, cartons, bales, pots, etc.) for each field in the reporting year.

- **Crop Yield Unit Weight:** If you use a crop yield unit that is not pounds or tons, report the weight of the crop yield unit (i.e., “10 lb. pots” instead of “pots”).

- **Additional Comments:** Provide any additional comments you may have regarding Table 6 in the space provided.

Example 1: If you grow a crop that has an established removal coefficient:

Total N Applied to Each Field						
Field Number	**Irrigated Acres**	**N-P-K Ratio in Fertilizer (if known)**	**Total Number of Fertilizer Bags Used**	**Weight per Bag of Fertilizer**	**Total Fertilizer Applied**	**Total N Applied**
1	5	10-20-20 *(The type of fertilizer I used on field 1 is 10-20-20).*	15 *(I applied 15 bags of fertilizer to the crops on field 1).*	40 lbs *(Each fertilizer bag weighs 40 lbs).*	120 *(15 x 40 = 600)* *(600/5 = 120)* *(Total Number of Fertilizer Bags Used (15) x Weight per Bag of Fertilizer (40) = 600 lbs. 600 / the irrigated acres (5) = 120 lbs/acre).*	12 (120 x 0.10 = 12) *(Total Fertilizer Applied (120) x the N ratio converted into a decimal (0.10) = 12 lbs/acre).*

Example 1 - *continued*: If you grow a crop that has an established removal coefficient:

Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight per Field*			
Field Number	**Crop Yield**	**Crop Yield Unit**	**Crop Yield Unit Weight**
1	100 *(I sold 100 10 lb. pots that were located on field 1).*	Pots *(I sell the crops grown on field 1 in pots).*	10 lb. pot *(Each pot grown on field 1 that I sold in the reporting year is about 10 lbs.).*

Crop Yield is reported in:

☒ Total units sold
☐ Total production unit
☐ Other: _____

Example 2: If you grow a crop that does NOT have an established removal coefficient:

Total N Applied to Each Field						
Field No.	**Irrigated Acres**	**N-P-K Ratio in Fertilizer (if known)**	**Total Number of Fertilizer Bags Used**	**Weight per Bag of Fertilizer**	**Total Fertilizer Applied**	**Total N Applied**
1	4	20-10-10 *(The type of fertilizer I used on field 1 is 20-10-10).*	5 *(I went through a total of 5 fertilizer bags on this field in the reporting year).*	40 lbs *(Each fertilizer bag weighs 40 lbs).*	50 *(5 x 40 = 200)* *(200/4 = 50)* *(Total Number of Fertilizer Bags Used (5) x Weight per Bag of Fertilizer (40) = 200. 200/ irrigated acres (4) = 50 lbs/acre)*	10 *(50 x 0.2 = 10)* *(Total Fertilizer Applied (50) x the N ratio converted into a decimal (0.20) = 10)*

Example 2 - *continued*: If you grow a crop that does NOT have an established removal coefficient:

Crop Yield, Crop Yield Unit, and Crop Yield Unit Weight per Field*			
Field Number	**Crop Yield**	**Crop Yield Unit**	**Crop Yield Unit Weight**
1	N/A	N/A	N/A

Crop Yield is reported in:

☐ Total units sold
☐ Total production unit
☐ Other: _____

SECTION 4: A/R RATIO AND A-R DIFFERENCE CALCULATIONS

Dischargers that qualify for any of the four exemptions described in section 3, step 1 may skip this step and proceed to section 5.

Step 1: Dischargers must complete Table 7 by calculating the annual A/R ratio and A-R difference values for each field. Dischargers only need to calculate the annual A/R ratio and A-R difference values for crops that have an established removal coefficient.

- **Field Number(s):** Use the field number(s) you identified in section 2, step 2, Table 4.
- **Crop Yield:** Use the crop yields you reported in section 3, step 4 in Table 5 or Table 6.
- **Total N Applied:** Use the Total N Applied you calculated in section 3, step 4 in Table 5 or Table 6.
- **Removal Coefficient Value:** Enter the removal coefficient value for each crop type. To determine the existing removal coefficient(s) value, visit the CDFA's website at the following link: https://www.cdfa.ca.gov/is/ffldrs/frep/FertilizationGuidelines/N_Uptake.html
- **Total N Removed:** The Total Nitrogen Removed must be determined by multiplying your crop yield per field by an established crop-specific nitrogen removal coefficient, C_N, which represents the amount of nitrogen in the produced, grown, or harvested crop.

Nitrogen Removed (lbs/acre) = Crop Yield (units/acre) x C_N (lbs/unit)

- **A/R Ratio:** The A/R ratio is the ratio of total Nitrogen Applied to the total Nitrogen Removed. Use the formula below to calculate the A/R Ratio:

$$\text{A/R Ratio} = \frac{\text{Nitrogen Applied}}{\text{Nitrogen Removed}}$$

- **A-R Difference:** The A-R difference is the difference of total Nitrogen Applied and the total Nitrogen Removed. Use the formula below to calculate the A-R Difference:

A-R Difference = Nitrogen Applied – Nitrogen Removed

Example 1

Field Number(s)	Crop Yield	Total N Applied	Removal Coefficient Value	Total N Removed	A/R Ratio	A-R Difference
1	1,000 *(I harvested 1,000 lbs of oranges in field 1 in the reporting year).*	10 *(I calculated this value in Table 6- I applied 10 lbs/acre of nitrogen to my orange trees in the reporting year).*	0.00150 *(Oranges have an established removal coefficient of 0.00150. I found this value on CDFA's website).*	1.5 *(Crop Yield (1,000) x Removal Coefficient Value (0.00150) = 1.5*	6.67 *(Total N Applied (10) / Total N Removed (1.5) = 6.67*	8.5 *(Total N Applied (10) – Total N Removed (1.5) = 8.5).*

Step 2: Dischargers must calculate the multi-year A/R ratio and A-R difference values for each field and report those values in Table 8. The multi-year A/R ratio and A-R difference must be reported as the ratio of total nitrogen applied to total nitrogen removed and the difference of the total nitrogen applied to total nitrogen removed for the three prior consecutive reporting years. This calculation only applies to fields that have three years of consecutive data with the same crop type in all three years.

- **Field Number(s):** Use the field number(s) you identified in section 2, step 2, Table 4.

- **Reporting Year (n):** Use the reporting year you identified in section 1, step 1, Table 1 or Table 2.
  - **Total N Applied:** Use the total nitrogen applied values you used in Table 7.
  - **Total N Removed:** Use the total nitrogen removed values you calculated in Table 7.

- **Previous Reporting Year (n-1):** Use the values from the previous reporting year.
    - **Total N Applied:** Use the total nitrogen applied values you used in Table 7 in your previous INMP Summary Report.
    - **Total N Removed:** Use the total nitrogen removed values you calculated in Table 7 in your previous INMP Summary Report.

- **Year Prior to the Previous Reporting Year (n-2):** Use the values from the year prior to the previous reporting year.
    - **Total N Applied:** Use the total nitrogen applied values you used in Table 7 in your the INMP Summary Report you submitted two years ago.
    - **Total N Removed:** Use the total nitrogen removed values you calculated in Table 7 in the INMP Summary Report you submitted two years ago.

- **Multi-year A/R Ratio:** Calculate the multi-year A/R ratio by adding up the total N applied for all three years per field (A_3) and adding up the total N removed for all three years per field (R_3) and then divide the A_3 value by the R_3 value (A_3/R_3).

$$A_3/R_3 = (A_n + A_{n-1} + A_{n-2})/(R_n + R_{n-1} + R_{n-2})$$

- **Multi-year A-R Difference:** Calculate the multi-year A-R difference by subtracting the R_3 value from the A_3 value ($A_3 – R_3$).

$$A_3\text{-}R_3 = (A_n + A_{n-1} + A_{n-2}) – (R_n + R_{n-1} + R_{n-2})$$

For example, if you submitted the INMP Summary Report on March 1, 2027, the reporting year, n, would be 2026. The previous reporting year, n-1, would be 2025. The year before the previous reporting year, n-2, would be 2024.

SECTION 5: IDENTIFY FIELD-LEVEL MANAGEMENT PRACTICES

Step 1: Complete Table 9 by identifying what irrigation methods you used on each field of your Operation in the reporting year. For each field, check what primary and secondary irrigation type(s) you had on each field. If a certain irrigation type you used is not listed in the table, check the “other” box and write the irrigation type you used in the space provided under Table 9.

Step 2: Complete Table 10 by identifying what irrigation efficiency practices you used on each field of your Operation in the reporting year, if any. If a certain irrigation efficiency practice that you used is not listed in the table, check the “other” box and write the irrigation efficiency practice you used in the space provided under Table 10.

Step 3: Complete Table 11 by identifying what types of nitrogen efficiency practices you implemented on each field of your Operation in the reporting year, if any. If a certain nitrogen efficiency practice you used is not listed in the table, check the “other” box and write the nitrogen efficiency practice you used in the space provided under Table 11. If you did not

implement any nitrogen efficiency practices at your Operation in the reporting year, write N/A in the additional comments section.

Step 4: Complete Table 12 by identifying what types of sediment and erosion control practices you implemented at each field of your Operation in the reporting year, if any. If you implemented a sediment and erosion control practice that is not listed in the table, check "other" and write the sediment and erosion control practice you used in the space provided under Table 12. If you did not implement any sediment and erosion control practices at your Operation in the reporting year, write N/A in the additional comments section.

SECTION 6: CERTIFICATION

If your Third-Party Group or the San Diego Water Board identified your Operation or any field(s) at your Operation as a statistical outlier in the previous reporting year, your INMP Summary Report must be certified. The person certifying the INMP Summary Report must complete the INMP Certification section including signature, date, and method of certification.

Any INMP Summary Report requiring certification must be certified by an Irrigation and Nitrogen Management Specialist, such as:

- Crop Advisers certified by the American Society of Agronomy (CCA). Any Certified Crop Adviser who certifies an INMP must also have completed the nitrogen management training program offered by the University of California Agriculture and Natural Resources (UCANR) and the California Department of Food and Agriculture (CDFA).
- Certified Professional Soil Scientists (CPSS)
- Certified Professional Agronomists (CPAg)
- Technical Service Providers (TSP) certified in nutrient management in California by the Natural Resources Conservation Service (NRCS)
- Certified Agricultural Irrigation Management Specialists (CAIS) certified by the Irrigation Association.

Additionally, plans may be self-certified by the Member or Discharger enrolled as an individual if:

- The certifying Member has attended the California Department of Food and Agriculture (CDFA) or other approved training program for INMP certification. The Member must retain written documentation of their attendance in the training program.
- The certifying Member adheres to a site-specific recommendation from the Natural Resources Conservation Service (NRCS Nutrient Management Plan) or the University of California Cooperative Extension (UCCE). The Member must retain written documentation of the recommendation.

ATTACHMENT J – WATER QUALITY PROTECTION PLAN

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
2375 Northside Drive, Suite 100, San Diego, CA 92108
Phone (619) 516-1990
Fax (619) 516-1994

Dischargers not formerly enrolled in Order No. R9-2016-0004 or Order No. R9-2016-0005 must complete the Water Quality Protection Plan (WQPP) to identify the type and location of management practices currently implemented at each Operation. Dischargers must ensure that all management practices identified in the WQPP are properly operated and maintained. Dischargers must evaluate the effectiveness of the management practices and must make changes to the WQPP as necessary by contacting their Third-Party Group (if applicable) or the San Diego Water Board. A paper or electronic copy of the WQPP must be maintained at the Discharger's Operation or primary place of business.

WASTEWATER PONDS

Does your Operation have any wastewater ponds that capture irrigation tailwater, stormwater, irrigation tailwater comingled with stormwater, brine waste, etc.?

☐ Yes

☐ No

If yes, complete the following table. If you have more than five wastewater ponds located within your Operation, contact the San Diego Water Board for additional rows in the table.

Wastewater Pond Number	Address	Lined or Unlined	Liner Type (plastic, clay, concrete, etc.)	Age of Liner (years)	Capacity (Mgal or acre-feet)	Contents of the Wastewater Pond (irrigation tailwater, mixed stormwater, brine, etc.)
1						
2						
3						
4						
5						

GROUNDWATER WELLS

Does your Operation have any groundwater well(s)?

☐ Yes

☐ No

If yes, complete the following table. If you have more than five groundwater wells located at your Operation, contact the San Diego Water Board for additional rows in the table.

Groundwater Well	Address	Use of Well (drinking water, irrigation, etc.).	Depth (feet)	Screening Interval (for active, non-drinking water supply wells only)	Aquifer Type (unconfined or confined) for active, non-drinking water supply wells only
1					
2					
3					
4					
5					

SEDIMENT AND EROSION CONTROL

Sediment and Erosion Control	N/A / Yes / Future* *include future date
Sediment and erosion controls are implemented at my Operation.	

In the table below, explain what kind of sediment and erosion control practices you implement or plan to implement **for each address** of your Operation. If you have more than three addresses, please contact the San Diego Water Board for additional rows in the table. If your Operation does not have the potential to cause erosion and you do not implement any sediment and erosion control practices, explain why for each address in the table below.

Examples of sediment and erosion control practices can include, but are not limited to:

- Silt fences, straw wattles, or sandbags placed along perimeter of the Operation or around areas prone to erosion
- Gravel or woodchips on dirt roads
- Vegetation coverage on steep slopes
- Spray dirt roads for dust control

Address	Sediment and Erosion Control Practices

STOCKPILE MANAGEMENT

Do you have any stockpiled material (piles of sediment, gravel, rocks, woodchips, manure, etc.) located at your Operation?

☐ Yes
☐ No
☐ Occasionally

If yes or occasionally, please answer the following questions:

Stockpiled Supplies	**N/A / Yes / Future* *include future date**
Stockpiled material(s) are stored at least 100 feet from surface waterbodies and stormwater channels, if possible.	
Stockpiled materials contain best management practices at least 24 hours prior to a rain event (ex: straw wattles around the perimeter of the stockpiles, stockpiles covered with tarp, etc.)	
If your stockpiles cannot be stored at least 100 feet away from surface waterbodies and/or stormwater channels, explain why:	

CHEMICALS AND HAZARDOUS MATERIALS

Chemical Storage and Handling	N/A / Yes / Future* *include future date
Chemicals are handled, managed, and disposed of according to applicable regulations and label instructions.	
Chemicals are stored off the ground (ex: on a wood palette, shelf, concrete, on a shelf, etc.)	
Chemicals are stored under roof coverage.	
Are the chemicals (including but not limited to pesticides and fertilizers) used at the Operation stored on-site? ☐ Yes ☐ No ☐ I do not use any chemicals at my Operation.	
If the chemicals used at the Operation are stored on-site, what address(es) are chemicals stored at?	

If applicable, list the names of all the chemicals typically applied to crops, including but not limited to fertilizers and pesticides:

Fertilizers:
Pesticides:
Other:

Hazardous Materials	N/A / Yes / Future* *include future date
Hazardous materials are handled, managed, and disposed of according to applicable regulations and label instructions.	
Inspect vehicles and other equipment for leaks on a regular basis.	
Drain fluids out of old, unused vehicles and/or add drip pans underneath the vehicles to prevent fluids from infiltrating into the ground and comingling with stormwater.	
Hazardous materials have secondary containment to prevent the potential discharge of those substances.	

COMPOST AND MANURE MANAGEMENT

Do you apply compost to your field(s) and/or crop(s) at your Operation?

☐ Yes
☐ No

Do you apply manure to your field(s) and/or crop(s) at your Operation?

☐ Yes
☐ No

If you answered yes to either of the above questions, please answer the following questions:

Compost and Manure	**N/A / Yes / Future* *include future date**
Compost and manure stockpiles are stored at least 100 feet from surface waterbodies and stormwater channels, if possible.	
Compost and manure stockpiles contain best management practices at least 24 hours prior to a rain event (ex: straw wattles around the perimeter, stockpiles covered with tarp, etc).	
Compost and manure are land-applied at an agronomic rate.	
If your compost and/or manure stockpiles cannot be stored at least 100 feet away from surface waterbodies and/or stormwater channels, explain why:	

WASTE MANAGEMENT

Waste Management	N/A / Yes / Future* *include future date
Keep Operation clean and free of trash and debris.	
Keep dumpsters and other waste containers in good condition. Routinely check for areas where they have rusted out and could potentially leak.	
Septic tanks are serviced routinely.	
Porta-Potties located at the Operation are serviced routinely and have secondary containment.	

MAPS

Complete maps 1, 2, and 3 for each address of your Operation. If you have multiple addresses, contact the San Diego Water Board for additional tables.

Map 1
Address:
Indicate the following: 1. Operation property boundaries (green border) 2. Approximate location of growing areas (red border) 3. Surface water bodies (blue line/border)

Map 2
Indicate the following: 1. Location of wells a. Irrigation wells (IW) b. Domestic water supply wells (DW) 2. Chemical storage area 3. Wastewater ponds (WP) 4. Manure (M) and compost (C) areas, including storage and disposal sites

Map 3
Indicate the surface water flow direction and general topographic slope direction by drawing arrows pointing in the direction of the water flow.

SIGNATURE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): Date:

Signature:

ATTACHMENT K - WATER QUALITY PROTECTION PLAN SUPPLEMENTAL INFORMATION (EXISTING ENROLLEES ONLY)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
2375 Northside Drive, Suite 100, San Diego, CA 92108
Phone (619) 516-1990
Fax (619) 516-1994

Dischargers previously enrolled in Order Nos. R9-2016-0004 or R9-2016-0005 must complete the Water Quality Protection Plan Supplemental Information form to provide the San Diego Water Board with updated information regarding the type and location of management practices currently implemented at each Operation. Dischargers must ensure that all management practices identified in the WQPP are properly operated and maintained. Dischargers must evaluate the effectiveness of the management practices and must make changes to their WQPP as necessary by contacting their Third-Party Group (if applicable) or the San Diego Water Board. A paper or electronic copy of the WQPP must be maintained at the Discharger's Operation or primary place of business.

CONTACT INFORMATION

Operation Name:	
Operation Owner Name:	Operator Name:

Operation Address(s):	Assessor Parcel Number(s):

WASTEWATER PONDS

Does your Operation have any wastewater ponds that capture irrigation tailwater, stormwater, irrigation tailwater comingled with stormwater, brine waste, etc.?

☐ Yes

☐ No

If yes, complete the following table. If you have more than five wastewater ponds located within your Operation, contact the San Diego Water Board for additional rows in the table.

Wastewater Pond Number	Address	Lined or Unlined	Liner Type (plastic, clay, concrete, etc.)	Age of Liner (years)	Capacity (Mgal or acre/feet)	Contents of the Wastewater Pond (irrigation tailwater, stormwater, brine, etc).
1						
2						
3						
4						
5						

GROUNDWATER WELLS

Does your Operation have any active groundwater well(s)?

☐ Yes
☐ No

If yes, complete the following table. If you have more than five active groundwater wells located at your Operation, contact the San Diego Water Board for additional rows in the table.

Groundwater Well	Address	Use of Well (drinking water, irrigation, etc).	Depth (feet)	Screening Interval (for active, non-drinking water supply wells only	Aquifer Type (unconfined or confined) for non-drinking water supply wells only
1					
2					
3					
4					
5					

SEDIMENT AND EROSION CONTROL

Sediment and Erosion Control	N/A / Yes / Future* *include future date
Sediment and erosion controls are implemented at my Operation.	

In the table below, explain what kind of sediment and erosion control practices you implement or plan to implement **for each address** of your Operation. If you have more than three addresses, please contact the San Diego Water Board for additional rows in the table. If your Operation does not have the potential to cause erosion and you do not implement any sediment and erosion control practices, explain why for each address in the table below.

Examples of sediment and erosion control practices can include, but are not limited to:

- Silt fences, straw wattles, or sandbags placed along perimeter of the Operation or around areas prone to erosion
- Gravel or woodchips placed on dirt roads
- Vegetation coverage on the ground on steep slopes
- Spray dirt roads for dust control
- Cover sediment stockpiles prior to rain or strong wind events

Address	Sediment and Erosion Control Practices

SIGNATURE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): Date:

Signature: