State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT

November 9, 2016

ITEM: 9

SUBJECT: General Waste Discharge Requirements for Commercial Agricultural Operations within the San Diego Region (Tentative Order Nos. R9-2016-0004 and R9-2016-0005 and Tentative Resolution No. R9-2016-0136). (*Barry Pulver*)

PURPOSE: To receive public testimony and consider adoption of Tentative General Orders R9-2016-0004 and R9-2016-0005,[1] and Tentative Resolution No. R9-2016-0136.

RECOMMENDATION: Adoption of the following is recommended:

1. Tentative 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* (Tentative Third-Party Group Order; **Supporting Document No. 1**).
2. Tentative Order No. 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* (Tentative Individual Order; **Supporting Document No. 2**).
3. Tentative Resolution No. R9-2016-0136, *Adoption of a Negative Declaration and Initial Study for the General Waste Discharge Requirements for Discharges from Agricultural Operations in the San Diego Region* (Tentative Resolution; **Supporting Document Nos. 3, 4, 5**).[2]

KEY ISSUES:

1. The Tentative General Orders continue the San Diego Water Board's regulation of discharges from Agricultural Operations that began in 1983.
2. The Tentative General Orders provide regulatory coverage for Agricultural Operations - either as a Member of a Third-Party Group or as an Individual Discharger.
3. The Tentative General Orders implement applicable load allocations for Agricultural Operations contained in the *Total*

[1] Tentative General Orders Nos. R9-2016-0004 and R9-2016-0005 are collectively referred to as Tentative General Orders.

[2] Supporting Document No. 3 is the Tentative Resolution. Supporting Document No. 4 is the Draft Negative Declaration (Draft Negative Declaration). Supporting Document No. 5 is the CEQA Initial Study and Environmental Checklist (CEQA Checklist).

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

4. The Tentative General Orders implement the State Water Board's *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (Nonpoint Source Policy). [3]

PRACTICAL VISION:

The Tentative General Orders include a monitoring and reporting program (MRP). In accordance with the *Framework for Monitoring and Assessment in the San Diego Region* (Framework),[4] which is incorporated into the Monitoring and Assessment chapter of the Practical Vision, the MRP requires both core and regional monitoring. Core monitoring consists of the basic site-specific monitoring necessary to measure compliance with the requirements of the Tentative General Orders and impacts to receiving water quality from Agricultural Operations. Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs, including commercial agriculture, on the ecological health of water bodies in the San Diego Region. The MRP implements the Monitoring and Assessment chapter of the Practical Vision by requiring the collection of data and other information necessary for determining the status and trends of water quality conditions in the San Diego Region with respect to agricultural discharges; investigating the causes of unsatisfactory water quality conditions; measuring the adequacy and effectiveness of waste management practices, and; communicating key findings to the public, stakeholders, and decision-makers.

The Tentative General Orders also further the goals of the Recovery of Streams, Wetlands, and Riparian Areas chapter of the Practical Vision by requiring Agricultural Operations to reduce or eliminate discharges of wastes associated with agricultural activities to the waters of the State, thereby protecting and restoring streams located in agricultural areas.

[3] The Nonpoint Source Policy is available at http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf (as of October 20, 2016)

[4] Resolution No. R9-2012-0069, *A Framework for Monitoring and Assessment in the San Diego Region*, was adopted by the San Diego Water Board on December 12, 2012, and is available at http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2012/R9-2012-0069.pdf (as of October 20, 2016).

DISCUSSION:

A map showing the location of agricultural activities in the San Diego Region is attached as **Supporting Document No. 6**. The June 22, 2016, Executive Officer Summary Report (EOSR) for Item 9*, Public Workshop*, which contains detailed information about the development and content of the Tentative General Orders and Tentative Resolution, is attached as **Supporting Document No. 7**.

The Draft Negative Declaration and Initial Study (**Supporting Document Nos. 4 and 5**) were distributed by the California State Clearinghouse and Planning Units (State Clearinghouse) to selected State agencies for review. The San Diego Water Board also released the Tentative Resolution, along with the Tentative General Orders, for a 45-day public review and comment period on June 13, 2016. The comment period closed on July 29, 2016. Comment letters were received from the following entities:

- Best Best & Krieger, LLC on behalf of Rancho Guejito Corporation (**Supporting Document No.8**)
- City of San Diego (**Supporting Document No. 9**)
- County of San Diego (**Supporting Document No. 10**)
- Mr. Rami Mina (**Supporting Document No. 11**)
- San Diego Region Irrigated Lands Group (**Supporting Document No. 12**)

The State Clearinghouse reported that no State agencies submitted comments on the Draft Negative Declaration and Draft Initial Study by the close of the comment period on July 29, 2016 **Supporting Document No. 13**).

A Response to Comments Report (RTC Report) containing the San Diego Water Board's responses to the comment letters is provided as **Supporting Document No. 14**. Revisions to the Tentative General Orders, the CEQA Initial Study and Environmental Checklist have been made as appropriate to address the comments and to correct minor errors. The modifications are shown in **Supporting Document Nos. 1, 2, and 5** in underline/strikeout format.

A summary of the most significant comments received and the responses to these comments is provided below:

1. Comment: *The Draft Initial Study and Draft Negative Declaration are inadequate because there is evidence in the record to support a fair argument that potentially significant environmental impacts may result from the Tentative General Orders and on that basis an environmental impact report must be prepared before the Regional Board can take action on the Tentative General Orders. Specifically, the commenter challenges the adequacy of the impact analyses for aesthetics, agricultural resources, air quality, biological resources, cultural resources, and greenhouse gas*

emissions.

Response: The San Diego Water Board's specific responses to comments regarding the Draft Initial Study and Draft Negative Declaration are located at Comment Nos. 7, 8, 9, 10, 11, 12, and 13 in the RTC Report.

In summary, the commenter speculates that the economic impact from the Tentative General Orders could put Agricultural Operations out of business and, by extension, worsen aesthetic vistas and air quality/greenhouse gas emissions. The commenter has provided no evidence to substantiate these claims. The commenter also argues that the Draft Initial Study and Draft Negative Declaration made improper assumptions and unsupported conclusions regarding the likely impacts to biological resources, cultural resources, air quality, and greenhouse gas emissions from installation of structural management practices.

The Draft Initial Study and Draft Negative Declaration focus on the reasonably foreseeable impacts associated with the installation of structural management practices. The Tentative General Orders do not prescribe specific management practices. Instead, the Tentative General Orders allow maximum flexibility for Dischargers in choosing the most appropriate and cost-effective combination of management practices. Although installation of some management practices may require limited trenching or digging, the resultant environmental impacts are expected to be within baseline conditions because these impacts would be similar to those from existing farm activities such as grading, sowing, and tilling for crop cultivation. San Diego Water Board inspections of agricultural facilities performed in 2013 found that the use of low flow irrigation methods such as drip and micro-spray irrigation are already standard practice in the San Diego Region due to the high price of water locally as well as the limited availability of groundwater. The San Diego Water Board also considered the potential direct and indirect environmental impacts of structural management practices that may be installed (e.g. buffer strips, sedimentation basins, etc.) by Dischargers to reduce or eliminate waste discharges in compliance with the requirements of the Tentative General Orders. In reviewing historical compliance methods, aerial photography of agricultural areas and crop reports for the San Diego Region, it is not anticipated that land intensive structural management practices are likely to be installed because there are alternative management practices that can achieve similar results using less land and at lower costs. Further, because agricultural discharges are most effectively addressed by management practices through control of pollution sources, new control measures would likely be located in areas of

existing crop production where soil has previously been disturbed and not result in significant impacts to the physical environment. For all of these reasons, the Draft Initial Study and Draft Negative Declaration meet the applicable requirements of CEQA and are adequate to support the adoption of the Tentative General Orders.

2. Comment: *Due to the costs associated with permit compliance, Agricultural Operations will go out of business, contributing to a loss of agricultural land in the San Diego Region.*

   Response: The San Diego Water Board's specific responses to comments regarding the cost of compliance with the Tentative General Orders are located at Comment Nos. 7, 8, 39, 40, 41, 50, and 87 in the RTC Report.

   The San Diego Water Board considered the costs of compliance and looked for opportunities to reduce the costs during the development of the Tentative General Orders. The projected costs associated with enrolling under and implementing the Tentative General Orders are contained in section I.G.7 of Attachment B (Fact Sheet) to the Tentative General Orders.

   It's important to keep in mind that a host of factors, from climate change to labor costs, ultimately influence the viability of Agricultural Operations in the San Diego Region. Moreover, Agricultural Operations are already subject to increasing regulation as the impacts of agricultural discharges on water quality have been further studied and understood. Thus, while the San Diego Water Board is sensitive to the cost concerns of the agricultural community, no specific evidence was presented by the commenters to establish that a significant number of Agricultural Operations will be forced out of business by the adoption of the Tentative General Orders.

3. Comment: *The Water Quality Protection Plans, monitoring reports, and other technical submittals will require Dischargers to divulge confidential information.*

   Response: The San Diego Water Board's specific responses to comments regarding confidentiality are located at Comment Nos. 48, 58, and 82 in the RTC Report.

   Although the San Diego Water Board recognizes that the agricultural community has legitimate concerns with privacy and protection of proprietary information, the Water Quality Protection Plans are required to contain only generalized information and do not run counter to competitive advantage or trade secret concerns. Moreover, the existing exceptions to the Water Code and Public Records Act, which allow withholding of information deemed trade secrets and secret processes from public disclosure, are sufficient to protect the

most sensitive information submitted. As such, the Tentative General Orders have been revised to establish a process which will allow Dischargers to specify that certain information is exempt from public disclosure, subject to review by the San Diego Water Board.

Resource Considerations for Implementation of the Commercial Agriculture Regulatory Program

Key activities of the San Diego Water Board's Commercial Agriculture Regulatory Program include implementing the requirements of the Tentative General Orders to effectively address water quality impacts caused by agricultural discharges, ensuring agricultural community participation, monitoring and reporting to verify compliance with requirements of the Tentative General Orders, and enforcing the Tentative General Orders to assure compliance. The workload will fall within six main categories 1) Outreach; 2) Enrollment; 3) Monitoring Report Review and Data Assessment; 4) Inspections; 5) Enforcement; and 6) Program Management. Agricultural Operations are required to file Notices of Intent (NOIs) to enroll under the Tentative General Orders within 270 days of Board adoption. The San Diego Water Board will be focusing on outreach and enrollment activities during the first year of implementation to facilitate agricultural community participation in the enrollment process.

Table 1 shows a summary of the Program tasks and the estimated person years (PYs) needed to complete these tasks. The San Diego Water Board currently directs all of its Nonpoint Source Program resources under task code 281 (0.8 PY) and some of its Waste Discharge Requirements (WDR) resources under task code 126 (0.2 PY) to staff the Commercial Agriculture Regulatory Program. As demonstrated by Table 1, additional staff resources will be required to fully implement the Tentative General Orders as enrollment of Agricultural Operations progresses over the next five years.

Table 1. Estimated Average PYs Needed to Implement the Commercial Agriculture Regulatory Program for Years 1-5[5]

Task	Year				
	1	2	3	4	5
Outreach	1.0	0.5	0.1	0.1	0.1
Enrollment	6.0	4.5	1.4	0.4	0.1
Enforcement	0	0.5	2.0	0.5	0.3
Inspections	0	1.0	3.0	5.0	5.5

[5] Table 1 Assumptions: a) 6,000 agricultural operations enrolled by end of year 5 with 75% enrollment by end of year 2. b) Increased outreach in years 1 and 2 to encourage enrollment. c) Enforcement begins in year 2 with focus on non-filers. d) Increased enforcement in year 3 to find non-filers. e) Enforcement in years 3, 4, and 5 includes both non-filers and violations of orders. f) Inspections begin in year 2 with an increasing number of inspections per year. g) Increased report review and data assessment in years 4 and 5 to provide additional oversight with bioassessment and site visits to observe bioassessment monitoring.

Report Review and Data Assessment	0.5	1.0	1.0	1.5	1.5
Program Management	0.5	0.5	0.5	0.5	0.5
Total	**8**	**8**	**8**	**8**	**8**
Existing Allocated PYs	**1**	**1**	**1**	**1**	**1**
Additional Required PYs	**7**	**7**	**7**	**7**	**7**

The San Diego Water Board will continue efforts to address the staff resources shortfall through redirection of available resources from other programs where possible and supporting State Water Board proposals to secure additional resources statewide through the State budget change proposal process. The San Diego Water Board will also continue using proactive solutions that leverage outside resources to support and facilitate implementation of the Tentative General Orders. This concept is exemplified by the reliance on third-party group representatives in the Tentative Third-Party Group Order for outreach and education of enrolled agricultural discharger members and for implementation of a number of the requirements of the regulatory program, including representative monitoring. The San Diego Water Board will also seek to benefit from collaborative partnerships with other governmental (federal, state or local) and non-governmental agencies that perform related functions to support program implementation, decision making, field presence and compliance efforts.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS:

1. Revised Tentative Order No. R9-2016-0004 with Attachments
2. Revised Tentative Order No. R9-2016-0005 with Attachments
3. Tentative Resolution No. R9-2016-0136
4. Draft Negative Declaration
5. Revised CEQA Initial Study and Environmental Checklist
6. Location Map
7. June 22, 2016 Public Workshop Executive Officer Summary Report
8. Comments from Best Best & Krieger on behalf of Rancho Guejito Corporation, dated July 29, 2016
9. Comments from the City of San Diego, dated July 29, 2016
10. Comments from the County of San Diego, dated July 29, 2016
11. Comments from Mr. Rami Mina, dated June 27, 2016
12. Comments from the San Diego Region Irrigated Lands Group, dated July 29, 2016
13. California State Clearinghouse and Planning Unit letter dated

August 1, 2016

14. Response to Comments Report

PUBLIC NOTICE: Notice of this item was provided to interested persons via the San Diego Water Board e-mail subscription list on October 10, 2016. Notice was also provided in the meeting notice and agenda for the November 9, 2016 Board meeting, which is posted on the San Diego Water Board's website.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

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REVISED TENTATIVE 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

Discharges from commercial agricultural operations, including irrigation runoff, other non-storm water runoff, and storm water runoff to waters of the State in the San Diego Region are subject to waste discharge requirements (WDRs), as set forth in this General Order. This General Order also authorizes an approved Third-Party Group to help its Members fulfill these WDRs subject to the terms of the conditions of this General Order.

Tables 1 and 2 below provide summary information regarding the applicability of this General Order:

Table 1. General Information

Discharger	Any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region.
Member	A Discharger who belongs to a Third-Party Group.
Agricultural Operation	Any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the intent to make a profit.
Third-Party Group	An organization approved by the San Diego Water Board to assist Dischargers in carrying out the terms and conditions of this General Order.
Eligibility for Coverage	Dischargers that are members of a Third-Party Group.
Waters of the State	Any surface water or groundwater, including saline waters, within the boundaries of the state.

Table 2. Discharge Location and Receiving Waters

Discharge Points	Locations throughout San Diego Region
Discharge Description	Agricultural Operation Waste Discharges
Receiving Waters	Inland Surface Waters, Enclosed Bays and Estuaries, Coastal Ocean Waters, and Groundwaters of the San Diego Region

Table 3. Administrative Information

This General Order was adopted by the California Regional Water Quality Control Board, San Diego Region on:	November 9, 2016
This General Order became effective on:	November 9, 2016

I, David W. Gibson, Executive Officer, do hereby certify that this General 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 November 9, 2016.

Tentative
David W. Gibson, Executive Officer

CONTENTS

TABLES

ATTACHMENTS

I. FINDINGS

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

Scope and Coverage

A. This General Order serves as WDRs for waste discharges from Agricultural Operations unless the discharges are covered by other applicable WDRs for individual Agricultural Operations.[1] Agricultural discharges, including both irrigation water runoff and storm water running off of agricultural fields into surface waters or percolating to groundwater may carry waste constituents including but not limited to sediments, pesticides, nutrients and pathogens that can affect the quality of waters of the State.

B. This General Order applies to the owner(s) and the operator(s) of an Agricultural Operation that are enrolled in a Third-Party Group approved by the San Diego Water Board under section II.B of this General Order to assist Dischargers in carrying out the terms and conditions of this General Order. The party enrolled in the Third-Party Group is considered the member of the ~~third~~Third-~~p~~Party ~~g~~Group (Member).

C. This General Order contains substantive and procedural requirements for Third-Party Groups and the process by which the San Diego Water Board will approve a Third-Party Group. Third-Party Groups may be formed based on a defined geographic area, crop(s), or other appropriate grouping. A Third-Party Group is not authorized to represent Members for the purposes of this General Order until it receives written approval from the San Diego Water Board. The formation, operation, and funding of the Third-Party Groups is the responsibility of the Third-Party Group.

D. By joining and maintaining membership in a Third-Party Group, a Member is agreeing to be represented by the Third-Party Group for the purposes of this General Order. Any requirements or conditions not fulfilled by the Third-Party Group are the responsibility of the Member. Although the Member and its Third-Party Group are primarily responsible for compliance under this General Order, a non-member may be held responsible for the conduct of operations on the Member's enrolled parcel.[2]

E. This General Order is applicable to discharges from Agricultural Operations within the San Diego Region. The San Diego Region jurisdictional area forms the southwest corner of California and occupies approximately 3,900 square miles of surface area. The western boundary of the San Diego 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

[1] General Order No. R9-2016-0005 issued by the San Diego Water Board on November 9, 2016, establishes waste discharge requirements for discharges from commercial Agricultural Operations for Dischargers that are not participating in a Third-Party Group.

[2] The person with day-to-day control of the discharge typically has the primary responsibility for compliance; however, if this person fails to clean up or control a discharge, or threatened discharge, or comply with the MRP (Attachment A), the landowner must assume responsibility for compliance (See Vallco Park, State Water Board WQO 86-18).

Cleveland National Forest. The southern boundary of the San Diego Region is formed by the U.S. and Mexico international border.

F. This General Order does not apply to discharges of waste that are regulated under other WDRs or a conditional waiver of WDRs (Waivers). If the other WDRs or Waivers only regulate some of the waste discharge activities at the Agricultural Operation, the owner or operator must obtain regulatory coverage for any discharges of waste that are not regulated by the other WDRs or Waivers. Such regulatory coverage may be sought through enrollment under this General Order, other applicable WDRs for individual Agricultural Operations, or by obtaining appropriate changes in the owner's or operator's existing WDRs or Waivers.

Discharges Covered Under this General Order

G. This General Order regulates discharges from Agricultural Operations within the San Diego Region that could affect waters of the State. For the purposes of this General Order, an Agricultural Operation is any agricultural business or trade activity, including farms, nurseries, and orchards, that produce crops with the intent to make a profit. The San Diego Water Board presumes an intent to make a profit if at least one of the following criteria is met:

1. The owner or operator files a federal Department of Treasury Internal Revenue Service Form 1040 Schedule F *Profit or Loss from Farming* with their federal taxes.
2. The owner or operator receives agriculture water use rates or has been given an agricultural water use variance from their water purveyor.
3. The owner or operator of the Agricultural Operation ~~holds a current~~is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting.

Discharges Not Covered Under this General Order

H. This General Order does not provide coverage for any of the following:

1. Discharges from Agricultural Operations that are adequately covered under other applicable WDRs.
2. Discharges from agricultural activities that do not meet the definition of an Agricultural Operation provided in Attachment C (Abbreviations and Definitions) and Table 1 of this General Order.
3. Discharges from medicinal cannabis operations.[3]
4. Discharges from agricultural activities not engaged in for profit, such as hobby growing or gardening.[4]

[3] The Medical Marijuana Regulation and Safety Act (MMRSA) created a regulatory framework for licensing the cultivation and sale of medical marijuana. MMRSA added section 13276 to the Water Code which requires Regional Water Boards to adopt WDRs, or a Waiver of WDRs, to address environmental impacts associated with cannabis cultivation. The San Diego Water Board will address discharges associated with cannabis cultivation in a separate order.

[4] Section 183(c) of the Internal Revenue Code defines an "activity not engaged in for profit" as any activity other than one for which deductions are allowable under Section 162 (trade or business expenses) or Section 212(1) or (2) (expenses for production of income) of the Internal Revenue Code.

5. Discharges from Agricultural Operations into areas designated by the State Water Resources Control Board (State Water Board) as Areas of Biological Significance (ASBS).
6. Discharges from Agricultural Operations that are comingled with other non-agricultural wastes (e.g. industrial wastes, sewage).
7. Discharges from confined animal operations, including but not limited to animal feeding operations, or facilities where animals are corralled, penned, tethered, or otherwise enclosed or held.
8. Discharges from Agricultural Operations subject to National Pollution Discharge Elimination System (NPDES) permit requirements, as provided in Clean Water Act (CWA) section 402 and regulations and guidelines adopted thereunder.
9. Discharges of dredged ~~and~~ or fill material from Agricultural Operations to waters of the State subject to regulation under CWA sections 401 and 404 and the California Water Code (Water Code).
10. Discharges from Agricultural Operations to a federally-owned, publicly-owned, or privately-owned treatment works regulated under WDRs or an NPDES permit, where such discharges are authorized by the entity that has jurisdiction over discharges to such treatment works.
11. Discharges from Agricultural Operations where all growing operations are conducted within buildings or in completely enclosed areas with no potential to discharge waste to waters of the State.

Reasons for Issuance of this General Order

I. There are more than 6,000 agricultural operations on approximately 70,000 acres of land in the San Diego Region. The production of crops on these lands requires disturbance to 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 waters of the State. The prohibitions and requirements of this General Order are intended to ensure that the discharge of wastes from Agricultural Operations are properly managed to protect, maintain, and improve water quality and prevent impairment of beneficial uses in waters of the State within the San Diego Region.

J. Nitrogen is an essential plant nutrient required to ensure robust crop growth. Management practices at agricultural operations vary with regard to nitrogen application based on the type of crop grown, soil type, irrigation method and other variables. Nitrogen fertilizer use, if not properly managed, can lead to nitrate levels in groundwater that exceed the water quality objective, including the safe drinking water maximum contaminate level (MCL)~~standard~~. A study conducted by the State Water Board Groundwater Ambient Monitoring and Assessment Program (GAMA)[5] in 2008 to 2009 involved the collection of groundwater samples from 137

[5] Groundwater Ambient Monitoring and Assessment (GAMA), *Domestic Well Project Groundwater Quality Data Report, San Diego County Focus Area*, State Water Resources Control Board, March 2010, available at http://www.waterboards.ca.gov/water_issues/programs/gama/docs/sdreport.pdf(as of October 19, 2016.

domestic wells within San Diego County. The report concluded that 18 percent of the samples were reported to exceed the nitrate ~~maximum contaminant level (~~MCL~~)~~ of 45 milligrams per liter (mg/L). In general, these wells were located in alluvial basins where, agricultural activities confined animal feeding operations, and on-site wastewater treatment systems are currently or were historically located.

K. In September 2013, an Agricultural Expert Panel was convened by the State Water Board to consider a variety of questions, including ones specific to the development of an agricultural nitrate control program. The Agricultural Expert Panel issued a final report of recommendations on September 9, 2014[6] concluding, in part, that because deep percolation of nitrates was universal within irrigated agriculture, a good regulatory program must encompass all irrigated areas, not only lands directly above high nitrate aquifers, those previously identified to be in a high vulnerability area, or those with a certain farm or field size. The San Diego Water Board agrees that groundwater in alluvial basins can be vulnerable to agricultural nitrate impacts, regardless of the time it takes for those impacts to appear in groundwater due to soil conditions, geologic conditions, and depth to groundwater. The San Diego Water Board also agrees that regulatory coverage for all agricultural lands is appropriate. However, the San Diego Water Board is not requiring compulsory nutrient management plans or reporting of crop-specific Nitrogen Applied/Nitrogen Removed A/R ratios[7] due to the reduced risk of nitrate percolation to groundwater presented by the unique soil conditions, geologic conditions, and crops grown in the San Diego Region as discussed in section I.D.2.d of the Fact Sheet (Attachment B).

L. Discharges from Agricultural Operations within the San Diego Region have adversely affected water quality, as documented by listings on the CWA section 303(d) List of Water Quality Limited Segments (303(d) List). The 2008 303(d) List identifies 12 water quality limited segments comprised of approximately 80 linear miles and 1,132 acres of surface waters within the San Diego Region where water quality standards were not attained and where agricultural activities were identified as a potential source of the impairment.

M. Past surface water monitoring conducted in accordance with the *2007 Conditional Waiver of Waste Discharge Requirements for Discharges from Agricultural and Nursery Operations* (Agricultural Waiver) within the Santa Margarita River and San Luis Rey River watersheds in areas influenced by agricultural activities also document water quality standards exceedances. Most samples exceeded water quality objectives for total dissolved solids, total nitrogen, and total phosphorus, constituents typically associated with agricultural activities. Likewise, regional biological monitoring document water quality impacts to the biological integrity of watersheds in the San Diego Region which are influenced by agriculture. The Southern California Index of Biological Integrity Scores – a multi-metric index based on the relative abundance of tolerant and sensitive benthic macroinvertebrates – for the bioassessment ranged from 5.7 (very poor condition) to 61 (good condition). The bioassessment data showed that 50% of streams were in poor or very poor condition, 0% in fair condition and 50% in good or very good condition.

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[6] Conclusions of the Agricultural Expert Panel, Recommendations to the State Water Board pertaining to the Irrigated Lands Regulatory Program (September. 9, 2014), available at <http://www.swrcb.ca.gov/water_issues/programs/agriculture/docs/ILRP_expert_panel_final_report.pdf> (as of April 26, 2016) (Agricultural Expert Panel Report).

[7] The A/R ratio refers to the multi-year ratio of nitrogen applied to the field to nitrogen removed from the field.

N. Total Maximum Daily Loads (TMDLs) are required to be established for surface waters placed on the 303(d) List for failure to attain applicable water quality standards. This General Order incorporates all applicable requirements for agricultural operations identified in the following approved TMDLs:

1. Resolution No. R9-2005-0036, *A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Revised Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed, San Diego County* (Rainbow Creek TMDL).
2. Resolution No. R9-2010-0001, *A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)* (Bacteria TMDL).

Attachment E (Impaired Waterbodies and Applicable Total Maximum Daily Loads (TMDLs)) of this General Order provides additional information regarding these TMDLs. This General Order may be considered for use as a non-TMDL solution to address other 303(d) listed waterbody impairments where agricultural activities are identified as the source of the pollutant(s) causing the impairment(s).

Legal and Regulatory Considerations

O. The San Diego Water Board regulates waste discharges that could affect the quality of the waters of the State, which includes both surface water and groundwater, pursuant to the Porter-Cologne Water Quality Control Act (division 7 of the Water Code commencing with section 13000).

P. This General Order adopts WDRs for discharges from Agricultural Operations that are owned or operated by Members of an approved Third-Party Group. Members are required to implement management practices identified in a Water Quality Protection Plan (WQPP) that prevent or reduce waste discharges that cause or contribute to exceedances of applicable water quality objectives and criteria, unreasonably affect beneficial uses, or cause or contribute to a condition of pollution or nuisance in waters of the State. Members must attend water quality training, prepare a WQPP, perform inspections to evaluate management practice effectiveness, and report annually on monitoring and inspection results. The Third-Party Group conducts monitoring and reporting activities. If monitoring results identify exceedances of water quality standards, the Third-Party Group must develop a Water Quality Restoration Plan (WQRP) to assess the effectiveness of implemented management practices and, when necessary, require Members to identify, implement, or upgrade management practices to meet water quality standards. This General Order also requires Members in certain watersheds to implement TMDLs applicable to Agricultural Operations.

Q. The issuance of this General Order is consistent with Water Code section 13263, which requires the San Diego Water Board to prescribe WDRs for proposed, existing, or material changes in discharges of waste that could affect water quality. Water Code section 13263 also allows the San Diego Water Board to issue WDRs although no report of waste discharge has been filed, and to issue general WDRs for a category of discharge, if appropriate.

R. Water Code section 13263, subdivision (i) states that a Regional Water Board may prescribe general WDRs for a category of discharges if the Regional Water Board finds or determines that all of the following criteria apply to the discharges in that category:

1. The discharges are produced by the same or similar operations.

2. The discharges involve the same or similar types of waste.
3. The discharges require the same or similar treatment standards.
4. The discharges are more appropriately regulated under general WDRs than individual WDRs.

Discharges from Agricultural Operations that are regulated under this General Order are consistent with the criteria listed above as described in section I.F of the Fact Sheet (Attachment B).

S. Water Code section 13267, subdivision (a), authorizes the San Diego Water Board to investigate the quality of any waters of the State within its region in connection with any action relating to the Basin Plan. Water Code section 13267, subdivision (b) provides that the San Diego Water Board, in conducting an investigation, may require Dischargers to furnish, under penalty of perjury, technical or monitoring program reports. The burden, including costs, of these reports must bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. The requirements and prohibitions of this General Order implement the requirements of Water Code section 13276(b) for the reasons set forth below:

1. ~~The t~~Technical and monitoring reports required by this General Order are necessary to ensure that the prior harm and future threat to water quality discharges associated with Agricultural Operations are properly assessed, abated, and controlled. This General Order requires the implementation of a monitoring and reporting program (MRP; Attachment A) that is intended to determine the effects of the waste discharges on water quality, to verify the adequacy and effectiveness of this General Order's conditions, and to evaluate each Third-Party Group's and Member's compliance with the terms and conditions of this General Order. Each Third-Party Group and Member who is covered under this General Order must comply with the MRP (Attachment A), and future revisions thereto.
2. The burden of preparing and submitting the technical and monitoring reports to the San Diego Water Board is reasonable. The reports are necessary to evaluate the Third-Party Group's and Member's compliance with the terms and conditions of this General Order and to assure protection of waters of the State. The costs of monitoring and reporting were evaluated prior to adoption of this General Order and are included in section I.G.7 of the Fact Sheet (Attachment B).

T. The San Diego Water Board's Water Quality Control Plan for the San Diego Basin (Basin Plan) designates beneficial uses, establishes water quality objectives, contains programs of implementation needed to achieve water quality standards, and references the plans and policies adopted by the State Water Board. The water quality objectives are developed to protect the beneficial uses of waters of the State. Beneficial uses designated for groundwater and surface water in the Basin Plan which may be affected by discharges from Agricultural Operations are presented in Table 4.

Table 4. Beneficial Uses of Surface Waters and Groundwaters

Beneficial Use	Abbreviation
Surface Waters	
Agricultural Supply	AGR
Cold Freshwater Habitat	COLD
Commercial and Sport Fishing	COMM
Contact Water Recreation	REC-1
Estuarine Habitat	EST
Freshwater Replenishment	FRSH
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
Groundwaters	
Municipal and Domestic Supply	MUN
Agricultural Supply	AGR
Industrial Service Supply	IND
Industrial Process Supply	PROC
Freshwater Replenishment	FRSH

U. This General Order implements the Basin Plan and other State Water Board water quality control plans and policies by requiring the implementation of management practices to achieve compliance with applicable water quality standards and the prevention of nuisance and pollution conditions. This General Order requires implementation of a MRP (Attachment A) to determine the effects of discharges on water quality and the effectiveness of management practices designed to comply with applicable water quality objectives.

V. The U.S. Environmental Protection Agency (USEPA) adopted the National Toxics Rule (NTR) on February 5, 1993, and the California Toxics Rule (CTR) on May 18, 2000, which was modified on February 13, 2001. The NTR and CTR contain water quality criteria which, when combined with beneficial use designations in the Basin Plan, constitute enforceable water quality standards for priority toxic pollutants in California surface waters.

W. The State Water Board adopted the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (Nonpoint Source Policy) in May 2004. The purpose of the Nonpoint Source Policy is to improve the Water Board's ability to effectively manage nonpoint source pollution and conform to the requirements of the federal CWA and the Federal Coastal Zone Act Reauthorization Amendments of 1990. The Nonpoint Source Policy requires that among other key elements, a nonpoint source control implementation

program's ultimate purpose to be explicitly stated. It also requires implementation programs to, 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. Consistent with the Nonpoint Source Policy, implementation of management practices may be used to measure nonpoint source control progress. However, implementation of management practices is not a substitute for meeting water quality objectives.

X. This General Order constitutes a Nonpoint Source Implementation Program for the discharges regulated by this General Order. Section I.G.3 of t~~T~~he Fact Sheet (Attachment B) describes the five key elements required by the Nonpoint Source Policy and provides an explanation of how the requirements of this General Order meet the requirements of the Nonpoint Source Policy.

Y. Adoption of WDRs is the project for the purposes of the California Environmental Quality Act (CEQA; Public Resources Code section 21000 et seq). The San Diego Water Board is the Lead Agency for the development and adoption of this General Order. As the Lead Agency, the San Diego Water Board conducted an Initial Study in accordance with the CEQA Guidelines (California Code of Regulations (CCR) title 14, section 15063 et seq). Based on the Initial Study, the San Diego Water Board prepared a Negative Declaration. The San Diego Water provided notice of its intent to adopt a Negative Declaration for this General Order on June 13, 2016 (14 CCR section 15072). The Negative Declaration/Initial Study was considered concurrently with this General Order in Resolution No. R9-2016-0136. The Negative Declaration is appropriate because the San Diego Water Board has determined, in light of the whole record, that there is no substantial evidence that adoption of this General Order may cause a significant effect on the environment.

Z. The San Diego Water Board has considered Water Code section 106.3, which states that that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This General Order requires Members to implement management practices to meet water quality standards intended to protect water for municipal and domestic uses.

AA. State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Antidegradation Policy) requires that high quality of waters be maintained unless degradation is consistent with the maximum benefit of people of the State; the degradation will not unreasonably affect present and anticipated beneficial uses; and the degradation will not result in violation of any applicable water quality control plan. This General Order is consistent with the Antidegradation Policy as described in section I.G.6 of the Fact Sheet (Attachment B).

BB. Pursuant to Water Code section 13263(a), the San Diego Water Board has considered the following factors found in section 13241 in establishing this General Order:

1. Past, present, and probable future beneficial uses of water.
2. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
3. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
4. Economic considerations.

5. The need for developing housing within the Region.
6. The need to develop and use recycled water within the Region.

The San Diego Water Board's consideration of these factors is described in section I.G.7 of the Fact Sheet (Attachment B).

CC. The Findings of this General Order, supplemental information and details in the Fact Sheet (Attachment B), and the administrative record of the San Diego Water Board relevant to the ~~Irrigated Lands~~Commercial Agriculture Regulatory Program ~~(ILRP)~~, were considered in establishing these WDRs. The Fact Sheet (Attachment B), which contains background information and rationale for the requirements in this General Order, is hereby incorporated into and constitutes Findings for this General Order. Attachment A and Attachments C through J are also incorporated into this General Order.

DD. The San Diego Water Board has notified interested agencies and persons of its intent to adopt this General Order for discharges of waste from Agricultural Operations within the San Diego Region, and has provided them with an opportunity for a public hearing and an opportunity to submit comments.

EE. The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to this General Order.

FF. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review this action in accordance with Water Code section 13320 and CCR title 23, sections 2050-2056. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of adoption of this General Order. If the thirtieth day after the adoption of this General Order falls on a Saturday, Sunday, or a State holiday, the petition may be submitted on the following business day. Copies of the law and regulations applicable to filing petitions may be found at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

GG. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any action authorized under this Order, the Member shall obtain authorization for an incidental take prior to construction or operation of the project. The Member shall be responsible for meeting all requirements of the applicable Endangered Species Act.

HH. The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under Water Code section 13223 or this Order explicitly states otherwise.

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13260, 13263, and 13267 and in order to meet the provisions contained in division 7 of the Water Code and regulations and policies adopted thereunder, Third-Party Groups and Members of Third-Party Groups shall comply with the following:

II. APPLICATION FOR THIRD-PARTY GROUP CERTIFICATION

A. Request for Coverage

1. A Third-Party Group covered under this General Order is responsible for managing fee collection and payment, managing communications between Members and the San Diego Water Board, and for fulfilling monitoring and reporting requirements on behalf of its Members, including but not limited to conducting surface water and groundwater monitoring, conducting regional monitoring, and preparing and implementing WQRPs.
2. To obtain coverage under this General Order, a Third-Party Group must submit a letter of application to the San Diego Water Board. The letter of application must demonstrate to the satisfaction of the San Diego Water Board that the Third-Party Group has the ability to carry out its responsibilities under this General Order. In making this determination, the San Diego Water Board will consider the Third-Party Group's organizational structure (i.e. individual, non-profit, corporation, partnership, governmental agency, other), governance structure, as well as any substantive and procedural mechanisms that will be used to ensure transparency and accountability to Members.
3. A complete letter of application must include the following information:
    a. Third-Party Group information, including the name of the Third-Party Group, a mailing address, a telephone number, an e-mail address, and a primary contact person.
    b. Any relevant information on the geographic area or crop(s) that will be represented by the Third-Party Group.
    c. A brief description of the Third-Party Group's commitment, ability, and staff resources that enable it to collect and report monitoring data on behalf of its Members and perform other duties as required under the terms and conditions of this General Order.
    d. Documentation of the 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 contained in section IX.E of this General Order.

B. Notice of Applicability (NOA)

The Third-Party Group letter of application is subject to San Diego Water Board approval. The San Diego Water Board will issue an NOA to the Third-Party Group once the letter of application is deemed complete and eligible for coverage under this General Order. Coverage will not become effective until the San Diego Water Board issues an NOA to the Third-Party

Group. Upon receipt of an NOA, the Third-Party Group shall comply with the relevant terms and conditions of this General Order.

C. Third-Party Group Dissolution

A Third-Party Group wishing to dissolve must notify the San Diego Water Board and its Members at least 30 days prior to the dissolution.

D. Termination of Coverage by the San Diego Water Board

The San Diego Water Board may terminate a Third-Party Group's approval under this General Order for cause including, but not limited to the following:

1. Violating any terms or conditions of this General Order.
2. Obtaining enrollment under this General Order by misrepresentation or failure to disclose all relevant facts.

E. Successor Third-Party Groups

In the event a Third-Party Group dissolves or loses coverage under this General Order, the Third-Party Group may delegate performance under this General Order to a successor organization with approval of the San Diego Water Board. Any successor organization seeking to serve as a Third-Party Group must submit a letter of application in accordance with section II.A.3 of this General Order. The San Diego Water Board will consider the factors set forth in Section II.A.2 in evaluating the letter of application and determining whether to issue an NOA approving enrollment of the successor organization.

F. Annual Fees

Members are required to pay an annual fee to the State Water Board. A Third-Party Group must collect these fees and submit them to the State Water Board on behalf of its Members. The fee schedule is set forth in CCR title 23, division 3, chapter 9 (commencing with section 2200.6). The fee regulations can be accessed online at: http://www.waterboards.ca.gov/resources/fees/water_quality/.

III. MEMBER APPLICATION FOR COVERAGE UNDER THIS GENERAL ORDER

A. Duty to Apply

New and existing Agricultural Operations without coverage under individual WDRs or other applicable WDRs are required to enroll under this General Order, or obtain coverage under individual WDRs or other applicable WDRs. Either the owner or operator of an Agricultural Operation may enroll as a Member under this General Order by submitting a complete Notice of Intent (NOI) (Attachment G) to the Third-Party Group and the San Diego Water Board. Regulatory coverage under this General Order is not effective until the San Diego Water Board approves the NOI as described in section III.D of this General Order.

B. Time to Apply

A Member shall request coverage under this General Order according to the following timeframes:

1. Existing Dischargers[8] without active coverage in other applicable general or individual WDRs shall submit a completed NOI (Attachment G) to enroll under this General Order no later than the ~~180~~ 270 days following the effective date of this General Order.
2. Existing Dischargers with active coverage in other applicable general or individual WDRs may submit an NOI to transfer enrollment to this General Order at any time in accordance with section III.F of this General Order.
3. New Dischargers[9] shall submit a complete NOI to enroll under this General Order at least 90 days before the discharge is to commence, unless permission for a later date has been granted by the San Diego Water Board.

C. Notice of Intent (NOI)

To obtain coverage under this General Order, a Member shall complete and submit an NOI to the Third-Party Group and the San Diego Water Board in accordance with the schedule provided in section III.B of this General Order. The NOI and any attachments may be submitted electronically if such method of submittal is approved by the San Diego Water Board in the future.[10] The NOI shall include all of the following items to be deemed complete:

1. A complete NOI (Attachment G). The NOI shall be signed and certified in accordance with the Signatory and Certification Requirements contained in section IX.E of this General Order.
2. A complete Water Quality Protection Plan (WQPP) in accordance with section ~~XII.C~~VII.C of this General Order.
3. One-time application fee made payable to "SWRCB", in accordance with CCR title 23, division 3, chapter 9, section 2200.6(b). The one-time application fee is waived for approved Members of Third-Party Groups who submit a timely NOI for enrollment by the deadlines specified in section III.B of this General Order. ~~This application fee does not apply to dischargers who were members of a group on or before June 30, 2008.~~ The fee regulations can be accessed online at: http://www.waterboards.ca.gov/resources/fees/water_quality/
4. Certification that the Member has provided notice to any unenrolled owner(s) or operator(s) of the Agricultural Operation and the landowner of their intent to obtain coverage under this General Order.

D. Notice of Applicability (NOA)

1. The NOI and WQPP are subject to San Diego Water Board approval. The San Diego Water Board will issue an NOA to the Member once the NOI application package is deemed complete and eligible for coverage under this General Order. Regulatory coverage for the Agricultural Operation discharge, as described in the NOI application package, commences with the date of issuance of the NOA. Coverage will not become

[8] An Existing Discharger is any owner or operator who discharges, or proposes to discharge, waste from an Agricultural Operation that was in existence on the adoption date of this General Order.

[9] A New Discharger is any Owner or Operator who proposes a new discharge of waste from an Agricultural Operation that was not existence on the adoption date of this General Order.

[10] If documents described in section III.C of this General Order, Notice of Intent (NOI), are submitted electronically by or on behalf of the Member, any person providing the documents shall ensure that all of the relevant requirements of the San Diego Water Board are met for that submission.

effective until the San Diego Water Board issues an NOA to the Member. Upon receipt of an NOA, the Member shall comply with the terms and conditions of this General Order.

2. The San Diego Water Board reserves the authority to modify, revoke and reissue the NOA, and request an updated NOI based on new information or changed circumstances. New information and changed circumstances includes but is not limited to the following:

   a. Failure to fully disclose all relevant facts.

   b. Receipt of a request for modification of the NOA by the Member.

   c. Material and substantial alterations or additions to the Agricultural Operation.

E. Notice of Exclusion (NOEX)

An NOEX is a notice that indicates that the discharge is not eligible for coverage under this General Order. The San Diego Water Board may issue an NOEX to the Member and the Third-Party Group for one or more of the following reasons:

1. The proposed discharge is not covered within the scope of this General Order.
2. The NOI is deemed incomplete.
3. The San Diego Water Board has determined that the Member ~~(Discharger)~~ must submit an application for coverage under individual WDRs or other applicable WDRs.

F. Enrollment Modification

There may be no gaps in coverage. A Discharger must submit an amended NOI at least 90 days prior to changing Third-Party Group membership or enrolling under individual WDRs or other applicable WDRs.

G. Notice of Termination (NOT)

To terminate coverage under this General Order, a Member ~~(Discharger)~~ shall submit a completed NOT (Attachment H) to the Third-Party Group and the San Diego Water Board. The NOT shall provide notice that the Member ~~(Discharger)~~ meets one or more of the following conditions and shall be signed and certified by the Member ~~(Discharger)~~ in accordance with the Signatory and Certification Requirements contained in section IX.E of this General Order:

1. A new owner or operator has taken over responsibility for the Agricultural Operation, and transfer of coverage under this General Order is not requested.
2. The Member ~~(Discharger)~~ no longer owns or operates an Agricultural Operation that meets the enrollment criteria specified in section I.G of this General Order.
3. The Member ~~(Discharger~~) has applied for and obtained coverage under individual WDRs or other applicable WDRs for the Agricultural Operation.

The Member ~~(Discharger~~) shall continue to comply with the requirements of this General Order until the San Diego Water Board notifies the Member ~~(Discharger~~) in writing that the NOT has been accepted.

The Member's ~~(Discharger's~~) coverage under this General Order will terminate on the date specified in the NOT acceptance letter issued by the San Diego Water Board. San Diego Water Board acceptance of the NOT does not relieve the Member's ~~(Discharger's)~~

responsibility for paying any outstanding fees, submitting any outstanding reports as specified in this General Order, or responding to enforcement actions pertaining to this General Order. The San Diego Water Board reserves the right to take any enforcement action authorized by law for violations of this General Order. Upon receipt of the San Diego Water Board's NOT acceptance letter, the Member ~~(Discharger)~~ will no longer be authorized to discharge under this General Order.

H. Termination of Coverage by the San Diego Water Board

Enrollment in this General Order may be terminated by the San Diego Water Board for cause including, but not limited to the following:

1. Violating any terms or conditions of this General Order.
2. Obtaining enrollment under this General Order by misrepresentation or failure to disclose all relevant facts.
3. The San Diego Water Board determining that individual WDRs would be more appropriate for the Agricultural Operation.

I. Transfer of Enrollment

Enrollment under this General Order is transferable with approval by the San Diego Water Board. Members ~~(Dischargers)~~ seeking to transfer enrollment under this General Order shall submit an amended NOI (Attachment H) indicating the change of information to the San Diego Water Board. The transfer request must also include a statement and signature that the new owner or operator assumes full responsibility for compliance with this General Order, including implementation of any approved WQPP and WQRP. The transfer of enrollment is not complete until the San Diego Water Board issues an amended NOA to the new Member, if enrolled in this General Order, or Discharger if enrolled under the Individual General Order. ~~(Discharger).~~

J. Annual Fees

Dischargers subject to WDRs are required to pay an annual fee to the State Water Board. Member enrollment under this General Order is conditioned upon total payment of any fee required under CCR title 23, division 3, chapter 9 (commencing with section 2200.6) and owed by the Member. The Member's Third-Party Group is responsible for collection and payment of these fees. The fee regulations can be accessed online at http://www.waterboards.ca.gov/resources/fees/water_quality/.

IV. PROHIBITIONS

A. Members shall comply with the Discharge Prohibitions contained in chapter 4 of the Basin Plan and any other applicable statewide water quality control plan. All such prohibitions are incorporated in this General Order as if fully set forth herein and summarized in Attachment F as a condition of this General Order.

B. The discharge of waste at a location or in manner different from that described in the NOI is prohibited.

C. The discharge of wastes from any Agricultural Operation to waters of the State within the San Diego Region is prohibited, unless the Agricultural Operation is covered under this General Order, or other applicable general or individual WDRs.

D. The discharge of a hazardous waste as defined in CCR title 22, section 66261.3 is prohibited.

E. The discharge or deposition of oil, trash, rubbish, refuse, or other solid waste directly into surface waters, or in any manner which may permit it to be washed or transported into the surface waters is prohibited.

F. The discharge of residual pesticides, algaecides, herbicides and/or fumigants in a manner not described in this General Order and inconsistent with other permits for these discharges is prohibited.

G. The discharge of wastes (e.g., fertilizers, fumigants, pesticides) into groundwater via backflow through a water supply well is prohibited.

H. The discharge of any waste (e.g., fertilizers, fumigants, pesticides) down a groundwater well casing is prohibited.

V. DISCHARGE SPECIFICATIONS

A. General Discharge Specifications

1. The waste discharge shall not cause or contribute to surface erosion or scouring of aquatic substrates.
2. The waste discharge shall not contain material or substances that cause or contribute to the occurrence or potential presence of pathogenic organisms or viruses, as identified by indicator bacteria levels, in surface waters or groundwater.
3. The waste discharge shall not contain materials or substances in amounts that cause or contribute to the occurrence of objectionable tastes or odors in surface waters or groundwater.
4. The waste discharge shall not contain material or substances in amounts that cause or contribute to foaming in surface waters or groundwater.
5. The waste discharge shall not contain material or substances in amounts that will accumulate to toxic levels in in surface waters, sediments, biota, or groundwater.
6. The waste discharge shall not contain material or substances in amounts that cause the pH to:
   a. ~~f~~Fall below ~~6.0~~6.5 or rise above ~~9.0~~ 8.5 in inland surface waters ~~or groundwater;~~.
   b. Fall below 7.0 or rise above 9.0 in bays and estuaries;
   c. Change at any time more than 0.2 units from that which occurs naturally in ocean waters; or
   d. Fall below 6.5 or rise above 9.0 in groundwater.
7. The waste discharge shall not contain material or substances in amounts that result in vectors or other nuisances in surface waters or groundwater.
8. The waste discharge shall not contain material or substances in amounts that result in aesthetically undesirable discoloration of surface waters or groundwater.
9. The waste discharge shall not contain settleable material or substances in amounts that may form sediments which will degrade benthic communities or other aquatic life in surface waters.

10. The waste discharge shall not contain material or substances in amounts that significantly degrade the natural light to benthic communities and other aquatic life in surface waters.

B. Waste Discharge Control Requirements

To minimize or prevent the discharge of waste to waters of the State, Members shall:

1. To the extent practical avoid the application of~~Not apply~~ fertilizers, pesticides, herbicides, algaecides, or fumigants within three days prior to a predicted rain event.
2. Not use soil amendments containing any of the following:
   a. Municipal solid waste except for biodegradable waste meeting the definition of "compost" as defined in Public Resources Code section 40116.
   b. Septage, liquid waste, oil, or grease.
   c. Hazardous waste, designated waste, or any other waste determined by the San Diego Water Board to pose a potential threat to water quality.
3. Maintain a minimum 100 foot buffer zone between compost piles and all surface waterbodies.
4. Conduct all composting activities on a working surface that prevents ponding of water, infiltration of water and leachate to the underlying soil, and erosion.
5. Manage compost piles to prevent water oversaturation and leachate generation.
6. Implement proper handling, storage, disposal and management of pesticides, herbicides, fertilizer, and other chemicals. All pesticides, herbicides and fertilizers shall be applied in accordance with the manufacturer's label.
7. Implement management practices to prevent erosion, reduce storm water runoff quantity and velocity, and hold soil particles in place.
8. Implement and comply with management practices as described in the WQPP and any applicable WQRP.[11] Members must (1) implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and (2) when effectiveness evaluation or 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, Members must implement improved management practices.
9. Properly operate and maintain in good working order any facility, unit, system, or monitoring device installed to achieve compliance with this General Order.

[11] Pursuant to Water Code section 13260, this General Order does not specify the design, location, type of construction, or particular manner of management practice compliance and Third-Party Groups and Members can use any appropriate management practice to comply with the requirements of this General Order. In determining appropriate management practices, Third-Party Groups and Members are encouraged to consult the State Water Board's Non-Point Source Management Measures Encyclopedia at: http://www.waterboards.ca.gov/water_issues/programs/nps/edu_outreach.shtml and the University of California Cooperative Extension listing of available management practices at http://ucanr.edu/sites/agwaterquality/Grower_Resources/.

10. Comply with any TMDL-based requirements set forth in Attachment E (Impaired Water Bodies and Applicable TMDLs) of this General Order.

VI. RECEIVING WATER LIMITATIONS

~~Water Quality Standards~~

The discharge of waste shall not cause or contribute to exceedance~~s~~ of any ~~water quality standard, federal pollutant criteria, or other~~ applicable water quality standard in any surface water or groundwater; unreasonably affect any applicable beneficial use; or cause or contribute a condition of pollution or nuisance. ~~Applicable water quality standards include those contained in the following water quality control plans and policies and federal regulations:~~

~~The Basin Plan.~~

~~The *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan).~~

~~The *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries* (Thermal Plan).~~

~~The *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* (Bays and Estuaries Policy).~~

~~The *Water Quality Control Plan for Enclosed Bays and Estuaries Plan, Part 1: Sediment Quality*~~

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

~~The National Toxics Rule (NTR).~~[12]

~~The California Toxics Rule (CTR).~~[13,14]

VII. REQUIREMENTS – MEMBERS

A. General

1. Members shall comply with the MRP (Attachment A) and any future revisions as specified by the San Diego Water Board.
2. Members shall 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 waters of the State.
3. Members shall comply with all applicable provisions of the Water Code, the Basin Plan, and other State Water Board water quality control plans and policies.
4. Members shall maintain a copy of this General Order and copies of all reports required by this General Order, either in hard copy or electronic format, at the primary place of business, or the Member's headquarters for its Agricultural Operation, unless otherwise stated in this General Order.

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[12] ~~Title 40 of the Code of Federal Regulations (40 CFR) section 136.~~

[13] ~~65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR.~~

[14] ~~If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.~~

B. Education

1. By December 31 of each year, Members shall complete at least ~~four~~ two hours of appropriate water quality training to maintain compliance with this General Order. Training should focus on the actions necessary to attain compliance with water quality standards in receiving waters by identifying water quality problems, implementing pollution prevention strategies and practices designed to protect water quality and resolve water quality problems, and to achieve compliance with this General Order. Water quality training options include formal classroom training, individual meetings with a qualified trainer, and/or internet-based training with the local Farm Bureau, University of California Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), Resource Conservation Districts (RCDs), or another comparable organization.
2. ~~Members shall maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems~~.

C. Water Quality Protection Plan (WQPP)

1. Members shall prepare a complete WQPP to identify the type and location of management practices[15] currently employed and additional management practices based on current conditions at their Agricultural Operation needed to minimize or prevent the discharge of waste to waters of the State either directly or indirectly through irrigation water runoff and infiltration, non-storm water runoff, and storm water runoff.
2. A copy of the WQPP shall be submitted with the NOI.
3. Members shall commence implementation of the WQPP upon receipt of an NOA from the San Diego Water Board.
4. At least quarterly, Members shall ~~periodically~~ evaluate the effectiveness of the management practices in the WQPP and make modifications to the WQPP as necessary.
5. The WQPP shall be kept current and available on the Agricultural Operation site and made available to the San Diego Water Board upon request.
6. The WQPP shall contain all of the following information to be deemed complete:
   a. Name, mailing address, Assessor's Parcel Number, size (in acres), and type of the Agricultural Operation.
   b. Name, mailing address, phone number, email address, and type (individual, corporation, partnership, governmental agency, other) of the owner of the Agricultural Operation.
   c. Name, mailing address, phone number, and email address of the operator of the Agricultural Operation
   d. Name, mailing address, phone number, and email address of the landowner.
   e. Name, mailing address, phone number, and email address of the individual who prepared the WQPP.

[15] See Footnote 11 *Supra*

f. Name, mailing address, phone number, and email address of the Third-Party Group primary contact person.

g. A brief description of the nature of the Agricultural Operation including the activities conducted by the Member which require coverage under this General Order

h. List of crops grown (i.e., orchard, vineyard, nursery products, row crops) at the Agricultural Operation and the acres dedicated for each typeo of crop ~~grown~~.

i. List of agricultural chemicals typically applied to crops at the Agricultural Operation, including but not limited to fertilizers and organic amendments, pesticides, and fumigants.

j. The name of the receiving surface waters (if known) to which irrigation runoff, storm water runoff, and non-storm water runoff from the Agricultural Operation is discharged.

k. A scaled topographic Site Location Map~~map~~ extending one mile beyond the property boundary of the Agricultural Operation and depicting the following:

i. Property boundaries, roads, structures, and drainage structures.

ii. Irrigation wells, domestic water supply wells, springs, and other surface water bodies listed in public records or otherwise known to the Member to be in the map area.

~~iii. Growing areas.~~

~~iv. Compost and manure management areas including storage and disposal sites.~~

~~v. Chemical storage areas.~~

~~vi. Topographic lines.~~

~~vii. Major pipes or other structures through which through which irrigation runoff, storm water runoff and non-storm water runoff from the Agricultural Operation is discharged to surface waters, if applicable.~~

~~viii. The location and types of management practices employed at the Agricultural Operation.~~

~~ix.~~iii. ~~The location of proposed surface water and groundwater monitoring stations~~.

l. A scaled Site Plan depicting the following:

i. Property boundaries, roads, structures, and drainage structures.

ii. Irrigation wells, domestic water supply wells, springs, surface water bodies, and storm water and non-storm water conveyance systems located within the property.

iii. Approximate location of growing areas.

iv. Compost and manure management areas including storage and disposal sites.

v. Chemical storage areas.

vi. Surface flow directions and general topographic slope direction lines.

vii. The location and types of management practices employed.

viii. The location of groundwater wells used for domestic supply.

m. A detailed description of each current and proposed management practice, including its purpose, operational status, ~~and~~ a time schedule for the operation and maintenance of current management practices, and a time schedule for the construction, ~~and~~ implementation, operation and maintenance of~~, if~~ the proposed management practice~~s is~~ not currently in use. This includes but is not limited to management practices related to irrigation efficiency and management, pesticide management, nutrient management, salinity management, and sediment and erosion control to achieve compliance with this General Order. This also includes management practices required to address applicable TMDLs, including but not limited to management practices identified in the Rainbow Creek Nutrient Management Plan. The time schedule for construction and implementation of proposed management practices shall reflect the shortest practicable time required to perform each task and shall include a final date for construction and implementation. The schedule may not be longer than that which is reasonably necessary to achieve compliance with the receiving water limitations contained in section VI of this General Order.

n. ~~A detailed schedule for operation and maintenance of each current or proposed management practice~~.

o. A detailed visual observation monitoring program ~~and schedule for~~ as required by section VII.D of this General Order for evaluating whether management practices are adequate, properly implemented, and ~~the~~ effective~~ness of each current or proposed management practice~~.

p. Certification and signature in accordance with Signatory and Certification Requirements contained in section IX.E of this General Order.

7. Members shall ensure that all management practices identified in the WQPP are properly operated and maintained. Members shall periodically evaluate the effectiveness of the management practices and shall make modifications to the WQPP as necessary when visual observation monitoring indicates waste discharges have not been adequately addressed in the WQPP.

D. Quarterly Self-Inspection Report

1. At least quarterly~~Quarterly~~ during the months of March, June, September, and December, Members shall inspect the Agricultural Operation to assess the operation and maintenance of installed management practices and to correct any deficiencies.

2. Members shall document the inspections by completing the Quarterly Self-Inspection Report (Attachment I).

3. The Quarterly Self-Inspection Report shall be signed and certified in accordance with the Signatory and Certification Requirements contained in section IX.E of this General Order.

4. Members shall submit copies of all Quarterly Self-Inspection Reports with the Annual Self-Assessment Report described in section VII.E of this General Order, to the Third-Party Group.

E. Annual Self-Assessment Report

1. By April 30 of each year, Members shall submit a completed Annual Self-Assessment Report (Attachment J) to their Third-Party Group, covering January 1 through December 31 of the prior year.

2. The purpose of the Annual Self-Assessment Report is to a) evaluate whether the ~~compliance with this General Order and the effectiveness of the~~ WQPP described in section VII.C, and the management practices used to control the discharge of pollutants from the Agricultural Operation are adequate, properly implemented and effective in accordance with the terms of this General Order and b) determine whether additional control measures are necessary.

3. The Annual Self-Assessment Report shall include as attachments copies of the Quarterly Self-Inspection Reports and evidence that Members completed the annual water quality training.

4. The Annual Self-Assessment Report shall also include a listing of each incident of noncompliance during the annual monitoring period and, for each incident of noncompliance, the cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

5. The Annual Self-Assessment Report shall be signed and certified in accordance with the Signatory and Certification Requirements contained in section IX.E of this General Order.

6. By June 30 of each year Third-Party Groups shall submit to the San Diego Water Board copies of the Annual Self-Assessment and Quarterly Self-Inspection Reports submitted by Members.

VIII. REQUIREMENTS – THIRD-PARTY GROUPS

A. General Requirements

1. Third-Party Groups shall comply with all applicable sections of this General Order including the MRP (Attachment A) and any future revisions as specified by the San Diego Water Board.

2. Third-Party Groups shall prepare annual summaries of expenditures of fees and revenue used to comply with this General Order. The summaries shall be provided to or made readily available to its Members and the San Diego Water Board.

3. Third-Party Groups shall make available to its Members all correspondence, plans, and reports required by this General Order.

4. If a Third-Party Group receives a notice of violation (NOV) from the San Diego Water Board, it must provide its Members information regarding the reason(s) for the violation. The notification must be provided to its affected Members within thirty (30) days of receiving the NOV from the San Diego Water Board.

5. Third-Party Groups shall work cooperatively with the San Diego Water Board to ensure all its Members are providing required information and taking necessary actions to address exceedances of water quality standards.

6. Third-Party Groups shall collect any fees from its Members and submit these fees to the State Water Board pursuant to the fee schedule contained in Title 23 CCR section 2200.6.

7. Third-Party Groups must provide its Members with basic information regarding this General Order, including a link to the San Diego Water Board's ~~ILRP~~ Commercial Agriculture Regulatory Program website.[16]

8. Third-Party Groups shall maintain a copy of this General Order and copies of all reports required by this General Order, either in hard copy or electronic format, at the primary place of business.

B. Water Quality Restoration Program Plan (WQRP)

1. If a ~~Surface~~ Water Quality Benchmark described in section VII, Table A.4 of the MRP (Attachment A) is exceeded, Third-Party-Groups must promptly notify the San Diego Water Board and ~~thereafter~~ prepare a WQRP in consultation with its Members suspected of causing or contributing to the exceedance. The WQRP must contain the information described in section VIII.B.3 below. For the purposes of this General Order, an exceedance occurs when a) a sampling result for a constituent at a single surface water monitoring location exceeds the monitoring benchmark more than three out of four times for the same constituent or b) a groundwater sampling result exceeds the nitrate benchmark in accordance with section III.C.b of the MRP (Attachment A) of this General Order. The San Diego Water Board may also require Third-Party Groups to prepare a WQRP if a trend of degradation of water quality is identified that threatens a beneficial use in receiving waters affected by its Member's Agricultural Operation(s).

2. Third-Party-Groups shall submit the WQRP to the San Diego Water Board within 90 days of the exceedance or determination of threatened degradation unless permission for a later submittal date has been granted by the San Diego Water Board.

3. The WQRP shall contain the following information:

   a. For each constituent that has exceeded a ~~Surface~~ Water Quality Benchmark or indicates a trend of water quality degradation that threatens a beneficial use, the WQRP shall include a graph showing the concentrations over time since 2016 and a trend analysis for the constituent.

   b. The WQRP shall include a description of the actual or suspected waste sources that may be causing or contributing to the exceedance or trend of water quality degradation that threatens a beneficial use(s). The WQRP shall also include a list and map location of Members (designated Members) in the geographic area addressed in the WQRP.

   c. The WQRP shall identify management practices currently being implemented and additional or improved management practices that will be implemented by designated Members to prevent or minimize the discharge of any waste that is causing or contributing to the exceedance or trend of water quality degradation. The

[16] The San Diego Water Board's ~~Irrigated Lands Regulatory Program~~Commercial Agriculture Regulatory Program website can be accessed at http://www.waterboards.ca.gov/sandiego/water_issues/programs/irrigated_lands/irrigated_ag.shtml (as of May 1, 2016).

WQRP shall also include a brief justification for selecting specific management practices.[17]

d. The WQRP shall include a schedule for the implementation and completion of all tasks described in the WQRP. The schedule shall reflect the shortest practicable time required to perform each task, given the type of management practices planned or program being implemented, and the experience of commercial agriculture with the time required to implement similar management practices or programs. The schedule may not be longer than that which is reasonably necessary to achieve the receiving water limitations in section VI of this General Order. If the schedule exceeds one year, the schedule must include interim annual milestones that demonstrate progress towards completion of the WQRP tasks and compliance with the applicable receiving water limitations of this General Order.

e. The WQRP shall include a monitoring and reporting plan to provide feedback on WQRP progress and its effectiveness in achieving compliance with the applicable receiving water limitations of this General Order.

f. The WQRP shall provide for submittal of progress reports with annual ~~monitoring~~ reports to the San Diego Water Board.

The San Diego Water Board may require Third-Party-Groups to modify and resubmit the WQRP to include additional management practices, monitoring, or reporting conditions if the WQRP is not in conformance with the above criteria. Third-Party-Groups shall submit any modifications to the WQRP required by the San Diego Water Board within 30 days of written notification from the San Diego Water Board.

4. A WQRP is deemed approved 90 days after submission of the WQRP to the San Diego Water Board, unless the San Diego Water Board provides written notice to Third-Party Groups that the WQRP has not been accepted or is conditionally accepted.

5. Third-Party-Groups and its designated Members shall commence implementation of the WQRP 90 days after submission of the WQRP in accordance with the accepted schedule, unless otherwise directed in writing by the San Diego Water Board. Before beginning these activities Third-Party Groups shall:

   a. Notify the San Diego Water Board of the intent to initiate actions included in the WQRP.

   b. Comply with any conditions set by the San Diego Water Board.

6. If Third-Party-Groups and its designated Members have complied with the WQRP procedures set forth above and are implementing the actions required, Third-Party-Groups will not be required to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitation unless directed by the San Diego Water Board to develop and implement additional management practices.

7. The iterative WQRP implementation process shall continue until such time as compliance with the applicable water quality standard(s) is attained.

[17] See Footnote 11 *Supra*

8. The San Diego Water Board will not require preparation and submittal of a WQRP if Third-Party-Groups can demonstrate one of the following conditions to the satisfaction of the San Diego Water Board:

   a. The exceedance is solely caused by discharges not associated with agricultural activity.

   b. The exceedance is solely attributable to pollutants from natural background sources.

   c. The exceedance is solely attributable to a nonmember's Agricultural Operation.

   d. The additional management practices required to achieve water quality standards are not technologically available or are economically impracticable.

C. Surface Water and Groundwater Monitoring Program Plan

1. Within ~~180~~ ~~365~~ 270 days of receipt of the NOA, Third-Party Groups shall submit a Surface Water and Groundwater Monitoring Program Plan (Monitoring Program Plan), as described in section VI of the MRP (Attachment A), to the San Diego Water Board for review and approval. Third-Party Groups must implement the Monitoring Program Plan within 90 days of approval.

2. Annually, Third-Party Groups shall evaluate the Monitoring Program Plan and amend it as necessary based on the results of monitoring data or changes to the membership. Third-Party Groups shall submit this evaluation, and any proposed amendments, with the Annual Surface Water and Groundwater Monitoring Report (required in section VII of the MRP (Attachment A), to the San Diego Water Board for review and approval. Third-Party Groups must implement any applicable amendments within 90 days of approval.

3. The San Diego Water Board may require changes to a Monitoring Program Plan if the current approach is not making adequate progress towards addressing the water quality problem or if the information reported by the Third-Party Groups does not allow the San Diego Water Board to determine the effectiveness of the plan.

D. Quarterly Membership Update Report

1. Quarterly by the last day of the months of March, June, September, and December, Third-Party Groups shall submit to the San Diego Water Board a Quarterly Membership Update Report.

2. The Quarterly Membership Update Report shall include the following information:

   a. A list of the current Members, new Members, and Members who have left the Third-Party Group since the previous reporting period. The membership list shall contain, at a minimum, the following information for each Member: the Member's name and mailing address; the parcel numbers covered under the membership; the county of each parcel; the section, township, and range associated with each parcel; the number of irrigated acres for each parcel; the contact name and phone number of the individual(s) authorized to provide access to the enrolled parcels; and the name of the operator for each parcel, if different from the Member.

   b. An updated location map of its Members' Agricultural Operations.

3. The first Quarterly Membership Update Report is due at the end of the first full quarter following San Diego Water Board issuance of the NOA for Third-Party Group enrollment under this General Order.

E. Annual Surface Water and Groundwater Report

Third-Party Groups shall prepare and submit an Annual Surface Water and Groundwater Monitoring Report to the San Diego Water Board as described in section VII of the MRP (Attachment A).

F. Annual Submittal of Copies of the Annual Self-Assessment and Quarterly Self-Inspection Reports submitted by Members

By June 30 of of each year Third-Party Groups shall submit copies of the Annual Self-Assessment and Quarterly Self-Inspection Reports submitted by Members as specified in section VII.E.6.of this General Order.

IX. PROVISIONS

A. General Order Compliance Provisions

1. Duty to Comply

   Third-Party Groups and Members shall comply with the applicable terms and conditions of this General Order. Any noncompliance with this General Order constitutes a violation of the Water Code and is grounds for a) enforcement action; b) termination, revocation and reissuance, or modification of the NOA or this General Order; or c) denial of a report of waste discharge in application for new or revised WDRs, or a combination thereof.

2. Need to Halt or Reduce Activity Not a Defense

   It shall not be a defense for Members in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Order.

3. Duty to ~~Mitigate.~~Minimize or Prevent Discharges

   Members shall take all reasonable steps to minimize or prevent any discharge in violation of this General Order that has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

4. Proper Operation and Maintenance

   Member shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by Third-Party Groups or Members to achieve compliance with the conditions of this General Order.

5. Effect of this General Order

   This General Order does not convey any property rights of any sort or any exclusive privileges. The issuance of this General Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, State, or local law or regulations.

6. 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 Agricultural Operations subject to this General Order. The inspection must be made with the consent of the owner or

possessor of the facilities, 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.

Members shall allow the San Diego Water Board or the State Water Board and/or its authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to conduct the following:

a. Enter the Agricultural Operation or where records are kept under the conditions of this General Order.

b. Access and copy, at reasonable times, any records that shall be kept under the conditions of this General Order.

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

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

B. Permit Action Provisions

~~Reopener Provision~~

This General Order may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:

1. Violation of any terms or conditions of this General Order.
2. Obtaining this General Order by misrepresentation or failure to disclose fully all relevant facts.
3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
4. Adoption of a TMDL amendment, new TMDL, or TMDL alternative.

The filing of a request by Third-Party Groups or Members for the modification, revocation, reissuance, or termination of this General Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this General Order.

C. Third-Party Monitoring Provisions

1. Monitoring

   Monitoring and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Test Procedures

   Monitoring shall be conducted according to 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*, as amended for the analyses of pollutants unless another method is required under 40 CFR subchapters N or O. In the case of pollutants for which there are no approved methods under 40 CFR

part 136 or otherwise required under 40 CFR subchapters N or O, monitoring shall be conducted according to a test procedure specified in this General Order for such pollutants.

3. Monitoring Results

Monitoring results shall be reported at the intervals specified in the MRP (Attachment A).

4. Duty to Provide Monitoring Information

If Third-Party Groups or Members monitors any pollutant more frequently than required by this General Order 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, the results of such monitoring shall be included in the calculation and reporting of the data to the San Diego Water Board.

D. Records Provisions

1. Access to Records

Third-Party Groups and Members shall allow the San Diego Water Board to access and copy, at reasonable times, any records that are kept under the conditions of this General Order.

2. Retention of Records

Third-Party Groups and Members shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this General Order, and records of all data used to complete the application for this General Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the San Diego Water Board.

3. Monitoring Records

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements.

b. The individual(s) who performed the sampling or measurements.

c. The date(s) analyses were performed.

d. The individual(s) who performed the analyses.

e. The analytical techniques or methods used.

f. The results of such analyses.

4. Confidentiality Claims[18]

Claims of confidentiality for the following information will be denied:

[18] Water Code section 13267, subd. (b)(2) authorizes the San Diego Water Board to review business information that may constitute trade secrets or secret processes. However, portions of a report that might disclose trade secrets or secret processes may be exempt from public disclosure pursuant to Government Code section 6254, subd. (k).

a. The name and address of any Third-Party Group or Member.

b. Letters of applications, reports, attachments, and monitoring data.

5. Confidentiality Claim Assertion and Evaluation

All reports prepared and submitted to the San Diego Water Board in accordance with the terms of this General Order will be made available for public inspection at the offices of the San Diego Water Board, except for reports, or portions of such reports, subject to an exemption from public disclosure in accordance with California law and regulations, including the Public Records Act, Water Code section 13267(b)(2), and the California Food and Agriculture Code. If the Third-Party Group or a Member of the Third-Party Group asserts that all or a portion of a report is subject to an exemption from public disclosure, it must clearly indicate on the cover of the report that it asserts that all or a portion of the report is exempt from public disclosure. The complete report must be submitted with those portions that are asserted to be exempt in redacted form, along with separately-bound unredacted pages (to be maintained separately by San Diego Water Board). The Member/Third-Party Group shall identify the basis for the exemption. If the San Diego Water Board cannot identify a reasonable basis for treating the information as exempt from disclosure, the Executive Officer will notify the Member/Third-Party Group that the information will be placed in the public file unless the San Diego Water Board receives, within 10 calendar days, a satisfactory explanation supporting the claimed exemption. Data on waste discharges, water quality, meteorology, geology, and hydrogeology shall not be considered confidential. NOIs, WQPPs and WQRPs shall generally not be considered exempt from disclosure.

E. Reporting Provisions

1. Duty to Provide Information

Third-Party Groups and Members shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage under this General Order. Third-Party Groups and Members shall also furnish to the San Diego Water Board, upon request, copies of records required to be kept by this General Order.

2. Signatory Requirements

a. Letters of Application and NOIs: must be signed by a Legally Responsible Person. For the purposes of this General Order 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.

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. Plans and Reports: must be signed by a Legally Responsible Person or by a Duly Authorized Representative. A person is a Duly Authorized Representative only if

i. The authorization is made in writing by a Legally Responsible Person.

ii. The authorization specifies either an individual or position having responsibility for the overall operation of the Third-Party Group or Agricultural Operation, or an individual having overall responsibility for environmental matters for the Third-Party Group or Agricultural Operation.

iii. The written authorization is submitted to the San Diego Water Board.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Third-Party Group or Agricultural Operation, a new authorization satisfying the above requirements shall be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

3. Signature and Certification

Reports and information required under this General Order may be signed and certified 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 General Order shall 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

Third-Party Groups and Members shall submit reports and information required under this General Order in electronic format via e-mail to SanDiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and shall be placed on a disc and delivered to:

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

Each electronic document shall be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). ~~All electronic documents shall include scanned copies of all signature pages; electronic signatures will not be accepted.~~ Electronic documents submitted to the San Diego Water Board shall include the following identification numbers in the header or subject line: CW-803119.

5. Noncompliance Reports

Third-Party Groups and Members shall report to the San Diego Water Board any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the Third-Party Group or Member

becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Third-Party Group or Member becomes aware of the circumstances. The written submission shall contain a description of the incident and its cause, the period of the noncompliance including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The San Diego Water Board may waive the above-required written report under this provision on a case by case basis if an oral report has been received within 24 hours. The following incidents of noncompliance must be reported within 24 hours under this provision:

a. Any discharge of treated or partially treated sewage wastewater that reaches surface waters of the State.

b. Groundwater monitoring results indicate that water in any well that is used or may be used for drinking water exceeds 45 mg/L nitrate as NO_3.

6. Hazardous Substance Discharge

Except as provided in Water Code section 13271(b), any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as a) that person has knowledge of the discharge, b) notification is possible, and c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services (OES) of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code title 2, division 1, chapter 7, article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Third-Party Group and/or Members is in violation of a Basin Plan prohibition.

7. Oil or Petroleum Product Discharge

Except as provided in Water Code section 13272(b), any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as a) such person has knowledge of the discharge, b) notification is possible, and c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California OES of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code title 2, division 1, chapter 7, article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to CWA section 311, or the discharge is in violation of a Basin Plan prohibition.

8. Anticipated Noncompliance

Third-Party Groups and Members shall give advance notice to the San Diego Water Board of any planned changes in the Agricultural Operation which may result in noncompliance with the terms and requirements of this General Order.

9. Other Information

Third-Party Groups and Members shall report all instances of noncompliance not reported under Reporting Provision 5, 6, or 7 above at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Provision 5.

10. Duty to Provide Information.

When the Third-Party Group or Member becomes aware that it failed to submit any relevant facts in a request for enrollment or NOI or submitted incorrect information in any report to the San Diego Water Board, it shall promptly submit such facts or information.

F. Compliance and Enforcement Provisions

1. Enforcement Authority - Members

Under this General Order, Third-Party Groups are tasked with assisting Members in carrying out certain terms and conditions of this General Order. However, Members, and any nonmember owner or operator, continue to bear ultimate responsibility for complying with this General Order.[19] In the event of any violation or threatened violation of the conditions of this General Order, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law.

2. Enforcement Authority – Third-Party Groups

Failure to comply with the applicable terms and conditions of this General Order may result in revocation of approval to act as a Third-Party Group.~~termination of coverage under this General Order.~~ Affected Dischargers would be required to join an approved Third-Party Group or obtain coverage under other applicable general or individual WDRs. In the event of any violation or threatened violation of the conditions of this General Order applicable to Third- Party Groups, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law.

3. Provision Severability

The provisions of this General Order are severable, and if any provision of this General Order, or the application of any provision of this General Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this General Order, shall not be affected thereby.

4. Payment of Fees

This General Order is conditioned upon total payment of any fee required under CCR title 23 sections 2200.6(a) and (b).

5. Investigation of Violations

In response to a suspected violation of any condition of this General Order, the San Diego Water Board may, pursuant to Water Code sections 13267, require the Third-Party

[19] See Footnote 2, *Supra*

Group and Members to investigate, monitor, and report information on the violation. The only restriction is that the burden, including costs of preparing the reports, shall bear a reasonable relationship to the need for and the benefits to be obtained from the reports.

ATTACHMENT A – MONITORING AND REPORTING PROGRAM

CONTENTS

TABLES

ATTACHMENT A – MONITORING AND REPORTING PROGRAM (MRP)

I. INTRODUCTION

California Water Code (Water Code) section 13267 authorizes the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to establish monitoring, reporting, and recordkeeping requirements. Pursuant to this authority and consistent with the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (Nonpoint Source Policy) and the *Framework for Monitoring and Assessment in the San Diego Region* as detailed in the San Diego Water Board's *Practical Vision*, this monitoring and reporting program (MRP) establishes conditions for Third-Party Groups, on behalf of Members, to conduct monitoring activities and to submit technical and monitoring reports to the San Diego Water Board consistent with this General Order. The Nonpoint Source Policy recognizes that, given the extent and diversity of nonpoint source discharges, third-party programs may be an effective tool in reaching a large number of dischargers. The purpose of the MRP is as follows:

- Determine compliance with discharge specifications, receiving water limitations, and other requirements established in this General Order.
- Assess the effectiveness of management practices required by this General Order.
- Characterize the effects of discharges from Agricultural Operations on waters of the State.

Each section contains the key monitoring and assessment questions the monitoring is designed to answer. In developing the list of key monitoring and assessment questions, the San Diego Water Board considered four basic types of information for each question:

- Information Need – Why does the San Diego Water Board need to know the answer?
- Monitoring Criteria – What monitoring will be conducted for deriving an answer to the question?
- Expected Product – How should the answer be expressed and reported?
- Possible Follow-up Actions – What actions shall be taken to address any impairment in the receiving water?

The framework for this monitoring program has three components that comprise a range of spatial and temporal scales: 1) core monitoring, 2) regional monitoring, and 3) special studies.

1) Core Monitoring

   Core monitoring consists of the basic site-specific monitoring necessary to measure compliance with the requirements of this General Order and impacts to receiving water quality from the Members' Agricultural Operations. Core monitoring is typically conducted in the immediate vicinity of discharges representative of all Members by examining local scale spatial effects of discharges that are similar in size, crop type, and location of the Members' Agricultural Operations.

2) Regional Monitoring

   Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs, including commercial agriculture, on the ecological health of water bodies in the San Diego Region. This MRP relies on biological assessment techniques to evaluate the biological condition of waterbodies receiving waste discharges from agricultural operations from a regional perspective. Biological assessment, or "bioassessment," is a way to measure ecosystem health based on the living

organisms at a given location. To achieve this, scientists examine communities of organisms such as invertebrates (e.g., insects, crustaceans), fish, algae, and plants to quantify their numbers and species. Summarized community data provides key information about the condition of aquatic ecosystems, such as streams, wetlands, and oceans.

Regional monitoring can include ambient monitoring. Under the San Diego Water Board's *Commercial Agricultur~~al Operation~~ Regulatory Program*, Third-Party Groups will take the lead role in coordinating and carrying out regional monitoring. Regional monitoring programs can assist in the interpretation of core monitoring data by providing a more complete picture of natural variability and cumulative impacts in the receiving waters. This assessment in turn allows Members to more effectively use core monitoring data in prioritizing actions targeting pollutants and pollutant sources.

3) Special Studies

Special studies are directed monitoring efforts designed in response to specific management or research questions identified through either core or regional monitoring programs. Oftentimes, special studies are used to help understand core or regional monitoring results where a specific environmental process is not well understood, or to address unique issues of local importance.

II. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. Samples and measurements taken for the purposes of monitoring shall be representative of the volume and nature of the discharge, and shall be collected at the monitoring points approved by the San Diego Water Board. Monitoring locations shall not be changed without prior notification to and approval by the San Diego Water Board.

B. All monitoring instruments and devices shall be properly maintained and calibrated as necessary to ensure their continued accuracy. Any flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

C. Monitoring shall be conducted 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*, as amended, for the analyses of pollutants, unless another method is specified in this General Order. The San Diego Water Board may approve equivalent test procedures at its discretion.

D. Groundwater monitoring, sample preservation and analyses shall be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, USEPA.

E. All analyses shall be performed in a laboratory certified to perform such analyses by the State Water Resources Control Board's (State Water Board) Division of Drinking Water (DDW), or by a laboratory approved by the San Diego Water Board. The laboratory shall be accredited under the DDW Environmental Laboratory Accreditation Program (ELAP) to ensure the quality of analytical data used for regulatory purposes to meet the requirements of this Order.

Additional information on ELAP can be accessed at: http://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml.

F. Each monitoring report shall affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the Environmental Laboratory Accreditation Program, and in accordance with current USEPA guideline procedures, or as specified in this Monitoring Program."

G. All plans and reports required under this MRP shall be prepared by professionals qualified to prepare such plans and reports. Professionals shall be qualified, licensed where applicable, and competent and proficient in the fields pertinent to the required activities. California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of registered professionals. A statement of qualifications of the responsible lead professionals shall be included in all plans and reports submitted by the Member.

H. For any monitoring period in which ~~no discharge occurred~~ there is insufficient water to collect samples at a given monitoring location, the monitoring report shall include a statement certifying that observation and adequate documentation to support the statement.~~no discharge occurred during the monitoring period.~~

I. Monitoring results shall be reported at intervals and in a manner specified in this General Order.

J. This MRP may be modified by the San Diego Water Board, as appropriate.

III. CORE MONITORING REQUIREMENTS

A. Core Monitoring Questions

The Core Monitoring requirements have been designed to answer the following questions:

1. How effective are the management practices at preventing or reducing discharge of wastes from the Members' Agricultural Operations that are causing or contributing to exceedances of applicable water quality standards in surface water and groundwater?
2. What effect, if any, have the Members' Agricultural Operations had on surface water and groundwater quality?

B. Core Monitoring – Surface Water

1. Surface Water Core Monitoring Locations

Third-Party Groups shall establish monitoring locations in surface waters that receive direct or indirect discharges from the Members' Agricultural Operations. Monitoring locations shall meet the following minimum requirements:

a. The number and location of monitoring locations shall be based on site-specific characteristics and shall be supported by scientific rationale and the drainage characteristics of the Members' Agricultural Operations. Monitoring locations shall be selected to adequately characterize the majority of the discharges from the Members' Agricultural Operations, based on typical discharge patterns, including tail water discharges, discharges from tile drains, and storm water runoff.

b. Monitoring locations shall be in areas influenced by or representing the Members' Agricultural Operations (representative areas).

c. Monitoring locations shall have sufficient spatial density or distribution within the region of interest to provide data to meet the Core Monitoring questions.

d. Where possible, monitoring shall be conducted at a sub watershed level, such as a Hydrologic Unit Code 12 (HUC 12).[1] Based on the location and density of

[1] An interactive map designating HU 12 can be accessed at http://viewer.nationalmap.gov/viewer/nhd.html?p=nhd (as of October 10, 2016).

Agricultural Operations, it may be feasible to combine HUC 12 sub watersheds for the basis to establish monitoring locations.

e. Monitoring locations shall be readily accessible (defined as sites that can be safely reached and sampled within one day) during both dry and wet weather.

f. If possible, monitoring locations shall be in wadeable stream reaches with surface flow during the sampling period. A wadeable reach is defined as that which is less than one meter deep for at least 50% of its length.

2. **Surface Water Monitoring Requirements**

a. The Third-Party Group shall conduct surface water monitoring at approved monitoring locations for the constituents and sampling frequency set forth in Table A-1 below:

Table A-1. Surface Water Monitoring Requirements

Parameter	Units	Frequency
Stream Width	ft	Once during the dry season (May 15 to October 15) and once during the wet season (October 15 to May 15)
Stream Depth	ft	
Stream Cross Sectional Area	ft^2	
~~Flow~~ Stream Velocity	ft/sec	
Stream Flow[2]	ft^3/~~day~~sec	
pH	standard units	
Temperature	°C	
~~Stream Width~~	~~ft~~	
~~Depth~~	~~ft~~	
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	
Total Phosphorus	mg/L	
Sulfate	mg/L	
E. coli – Freshwater and Saltwater	MPN/100 mL	
Enterococci – Freshwater and Saltwater	MPN/100 mL	
Fecal Coliform	MPN/100 mL	
Total Coliform	MPN/100 mL	
Chronic Toxicity	TUc	

[2] Third-Party Groups may wish to consult the State Water Board's website for guidance on how to measure stream flows at: http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/cwt/guidance/4113.pdf (as of October 20, 2016).

b. The wet season samples shall be collected within the first 24 hours of a storm with greater than 0.5-inch rain as measured by the nearest National Weather Service rain gauge, to the extent practicable. Practical constraints on wet season sampling events include but are not limited to 1) laboratory closures on weekends and holidays, 2) sample holding times, and 3) safety of the monitoring team. If there is no runoff at the monitoring site, then the observation shall be documented with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site.

c. ~~Dry season samples shall be collected after the site has applied pesticides or fertilizers and during an irrigation event.~~ If there is ~~no runoff~~ insufficient water to collect samples at the monitoring site, ~~then~~ the observation shall be documented~~. with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site.~~

d. All surface water monitoring data shall be submitted to the California Environmental Data Exchange Network (CEDEN).[3]

e. The San Diego Water Board may increase the frequency of surface water sampling based on information in the Notice of Intent (NOI), Surface Water Monitoring Program Plan, or Annual ~~Surface Water Monitoring~~ Reports. Factors that may result in an increased sampling frequency include, but are not limited to: crop type, frequency of crop rotation, and trends of water quality degradation.

C. Core Monitoring – Groundwater Monitoring Requirements (if applicable)

The purpose of groundwater monitoring is to assess trends in groundwater quality beneath Members' Agricultural Operation lands, and to confirm that management practices implemented to protect and improve groundwater quality are effective. As an initial step towards developing a groundwater quality program for Agricultural Operations, groundwater quality monitoring will be limited to areas in the San Diego Region where groundwater is a significant drinking water source. At this time the groundwater monitoring requirements of this General Order only applies to Agricultural Operations with drinking water supply wells.

The purpose of the drinking water supply well program outlined below is to identify wells that have nitrate concentrations that threaten to exceed the maximum contaminant level (MCL) of 45 mg/L as NO_3 [4] and notify any well users of the potential for human health impact.

1. *Water Supply Well Sampling and Monitoring Frequency.* Due to the potential severity and urgency of health issues associated with drinking groundwater with high concentrations of nitrates, Members, or Third-Party Groups on Members behalf, are required to 1) collect an initial groundwater sample at all drinking water supply wells located on the Agricultural Operation site within the first year following issuance of the Notice of Applicability (NOA); or 2) submit existing drinking water supply well sampling

[3] Information on CEDEN data submission requirements may be found at http://www.ceden.org/ (as of October 20, 2016), and a copy of the CEDEN electronic tabular format can be found at http://www.ceden.org/ceden_datatemplates.shtml (as of October 20, 2016).

[4] The MCL is also expressed as 10 mg/L of nitrate + nitrite as N. The authority to set the MCL for nitrate previously resided with the California Department of Public Health (CDPH) (and the Department of Health Services prior to the establishment of CDPH), but the authority to set the MCL for nitrate is now within the purview of the State Water Board.

data, provided sampling and testing for nitrates was completed using USEPA approved methods at least twice within the last 5 years.

a. Drinking water supply wells with samples reported to have a nitrate concentration less than 36 mg/L NO_3 [5] shall thereafter be monitored for nitrates once every five years beginning in 2020.

b. Drinking water supply wells with samples reported to have a nitrate concentration equal to or above 36 mg/L as NO_3 the well shall be resampled within 30 days of receipt of the laboratory test result to confirm the result. Based on the retest results, Members, or Third-Party Groups on Members behalf, shall do one of the following:

i. If the retest is equal to or above 36 mg/L as NO_3:

Members, or Third-Party Groups on Members behalf, shall thereafter monitor the drinking water supply well for nitrate levels on an annual basis, unless an alternative sampling schedule based on trending data for the well is approved by the San Diego Water Board. All further sampling shall be conducted at the time when nitrate concentration was at its maximum, based on initial monitoring. Sampling may cease if a drinking water well is taken out of service and no longer provides drinking water.

ii. If the retest is equal to or above 45 mg/L as NO_3:

(a) Within 24 hours of receipt of the laboratory test results, Members, or Third-Party Groups on Members behalf, shall notify the San Diego Water Board pursuant to section IX.E.5 of the General Order and the applicable County Health Department to determine if additional actions are needed.

(b) Within 10 days of receipt of the laboratory test results, the Member, or Third-Party Groups on Members behalf, shall immediately notify all individuals using the water supply well for a drinking source of the nitrate test results and actions to be taken.[6] Where the Member is not the property owner, the San Diego Water Board will notify the users promptly.

(c) Members, or Third-Party Groups on Members behalf, shall thereafter monitor the drinking water supply well for nitrate levels on an annual basis, unless an alternative sampling schedule based on trending data for the well is approved by the San Diego Water Board. All further sampling shall be conducted at the time when nitrate concentration was at its maximum, based on initial monitoring. Sampling may cease if a drinking water well is taken out of service and no longer provides drinking water.

iii. If the retest is less than 36 mg/L as NO_3, Members, or Third-Party Groups on Members behalf, shall collect a sample from the drinking water supply

[5] The nitrate level of 36 mg/L is 80% of the MCL and is presumed to be the benchmark defining when wells have a high potential for exceeding the MCL in a short time frame.

[6] The notification should include the information provided in the State Water Board's Nitrate MCL Exceedance template, which is available on the State Water Board website at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Notices.shtml (as of October 20, 2016)

well for a confirmation test within 30 days of receipt of the retest result, and shall submit a copy of the confirmation test report to the San Diego Water Board within 10 days of receipt of results. If the confirmation test result is less than less than 36 mg/L as NO_3, Members, or Third-Party Groups on Members behalf, shall continue to monitor the groundwater well once every five years beginning in 2020. Sampling may cease if a drinking water well is taken out of service and no longer provides drinking water.

2. *Drinking Water Well Sample Protocols.* Groundwater samples shall be collected using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols. Groundwater samples shall be collected at or near the well head before the pressure tank and prior to any well head treatment. In cases where this is not possible, the water sample shall 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.

3. *Drinking Water Well Sample Results.* The results of all drinking water well sampling shall be included in the Third- -Party Group Annual Surface Water and Groundwater Monitoring Report described in section VII of this MRP.

4. *Monitoring Frequency Changes.* Based on a review of groundwater monitoring reports, the San Diego Water Board may increase or decrease the frequency of groundwater water supply well monitoring. Factors that may inform the San Diego Water Board's evaluation of the monitoring frequency include, but are not limited to the exceedances or attainment of the nitrate MCL and the effectiveness of any management measures as a result of Water Quality Restoration Plan (WQRP) implementation.

IV. REGIONAL MONITORING REQUIREMENTS

A. Regional Monitoring Questions

The Regional Monitoring requirements have been designed to answer the following questions:

1. What effect, if any, have the Members' Agricultural Operations collectively had on regional surface water quality?

2. Are waterbody conditions in the areas with commercial agriculture in the San Diego Region getting better or worse?

B. Regional Monitoring Requirements - Surface Water

1. Surface Water Regional Monitoring Locations

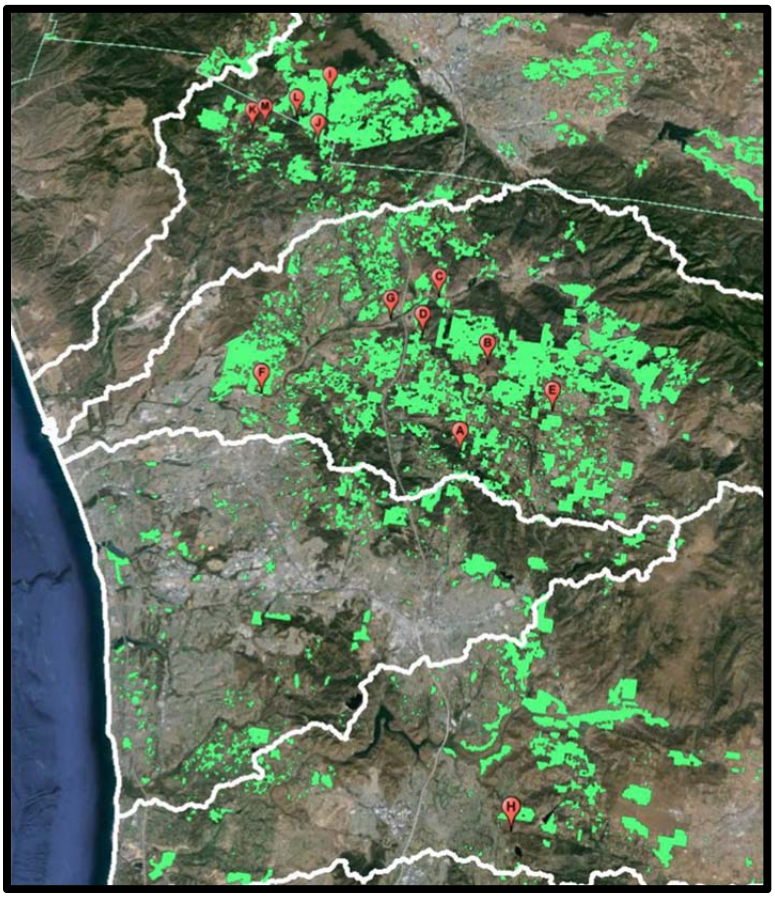
a. Third-Party Groups shall conduct Regional Bioassessment Monitoring at the locations used by the Southern California Storm Water Monitoring Coalition (SMC), as presented in Table A-2 and Figure A-1.

b. If there is more than one Third-Party Group enrolled in this General Order, the Third-Party Groups ~~shall~~ may work collaboratively to assign responsibility for conducting bioassessment ~~select~~ monitoring at the locations set forth in Table A-2. Third-Party Groups shall select monitoring locations based on the distribution and number of their respective Members to the extent practical. All monitoring locations listed in Table A-2 ~~shall~~ must be selected by at least one Third-Party Group.

Table A-2. Bioassessment Monitoring Locations

Map Location	Monitoring Location Designation	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

Figure A-1. Bioassessment Monitoring Locations



2. **Surface Water Regional Monitoring Requirements**

a. The Third-Party Group shall conduct Regional Bioassessment Monitoring at approved monitoring locations for the constituents and sampling frequency set forth in Table A-3 below:

Table A-3. Bioassessment Monitoring Requirements

Parameter	Units	Frequency
Temperature	°C	Twice every five years, once during the dry season and once during the wet season
Dissolved Oxygen	mg/L	Twice every five years, once during the dry season and once during the wet season
Conductivity	mS/cm	Twice every five years, once during the dry season and once during the wet season
pH	standard units	Twice every five years, once during the dry season and once during the wet season
Turbidity	NTU	Twice every five years, once during the dry season and once during the wet season
Stream Width	ft	Twice every five years, once during the dry season and once during the wet season
Stream Depth	ft	Twice every five years, once during the dry season and once during the wet season
Stream Cross Sectional Area	ft^2	Twice every five years, once during the dry season and once during the wet season
~~Flow~~ Stream Velocity	ft/sec	Twice every five years, once during the dry season and once during the wet season
Stream Flow	ft^3/sec	Twice every five years, once during the dry season and once during the wet season
~~Flow~~ Stream Velocity	ft/sec	Twice every five years, once during the dry season and once during the wet season
Stream Flow~~Volume~~	ft^3/~~day~~sec	Twice every five years, once during the dry season and once during the wet season
Total Dissolved Solids	mg/L	Twice every five years, once during the dry season and once during the wet season
Total Suspended Solids	mg/L	Twice every five years, once during the dry season and once during the wet season
Nitrate as N (NO_3)	mg/L	Twice every five years, once during the dry season and once during the wet season
Nitrite as N (NO_2)	mg/L	Twice every five years, once during the dry season and once during the wet season
Total Nitrogen as N	mg/L	Twice every five years, once during the dry season and once during the wet season
Chloride	mg/L	Twice every five years, once during the dry season and once during the wet season
Sulfate	mg/L	Twice every five years, once during the dry season and once during the wet season
Ammonium as N	mg/L	Twice every five years, once during the dry season and once during the wet season
Particulate Nitrogen	mg/kg	Twice every five years, once during the dry season and once during the wet season
Soluble Reactive Phosphorus	mg/L	Twice every five years, once during the dry season and once during the wet season
Particulate Phosphorus	mg/kg	Twice every five years, once during the dry season and once during the wet season

Parameter	Units	Frequency
Total Phosphorus	mg/L	Twice every five years, once during the dry season and once during the wet season
Particulate Organic Carbon	mg/L	Once every five years during the dry season
Dissolved Organic Carbon	mg/L	Once every five years during the dry season
Chlorophyll-A	µg/L	Once every five years during the dry season
Algae Ash Free Dry Mass	g/m^2	Once every five years during the dry season
Silica	mg/L	Once every five years during the dry season
Soft Community Assessment		Once every five years during the dry season
Diatoms Community Assessment		Once every five years during the dry season
Macroinvertebrate Bioassessment		Once every five years during the dry season
Percent Algae Cover	%	Once every five years during the dry season
Unshaded Solar Radiation	$cal/(cm^2\text{-day})$	Once every five years during the dry season
Percent Canopy Cover Over the Stream	%	Once every five years during the dry season

b. Third-Party Groups shall conduct Regional Bioassessment Monitoring in accordance with State Water Board's Surface Water Ambient Monitoring Program (SWAMP) standard operating procedures.7

c. Third-Party Groups shall confer with the SMC to schedule and coordinate monitoring activities.[8]

d. ~~Dry season samples shall be collected after the Member(s) have (has) applied pesticides or fertilizers and during an irrigation event.~~ If there is insufficient water to collect samples ~~no runoff~~ at the monitoring site, then the observation shall be documented. ~~with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site.~~

e. All data shall be submitted to CEDEN.[9]

V. SPECIAL STUDIES WATER QUALITY RESTORATION PLAN (WQRP)

If water quality monitoring data, collected as described in this MRP indicate exceedances of applicable ~~Surface~~ Water Quality Benchmarks (see Table A-4 of this MRP), Third-Party Groups shall develop a WQRP as described in section VIII.B of this General Order. Upon approval of the WQRP by the San Diego Water Board, the Third-Party Group shall implement targeted management practices intended to attain the ~~Surface~~ Water Quality Benchmarks. Management practices may include those recommended by organizations such as Natural Resources Conservation Service (NRCS) and University of California Cooperative Extension (UCCE).

[7] See State Water Board website at http://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/sops.shtml (as of October 20, 2016).

[8] See Southern California Stormwater Monitoring Coalition website at http://www.socalsmc.org/ (as of October 20, 2016).

[9] Information on CEDEN data submission requirements may be found at http://www.ceden.org/ (as of October 20, 2016), and a copy of the CEDEN electronic tabular format can be found at http://www.ceden.org/ceden_datatemplates.shtml (as of October 20, 2016).

VI. SURFACE WATER AND GROUNDWATER MONITORING PROGRAM PLAN

Third-Party Groups shall prepare and submit a detailed Surface Water and Groundwater Monitoring Program Plan (Monitoring Program Plan) to implement the surface water and groundwater (if applicable) monitoring requirements specified in this MRP. The Monitoring Program Plan is required under section VIII.C of this General Order and shall be submitted ~~180~~ 270 days after receipt of the NOA. Annually, thereafter, the Monitoring Program Plan shall be evaluated and amended, if needed, as required under section VIII.C.1 of this General Order. The evaluation and any amendments shall be submitted with the Annual Surface Water and Groundwater Monitoring Report. At a minimum the Monitoring Program Plan shall contain the following:

A. Monitoring Event Preparation and Protocols

The Monitoring Program Plan shall include a description of monitoring event preparation and field protocols for sample collection and sample handling (including chain of custody requirements). The Monitoring Program Plan shall also describe protocols for ensuring that all monitoring instruments and devices used by Third-Party Groups for the prescribed monitoring and sample collection are properly maintained and calibrated to ensure proper working condition and continued accuracy.

B. Quality Assurance Project Plan (QAPP)

The Monitoring Program Plan shall include a QAPP describing the objectives and organization of the Surface Water and Groundwater (if applicable) Monitoring Program, functional activities, and quality assurance/quality control to be conducted. 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 shall meet the State Water Board's SWAMP requirements and shall include at least the following four sections: 1) Project Management, 2) Data Generation and Acquisition, 3) Assessment and Oversight, and 4) Data Validation and Usability. Laboratory analytical methods shall be included as an appendix of the QAPP. A QAPP template is available at http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml.

C. Monitoring Locations

The Monitoring Program Plan shall include a list of the monitoring locations. The monitoring locations shall meet the monitoring location requirements listed in sections III.B, III.C and IV.B of this MRP. The Monitoring Program Plan shall describe the characteristics of each sampling site, including crop type and cultivation practices, and shall provide an appropriately scaled map of the monitoring locations and GPS coordinates for each monitoring location. The Monitoring Program Plan shall also provide the supporting scientific rationale for the selection of each surface water monitoring location including a demonstration that the proposed locations are appropriate for evaluating the effects of irrigation runoff, storm water, and non-storm water discharges from the Agricultural Operations, and for evaluating the success of management practices.

D. Monitoring Constituents

The Monitoring Program Plan shall include a list of the constituents to be monitored at each monitoring location shall be provided. The list shall include, but need not be limited to, the parameters listed in Tables A.1 and A.3 and section III.C of this MRP.

E. Monitoring Frequency

The Monitoring Program Plan shall include the frequency and approximate dates of monitoring. Surface water monitoring shall be conducted during the dry season and wet season and at the frequency specified in in Tables A.1 and A.3 and section III.C of this MRP.

F. 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 should be included in the Annual Monitoring Report (MRP section VII.L).

VII. ANNUAL SURFACE WATER AND GROUNDWATER MONITORING REPORT (ANNUAL MONITORING REPORT)

Annually by April 30 (beginning the year following issuance of this General Order), Third-Party Groups shall prepare and submit to the San Diego Water Board an Annual Surface Water and Groundwater Monitoring Report (Annual Monitoring Report), covering January 1 through December 31 of the prior year. For any monitoring period in which no discharge occurred, the monitoring report shall include a statement certifying that no discharge occurred during the monitoring period. The Annual Monitoring Report shall include the following elements:

A. Title Page and Table of Contents

B. Summary

The Annual Monitoring Report shall briefly outline what surface water and groundwater (if applicable) monitoring was done in the prior year, describe the significance of key findings, and list important recommendations.

C. Introduction

The Annual Monitoring Report shall identify the objectives and the issues being addressed.

D. Monitoring Area Description

The Annual Monitoring Report shall include a summary of the monitoring area geography, hydrology, the location of the Members' Agricultural Operations, the size of the Members' Agricultural Operation, the crop type(s) being grown at the Members' Agricultural Operation, the irrigation and cultivation method(s) utilized at the Members' Agricultural Operation, and the waste discharge sources in the areas being monitored. All monitoring locations and features including Members' Agricultural Operation property boundaries, waters of the State, and other features which may affect water quality should be provided on an appropriately scaled map.

E. Monitoring Methods

The Annual Monitoring Report shall provide details on the methods and procedures used for conducting the surface water and groundwater (if applicable) monitoring including a summary of the procedures followed for quality assurance.

F. Monitoring Results

The Annual Monitoring Report shall include the monitoring results of all surface water and groundwater samples collected during the period January 1 through December 31 of the prior

year, in electronic tabular format using available data submission templates for CEDEN.[10] Laboratory data sheets, and completed chain of custody forms shall be attached to the ~~report~~Annual Monitoring Report.

G. Surface Water Monitoring Data Analysis

The Annual Monitoring Report shall include an analysis of the surface water monitoring data including:

1. Interpretations and conclusions as to whether applicable receiving water limitations in section VI of this General Order were exceeded during the monitoring period ~~attained~~ at each monitoring location. For the purposes of this analysis ~~section~~, an exceedance of an applicable receiving water limitation means a single exceedance of a Water Quality Benchmark listed on Table A-4 below.
2. Interpretations and conclusions regarding any change in receiving water quality related to agricultural activities at the Members' Agricultural Operation (i.e., a comparison of water quality at upstream and downstream monitoring locations).
3. Identification of all repeated exceedances of applicable ~~Surface~~ Water Quality Benchmarks[11] contained in Table A-4 of this MRP at any monitoring location. For the purposes of this General Order, a~~n~~ repeated exceedance occurs when a surface water sampling result for a constituent at a single monitoring location exceeds the applicable ~~Surface~~ Water Quality Benchmarks more than 3 out of 4 times for the same constituent. If water quality monitoring data indicate such repeated exceedances of applicable ~~Surface~~ Water Quality Benchmarks, Third-Party Groups shall prepare and submit a ~~Water Quality Restoration Plan (~~WQRP~~)~~ pursuant to section VIII.B of this General Order.

H. Groundwater Monitoring Data Analysis (if applicable)

If applicable, the Annual Monitoring Report shall include an analysis of the groundwater monitoring data including:

1. Interpretations and conclusions as to whether the collected groundwater samples are reported to have nitrate concentrations that exceed the nitrate MCL of 45 mg/L as NO_3.~~is safe to drink.~~
2. Interpretations and conclusions regarding any change in groundwater quality related to agricultural activities at the Members' Agricultural Operation (i.e., a trend analysis comparing of groundwater quality data over time for the same constituent).
3. Identification of all exceedances of the applicable nitrate benchmark of 36 mg/L as NO_3 at any water supply well monitoring location.[12] If groundwater quality monitoring data indicate an exceedance~~s~~ of the nitrate benchmark in accordance with section III.C.b of

[10] 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 May 31, 2016).

[11] "Water Quality Benchmark" means discharge prohibitions and narrative or numeric ~~surface~~ 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 pursuant to a total maximum daily load (TMDL) (whether established in the Basin Plan or other lawful means).

[12] Section III.C of this MRP defines when the Nitrate groundwater benchmark is exceeded.

this MRP, Third-Party Groups shall prepare and submit a ~~Water Quality Restoration Plan (~~WQRP~~)~~ pursuant to section VIII.B of this General Order.

I. CEDEN Data Submission

All surface water quality data shall be reported to CEDEN. The Annual Monitoring Report shall include documentation that all surface water monitoring data was successfully uploaded to CEDEN.13

J. Geotracker Data Submission (if applicable)

If groundwater quality monitoring is conducted, all groundwater quality data shall be reported to Geotracker. The Annual Monitoring Report shall include documentation that all groundwater monitoring data was successfully uploaded to Geotracker.14

K. Recommendations

The ~~report~~ Annual Monitoring Report shall include recommendations for proposed future monitoring activities listed in orders of priority.

L. Monitoring Team

The Annual Monitoring Report shall include a description of the monitoring team, including names, titles, qualifications, and contact information.

M. Identification of Discharger

The Annual Monitoring Report shall include Third-Party Group's contact information.

N. Certification

The Annual Monitoring Report shall be signed and certified in accordance with Signatory and Certification Requirements contained in section IX.E of this General Order.

~~**O. Member Submitted Annual Self-Assessment and Quarterly Self-Inspection Reports**~~

~~The Annual Report shall include copies of the Annual Self-Assessment and Quarterly Self-Inspection Reports submitted to the Third-Party Group pursuant to section V.E.1 of the General Order~~

Table A-4. ~~Surface~~ Water Quality Benchmarks

Parameter	Units	Water Quality Benchmark
pH	standard units	Note 1
Temperature	°C	Note 1
Dissolved Oxygen	mg/L	Note 1
Turbidity	NTU	Note 2
Total Dissolved Solids	mg/L	Note 2

[13] CEDEN is the State Water Board's data system for surface water quality in California. Information on CEDEN data submission requirements may be found at http://www.ceden.org/, and a copy of the CEDEN electronic tabular format can be found at http://www.ceden.org/ceden_datatemplates.shtml (as of October 20, 2016).

[14] GeoTracker is the State Water Board statewide database and geographic information system that provides online access to environmental data. The Geotracker on-line database can be accessed on the State Water Board website at http://www.waterboards.ca.gov/gama/geotracker_gama.shtml (as of October 20, 2016).

Parameter	Units	Water Quality Benchmark
Total Suspended Solids	mg/L	Note 1
Ammonia	mg/L	0.025, Note 1
Nitrate (as NO_3)	mg/L	45, Note 3
Nitrate (as NO_3) - Groundwater	mg/L	36/45, see section III. C of this MRP.
Nitrate + Nitrite (as Nitrogen)	mg/L	10, Notes 3 and 4
Nitrite (as Nitrogen)	mg/L	1.0 Note 3
Total Nitrogen	mg/L	1.0, Notes 1 and 4
Total Phosphorus	mg/L	0.1, Notes 1 and 4
Sulfate	mg/L	Note 2
E. coli	MPN/100 mL	Note 1
Enterococci	MPN/100 mL	Notes 1 and 5
Fecal Coliform	MPN/100 mL	Notes 1 and 5
Total Coliform	MPN/100 mL	Notes 1 and 5
Chronic Toxicity	TUc	1.0, Note 6

Note 1. Water Quality Benchmarks shall be 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 Water Quality Control Plan for the San Diego Basin (9) (Basin Plan), b) ocean waters contained in the California Ocean Plan or c) other applicable water quality standards for the San Diego Region.

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

Note 3. Water Quality Benchmarks shall be based on based on designated water quality objectives for inland surface waters and groundwater contained in Chapter 3, Table 3-4 of the Basin Plan.

Note 4. For Agricultural 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 5. For Agricultural 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 6. 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.

ATTACHMENT B – FACT SHEET

CONTENTS

TABLES

ATTACHMENT B – FACT SHEET

As described in section I.CC of this General Order, the San Diego Regional Water Quality Control Board (San Diego Water Board) incorporates this Fact Sheet as findings of the San Diego Water Board supporting the issuance of this General Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this General Order.

I. BACKGROUND

A. Definitions

1. Discharger

   A Discharger is any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region.

2. Member

   A Member is any Discharger who belongs to a Third-Party Group.

3. Agricultural Operation

   For the purposes of this General Order, an Agricultural Operation is any agricultural business or trade activity (including farms, nurseries, and orchards), that produces crops with the intent to make a profit. The San Diego Water Board presumes intent to make a profit if the Agricultural Operation meets at least one of the following criteria:

   a. The owner or operator files the federal Department of Treasury Internal Revenue Service (IRS) Form 1040 *Schedule F Profit or Loss from Farming* with their federal taxes.

   b. The owner or operator receives agricultural water rates or has been given an agricultural water use variance from their water purveyor.

   c. The owner or operator ~~holds a current~~ is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting.

   The IRS presumes an agricultural operation was carried on for profit if it produced a profit in at least 3 of the last 5 tax years. It's a subjective judgment and the IRS considers the nine factors listed below for determining a profit motive with no one factor being decisive to distinguish farm businesses from hobby farms. These concepts are described in the IRS Farmers Tax Publication 225 at https://www.irs.gov/pub/irs-pdf/p225.pdf.

   - The manner in which the owner/operator carried on the agricultural activity.
   - The expertise of the owner/operator or his or her advisers.
   - The time and effort expended by the owner/operator in carrying on the agricultural activity.
   - The expectation that the assets used in the agricultural activity may appreciate in value (e.g. the degree to which assets may increase in value and cover the costs of the agricultural activity).
   - The success of the owner/operator in carrying on other similar or dissimilar activities.

- The owner/operator's history of income or loss with respect to the agricultural activity.
- The amount of occasional profits, if any, which are earned.
- The financial status of the owner/operator (e.g. how much of income of owner/operator comes from agricultural operation).
- Elements of personal pleasure or recreation (Does owner and/or operator enjoy what they do and are there aspects of that which show a profit motive?).

4. Third-Party Group

   A Third-Party Group is any organization approved by the San Diego Water Board to assist Members in carrying out the terms and conditions of this General Order.

5. Member vs. Non-Member

   An enrolled parcel may have multiple owners and/or operators. A Member is the owner or operator of the Agricultural Operation who is a member of a Third-Party Group. While a Non-Member is the owner and/or operator of the same Agricultural Operation, but who is not a member of a Third-Party Group; only one of the owners or operators needs to be a member of a Third-Party Group.

   The provisions of this General Order require that the Member provide notification to any Non-Members who are owners, operators, and/or property owners of the Agricultural Operation of the Member's enrollment under this General Order.

B. Applicability

1. This General Order applies to any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region who is a member of a Third-Party Group. To be covered under this General Order, either the owner or the operator must submit a Notice of Intent (NOI) and must belong to a Third-Party Group in good standing. Coverage under this General Order will not become effective until the San Diego Water Board issues a Notice of Applicability (NOA) signed by the Executive Officer to the Member.
2. This General Order does not apply to discharges of waste that are regulated under other waste discharge requirements (WDRs) or conditional waiver of WDRs (Waivers). If the other WDRs/Waivers only regulate some of the waste discharge activities at the regulated site, the owner/operator shall obtain regulatory coverage for any discharges of waste that are not regulated by the other WDRs/Waivers. Such regulatory coverage may be sought through enrollment under this General Order, applicable WDRs as an individual not participating in a Third-Party Group, or by obtaining appropriate changes in the owner and/or operator's existing WDRs/Waivers.

C. Agricultural Activities in the San Diego Region

The San Diego Region jurisdictional area forms the southwest corner of California and occupies approximately 3,900 square miles of surface area. The western boundary of the San Diego 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 following is a summary of Agricultural Operations in the San Diego Region.

1. Agricultural Operations in San Diego County

   There are approximately 5,700 Agricultural Operations on approximately 70,000 acres of land in San Diego County within the jurisdictional boundaries of the San Diego Water Board. The Agricultural Operations specialize in producing cut flowers, fruit, vegetables, and nuts.

2. Agricultural Operations in Riverside County

   There are approximately 300 Agricultural Operations on approximately 33,000 acres of land in Riverside County within the jurisdictional boundaries of the San Diego Water Board. The Agricultural Operations specialize in producing fruit and wine grapes.

3. Agricultural 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.[1] There are few remaining farms, orchards, and nurseries in Orange County within the jurisdictional boundaries of the San Diego Water Board, which are generally located along San Juan and Chiquita Creeks.

Unlike other areas of the State, the majority of the Agricultural Operations within the jurisdictional boundaries of the San Diego Water Board are relatively small, with the median size being approximately 4 acres. Moreover, the types of crops grown, the methods used to grow them, the climate, and the hydrogeology are all unique to the San Diego Region. The San Diego Water Board considered these differences in developing this General Order.

D. 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 and fertilizers, sediment, and salts from growing areas into surface waters and groundwater of the State. The following is a discussion of pollutants typically associated with Agricultural Operation discharges.

   a. Nutrients

      Agricultural fertilizers applied to produce crops may contain nitrogen and phosphorus in multiple chemical forms (nitrogen, nitrate, 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 methemoglobinaemia, commonly

[1] Orange County Important Farmland 2012 Map, prepared by the California Department of Conservation Farmland Mapping and Monitoring Program, dated January 2015, available at ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/ora12.pdf (as of October 20, 2016).

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.

i. Surface waters within the San Diego Region known to be impaired for nitrogen include:

(a) Arroyo Trabuco Creek

(b) De Luz Creek

(c) Santa Margarita Lagoon

(d) Lake Hodges

(e) Morena Reservoir

(f) Rainbow Creek

(g) Loma Alta Slough

ii. Surface waters within the San Diego Region known to be impaired for phosphorus include:

(a) Santa Margarita Lagoon

(b) Lake Hodges

(c) Rainbow Creek

(d) Loma Alta Slough

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.

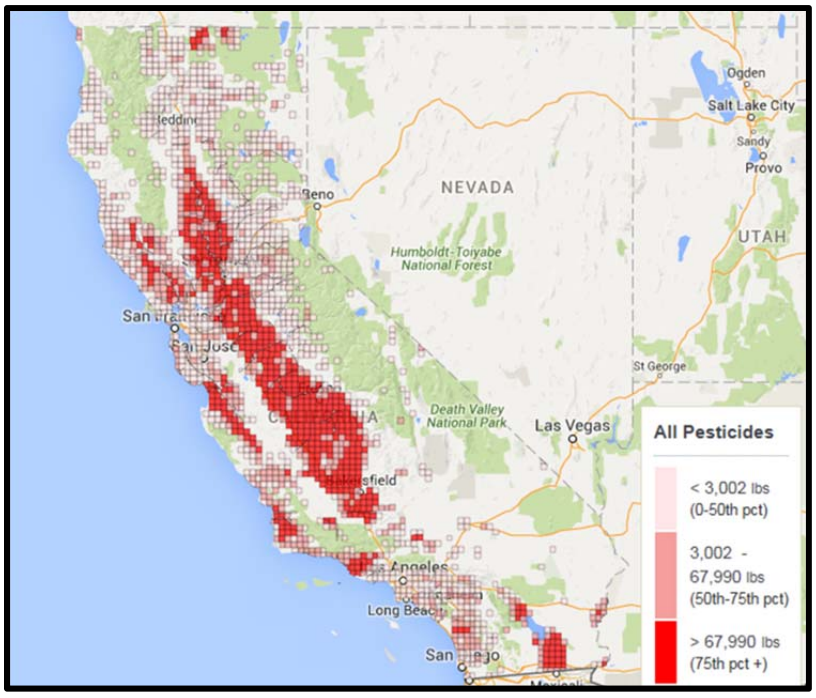
b. Agricultural Chemicals

Pesticides, herbicides, algaecides, and fumigants are applied to agricultural land to control pests, weeds, and fungus. If not properly managed, these chemicals can migrate into surface waters of the State and cause toxic conditions that threaten the viability of the water bodies to support aquatic and other species.

The California Department of Pesticide Regulation (DPR) publishes summaries of pesticide use in California. The following is a summary of data of pesticide use reported by the DPR for 2014.

i. The San Diego Region uses less agricultural chemicals than other areas of the State. As shown on Figure B-1, agricultural pesticides (including carcinogens, cholinesterase inhibitors, endocrine disruptors, fumigants, neonicotinoids, reproductive and development toxicants, and toxic air contaminates) are used throughout the State. Figure B-1 also illustrates that most of the Townships located in agricultural areas of the San Diego Region had a reported pesticide use ranging between the 0 and 75th percentile of all Townships in the State.

Figure B-1. Agricultural Pesticide Use in California[2]



ii. Table B-1 lists the reported pesticide use in agricultural counties in California. As shown in Table B-1, the San Diego Region uses significantly less pesticides as the other major agricultural counties in the State.

Table B-1. 2014 Reported Pesticide Use for Agricultural Counties in California[3]

County	Reported Pesticide Use in Pounds
Fresno	31,828,231
Kern	27,181,424
San Joaquin	14,908,389
Monterey	9,389,189
Stanislaus	7,076,488
Ventura	6,532,477
Imperial	5,005,430
Orange	919,351
Riverside	2,234,831
San Diego	1,617,591

[2] California Environmental Health Tracking Program, California Department of Public Health, Agricultural Pesticide Mapping Tool. Data from California Department of Pesticide Regulation Pesticide Use Reporting 2016, available at: www.cehtp.org/pesticidetool (as of October 20, 2016).

[3] Data from the *California Department of Pesticide Regulation – 2014 Summary Data,* available at: http://www.cdpr.ca.gov/docs/pur/pur14rep/lbsby_co_14.pdf (as of October 20, 2016).

iii. The DPR compiled a list of the top five pesticides used in San Diego County in 2014. 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 Agricultural 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 B-2 lists the top five pesticides used in San Diego County in 2014.

Table B-2. Top Five Pesticides Used in San Diego Region in 2014[4]

Pesticide	Representative Crops	Pounds Applied	Acres Treated
Glyphosate, Isopropylamine Salt	Avocados Outdoor Container Plants Citrus	99,796.	27,032
Glyphosate, Potassium Salt	Avocados Outdoor Container Plants Citrus	27,448	21,271
Mineral Oil	Avocados Outdoor Container Plants Citrus	263,448	12,638
Alpha-(Para-Nonylphenyl)-Omega-Hydroxypoly(Oxyethylene)	Avocados Outdoor Container Plants Outdoor Flowers Citrus	3,809	9,306
Abamectin	Avocados Outdoor Container Plants Greenhouse Container Plants Outdoor Flowers Citrus	151	8,356

Surface waters within the San Diego Region known to be impaired for agricultural chemicals include Tijuana River and Tijuana River Estuary.

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 waters of the State and pose a public health risk if ingested.

Waterbodies within the San Diego Region known to be impaired[5] for pathogens include:

i. Agua Hedionda Creek

ii. Agua Hedionda Lagoon

[4] Data obtained from California Department of Pesticide Regulation available at http://www.cdpr.ca.gov/docs/pur/pur14rep/top_5_ais_sites_acres14.pdf (as of October 20, 2016).

[5] The Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region Including Tecolote Creek (Bacteria TMDL) was adopted to address fecal indicator bacteria impairments in the San Diego Region.

iii. Aliso Creek
iv. Buena Vista Lagoon
v. Chollas Creek
vi. Dana Point Harbor
vii. Escondido Creek
viii. Forester Creek
ix. Loma Alta Slough
x. Long Canyon Creek (tributary to Murrieta Creek)
xi. Los Penasquitos Creek
xii. Murray Reservoir
xiii. Murrieta Creek
xiv. Pine Valley Creek (Upper)
xv. Redhawk Channel
xvi. San Diego River (Lower)
xvii. San Dieguito River
xviii. San Elijo Lagoon
xix. San Juan Creek
xx. San Luis Rey River, Lower (west of Interstate 15)
xxi. Santa Gertrudis Creek
xxii. Santa Margarita River (Lower)
xxiii. Sweetwater River, Lower (below Sweetwater Reservoir)
xxiv. Tecolote Creek
xxv. Temecula Creek
xxvi. Tijuana River and Estuary
xxvii. Warm Springs Creek (Riverside County)
xxviii. The majority of Mission Bay, San Diego Bay, and Pacific Ocean Shoreline

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.

Surface waters within the San Diego Region known to be impaired for sediments include:[6]

[6] The 303(d) list of Water Quality Limited Segments is available at http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/docs/updates_020910/App_B_All_Decisions.pdf (as of October 20, 2016).

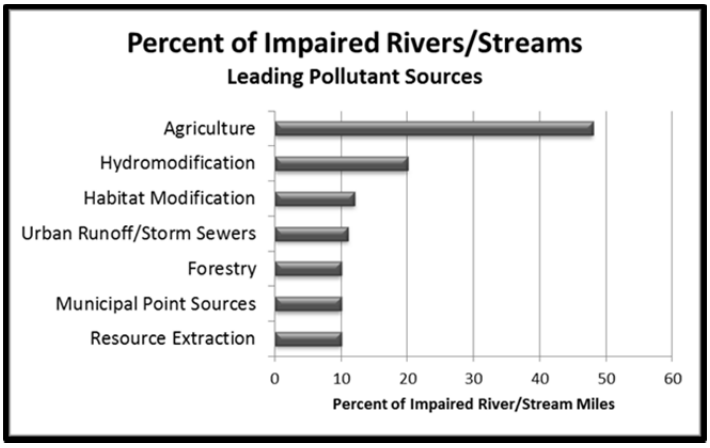
i. Agua Hedionda Lagoon
ii. Buena Vista Lagoon
iii. Los Penasquitos Lagoon
iv. San Diego River (Upper)
v. San Elijo Lagoon
vi. Tijuana River

2. Water Quality Impacts Associated with Agricultural Activities

a. Surface Water Impacts Associated with Agricultural Activities

The production practices used by agriculture can result in a number of pollutants entering water resources, including sediment, nutrients, pathogens, pesticides, and salts. The U.S. Environmental Protection Agency (USEPA) reports[7] that nationwide, agriculture is the listed source of pollution for 128,859 miles of rivers and streams. This amounts to 48% of the assessed rivers and streams found to have impaired conditions. Figure B-2, using data from the USEPA *National Water Quality Inventory 2000 Report*, illustrates the leading pollutant sources and their corresponding percentage of impaired rivers/streams.

Figure B-2. Percent of Impaired Rivers/Streams



Statewide, approximately 9,493 miles of rivers/streams and 513,130 acres of lakes/reservoirs are listed on the federal Clean Water Act (CWA) section 303(d) *List of Water Quality Limited Segments* (303(d) List) as being impaired by irrigated agriculture. Of these, approximately 2,800 miles, or approximately 28%, have been identified as impaired by pesticides.[8]

[7] USEPA, National Water Quality Inventory 2000 Report, available at https://www.epa.gov/sites/production/files/2015-09/documents/2000_national_water_quality_inventory_report_to_congress.pdf, as of October 20, 2016.

[8] State Water Board Irrigated Regulatory Program FAQ, available at http://www.swrcb.ca.gov/water_issues/programs/agriculture/docs/about_agwaivers.pdf as of October 20, 2016.

b. 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)[9] 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.

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 Resolution No. R9-2007-0104, *Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge Within the San Diego Region* (2007 Waiver)

The 2007 Waiver required that surface water monitoring be conducted. Surface water monitoring was conducted by the San Diego Regional Irrigated Lands Group, the San Mateo Irrigated Lands Group, and the Upper Santa Margarita Irrigated Lands Group. The purpose of the monitoring was to evaluate the condition of surface water in the San Luis Rey and Santa Margarita Watersheds in areas of agricultural activity. In addition to collecting and analyzing surface water samples for nutrients and general chemistry parameters, biological assessments were conducted.

Table B-3 summarizes the results of surface water monitoring performed in 2012 and 2013 in the San Luis Rey and Santa Margarita Watersheds by the Irrigated Lands Monitoring Groups, as a requirement of the 2007 Waiver.

[9] 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.

As shown in Table B-3, a majority of samples had concentrations of total dissolved solids, nitrogen, phosphorous, sulfate, and chloride that exceeded water quality objectives for those parameters.

Table B-3. Surface Water Monitoring Results, 2012 and 2013

Parameter	Units	Water Quality Objective	San Luis Rey Watershed	Santa Margarita Watershed
			6/27/13 - 7/18/13 (6 sampling events)	12/13/12 - 9/27/13 (6 sampling events)
pH	standard units	6.5 – 8.5	7.4-8.1	7.9-8.2 (4 samples)
Dissolved Oxygen	milligram per litter (mg/L)	>5.0	6.8-8.9	--
Total Dissolved Solids	mg/L	750	1545-2141	940-2568
Total Nitrogen	mg/L	1	5.7-41	not detected (ND)-14
Nitrate + Nitrite as N	mg/L	10	42 (1 sample)	--
Nitrate as N	mg/L	10	5.2-18.3 (5 samples)	ND-5.2
Nitrite as N	mg/L	1	ND-0.1 (5 samples)	ND-0.2
Un-ionized Ammonia	mg/L	0.025	0.0013 (1 sample)	--
Ammonia as N	mg/L	0.025	ND-0.06 (5 samples)	ND-0.42
Total Phosphorus	mg/L	0.1	0.03-0.24	0.03-0.26
Sulfate	mg/L	250	517-694	312-537
Chloride	mg/L	250	230-455	198-918

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 (e.g., 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 an Indicator of Biological Integrity (IBI) score based on a standard, or reference condition, representative of the area assessed, such as the Southern California IBI (SoCal IBI). There are five SoCal IBI ranks: Very Poor, Poor, Fair, Good, and Very Good.

Table B-4 summarizes the results of bioassessment monitoring performed between June and July, 2013, in surface waters in the vicinity of Agricultural Operations in the San Diego Region.

The results of the bioassessment indicates that 50% of the streams were in good or very good condition, 0% were in fair condition, and 50% were in poor or very poor condition.

Table B-4. Bioassessment Monitoring Results, June and July 2013

Watershed	SoCal IBI Score	SoCal IBI Rank
Santa Margarita Watershed	5.7	Very Poor
San Luis Rey Watershed	6-61	Very Poor - Good

c. Groundwater Impacts Associated with Agricultural Activities

In 2008, Senate Bill SBX2 1 (Perata) was signed into law (Water Code section 83002.5), requiring the State Water Resources Control Board (State Water Board), in consultation with other agencies, to prepare a report to the State Legislature to "improve understanding of the causes of [nitrate] groundwater contamination, identify potential remediation solutions and funding sources to recover costs expended by the State…to clean up or treat groundwater, and ensure the provision of safe drinking water to all communities."

In September 2013, an Agricultural Expert Panel was convened by the State Water Board to consider a variety of questions, including ones specific to the development of an agricultural nitrate control program. The Agricultural Expert Panel issued a final report of recommendations on September 9, 2014[10] concluding, in part, that because deep percolation of nitrates was universal within irrigated agriculture, a good regulatory program must encompass all irrigated areas, not only lands directly above high nitrate aquifers, those previously identified to be in a high vulnerability area, or those with a certain farm or field size. The San Diego Water Board agrees that groundwater in alluvial basins can be vulnerable to agricultural nitrate impacts, regardless of the time it takes for those impacts to appear in groundwater due to soil conditions, geologic conditions, and depth to groundwater.

d. Groundwater Quality in the San Diego Region

The Groundwater Ambient Monitoring and Assessment (GAMA) *Domestic Well Project, Groundwater Quality Data Report, San Diego County Focus Area Report* issued by the State Water Board's GAMA Program[11] stated that 18 percent of the 137 domestic water supply wells sampled (25 wells) were reported to have groundwater samples that exceeded the nitrate maximum contaminate level (MCL) of 45 mg/l. Additionally, the *Temecula Valley Basin Salt and Nutrient Management*

[10] Conclusions of the Agricultural Expert Panel, Recommendations to the State Water Resources Control Board pertaining to the Irrigated Lands Regulatory Program (September. 9, 2014), available at <http://www.swrcb.ca.gov/water_issues/programs/agriculture/docs/ILRP_expert_panel_final_report.pdf> (as of April 26, 2016) (Agricultural Expert Panel Report).

[11] State Water Board, Groundwater Ambient Monitoring and Assessment Domestic Well Project, Groundwater Quality Data Report, San Diego County Focus Area, dated March 2010, available at http://www.swrcb.ca.gov/gama/docs/sdreport.pdf (as of October 20, 2016).

Plan (Temecula SNMP)[12] found that nitrate as NO_3 concentrations in Temecula Valley (an area that includes Agricultural Operations) ranges between 1 to 7.5 mg/L, and groundwater model results for a 20 year projection considering an expansion of 4,000 acres of irrigation using recycled water would result in nitrate as NO_3 concentrations ranging between 1.5 and 10 mg/L.

In the San Diego Region, the types of crops grown, the typical irrigation methods used, and the soil types typically found in agricultural areas present a reduced risk of nitrate contamination of groundwater as compared to the conditions encountered in the Central Valley Region for the following reasons:

i. Wine grapes, avocados, and citrus fruits are the most prevalent crops grown in the San Diego Region. According to California Institute for Water Resources[13], production of wine grapes have a nitrate hazard rating of 1 (low), and avocados and citrus fruits have a nitrate hazard rating of 2 (low to moderate).

ii. Most of the Agricultural Operations in the region use drip or micro sprinkler irrigation, not flood or overhead spray irrigation, significantly limiting the amount of irrigation water that reaches groundwater aquifers.

iii. The soil type typically found in agricultural areas in the San Diego Region is Cretaceous-aged granitic and gabbroic rock (igneous rock). The terrains tend to be moderately to steeply sloping, and the soils generally overlaying them are thin and have a rocky to sandy loam texture (e.g. Fallbrook soil series). Areas overlain with thin soils over igneous rock are less prone to be areas where water infiltrates to groundwater.

These regional conditions warrant a modified approach to the groundwater protection and monitoring requirements recommended in the 2014 Agricultural Expert Panel Report. The development of detailed Nutrient Management Plans and crop-specific A/R ratios (the multi-year ratio of nitrogen applied to the field to nitrogen removed from the field) called for in the 2014 Agricultural Expert Panel Report will only be required for those areas of the San Diego Region that warrant a greater degree of groundwater protection.

E. State Water Board ~~and Regional~~ Irrigated Lands Program~~s~~ (ILRP~~s~~) and San Diego Water Board Commercial Agriculture Regulatory Program

1. State Water Board~~'s~~ 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 or make water unusable for drinking water or agricultural uses. Across the nine Regional Water Quality Control Boards (Regional Boards) there are significant differences in the approaches for regulating 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 can be explained by the need for more stringent requirements to protect vulnerable or impaired receiving waters.

[12] Temecula Valley Basin Salt and Management Plan, prepared by RMC Water and Environment, dated March 2014, available at http://www.ranchowater.com/DocumentCenter/View/1132 (as of October 20, 2016).

[14] University of California, Nitrate Groundwater Pollution Hazard Index, availale at http://ciwr.ucanr.edu/Tools/Nitrogen_Hazard_Index/ (as of October 20, 2016).

Currently, the State Water Board formally coordinates with all 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:

a. Program coordination

b. Public outreach

c. Multi-agency coordination with agricultural agencies/entities/academia/coalitions and third-party groups

d. Information management

e. Fee development and collection

f. Petitions and Enforcement

g. Adaptive management - Team Concept Demonstration Projects

On February 8, 2016, the State Water Board issued a draft order in the matter 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* (State Water Board Order). The State Water Board Order, if adopted, is expected to provide precedential direction to Regional Boards regarding the requisite elements of WDRs issued to regulate agricultural operations in the State. As drafted, the State Water Board Order incorporates many of the recommendations of the Agricultural Expert Panel convened by the State Water Board in 2013 to consider a variety of questions, including the appropriate regulatory structure for irrigated lands. The San Diego Water Board incorporated requirements consistent with the State Water Board Order to the extent these recommendations were applicable to regional conditions in San Diego.[14]

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

The San Diego Water Board's ~~agricultural regulatory program~~Commercial Agriculture Regulatory Program commenced with the adoption of a conditional waiver of WDRs for agricultural lands in 1983 (1983 Waiver) pursuant to Water Code section 13269. The 1983 Waiver conditionally waived the requirement for submittal of a permit application (report of waste discharge or 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.

[14] The Agricultural Expert Panel issued a final report of recommendations on September 9, 2014 concluding, in part, that because deep percolation of nitrates was universal within irrigated agriculture, a good regulatory program must encompass all irrigated areas, not only lands directly above high nitrate aquifers, those previously identified to be in a high vulnerability area, or those with a certain farm or field size. The San Diego Water Board agrees that regulatory coverage for all agricultural lands is appropriate. However, the San Diego Water Board is not requiring compulsory nutrient management plans due to the reduced risk of nitrate percolation to groundwater presented by the unique soil conditions, geologic conditions, and crops grown in the San Diego Region as discussed in section D. I.D of this Fact Sheet.

The 2007 Waiver allowed growers to form discharger coalitions with a third-party representative responsible for outreach, education, and implementation of a number of 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. This General Order extends regulatory coverage to both irrigated and non-irrigated Agricultural Operations, set forth conditions that will require dischargers to implement management practices to protect water quality, and ensure through monitoring and reporting that these practices are sufficiently protective of water quality.

F. Rationale for General WDRs

This General Order was developed to regulate discharges from a large number of Agricultural Operations within the San Diego Region. Agricultural discharges, including both irrigation water and storm water running off of agricultural fields into surface waters or percolating to groundwater, may carry constituents considered to be waste as defined under Water Code section 13050(d).[15] Water Code sections 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. This General Order must primarily implement the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) 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.[16] This General Order must also conform to State Water Board Policies including the *Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program*[17] (Nonpoint Source Policy) and the *Statement of Policy with Respect to Maintaining High Quality Waters, State Water Board Resolution No. 68-16*[18] (Antidegradation Policy). 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 this General Order complies with Water

[15] 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).

[16] The Basin Plan is available on the San Diego Water Board website at http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml (as of May 31, 2016).

[17] The Non-Point Source Policy is available on the State Water Board website at http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf (as of May 31, 2016).

[18] The Antidegradation Policy is available on the State Water Board website at http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf (as of May 31, 2016).

Code section 13263(i) criteria for the issuance of General WDRs which allows the San Diego Water Board to prescribe General WDRs if:

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

General WDRs are an effective and efficient method to regulate the more than 6,000 Agricultural Operations that meet the enrollment criteria in the San Diego Region because the discharges are similar and discharge requirements would be similar if individual WDRs were issued.

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."

G. 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 *Water Quality Control Plan for the San Diego Basin* (Basin Plan) contains specific water quality objectives, beneficial uses, and implemention plans that are applicable to surface waters or groundwaters that receive discharges of waste from agricultural operatons. The State Water Board has adopted water quality control plans and policies that are also applicable to discharges of waste from agricultural operatons. The USEPA has adopted the *National Toxics Rule* and the *California Toxics Rule* which coinstitute water quality criteria that apply to waters of the United States.

1. Basin Plan

The ~~San Diego Water Board's Water Quality Control Plan for the San Diego Basin (~~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 88-63 (Sources of Drinking Water Policy), and consistent with the CWA, existing and potential beneficial uses of waters in the San Diego Region have been identified (see Table B-5).

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

Beneficial Use	Abbreviation
Surface Waters	
Agricultural Supply	AGR
Cold Freshwater Habitat	COLD
Commercial and Sport Fishing	COMM
Contact Water Recreation	REC-1
Estuarine Habitat	EST

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

This General Order implements the Basin Plan and other applicable statewide water quality control plans and polices 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 Total Maximum Daily Loads (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:

a. *Total Maximum Daily Load for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed* (Rainbow Creek TMDL)

b. *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)*

This General Order implements these TMDLs. Like all other water quality standards in this General 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 this General 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 this General Order may serve as an alternative, non-TMDL solution to address other water bodies on the 303(d) List. The intent of this General Order is to reduce the loading of nutrients, agricultural chemicals, bacteria, and sediment from discharging to the waters of the State from Agricultural Operations. Not only will the installation and maintenance of effective management practices reduce the loading of pollutants from Agricultural Operations to the waters of the State, they also incorporate the same types of implementation measures that would be required under a TMDL to reduce the loading of pollutants to the waters of the State.

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). 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.

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.

This General Order regulates waste discharges from Agricultural 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 Implementation and Enforcement 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. This General Order incorporates all five key elements of the Nonpoint Source Policy:

a. *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 this General Order is to minimize or eliminate waste discharges from Agricultural Operations into waters of the State 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, this General Order sets out its ultimate purpose by establishing water quality requirements in section VI. Receiving Water Limitations that 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. These receiving water limitations are effective immediately except where a Discharger (Member) is implementing a Water Quality Restoration Plan (WQRP) for specified waste parameters with an approved time schedule.

To ensure that receiving water limitations are achieved and maintained, this General Order requires that Members must (1) implement 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, Members must implement improved management practices in accordance with any applicable WQRP as described in section VIII.C, of this General Order.

b. *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.*

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),[19] 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 Members to report on what practices they have or will implement to meet those standards.

[19] California's Management Measures for Polluted Runoff can be accessed on the State Water Board website at http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_progplan_vii.pdf (as of May 31, 2016).

Under this General Order, Members are required 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, this General Order requires Members to develop and implement a Water Quality Protection Plan (WQPP) (section VII.C of this General Order) that describes and documents implemented and planned management practices to protect surface water and groundwater quality. Members must implement management practices in accordance with the WQPP. If the selected management practices in the WQPP are not meeting applicable water quality standards, the Members must implement improved management practices in accordance with a WQRP that is prepared by the Third-Party Group.

c. *Key Element 3: Where a Regional Board determines it is necessary to allow time to achieve water quality requirements, the nonpoint source control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.*

This General Order requires in section VIII.C that designated Members include a proposed time schedule in the WQRP that is as short as practicable. The schedule must include quantifiable milestones designed to measure progress toward achieving the water quality requirements. The schedule may not be longer than that which is reasonably necessary to achieve compliance with the receiving water limitations contained in section VI of this General Order. Once the San Diego Water Board approves the WQRP, the designated Member must implement management practices in accordance with the proposed time schedule. This General Order includes specific time schedules to comply with the requirements of the Rainbow Creek TMDL and the Bacteria TMDL.

d. *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.*

Pursuant to Key Element 4 this General Order requires sufficient monitoring and reporting to determine if existing management practices are leading to compliance with water quality requirements and requires implementation of improved water quality practices where they are not. Water Code section 13267 authorizes the San Diego Water Board to establish monitoring, reporting, and recordkeeping requirements. The monitoring and reporting program (MRP) is contained in Attachment A of this General Order. Certain components of the monitoring are at a scale to characterize the effect of management practice implementation on trends in water quality. Other aspects of the monitoring are regional in scale to assist Third-Party Groups and Members in the interpretation of core monitoring data by providing a more complete picture of natural variability and cumulative impacts in the receiving waters. This assessment in turn allows Members to more effectively use core monitoring 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 Agricultural Operations by comparing water quality at the monitoring sites against water quality benchmarks.

This General Order requires Third-Party Groups and Members 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, the Geotracker website, and/or the California Environmental Data Network (CEDEN).

e. *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.*

This General Order requires Third Party Groups to develop a WQRP (section VIII.C. of this General Order) to identify the source(s) of the exceedance and identify actions that designated Members must take to address the exceedance(s). Also, section IX.F of this General Order makes clear that progressive enforcement that will be taken by the San Diego Water Board for violations of this General Order.

4. California Environmental Quality Act (CEQA)

The San Diego Water Board is the lead agency for the development of this General 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 this General Order. Based on the initial study, Staff prepared a Negative Declaration (Tentative Order R9-2016-0136) because it concluded that this project would have less than significant impacts on the environment. The San Diego Water Board has reviewed the contents of the Negative Declaration and the Initial Study, written public comments, and testimony at the hearing. 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 this General Order. This General Order advances the human right expressed in Water Code section 106.3 because it (1) requires implementation of 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 wells that are or may be used for drinking water; and (3) requires reporting 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 this General 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* (Resolution 68-16 or Antidegradation Policy). Resolution 68-16 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 (e.g., 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. Resolution 68-16 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. Resolution 68-16 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 Resolution 68-16 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 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 Polity 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 Antidegradaton 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 Resolution 68-16,[20] 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.

[20] See Questions and Answers, State Water Resources Control Board, Resolution 68-16 (February 16, 1995) (http://www.waterboards.ca.gov/water_issues/programs/dept_of_defense/docs/5g.pdf (as of May 31, 2016)

iii. Maximum Benefit to People of the State

The State 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 State Antidegradation policy. As stated previously, data collected by the San Diego Water Board, dischargers, educational institutions, and others demonstrate that many water bodies in the San Diego Water Board are already impaired for various constituents associated with irrigated agricultural activities. This General 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 Resolution 68-16 Requirements to this General 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.[21] 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, sediment, and pathogens (see section I.D.1.b 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.D.1 of this Fact sheet discussing surface water impacts associated with agricultural activities).

[21] Agricultural Operation discharges were regulated under a conditional waiver from 1983 through 2014, but comprehensive data as to trends under the waiver are not available.

Similarly, as described in section I.D.2.d of this Fact Sheet, approximately 18% of the wells sampled under the State Water Board's GAMA had a maximum nitrate level above the MCL of 45 mg/L for nitrate as NO_3. It is unknown when the degradation occurred. However, available data show 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 this General 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 this General Order is consistent with the Antidegradation Policy because it does not authorize any further degradation of the waters of the State, or require the change of any water quality standard. Members who enroll in this General Order are required to protect beneficial uses, and prevent nuisance by implementing management practices. Any degradation of an existing high quality water to water that 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 that 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 Members need the flexibility to choose management practices that best achieve a management practice's performance expectations given their own unique circumstances.

There is no specific set of technologies, practices, or treatment devices that can be described as achieving BPTC universally in the San Diego Region. 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.

This General 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 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. Agricultural Operation Performance Standards

This General Order establishes water quality benchmarks for implementation of management practices that all Members must achieve. The selection of appropriate 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 not specify the manner of compliance with its requirements, the selection of the management practice must be done by the Member for the agricultural operation. Following are the performance standards that all Members must achieve:

i. Minimize waste discharge offsite in surface water.

ii. Minimize or eliminate the discharge of sediment above background levels.

iii. Minimize percolation of waste to groundwater.

iv. Minimize excess nutrient application relative to crop need.

v. Prevent pollution and nuisance conditions in waters of the State.

vi. Achieve and maintain water quality objectives and beneficial uses.

vii. Protect wellheads from surface water intrusion.

e. Additional Planning and Implementation Measures

This General 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 and WQRP processes will result in the identification of management practices that meet the performance standards and represent BPTC. The WQPP and WQRP implements 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.

In addition to the WQPP and WQRP, this General Order includes a comprehensive suite of reporting requirements that should provide the San Diego Water Board with the information it needs to determine whether the necessary actions are being taken to achieve BPTC and protect water quality, where applicable (General Order section VII.D Quarterly Self Inspection Report and section VII.E. Annual Self-Assessment Report).

f. Maximum Benefit to People of the State

This General 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 agricultural in the San Diego Region is paramount to the economic vitality of the San Diego Region. San Diego Region communities depend on agricultural operations for employment.

Agriculture is a key contributor to the economy in the San Diego Region. In San Diego County alone, Agricultural Operations produce more than 200 agricultural commodities, export crops to 51 nations around the world, and generate more than 1.8 billion dollars in annual value to the economy.

Moreover, this General Order includes conditions and performance standards that will work to prevent further degradation of surface and groundwater quality. The receiving water limitations (section VI), the WQPP and the WQRP (section VIII.C) of this General Order and the MRP's requirements to track compliance with this General 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 13241

In issuing WDRs, the Water Code requires the San Diego Water Board to take the factors listed in Water Code section 13241 into consideration, including, but not limited to "(a) Past, present, and probable future beneficial uses of water; (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto; (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area; (d) Economic considerations; (e) The need for developing housing within the region; (f) The need to develop and use recycled water."

a. This General Order protects the beneficial uses identified in the Basin Plan. Applicable past, present, and probable future beneficial uses of waters within the San Diego Region were considered as part of the Basin Planning process and are reflected in the Basin Plan itself. Because this General Order is applicable to a wide geographic area, it is appropriate to consider beneficial uses as identified in the Basin Plan and other applicable policies, rather than those identified through a site-specific evaluation that might be appropriate for WDRs applicable to a single discharger.

b. Environmental characteristics of San Diego Region's waters have been considered in the development of this General Order.

c. This General Order provides a process to review water quality conditions that could reasonably be achieved through coordinated control of all factors which affect water quality in the area as a part of the development and implementation of the WQRP.

d. Economic Considerations

i. WDR Fees

Agricultural Operations enrolled in this General Order will pay annual WDR fees to the State Water Board. Annual WDR fees are established by the State Water Board and can be found in the California Code of Regulations (CCR) title 23, section 2200.6. The fees are assessed based on the acreage of the

Agricultural Operation. The 2015-16 annual fee for Members of a Third-Party Group is $0.75 per acre. Additionally, Agricultural Operations that were not enrolled in the 2007 Waiver prior to June 30, 2008 are required to pay a one-time enrollment fee. The enrollment fee is $200 for Agricultural Operations that receive a written request to submit an application for enrollment (NOI), and $50 for all other Members.

ii. Third-Party Group Fees

Agricultural Operations that 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 Region Irrigated Lands Group (SDRILG) was established as a Third-Party Group under the 2007 Waiver. At that time, the SDRILG's fee schedule included a one-time enrollment fee and an annual fee to cover monitoring and reporting expenses. The enrollment fee was $250 per acre up to a maximum of $1,250. Annual Third-Party fees are a function of the compliance costs borne by the Third-Party Group and the number of Members within the Third-Party Group. The yearly Third-Party Group fee, based on the cost estimates presented in Table B-~~7~~8,[22] on a per acre basis, including the cost of compliance and overhead ranges between $18 and $24 per acre based on the number of acres enrolled.~~is estimated to be $10 per acre.~~

iii. Structural Management Practices

Structural management practices will likely be installed to implement irrigation management, storm water management, nutrient management, and erosion control. Many Agricultural Operations have already installed relevant management practices. During inspections of Agricultural Operations in 2013, the San Diego Water Board found that 82% of the Agricultural Operations enrolled in the 2007 Waiver, and 58% of Agricultural Operations not enrolled in the 2007 Waiver had implemented management practices. Additionally, due to the high cost of water, Agricultural Operations generally use low-flow drip or micro-sprinklers. Because many Agricultural Operations have already installed appropriate structural management practices, the San Diego Water anticipates many will have relatively minor construction costs associated with management practice implementation. Therefore, the cost of construction of new management practices will only be incurred by a portion of Agricultural Operations within the San Diego Region. Table B-6 lists the anticipated structural management practices that may be installed and the cost range for design, implementation, and annual maintenance costs (assumed to be 30% of the installation 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* (FOTG).[23]

The selection of the most appropriate and cost effective structural management practices will be made by the Agricultural Operation and will be based on site-

[22] Table B-8 presents estimated Third-Party Group costs for a 4 acre Agricultural Operation, which includes an overhead cost of $10 per acre. That cost has been translated to a per acre cost.

[23] -USDA Practice Payment Scenarios, available at https://efotg.sc.egov.usda.gov/references/public/CA/FY16_Practice_Payment_Scenarios_wBookmarks.pdf (as of October 20, 2016).

specific conditions such as existing structural management practices (for example, almost all of the avocado orchards in San Diego County currently use mini-sprinklers irrigation),[24] crop type, site location, slope, soil and geology, and distance to surface water bodies. Furthermore, it is likely that the site-specific conditions may not require the construction of structural management practices, and that the structural management practices have already been deployed, either for compliance under the 2007 Waiver or as a normal operating activity.

Table B-6. Anticipated Structural Management Practices Costs

Structural Management Practice[25]	NRCS FOTG No.	Design and Implementation Cost (per acre)	Annual Maintenance Cost
Mini-Sprinkler Irrigation System	441-2	$0 to $2,600	$0 to $780
Mulching with Natural Materials	484-1	$0 to $290	$0 to $87
Silt Fence	570-2	$0 to $770	$0 to $231
Straw Bales	570-2	$0 to $1,892	$0 to $567
Straw Wattles or Fiber Rolls	570-2	$0 to $789	$0 to $264
Filter Strip – Native Species	393-3	$0 to $345	$0 to $103
Sedimentation Basin	350-3	$0 to $12,160[26]	$0 to $3,648

iv. Monitoring and Reporting Costs

Table B-7 summarizes the estimated costs for compliance with the monitoring and reporting requirements detailed in the MRP, Attachment B.

Table B-7. Estimated Water Quality Monitoring and Reporting Costs

Task	One-Time Cost	Annual Cost Based on Acres Enrolled[27]			
		30,000	40,000	50,000	60,000
Surface Water and Groundwater Monitoring Program Plan[28]	$0.60 / $0.45 / $0.36 / $0.30	--	--	--	--
Groundwater Monitoring (per Agricultural Operation)	$100	--	--	--	--
Surface Water Monitoring (per acre)	--	$8	$6	$5	$4
Prepare and Implement a WQRP, if needed (per acre)	$0.20	$1	$1	$1	$1
Annual Reporting (per acre)	--	$1	$1	$1	$1

[24] Per e-mail from Gary Bender, Ph.D., Farm Adviser Emeritus, University of California Agriculture and Natural Resources, dated May 16, 2016.

[25] The list presented in Table 3 is based on the type of agricultural activities in the San Diego Region and observations of implemented management practices made during Agricultural Operation inspections.

[26] The cost provided in NRCS FOTG 350-3 is based on one, 1,500 cubic yard earthen embankment to construct a sedimentation basin. The cost presented in Table 3 is per embankment, and not per acre.

[27] Costs estimated to nearest whole dollar.

[28] Estimated per acre cost based on enrollment of 30,000 acres, 40,000 acres, 50,000 acres, and 60,000 acres.

Task	One-Time Cost	Annual Cost Based on Acres Enrolled[27]			
		30,000	40,000	50,000	60,000
Bioassessment (per acre)[29]	--	$4	$3	$2	$2
Total (rounded to nearest whole dollar)	$101	$14	$11	$9	$8

~~Task~~	~~One-Time Cost~~	~~Annual Cost~~
~~Surface Water and Groundwater Monitoring Program Plan[30]~~	~~$0.30~~	~~--~~
~~Groundwater Monitoring (per Agricultural Operation)~~	~~$100~~	~~--~~
~~Surface Water Monitoring (per acre)[31]~~	~~--~~	~~$4~~
~~Prepare and Implement a WQRP, if needed (per acre)~~	~~$0.20~~	~~$0.60~~
~~Annual Reporting (per acre)~~		~~$1~~
~~Bioassessment (per acre)[32]~~	~~$0.30~~	~~$2~~
~~Total (rounded to nearest whole dollar)~~	~~$101~~	~~$10~~

v. Anticipated Costs in Relationship to Revenue

The analysis includes the economic burden of the fees, Third-Party Group fees, and the costs associated with the installation and maintenance of new structural management practices.[33] These costs are summarized in Table B-8. The estimated one-time cost for a median-sized (4 acre) Agricultural Operation to comply with this General Order ~~is approximately~~ranges from $1,040 to $1,~~190~~140, and the estimated annual cost for a median-sized (4 acre) Agricultural Operation to comply with this General Order ranges ~~between~~ from $~~13~~ 99 to $5,023, depending on the number of enrolled Agricultural Operations.

The agricultural products most commonly grown in the San Diego Region can be broadly grouped into three categories: 1) nursery and cut flower products, 2) fruit and nuts, and 3) vegetables. Table B-9 summarizes the acres planted and the revenue from these crops in San Diego County according to the 2014 County of San Diego Crop Report.[34] Table B-9 also lists the average per acre

[29] Bioassessment costs will only be incurred once every five years. Costs are a prorated yearly cost.

[30] ~~Per acre cost is based on enrollment of 60,000 acres (approximately 80% of the estimated eligible acreage in the San Diego Region). The actual per acre cost will be a function of the Third-Party Groups, and the number of acres enrolled in each Third- Party Group.~~

[31] ~~Per acre cost is based on enrollment of 60,000 acres (approximately 80% of the estimated eligible acreage in the San Diego Region). The actual per acre cost will be a function of the Third-Party Groups, and the number of acres enrolled in each Third- Party Group.~~

[32] ~~Bioassessment monitoring will be conducted every five years. The anticipated cost is the annualized cost per acre to conduct the bioassessment monitoring.~~

[33] The estimated annual maintenance costs for items that would likely be part of the normal operational activities and not specifically required by this General Orders, such as maintenance of a mini-sprinkler irrigation system is not included. Also, the maintenance for a sedimentation basin is not included as only a limited number of Agricultural Operations would likely require the construction of a sedimentation basin to comply with this General Orders.

[34] County of San Diego 2014 Crop Statistics & Annual Report, available at http://www.sandiegocounty.gov/content/dam/sdc/awm/docs/Crop%20Report-Final.pdf (as of October 20, 2016).

revenue and the estimated average revenue for a median-sized (4 acre) Agricultural Operation.

Table B-8. Summary of Estimated Costs for a 4 Acre Agricultural Operation

Cost	One-Time Cost	Annual Cost			
		30,000	40,000	50,000	60,000
Annual Fee	--	$3	$3	$3	$3
Third-Party Group Fees[35]	$1,040	$96	$84	$76	$72
Mulching with Natural Materials	--	$0 to $348	$0 to $348	$0 to $348	$0 to $348
Silt Fence	--	$0 to $924	$0 to $924	$0 to $924	$0 to $924
Straw Bales	--	$0 to $2,268	$0 to $2,268	$0 to $2,268	$0 to $2,268
Straw Wattles or Fiber Rolls	--	$0 to $1,056	$0 to $1,056	$0 to $1,056	$0 to $1,056
Filter Strip	--	$0 to $414	$0 to $414	$0 to $414	$0 to $414
Groundwater Monitoring	$0 to $100	--	--	--	--
Totals	$1,040 to $1,140	$99 to $5,023	$87 to $5,023	$79 to $5,023	$75 to $5,023

~~Cost~~	~~Member (4 Acres)~~	
	~~One-Time Cost~~	~~Annual Cost~~
~~Enrollment Fee~~	~~$50~~	~~--~~
~~Annual Fee~~	~~--~~	~~$3~~
~~Third-Party Group Fees~~	~~$1,040~~	~~$10~~
~~Mulching with Natural Materials~~	~~--~~	~~$0 to $348~~
~~Silt Fence~~	~~--~~	~~$0 to $924~~
~~Straw Bales~~	~~--~~	~~$0 to $2,268~~
~~Straw Wattles or Fiber Rolls~~	~~--~~	~~$0 to $1,056~~
~~Filter Strip~~	~~--~~	~~$0 to $414~~
~~Groundwater Monitoring, if needed~~	~~$100~~	~~[32]~~
~~**Totals**~~	~~$1,190~~	~~$13 to $5,023~~

Table B-9. Summary of Estimated Revenue

Crop	Harvested Acres	Annual Revenue	Annual Revenue/Acre	Annual Revenue for a 4 Acre Agricultural Operation
Nursery & Cut Flowers	12,702	$1,182,613,913	$93,105	$372,418
Fruits & Nuts	34,811	$385,988,806	$11,088	$44,353
Vegetables	4,631	$6,644,917	$1,435	$5,740

[35] Annual Third-Party Group Fees as assumed to be the total of the annual per acre monitoring cost for each enrollment scenario plus an annual operating cost of $10 per acre.

vi. Opportunities for Cost Reduction

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

(a) Selection of Cost-Effective Management Practices

This analysis includes an array of possible management practices. The actual cost will be dependent on the selection made by the Agricultural Operation 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 management practices.

(b) Funding Opportunities

The San Diego Water Board and 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 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 this General 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) Federal Farm Bill

Title II of the 2014 Farm Bill (the Agricultural Act of 2014), in effect through 2018, authorizes funding for conservation programs such as the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP). Both of these programs provide financial and technical assistance for activities that improve water quality on agricultural lands.

(2) 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.

(3) 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.

II. APPLICATION FOR THIRD-PARTY GROUP CERTIFICATION

This General Order includes provisions in section II of this General Order allowing a coalition of dischargers to organize around a third–party representative entity (known as a Third–Party Group) that assists the Members in attaining and maintaining compliance with certain aspects of this General Order. A Third-Party Group covered under this General Order is responsible for managing fee collection and payment, managing communications between its Members and the San Diego Water Board, and for fulfilling monitoring and reporting requirements on behalf of its Members, including but not limited to conducting surface water, conducting regional monitoring, preparing WQRPs, and overseeing implementation of WQRPs by designated Members.

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 (e.g. cities or counties), or other non-discharger groups. To ensure the Third- Party Group meets Nonpoint Source Policy requirements, the Third-Party Group must submit a letter of application demonstrating to the satisfaction of the San Diego Water Board that the Third-Party Group has the ability to carry out designated responsibilities under this General Order.

If a Third-Party Group wishes to dissolve, it must notify the San Diego Water Board and its Members at least 30 days prior to the dissolution. The notification provides Members time to apply for membership in another Third-Party Group or for coverage under other applicable separate WDRs (e.g. General Order No. R9-2016-0005[36] or individual WDRs).

A Third-Party Group may also be dissolved by the San Diego Water Board for cause including, but not limited to violating any terms or conditions of this General Order or obtaining enrollment under this General Order by misrepresentation or failure to disclose all relevant facts.

Section 2200 (Annual Fee Schedule) of title 23 of the CCR requires that all Members of Third-Party Groups pay an annual fee to the State Water Board. This General Order requires that Third-Party Groups must collect these fees and submit them to the State Water Board on behalf of its Members.

III. MEMBER APPLICATION FOR COVERAGE UNDER THIS GENERAL ORDER

New and existing Agricultural Operations without coverage under Order No. 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* or individual WDRs are required to enroll under this General Order. Either the owner or operator of an Agricultural Operation may enroll under this General Order by submitting a complete NOI (Attachment G) to the San Diego Water Board. Regulatory coverage under this General Order is

[36] General Order No. R9-2016-0005 issued by the San Diego Water Board on ~~September 14, 2016~~November 9, 2016, establishes WDRs for Agricultural Operations that are not Members of a Third Party Group.

not effective until the San Diego Water Board approves the NOI as described in section III.D of this General Order.

Section 2200 (Annual Fee Schedule) of title 23 of the CCR requires that all discharges subject to WDRs pay a one-time application fee to the State Water Board as well as annual fees. While the Third-Party Group handles collection and payment of annual fees, the Member is responsible for submitting the application fee to the State Water Board. The application fee is $200 for Members who received a written request to submit an application (e.g. NOI), and $50 for all other Members. Members who belonged to a Third Party Group prior to June 30, 2008 do not have to pay this application fee.

IV. RATIONALE FOR PROHIBITIONS

The Prohibitions in this General 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 including the Ocean Plan. This General Order does not authorize any discharges not covered under this General Order or other WDRs.

V. RATIONALE FOR DISCHARGE SPECIFICATIONS

A. General Discharge Specifications

Discharge specifications in this General Order are based on the Water Code, Basin Plan, and applicable State Water Board plans and policies. This General Order does not authorize any discharges not covered under this General Order or that are covered under other WDRs.

B. Waste Discharge Control Requirements

This General Order requires ~~Dischargers (~~Members~~)~~ to implement management practices to prevent adverse impacts to water quality from Agricultural Operations, consistent with the Nonpoint Source Policy and the Agricultural Expert Panel Report. Members must (1) implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and (2) when effectiveness evaluation or 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, Members must implement improved management practices.

VI. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in section VI. of this General Order are based on existing water quality standards requirements found in the following water quality control plans and policies and federal regulations:

A. The Basin Plan, including beneficial uses, water quality objective, and implementation plans.

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

~~**C.** The *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries* (Thermal Plan).~~

~~**D.**~~**C.** The Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Bays and Estuaries Policy).

~~**E.**~~**D.** The Water *Quality Control Plan for Enclosed Bays and Estuaries of California – Part 1* Sediment Quality including beneficial uses, water quality objective, and implementation plans.

~~F.~~**E.** The Policy *for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP).

~~G.~~**F.** The National *Toxics Rule* (NTR).[37]

~~H.~~**G.** The California *Toxics Rule* (CTR).[38,39]

The receiving water limitations of this General 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. The Members must show immediate compliance with the receiving water limitations except where the Member is implementing a WQRP for specified waste parameters in accordance with an approved time schedule.

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…" This General Order protects the beneficial uses of receiving waters in part through the requirements of section VI of this General Order to comply with applicable water quality standards contained in the water quality control plans and policies and federal regulations listed in section VI. A though H of the Fact Sheet (Attachment B to this General Order) above.

To facilitate compliance, the San Diego Water Board has identified Water Quality Benchmarks in Table A.4 of the MRP in Attachment A of this General Order for specific waste constituents required to be monitored. The Water Quality Benchmarks provide a measure and reliable indicator for determining compliance with applicable water quality standards. Table B-10 below lists specific key narrative and numeric water quality objectives and federal water quality criterion applicable to agricultural discharges.

Table B-10 Rationale for Water Quality Benchmarks

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	**WATERBODY BENEFICIAL USES**
Hydrogen Ion Concentration (pH)	
Narrative Objectives:	
Changes in normal ambient pH levels shall not exceed 0.2 pH units. (Basin Plan)	Surface Water MAR, EST, SAL
Changes in normal ambient pH levels shall not exceed 0.5 pH units. (Basin Plan)	Surface Water COLD, WARM
The pH shall not be changed at any time more than 0.2 units which occur naturally (Ocean Plan)	Ocean Waters
Numeric Objectives:	
The pH shall not be depressed below 7.0 nor raised above 9.0. (Basin Plan)	Bays and Estuaries
The pH shall not be depressed below 6.5 nor raised above 8.5. (Basin Plan)	All Surface Waters
Temperature	
Narrative Objectives:	
The natural receiving water temperature of intrastate waters shall not be altered	Surface Waters

[37] 40 CFR section 136.

[38] 65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR.

[39] If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. (Basin Plan)	
At no time or place shall the temperature of be increased more than 5°F above the natural receiving water temperature. (Basin Plan)	Surface Waters COLD
Dissolved Oxygen	
Numeric Objectives:	
The dissolved oxygen concentration shall not at any time be less than 5.0 mg/L. The annual mean dissolved oxygen concentration shall not be less than 7 mg/L more than 10% of the time. (Basin Plan)	Inland Surface Waters and Bays and Estuaries MAR, WARM
Narrative Objectives:	
The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials (Ocean Plan)	Ocean Waters
Turbidity	
Narrative Objectives:	
Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)	Surface Waters
Within San Diego Bay, the transparency of bay waters, insofar as it may be influenced by any controllable factor, either directly or through induced conditions, shall not be less than 8 feet in more than 20 percent of the readings in any zone, as measured by a standard Secchi disk. Wherever the water is less than 10 feet deep, the Secchi disk reading shall not be less than 80 percent of the depth in more than 20 percent of the readings in any zone. (Basin Pan)	San Diego Bay
The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of a standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the following limits: (Basin Plan) Natural Turbidity | Maximum Increase 0 – 50 NTU | 20% over natural turbidity 50 – 100 NTU | 10 NTU Greater than 100 NTUs | 10% over natural turbidity	Lagoons and Estuaries
Natural light shall not be significantly reduced at any point. (Ocean Plan)	Ocean Waters
Numeric Objective:	
Inland surface waters shall not contain turbidity in concentrations in excess of the numerical objectives described in Table 3-2 of the Basin Plan. These values are presented in Table B-11 below for reference purposes. (Basin Plan)	Inland Surface Waters
Total Dissolved Solids	
Numeric Objective:	

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
Inland surface waters shall not contain total dissolved solids in concentrations in excess of the numerical objectives described in Table 3-2 of the Basin Plan. These values are presented in Table B-11 below for reference purposes. (Basin Plan)	Inland Surface Waters
Numeric Objective: Groundwaters shall not contain total dissolved solids in concentrations in excess of the numerical objectives described in Table 3-3 of the Basin Plan. These values are presented in Table B-12 below for reference purposes. (Basin Plan)	Groundwaters
Total Suspended Solids	
Narrative Objective: Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses. (Basin Plan)	Surface Waters
Narrative Objective: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. (Basin Plan)	Surface Waters
Narrative Objective: Floating particulates and grease and oil shall not be visible. (Ocean Plan)	Ocean Waters
Narrative Objective: The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded loating particulates and grease and oil shall not be visible. (Ocean Plan)	Ocean Waters
Ammonia	
Numeric Objective: Not greater than 0.025 mg/L of un-ionized ammonia (NH_3) as Nitrogen. (Basin Plan)	Inland Surface Waters and Bays and Estuaries
Color	
Narrative Objective: The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface. (Ocean Plan)	Ocean Waters
Narrative Objective Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. (Basin Plan)	Inland Surface Waters, Bays and Estuaries and Groundwaters
Nitrate as NO_3	
Numeric Objective: Not greater than 45 mg/L (Basin Plan)	Inland Surface Waters MUN

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
Numeric Objective: Groundwaters shall not contain total nitrate in concentrations in excess of the numerical objectives described in Table 3-3 of the Basin Plan. These values are presented in Table B-12 for reference purposes. (Basin Plan)	Groundwaters
Nitrate + Nitrite (as Nitrogen)	
Numeric Objective: Not greater than 10 mg/L (Basin Plan)	Inland Surface Waters MUN
Biostimulatory Substances – Total Nitrogen and Total Phosphorus	
Narrative Objective: Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorus concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of total nitrogen:total phosphorus = 10:1, on a weight to weight basis shall be used. (Basin Plan)	Inland Surface Waters and Coastal Lagoons
Numeric Objective: Total Nitrogen: 1 mg/L Total Phosphorus: 0.1 mg/L (Basin Plan)	Inland Surface Waters and Coastal Lagoons
Rainbow Creek TMDL (Hydrologic Basin Numbers 2.22 and 2.23): The Basin Plan also establishes Numeric Targets for total nitrogen and total phosphorus for the Rainbow Creek watershed (Hydrologic Unit Basin Numbers 2.22 and 2.23). The Rainbow Creek TMDL was adopted to address excessive nitrogen and phosphorus concentrations in the Rainbow Creek Watershed. The Rainbow Creek TMDL established Numeric Targets for total nitrogen and total phosphorus, which are set equal to the numeric goals of the biostimulatory substances water quality objective as defined in the Basin Plan and shown below: Total Nitrogen: 1.0 mg/L Total Phosphorus: 0.1 mg/L (Basin Plan)	All Inland Surface Waters within the Rainbow Creek Watershed
Narrative Objective: Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota. (Ocean Plan)	Ocean Waters
Sulfate	

WATER QUALITY BENCHMARK (Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)	WATERBODY BENEFICIAL USES
Narrative Objective Inland surface waters shall not contain sulfate in concentrations in excess of the numerical objectives described in Table 3-2 of the Basin Plan. These values are presented in Table B-11 below for reference purposes. (Basin Plan)	Inland Surface Waters
Dissolved Sulfide	
Narrative Objective:	
The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above the present under natural conditions. (Ocean Plan)	Ocean Waters
E. Coli	
Numerical Objectives:	
Steady State - All Areas: 126 colonies per 100 mL (Basin Plan)	Surface Water REC-1 Freshwater
Maximum – Designated Beaches: 235 colonies per 100 mL (Basin Plan)	
Maximum – Moderately or Lightly Used Areas: 406 colonies per 100 mL (Basin Plan)	
Maximum – Infrequently Used Areas: 576 colonies per 100 mL (Basin Plan)	
In San Diego Bay where bay waters are used for whole fish handling, the density of E. coli shall not exceed 7 organisms per mL in more than 20 percent of any 20 daily consecutive samples of bay water. (Basin Plan)	San Diego Bay
Enterococci	
Numerical Objectives:	
Steady State - All Areas: 33 colonies per 100 mL (Basin Plan)	Surface Water REC-1 Freshwater
Maximum – Designated Beaches: 61 colonies per 100 mL (Basin Plan)	
Maximum – Moderately or Lightly Used Areas: 108 colonies per 100 mL (Basin Plan)	
Maximum – Infrequently Used Areas: 152 colonies per 100 mL (Basin Plan)	
Steady State - All Areas: 35 colonies per 100 mL (Basin Plan)	Surface Water REC-1 Saltwater
Maximum – Designated Beaches: 104 colonies per 100 mL (Basin Plan)	
Maximum – Moderately or Lightly Used Areas: 276 colonies per 100 mL (Basin Plan)	
Maximum – Infrequently Used Areas: 500 colonies per 100 mL (Basin Plan)	
Bacteria TMDL (Hydrologic Basin Numbers 901.11, 901.12, 901.13, 901.14, 901.27, 901.27, 901.30, 903.00, 904.50, 905.00, 906.10, 906.30, 906.50, 907.11, 907.12, 908.22) The Basin Plan also establishes Numeric Targets for enterococci for waterbodies under the Bacteria TMDL as follows: For moderately or lightly used creeks and beaches: Wet Weather: 104 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 35 MPN/100 mL, 30-day geometric mean For designated creeks and beaches: Wet Weather: 61 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 33 MPN/100 mL, 30-day geometric mean (Basin Plan)	Surface Water REC-1
Fecal Coliform	
Numeric Objectives:	

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 organisms per 100 mL. (Basin Plan)	Surface Water REC-1
In addition, the fecal coliform concentration shall not exceed 400 organisms per 100 mL for more than 10 percent of the total samples during any 30-day period. (Basin Plan)	
The average fecal coliform concentrations for any 30-day period shall not exceed 2,000 organisms per 100 mL nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 organisms per 100 mL. (Basin Plan)	Surface Water REC-2
The median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 organisms per 100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 organisms per 100 mL for a five-tube decimal dilution test or 330 organisms per 100 mL when a three-tube decimal dilution test is used. (Basin Plan)	Surface Water SHELL, COMM
Bacteria TMDL (Hydrologic Basin Numbers 901.11, 901.12, 901.13, 901.14, 901.27, 901.27, 901.30, 903.00, 904.50, 905.00, 906.10, 906.30, 906.50, 907.11, 907.12, 908.22) The Basin Plan also establishes Numeric Targets for Fecal Coliform for waterbodies under the Bacteria TMDL as follows: Wet Weather: 400 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 200 MPN/100 mL, 30-day geometric mean (Basin Plan)	Surface Water REC-1
Total Coliform	
Numeric Objectives:	
The most probable number of total coliform organisms in the upper 60 feet of the water column shall be less than 1,000 organisms per 100 mL (10 organisms per mL); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 organisms per 100 mL (10 per mL); and provided further that no single sample as described below is exceeded. (Basin Plan) The most probable number of total coliform organisms in the upper 60 feet of the water column in no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 organisms per 100 mL (100 organisms per mL). (Basin Plan)	Bays and Estuaries REC-1
The average fecal coliform concentrations for any 30-day period shall not exceed 2,000 organisms per 100 mL nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 organisms per 100 mL. (Basin Plan)	Surface Water REC-2
The median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 organisms per 100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 organisms per 100 mL for a five-tube decimal dilution test or 330 organisms per	Surface Water SHELL, COMM

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
100 mL when a three-tube decimal dilution test is used. (Basin Plan)	
Bacteria TMDL (Hydrologic Basin Numbers 901.11, 901.12, 901.13, 901.14, 901.27, 901.27, 901.30, 903.00, 904.50, 905.00, 906.10, 906.30, 906.50, 907.11, 907.12, 908.22) The Basin Plan also establishes Numeric Targets for Total Coliform for waterbodies under the Bacteria TMDL as follows: Wet Weather: 10,000 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 1,000 MPN/per 100 mL, 30-day geometric mean (Basin Plan)	Surface Water REC-1
Bacteria Water Quality Standards for Ocean Waters	
Bacterial Characteristics For discharges of waste to the Pacific Ocean, within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the San Diego Water Board (waters designated as REC-1), the following bacterial objectives shall be maintained throughout the water column [Ocean Plan]: a. 30-day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each site: i. Total coliform density shall not exceed 1,000 per 100 ml; ii. Fecal coliform density shall not exceed 200 per 100 ml; and iii. Enterococcus density shall not exceed 35 per 100 ml. b. Single Sample Maximum i. Total coliform density shall not exceed 10,000 per 100 ml; ii. Fecal coliform density shall not exceed 400 per 100 ml; iii. Enterococcus density shall not exceed 104 per 100 ml; and iv. Total coliform density shall not exceed 1,000 per 100 ml when the fecal coliform/total coliform ratio exceeds 0.1.	Ocean Waters
Physical Characteristics	
Narrative Objective: Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses. (Basin Plan) Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses. (Basin Plan) Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. (Basin Plan)	Inland Surface Waters, Bays and Estuaries and Groundwater
Organic Materials	
Narrative Objective: The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life. (Ocean Plan)	Ocean Waters
Biological Characteristics	

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
Narrative Objective: Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (Ocean Plan) The natural taste, odor, color of fish, shellfish, or other marine resources used for human consumption shall not be altered. (Ocean Plan) The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health. (Ocean Plan)	Ocean Waters
Chemical Characteristics	
Narrative Objective: The concentration of substances set forth in chapter II, table 1 of the Ocean Plan in marine sediments shall not be increased to levels which would degrade indigenous biota. (Ocean Plan) Numerical water quality objectives contained in chapter II, table 1 of the Ocean Plan shall not be exceeded. (Ocean Plan)	Ocean Waters
Pesticides	
Narrative Objective: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)	Inland Surface Waters, Bays and Estuaries and Groundwater
~~Chronic~~ Toxicity Characteristics	
Narrative Objective: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (Basin Plan)	Inland Surface Waters, Bays and Estuaries and Groundwater
Indicators of Numeric Objective: Chronic toxicity unit (TUc): 1.0 At 1.0 TUc, there is no observable detrimental effect when the indicator organism is exposed to 100 percent effluent; therefore, 1.0 TUc is a direct translation of the narrative objective into a number. (Basin Plan)	
Narrative Objective: Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities. (Bays and Estuaries Plan)	Bays and Estuaries
Narrative Objective: Pollutants shall not be present in sediments at levels that will bioaccumulate in	Bays and Estuaries

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
aquatic life to levels that are harmful to human. (Bays and Estuaries Plan)	
Numeric Federal Water Criterion National Toxics Rule (40 CFR section 136) and California Toxics Rule (65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR). The NTR and CTR establish federal water quality criteria that implement the Basin Plan narrative toxicity water quality objective. The Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) provides in section 5.1 that it is the intent of the State Water Board, in adopting this Policy, that the implementation of the priority pollutant criteria/objectives and other requirements of this Policy for nonpoint source discharges shall be consistent with the State's " Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program, 2004.	Inland Surface Waters and Bays and Estuaries

Table B-11. Numeric Water Quality Objectives

Inland Surface Waters	Hydrologic Unit Basin Number	Total Dissolved Solids (mg/L)	Sulfate (mg/L)	Turbidity (NTU)
SAN JUAN HYDROLOGIC UNIT (901.00)				
Laguna HA	1.10	1,000	500	20
Mission Viejo HA	1.20	500	250	20
San Clemente HA	1.30	500	250	20
San Mateo Canyon HA	1.40	500	250	20
San Onofre HA	1.50	500	250	20
SANTA MARGARITA HYDROLOGIC UNIT (902.00)				
Ysidora HA	2.10	750	300	20
Deluz HA	2.20	500	250	20
Deluz Creek HSA[4]	2.21	750	250	20
Gavilan HSA[4]	2.22	750	250	20
Murrieta HA	2.30	750	300	20
Auld HA	2.40	500	250	20
Pechanga HA	2.50	500	250	20
Wolf HSA[4]	2.52	750	250	20
Wilson HA	2.60	500	250	20
Cave Rocks HA	2.70	750	300	20
Aguanga HA	2.80	750	300	20
Oakgrove HA	2.90	750	300	20
SAN LUIS REY HYDROLOGIC UNIT (903.00)				
Lower San Luis HA	3.10	500	250	20
Monserat HA	3.20	500	250	20
Warner Valley HA	3.30	500	250	20
CARLSBAD HYDROLOGIC UNIT (904.00)				
Loma Alta HA	4.10	-	-	20
Buena Vista Creek HA	4.20	500	250	20
Agua Hedionda HA	4.30	500	250	20
Encinas HA	4.40	-	-	20

Inland Surface Waters	Hydrologic Unit Basin Number	Total Dissolved Solids (mg/L)	Sulfate (mg/L)	Turbidity (NTU)
SAN JUAN HYDROLOGIC UNIT (901.00)				
San Marcos HA	4.50	500	250	20
Escondido Creek HA	4.60	500	250	20
SAN DIEGUITO HYDROLOGIC UNIT (905.00)				
Solana Beach HA	5.10	500	250	20
Hodges HA	5.20	500	250	20
San Pasqual HA	5.30	500	250	20
Santa Maria Valley HA	5.40	500	250	20
Santa Ysabel HA	5.50	500	250	20
PENASQUITOS HYDROLOGIC UNIT (906.00)				
Miramar Reservoir HA	6.10	500	250	20
Poway HA	6.20	500	250	20
Scripps HA	6.30	-	-	20
Miramar HA	6.40	500	250	20
Tecolote HA	6.50	-	-	20
SAN DIEGO HYDROLOGIC UNIT (907.00)				
Lower San Diego HA	7.10	1,000	500	20
Mission San Diego HSA	7.11	1,500	500	20
Santee HSA[5]	7.12	1,000	500	20
Santee HSA[6]	7.12	1,500	500	20
San Vicente HA	7.20	300	65	20
El Capitan HA	7.30	300	65	20
Boulder Creek HA	7.40	300	65	20
PUEBLO SAN DIEGO HYDROLOGIC UNIT (908.00)				
Point Loma HA	8.10	-	-	20
San Diego Mesa HA	8.20	-	-	20
National City HA	8.30	-	-	20
SWEETWATER HYDROLOGIC UNIT (909.00)				
Lower Sweetwater HA	9.10	1,500	500	20
Middle Sweetwater HA	9.20	500	250	20
Upper Sweetwater HA	9.30	500	250	20
OTAY HYDROLOGIC UNIT (910.00)				
Coronado HA	10.10	-	-	-
Otay Valley HA	10.20	1,000	500	20
Dulzura HA	10.30	500	250	20
TIJUANA HYDROLOGIC UNIT (911.00)				
Tijuana Valley HA	11.10	-	-	-
San Ysidro HSA	11.11	2,100	-	20
Potrero HA	11.20	500	250	20
Barrett Lake HA	11.30	500	250	20
Monument HA	11.40	500	250	20
Morena HA	11.50	500	250	20
Cottonwood HA	11.60	500	250	20
Cameron HA	11.70	500	250	20
Campo HA	11.80	500	250	20

Endnotes for Table B-11

1. Modified from Table 3.2 of the Basin Plan
2. HA = Hydrologic Area

3. HSA= Hydrologic Subarea
4. These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
5. Sycamore Canyon Subarea, a portion of the Santee Hydrologic Subarea, includes the watersheds of the following north-south trending canyons: Oak Creek, Spring Canyon, Little Sycamore Canyon, Quail Canyon, and Sycamore Canyon. The Sycamore Canyon subarea extends eastward from the Mission San Diego HSA to the confluence of the San Diego River and Forester Creek, immediately south of the Santee Lakes.
6. These objectives apply to the Lower Sycamore Canyon portion of the Santee Hydrologic Subarea described as all of the Sycamore Canyon watershed except that part which drains north of the boundary between sections 28 and 33, Township 14 South, Range 1 West.

Table B-12. Groundwater Numeric Water Quality Objectives

Groundwater	Hydrologic Unit Basin Number	TDS (mg/L)	Nitrate as NO_3 (mg/L)
San Juan Hydrologic Unit (901.00)			
San Joaquin Hills HSA	1.11	1,200	45
Laguna Beach HSA	1.12	1,200	45
Aliso HSA	1.13	1,200	45
Dana Point HSA	1.14	1,200	45
Oso HSA	1.21	1,200	45
Upper Trabuco HSA	1.22	500	45
Middle Trabuco HSA	1.23	750	45
Gobernadora HSA	1.24	1,200	45
Upper San Juan HSA	1.25	500	45
Middle San Juan HSA	1.26	750	45
Lower San Juan HSA	1.27	1,200	45
Ortega HSA	1.28	1,100	45
Prima Deshecha HSA	1.31	1,200	45
Segunda Deshecha HSA	1.32	1,200	45
San Mateo Canyon HA[1]	1.40	500[9]	45[9]
San Onofre HA[1]	1.50	500[9]	45[9]
SANTA MARGARITA HYDROLOGIC UNIT (902.00)			
Ysidora HA[1]	2.10	750[2]	45[2]
Deluz HA	2.20	500	45
Deluz Creek HSA[3]	2.21	750	45
Gavilan HSA[3]	2.22	750	45
Murrieta HA	2.30	750[2]	45[2]
Domenigoni HSA	2.35	2,000	45
Auld HA	2.40	500	45
Pechanga HA	2.50	500	45
Pauba HAS[4]	2.51	750	45
Wolf HAS[5]	2.52	750	45
Wilson HA	2.60	500	45
Cave Rocks HA	2.70	500	45
Aguanga HA	2.80	500	45
Oakgrove HA	2.90	500	45
SAN LUIS REY HYDROLOGIC UNIT (903.00)			
Lower San Luis HA	3.10	800	45

Groundwater	Hydrologic Unit Basin Number	TDS (mg/L)	Nitrate as NO_3 (mg/L)
Mission HSA[1]	3.11	1,500[2,7]	45[2,7]
Bonsall HSA	3.12	1,500[2,7]	45[2,7]
Moosa HSA	3.13	1,200[6]	45
Valley Center HSA	3.14	1,000[6]	45
Pala HSA	3.22	900[2]	45[2,7]
Pauma HSA	3.23	800[2]	45[2,7]
La Jolla Amago HSA	3.23	500	45
Warner Valley HA	3.30	500	5
CARLSBAD HYDROLOGIC UNIT (904.00)			
El Salto HSA[1]	4.21	3,500	45[9]
Vista HSA[1]	4.22	1,000[9]	45
Agua Hedionda HA[1]	4.30	1,200	45
Los Monos HSA[1,]	4.31	3,500	45
Encinas HA	4.40	3,500[9]	45[9]
San Marcos HA[1,10,11]	4.50	1,000	45
Batiquitos HSA[1,10,11]	4.51	3,500	45
Escondido Creek HA[1]	4.60	750	45
San Elijo HSA[1]	4.61	2,800	45
Escondido HSA	4.62	1,000	45
SAN DIEGUITO HYDROLOGIC UNIT (905.00)			
Solana Beach HA[1]	5.10	1,500[9]	45[9]
Hodges HA	5.20	1,000	45[9]
San Pasqual HA	5.30	1,000[9]	45[9]
Santa Maria Valley HA	5.40	1,000	45
Santa Ysabel HA	5.50	500	45
PENASQUITOS HYDROLOGIC UNIT (906.00)			
Miramar Reservoir HA[1,12]	6.10	1,200	45
Poway HA	6.20	750[13]	45
Miramar HA[14]	6.40	750	45
SAN DIEGO HYDROLOGIC UNIT (907.00)			
Mission San Diego HSA[1]	7.11	3,000[9]	45[9]
Santee HSA	7.12	1,000[9]	45[9]
Santee HSA(alluvial aquifer for lower Sycamore Canyon)	7.12	2,000	45[9]
El Cajon HSA	7.13	1,200[9]	45[9]
Coches HSA	7.14	600[9]	45[9]
El Monte HSA	7.15	600[9]	45[9]
San Vicente HA	7.20	600	45
El Capitan HA	7.30	1,000	45
Conejos Creek HSA	7.31	350	45
Boulder Creek HA	7.40	350	45
PUEBLO SAN DIEGO HYDROLOGIC UNIT (908.00)			
National City HA	8.30	750	45
SWEETWATER HYDROLOGIC UNIT (909.00)			
Telegraph HSA	9.11	3,000[9]	45[9]
La Nacion HSA	9.12	1,500	45[9]
Middle Sweetwater HA	9.20	1,000	45
Upper Sweetwater HA	9.30	500	45
OTAY HYDROLOGIC UNIT (910.00)			

Groundwater	Hydrologic Unit Basin Number	TDS (mg/L)	Nitrate as NO_3 (mg/L)
Otay Valley HA	10.20	1,500	45[b]
Dulzura HA	10.30	1,000	45
TIJUANA HYDROLOGIC UNIT (911.00)			
Tijuana Valley HA[16]	11.10	2,500[9]	--
Potrero HA	11.20	500	45
Barrett Lake HA	11.30	500	45
Monument HA	11.40	500	45
Morena HA	11.50	500	45
Cottonwood HA	11.60	500	45
Cameron HA	11.70	500	45
Campo HA	11.80	500	45

Notes:
Modified from Table 3.3 of the Basin Plan
HA = Hydrologic Area
HSA= Hydrologic Subarea

Endnotes for Table B-12

1. The water quality objectives do not apply westerly of the easterly boundary of Interstate Highway 5. The objectives for the remainder of the Hydrologic Area (Subarea) are as shown.
2. The recommended plan would allow for measurable degradation of ground water in this basin to permit continued agricultural land use. Point sources, however, would be controlled to achieve effluent quality corresponding to the tabulated numerical values. In future years demineralization may be used to treat ground water to the desired quality prior to use.
3. These objectives apply to the alluvial ground water beneath the Santa Margarita River from the confluence of Murrieta and Temecula Creeks through the Gavilan and DeLuz HSAs to a depth of 100 feet and a lateral distance equal to the area of the floodplain covered by a10 year flood event. These objectives do not apply to ground water in any of the basins beneath DeLuz, Sandia, and Rainbow Creeks and other unnamed creeks, which are tributaries of the Santa Margarita River.
4. These objectives apply to ground waters within 250 feet of the surface for the most downstream 4,200 acres of the Pauba HSA (2.51) which drain directly to the most downstream 2.7 mile segment of Temecula Creek. Excluded from this area are all lands upgradient from a point 0.5 miles east of the intersection of Butterfield Stage Road and Highway 79.
5. These objectives apply to ground waters within 250 feet of the surface for the most downstream 2,800 acres of the Wolf HSA (2.52) including those portions of the HSA which drain directly to the most downstream 1.5 mile segment of Pechanga Creek. Excluded from this area are all lands of HSA 2.52 which are upgradient of the intersection of Pala Road and Via Eduardo.
6. The total dissolved solids (TDS) objective for the alluvial aquifer in the Moosa Hydrologic Subarea (903.13) is 1,200 mg/l. The TDS objective for the alluvial aquifer in the Valley Center Hydrologic Subarea (903.14) is 1,100 mg/l.
7. A portion of the Upper Mission Basin is being considered as an underground potable water storage reservoir for treated imported water. The area is located north of Highway 76 and the boundary of hydrologic subareas 3.11 and 3.12. If this program is adopted, local objectives approaching the quality of the imported water would be set and rigorously pursued.
8. The water quality objectives apply to the portion of Subarea 4.31 bounded on the west by the easterly boundary of the Interstate 5 right-of way and on the east by the easterly boundary of El Camino Real.
9. Detailed salt balance studies are recommended for this area to determine limiting mineral concentration levels for discharge. On the basis on existing data, the tabulated objectives would probably be maintained in most areas. Upon completion of the salt balance studies, significant

water quality objective revisions may be necessary. In the interim period of time, projects of ground water recharge with water quality inferior to the tabulated numerical values may be permitted following individual review and approval by the Regional Board if such projects do not degrade existing ground water quality to the aquifers affected by the recharge.

10. The water quality objectives do not apply to hydrologic subareas 4.51 and 4.52 between Highway 78 and El Camino Real and to all lands which drain to Moonlight Creek, Cottonwood Creek and Encinitas Creek. The objectives for the remainder of the Hydrologic Area are as shown.
11. The water quality objectives apply to the portion of Subarea 4.51 bounded on the south by the north shore of Batiquitos Lagoon, on the west by the easterly boundary of the Interstate 5 right-of-way and on the east by the easterly boundary of El Camino Real.
12. The water quality objectives do not apply to all lands which drain to Los Penasquitos Canyon from 1.5 miles west of Interstate Highway 15. The objectives for the remainder of the Hydrologic Area are as shown.

VII. RATIONALE FOR REQUIREMENTS – MEMBERS

A. General

This General Orders includes requirements and conditions in accordance with the Water Code, the Basin Plan, the Nonpoint Source Policy, and other applicable federal, State, and regional law and regulations.

B. Education

This General Order requires Members to attend water quality training annually, to ensure that the Members are familiar with the most current information regarding management practices, water quality monitoring, and reporting. Members can also maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems.

C. Water Quality Protection Plan (WQPP)

This General Order requires Members to prepare and periodically update a WQPP to document the type and location of management practices being implemented or planned to minimize or prevent the discharge of pollutants to waters of the State either directly or indirectly through irrigation water runoff and infiltration, non-storm water runoff, and storm water runoff from agricultural operations. A copy of the WQPP is required to be submitted with the NOI.

D. Quarterly Self-Inspection Report

This General Order requires Members to perform and record quarterly self-inspections to assess the operation and maintenance of installed management practices.

E. Annual Self-Assessment Report

This General Order requires Members to submit Annual Self-Assessment Reports, to the Third-Party Group including copies of the Quarterly Self-Inspection Reports and evidence that the Member completed the annual water quality training.

VIII. RATIONALE FOR REQUIREMENTS – THIRD-PARTY GROUPS

A. General

A Third-Party Group covered under this General Order is responsible for managing fee collection and payment, managing communications between its Members and the San Diego Water Board, and for fulfilling monitoring and reporting requirements on behalf of its Members, including but not limited to conducting surface water and groundwater monitoring,

conducting regional monitoring, preparing WQRPs, and overseeing implementation of WQRPs by designated Members.

B. Surface Water and Groundwater Monitoring Program Plan

This General Order requires the Third-Party Group to prepare and periodically update a Surface Water and Groundwater Monitoring Program Plan to identify the impacts of agricultural activities on receiving waters, and to determine if existing management practices are leading to compliance with water quality requirements and implementation of improved water quality practices where they are not. A copy of the Surface Water and Groundwater Monitoring Program Plan is required to be submitted 180 days after issuance of the NOA and annually thereafter.

C. Water Quality Restoration Program Plan (WQRP)

This General Order requires the Third-Party Group to prepare a WQRP within 90 days of exceeding a Water Quality Benchmark (section V of the MRP). The WQRP is an iterative and The WQRP is an iterative and adaptive plan intended to identify sources of water quality impairment. When effectiveness evaluation or 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, the WQRP imposes requirements on the designated Members to implement improved management practices at Agricultural Operations.

D. Quarterly Membership Updates

This General Order requires the Third-Party Group to report its membership quarterly.

E. Annual Report

This General Order requires the Third-Party Group to submit Annual Reports, including copies of Member's Annual Self-Assessment Reports, evidence that the Members completed the annual water quality training, and the Annual Surface Water and Groundwater Monitoring Report to evaluate compliance with the requirements of this General Order.

IX. RATIONALE FOR MONITORING AND REPORTING PROGRAM (MRP; ATTACHMENT A)

Water Code section 13267 authorizes the San Diego Water Board to require technical and monitoring program reports. The MRP for this General Order provides the San Diego Water Board information to determine the effectiveness of the management practices and the effect on the quality of the waters of the State. The MRP requires Members and Third-Party Groups to conduct groundwater and surface water monitoring and to develop and implement WQRPs to identify the source of a water quality standard exceedance and implement appropriate management practices to achieve compliance with the water quality standard.

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

A. Rationale for Core Monitoring

1. Surface Water Monitoring

Third-Party Groups are required to monitor locations in the receiving water where discharges from Agricultural Operations enter waters of the State according to a monitoring program approved by the Executive Officer. The parameters required to be

monitored are representative of typical discharges from Agricultural Operations, and will provide an evaluation of the effectiveness of the employed management practices on trends in water quality in the monitored areas. For example, Third-Party Groups must monitor for turbidity to evaluate whether, and to what extent, sediment discharges may be causing or contributing to a trend of water quality degradation. Because the use of some agricultural chemicals can change with time, the MRP also requires Third-Party Groups to monitor for chronic toxicity in surface waters. Chronic toxicity can used to determine if the application of pesticides, herbicides, algaecides, and fumigants is causing or contributing to exceedances of the Basin Plan narrative water quality objective for toxicity in surface waters.

Members and Third Party Groups are required to compare monitoring results and to compare the 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 results from the surface water monitoring programs indicate that applicable Water Quality Benchmarks are exceeded, the Third-Party Group is required to submit a WQRP, as described in section VIII.B of this General Order. The WQRP requires improved management practices and additional monitoring, if necessary, to achieve and document compliance with Water Quality Benchmarks.

The MRP (Attachment A) requires monitoring for chronic toxicity in surface waters in order to determine if the application of pesticides, herbicides, algaecides, and fumigants is causing or contributing to exceedances of the Basin Plan narrative water quality objective for toxicity in surface waters.

The MRP (Attachment A) requires monitoring for indicators of pathogens (known as fecal indicator bacteria) in surface waters. Compost and manure are applied to crop land to improve soil texture, add organic matter and nutrients to the soil. If not properly managed, these materials can migrate into surface waters of the State and pose a public health risk if ingested.

The MRP (Attachment A) requires monitoring for turbidity in surface waters at risk of Agricultural Operation activities like tilling and grading. These activities can lead to an increase in the migration of sediment discharges to surface waters that would violate the turbidity water quality objective, causing impacts to wildlife and aquatic habitat.

2. Groundwater Monitoring

As an initial step towards developing a groundwater quality program for Agricultural Operations, groundwater quality monitoring under this General Order is limited to areas in the San Diego Region where groundwater is a significant drinking water source. At this time the groundwater monitoring requirements of this General Order only applies to Members with drinking water supply wells located on the property of the Agricultural Operation. The purpose of the drinking water supply well program outlined below is to identify wells that have nitrate concentrations that threaten to exceed the MCL of 45 mg/L as NO_3 and notify any well users of the potential for human health impact.

Due to the potential severity and urgency of nitrates, Members, or Third-Party Groups on Members behalf, are required to 1) collect an initial groundwater sample of all drinking water supply wells on the Agricultural Operation within one year of receipt of a NOA; or 2) submit existing drinking water supply well sampling data, provided sampling and testing for nitrates was completed using USEPA-approved methods at least twice during the previous five years.

Where existing data or sampling data from initial rounds of sampling indicate nitrate concentration is at or above 36 mg/L nitrate as NO_3, a repeat sample must be taken within 30 days. If the retest is at or above 36 mg/L nitrate as NO_3, Members, or Third Party Groups on the Members behalf, must thereafter monitor the drinking water supply well for nitrate levels on an annual basis, unless an alternative sampling schedule based on trending data for the well is approved by the San Diego Water Board. If the retest is at or above 45 mg/L nitrate as NO_3, Members, or Third Party Groups on the Members behalf must provide notification to the San Diego Water Board within 24 hours of learning of the exceedance and monitor the well annually for nitrate thereafter unless an alternative sampling schedule is approved by the San Diego Water Board. For drinking water wells on the Member's property, within 10 days of receipt of the laboratory test results over 45 mg/L, Members, or Third Party Groups on the Members behalf, must immediately notify all individuals using the water supply well for a drinking source of the nitrate test results and the actions to be taken. Where Members are not the property owner, the San Diego Water Board will notify the users promptly.

Where existing data or sampling data from initial rounds of sampling indicate the nitrate concentration is below 36 mg/L nitrate as NO_3, the well must be resampled once every five years from that point forward unless an alternative sampling schedule is approved by the San Diego Water Board.

Results of the drinking water supply well monitoring must be included in the Annual Report submitted to the Third-Party Group. The groundwater monitoring requirement will provide the San Diego Water Board with additional information on existing conditions, identify on-site drinking water wells with nitrate concentrations that are detrimental to public health, and provide a long-term evaluation on the effectiveness of management practices in preventing or reducing the discharge of nitrates to groundwater. The exceedance of the groundwater nitrate Water Quality Benchmark as detailed above and in sections III.C and VII..H of the MRP (Attachment A) triggers the requirement for the Third-Party Group to develop a WQRP. Sampling may cease at any drinking water well if it is taken out of service and no longer provides drinking water.

B. Rationale for Regional Monitoring

Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs from commercial agriculture. Regional monitoring can include ambient monitoring. Under the San Diego Water Board's Commercial Agricultural Operation Regulatory Program, Third-Party Groups will take the lead role in coordinating and carrying out regional monitoring. Individual Dischargers, however, are encouraged to participate in regional monitoring programs as these programs can assist in the interpretation of core monitoring data by providing a more complete picture of natural variability and cumulative impacts in the receiving waters. This assessment in turn allows Individual Dischargers to more effectively use core monitoring data in prioritizing actions targeting pollutants and pollutant sources. Under this General Order, regional monitoring is conducted in the form of 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. This data is expected to supplement the core surface water monitoring information to provide a holistic picture of the biological, chemical, and physical integrity of waters of the State in the San Diego Region.

Bioassessment monitoring 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 (e.g., 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 Causal Analysis/Diagnosis Decision Information System (CADDIS), an on-line decision support system supported by the U.S. Environmental Protection Agency (USEPA) can also be used by technically qualified biologists to help identify the specific causes (stressors) responsible for degraded biological conditions in streams and rivers that have been classified as impacted by the IBI score. CADDIS is available on-line on the USEPA website at http://www.epa.gov/caddis. The framework is largely based on five steps of stressor identification using a weight of evidence approach to either diagnose or refute a stressor. Additional information regarding the use of CADDIS is available in a Southern California Coastal Water Research Project Report (SCCWRP) entitled Casual Assessment Evaluation and Guidance for California, Technical; Report 750-April 2015. The report is available on the SCCWRP website at http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/750_CausalAssessmentGuidance041515wCov.pdf

C. Rationale for Special Studies

Special studies are directed monitoring efforts designed in response to specific management or research questions identified through either core or regional monitoring programs. Oftentimes, special studies are used to help understand core or regional monitoring results where a specific environmental process is not well understood, or to address unique issues of local importance.

If water quality monitoring data, collected as described in the MRP, indicate exceedances of applicable Water Quality Benchmarks, Third-Party Groups must develop a WQRP as described in section VIII.C of this General Order. Upon approval of the WQRP by the San Diego Water Board, the designated Member must implement targeted management practices intended to attain the Water Quality Benchmarks. Management practices may include those recommended by organizations such as NRCS and UCCE.

Examples of additional or upgraded management practices that may be implemented to address Water Quality Benchmark exceedances include, but are not limited to:

a. Nutrients

   i. Improved irrigation efficiency to reduce runoff.

   ii. Certified nutrient management plans, including crop-specific applied/removed ratios for nitrogen.[40]

b. Legacy pesticides (e.g. DDT, DDE, chlordane, and dieldrin).

   i. Improved irrigation efficiency to reduce runoff.

   ii. Erosion and runoff control measures.

   iii. Storm water runoff filtration and/or infiltration.

[40] The American Society of Agronomy and The National Resource Conservation Service (NRCS) certify professionals in the preparation of nutrient management plans.

c. Current use pesticides (e.g. chlorpyrifos, diazinon, and pyrethroids)

i. Pesticide management plans.

ii. Improved irrigation efficiency to reduce runoff.

iii. Erosion and runoff control measures.

iv. Storm water runoff filtration and/or infiltration.

X. PUBLIC PARTICIPATION

The San Diego Water Board has considered the issuance of this General Order that will provide regulatory coverage for Agricultural Operations located within the San Diego Region. As a step in the adoption process of this General Order, the San Diego Water Board developed a Tentative General Order and encouraged public participation in the Board's proceedings to consider adoption of the Tentative General Order in accordance with the requirements of Water Code section 13167.5.

A. Notification of Public Hearing and Public Comment Period

By electronic mail dated June 13, 2016, the San Diego Water Board notified the public, stakeholders, and interested agencies of its intent to consider adoption of the Tentative General Order in a public hearing during a regularly scheduled Board Meeting. The San Diego Water Board also provided notice that the Tentative General Order was posted on the San Diego Water Board website and provided a period of 45 days for public review and comment.

The public also had access to the San Diego Water Board meeting agenda including all supporting documents and any changes in meeting dates and locations through the San Diego Water Board's website at: http://www.waterboards.ca.gov/sandiego/

B. Written Comments and Responses

Interested persons were invited to submit written comments concerning the Tentative General Order as provided through the notification process. Written comments or emailed comments were required to be received in the San Diego Water Board office at 2375 Northside Drive, Suite 100, San Diego, California 92108.

To be fully responded to by staff and considered by the San Diego Water Board, the written or emailed comments were due at the San Diego Water Board office not later than 5:00 p.m. on July 29, 2016. The San Diego Water Board provided written responses to all timely received public comments on the Tentative General Order and posted the response to comments document on the San Diego Water Board's website in advance of the public hearing date.

C. Public Hearing

The San Diego Water Board held a public hearing on the Tentative General Order during its regular Board meeting on the following date and time and at the following location:

Date: November 9, 2016

Time: 9:00 AM

Location: California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108

Interested persons were invited to attend. At the public hearing, the San Diego Water Board heard and considered all comments and testimony pertinent to the discharge and the

Tentative General Order. For accuracy of the record, important testimony was requested in writing.

D. Public Access to Records

Records pertinent to the San Diego Water Board's proceedings to adopt this General Order including but not limited to public notices, draft and finalized versions of the Tentative General 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.

The San Diego Water Board website contains information and instructions on how to request access and obtain copies of these records at:
http://www.waterboards.ca.gov/sandiego/about_us/contact_us/records.shtml

Before making a request to view public records in the San Diego Water Board office you may wish to determine if the information is already available on the San Diego Water Board's website at http://www.waterboards.ca.gov/sandiego/.

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 July 23, 2015 and December 22, 2015, the San Diego Water Board provided written notice of its intent to adopt the Tentative General Order to Tribes that requested such notice. No Tribes requested consultation on this General Order.

F. Stakeholder Meetings and Public Workshops

Several Public Workshops were held during the development of this General Order (Table B-13). The Public Workshops were announced via postings on the San Diego Water Board's webpage and via the emails, letters, and telephone conversations.

Table B-13. Summary of Stakeholder Meetings and Public Workshops

Meeting	Topic	Date
Informal Stakeholder Workgroup	Renewal of the *Conditional Waiver of Waste Discharge Requirements for Agricultural an Nursery Operations*	July 30, 2012
Informal Stakeholder Meeting	Draft Initial Study and Environmental Checklist for *Tentative General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	January 22, 2014
Informal Stakeholder Meeting	*Tentative General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	February 19, 2014
Public Workshop No. 1	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	July 14, 2015
Public Workshop No. 2	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge*	July 15, 2015

Meeting	Topic	Date
	Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region	
Public Workshop No. 3	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	August 18, 2015
Public Workshop No. 4	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	September 10, 2015
Public Workshop No. 5	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	September 15, 2015
Public Workshop No. 6	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	September 17, 2015
Public Workshop No. 7	Tentative General 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,* and Tentative General Order No. R9-2016-0005, *General Waste Discharge Requirements for Discharges Commercial Agricultural Operations for Dischargers Not Participating in a Third-Party Group in the San Diego Region*	June 22, 2016

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 this General 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 this General Order, except that if the thirtieth day following the adoption date of this General 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: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml

For instructions on how to file a petition for review, see the State Water Board's website at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

H. Additional Information

Requests for additional information or questions regarding this General Order should be directed to Barry Pulver at (619) 521-3381 or barry.pulver@waterboards.ca.gov.

ATTACHMENT C – ABBREVIATIONS AND DEFINITIONS

ABBREVIATIONS

Abbreviation	Definition
303(d) List	CWA section 303(d) List of Water Quality Limited Segments
40 CFR	title 40 of the Code of Federal Regulations
AGR	Agricultural Supply
Agricultural Waiver	2007 Conditional Waiver of Waste Discharge Requirements for Discharges from Agricultural and Nursery Operations
Antidegradation Policy	*State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California*
A/R	Multi-year ratio of nitrogen applied to the field to nitrogen removed from the field
ASBS	Areas of Special Biological Significance
Bacteria TMDL	*A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region*
Basin Plan	Water Quality Control Plan for the San Diego Basin
Bays and Estuaries Policy	Water Quality Control Policy for the Enclosed Bays and Estuaries of California
BIOL	Preservation of Biological Habitats of Special Significance
BMP	Best Management Practice
CCR	California Code of Regulations
CEDEN	California Environmental Data Exchange Network
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
COLD	Cold Freshwater Habitat
COMM	Commercial and Sport Fishing
CTR	California Toxics Rule
CWA	Clean Water Act
DDW	Division of Drinking Water
ELAP	Environmental Laboratory Accreditation Program
EST	Estuarine Habitat
FRSH	Freshwater Replenishment
GAMA	Groundwater Ambient Monitoring and Assessment Program
GWR	Groundwater Recharge
HA	Hydrologic Area
HAS	Hydrologic Subarea
HU	Hydrologic Unit
ILRP	Irrigated Lands Regulatory Program
IND	Industrial Service Supply
lbs/day	Pounds per Day
MCL	maximum contaminate level
mg/kg	Milligrams per kilogram
mg/L	milligrams per liter
MMRSA	Medical Marijuana Regulation and Safety Act
MP	Management Measure
MPN	Most probable number of bacterial colonies
MRP	Monitoring and Reporting Program
mS/cm	Micro siemens per cubic meter
MUN	Municipal and Domestic Supply
NOA	Notice of Applicability
NOEX	Notice of Exclusion

Abbreviation	Definition
NOI	Notice of Intent
NOT	Notice of Termination
NOV	Notice of Violation
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Units
Ocean Plan	Water Quality Control Plan for Ocean Waters of California
OCR	Optical Character Recognition
OES	Office of Emergency Services
PDF	Portable Document Format
PROC	Industrial Process Supply
QAPP	Quality Assurance Project Plan
Rainbow Creek TMDL	*A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed, San Diego County*, Resolution No. R9-2005-0036
RARE	Rare, Threatened, or Endangered Species
RCDs	Resource Conservation Districts
REC-1	Contact Water Recreation
REC-2	Noncontact Recreation
ROWD	Report of Waste Discharge
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SCCWRP	Southern California Coastal Waters Research Project
SHELL	Shellfish Harvesting Beneficial Use
SIP	State Implementation Policy
SMC	Southern California Storm Water Monitoring Coalition
SPWN	Spawning, Reproduction, and/or Early Development
State Implementation Policy	Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California
State Water Board	State Water Resources Control Board
SWAMP	Surface Water Ambient Monitoring Program
SWRCB	State Water Resources Control Board
Thermal Plan	*Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries*
TMDLs	Total Maximum Daily Loads
TSS	Total Suspended Solids
U.S.	United States
UCCE	University of California Cooperative Extension
USEPA	U.S. Environmental Protection Agency
Waivers	conditional waiver of WDRs
WARM	Warm Freshwater Habitat
Water Code	California Water Code
WDID	Waste Discharge Identification
WDRs	waste discharge requirements
WILD	Wildlife Habitat
WLA	Waste Load Allocation
WQO	Water Quality Objective
WQPP	Water Quality Protection Plan
WQRP	Water Quality Restoration Plan
WQS	Water Quality Standard
µg/l	Micrograms per Liter

DEFINITIONS

Acute Toxicity

A measurement of the adverse effect (usually mortality) of a waste discharge or ambient water sample on a group of test organisms during a short-term exposure.

Agricultural Operation

Any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the intent to make a profit. The San Diego Water Board presumes an intent to make a profit if at least one of the following criteria is met:

1. The owner or operator files a federal Department of Treasury Internal Revenue Service Form 1040 Schedule F Profit or Loss from Farming with their federal taxes.
2. The owner or operator receives agriculture water use rates or has been given an agricultural water use variance from their water purveyor.
3. The owner or operator of the Agricultural Operation is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting.

Areas of Special Biological Significance (ASBS)

Those areas designated by the State Water Resources Control Board (State Water Board) as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Chlordane

Shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity Tests

A measurement of the sub-lethal effects of a discharge or ambient water sample (e.g. reduced growth or reproduction). Certain chronic toxicity tests include an additional measurement of lethality.

Clean Water Act (CWA)

The Federal Water Pollution Control Act enacted by Public Law 92-500 as amended by Public Laws 95-217,95-576,96-483, and 97-117; 33 USC 1251 et seq.

Compost

Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or which are separated at a centralized facility. "Compost" includes vegetable, yard, and wood wastes which are not hazardous waste.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.
For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

DDT

Shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Degradation

Any measurable adverse change in water quality.

Detected, but Not Quantified (DNQ)

Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dichlorobenzenes

Shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Discharger

Any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region.

Dredged Material

Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil."

Enclosed Bays

Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero,

San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estuaries and Coastal Lagoons

Estuaries and Coastal Lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Groundwater

Water in the ground that is in the zone of saturation. The upper surface of the saturate zone is called the water table.

Halomethanes

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

Hexachlorocyclohexane (HCH)

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Impaired Water Body

A surface water body that is not attaining water quality standards and is identified on the State Water Board's Clean Water Act section 303(d) list.

Initial Dilution

The process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or

the diluting plume reaches a fixed distance from the discharge to be specified by the San Diego Water Board whichever results in the lower estimate for initial dilution.

Inland Surface Waters

The surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Irrigated Lands

Land irrigated to produce crops or agricultural products for commercial purposes. Irrigated lands do not include lands used solely for grazing.

Irrigation Return Flow or Runoff

Surface and subsurface water which leaves the field following application of irrigation water

Kelp Beds

For purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

Management Practices

A practice or combination of practices that is the most effective and practicable (including technological, economic, and institutional considerations) means of controlling nonpoint pollutant sources at levels protective of water quality.

Mariculture

The culture of plants and animals in marine waters independent of any pollution source.

Material

(a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant.

Member

A Discharger who belongs to a Third-Party Group.

Method Detection Limit (MDL)

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B.

Minimum Level (ML)

The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Monitoring

Monitoring undertaken in connection with assessing water quality conditions, and factors that may affect water quality conditions. Monitoring includes, but is not limited to, water quality monitoring undertaken in connection with agricultural activities, monitoring to identify short and long-term trends in water quality, nutrient monitoring, active inspections of operations, and management practice implementation and effectiveness monitoring. The purposes of monitoring include, but are not limited to, verifying the adequacy and effectiveness of the General Order's requirements, and evaluating each Member's compliance with the requirements of the General Order.

Natural Light

Reduction of natural light may be determined by the San Diego Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the San Diego Water Board.

Non-Irrigated Agriculture

Land that employs dryland farming techniques to produce crops or agricultural products for commercial purposes. Non-irrigated lands do not include lands used solely for grazing.

Non-Storm Water Discharge

Any discharge that is not composed entirely of storm water.

Nuisance

"Nuisance" means anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as a result of, the treatment or disposal of waste. [Water Code section 13050(m)]

Nutrient

Any element taken in by an organism which is essential to its growth and which is used by the organism in elaboration of its food and tissue.

Not Detected (ND)

Sample results less than the laboratory's MDL.

Ocean Waters

The territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

Off-Property Discharge

The discharge or release of waste beyond the boundaries of the agricultural operation or to water bodies that run through the agricultural operation.

Perched groundwater

Groundwater separated from an underlying body of groundwater by an unsaturated zone**.**

PAHs (polynuclear aromatic hydrocarbons)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls)

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

Pollutant

"Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean: (a) Sewage from vessels; or (b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources. NOTE: Radioactive materials covered by the Atomic Energy Act are those encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include radium and accelerator-produced isotopes. See Train v. Colorado Public Interest Research Group, Inc., 426 U.S. 1 (1976). (40 CFR 122.2).

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table 1 pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent

bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The San Diego Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution

Pollution" means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses. "Pollution" may include "contamination." [Water Code section 13050(l)].

Receiving Waters

Surface water or groundwater that receives or has the potential to receive discharges of waste from agricultural operations.

Reported Minimum Level

The reported ML (also known as the Reporting Level or RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the San Diego Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

Requirements of Applicable Water Quality Control Plans

Water quality objectives, prohibitions, total maximum daily load implementation plans, or other requirements contained in water quality control plans adopted by the San Diego Water Board or the State Water Board and approved according to applicable law.

San Diego Water Board

As used in the General Order the term "San Diego Water Board" is synonymous with the term "Regional Board" as defined in Water Code section 13050(b) and is intended to refer to the California Regional Water Quality Control Board for the San Diego Region as specified in Water Code Section 13200.

Shellfish

Organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference

Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation

The highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs)

Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolutions 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

Storm Water

Includes storm water runoff, snowmelt runoff, and storm water surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

TCDD Equivalents

The sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

Third-Party Group

An organization approved by the San Diego Water Board to represent and assist Dischargers in carrying out the terms and conditions of this General Order.

Total Maximum Daily Load (TMDL)

From the Code of Federal Regulations (CFR), 40 CFR 130.2(i), a TMDL is: “The sum of the individual WLAs [wasteload allocations] for point sources and LAs [load allocations] for nonpoint sources and natural background. … TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. …”.

Toxicity

Refers to the toxic effect to aquatic organisms from waste contained in an ambient water quality sample.

Toxicity Reduction Evaluation (TRE)

A study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

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 as defined in Water Code section 13050(d). Wastes from agricultural operations that conform to this definition include, but are not limited to, earthen materials (such as soil, silt, sand, clay, and rock), inorganic materials (such as metals, salts, boron, selenium, potassium, nitrogen, and phosphorus), organic materials such as pesticides, and biological materials, such as pathogenic organisms.

Waste Discharges from Agricultural Operations

The discharge or release of waste to surface water or groundwater. Waste discharges to surface water include, but are not limited to, irrigation return flows, tailwater, drainage water, subsurface (tile) drains, storm water runoff flowing from irrigated lands, aerial drift, and overspraying of pesticides. Waste can be discharged to groundwater through pathways including, but not limited to, percolation of irrigation or storm water through the subsurface, backflow of waste into wells (e.g., backflow during chemigation), discharges into unprotected wells and dry wells, and leaching of waste from tailwater ponds or sedimentation basins to groundwater. A discharge of waste subject to the General Order is one that could directly or indirectly reach waters of the State, which includes both surface waters and groundwaters.

Water Quality Benchmark

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 pursuant to a total maximum daily load (TMDL) (whether established in the Basin Plan or other lawful means).

Water Quality Criteria

Levels of water quality required under section 303(c) of the Clean Water Act that are expected to render a body of water suitable for its designated uses. Criteria are based on specific levels of pollutants that would make the water harmful if used for drinking, swimming, farming, fish production, or

industrial processes. The California Toxics Rule adopted by USEPA in April 2000 sets numeric water quality criteria for non-ocean surface waters of California for a number of toxic pollutants.

Water Quality Objectives

Defined in Water Code section 13050 as “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 specified area.” Water quality objectives may be either numerical or narrative and serve as water quality criteria for purposes of section 303 of the Clean Water Act.

Water Quality Problem

Exceedance of an applicable water quality standard or a trend of degradation that may threaten applicable Basin Plan beneficial uses.

Water Quality Standards

Provision of state or federal law that consist of the designated beneficial uses of a waterbody, the numeric and narrative water quality criteria that are necessary to protect the uses of that particular waterbody, and an antidegradation statement. Water quality standards include water quality objectives in the San Diego Water Board Basin Plan, water quality criteria in the California Toxics Rule and National Toxics Rule adopted by USEPA, and/or water quality objectives in other applicable State Water Board plans and policies. Under section 303 of the Clean Water Act, each state is required to adopt water quality standards.

Water Recycling

The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

Waters of the State

Any surface water or groundwater, including saline waters, within the boundaries of the State. [Water Code section 13050(e)]

ATTACHMENT D – MAP

FIGURE D-1

MAP OF THE SAN DIEGO REGION AND WATERSHEDS

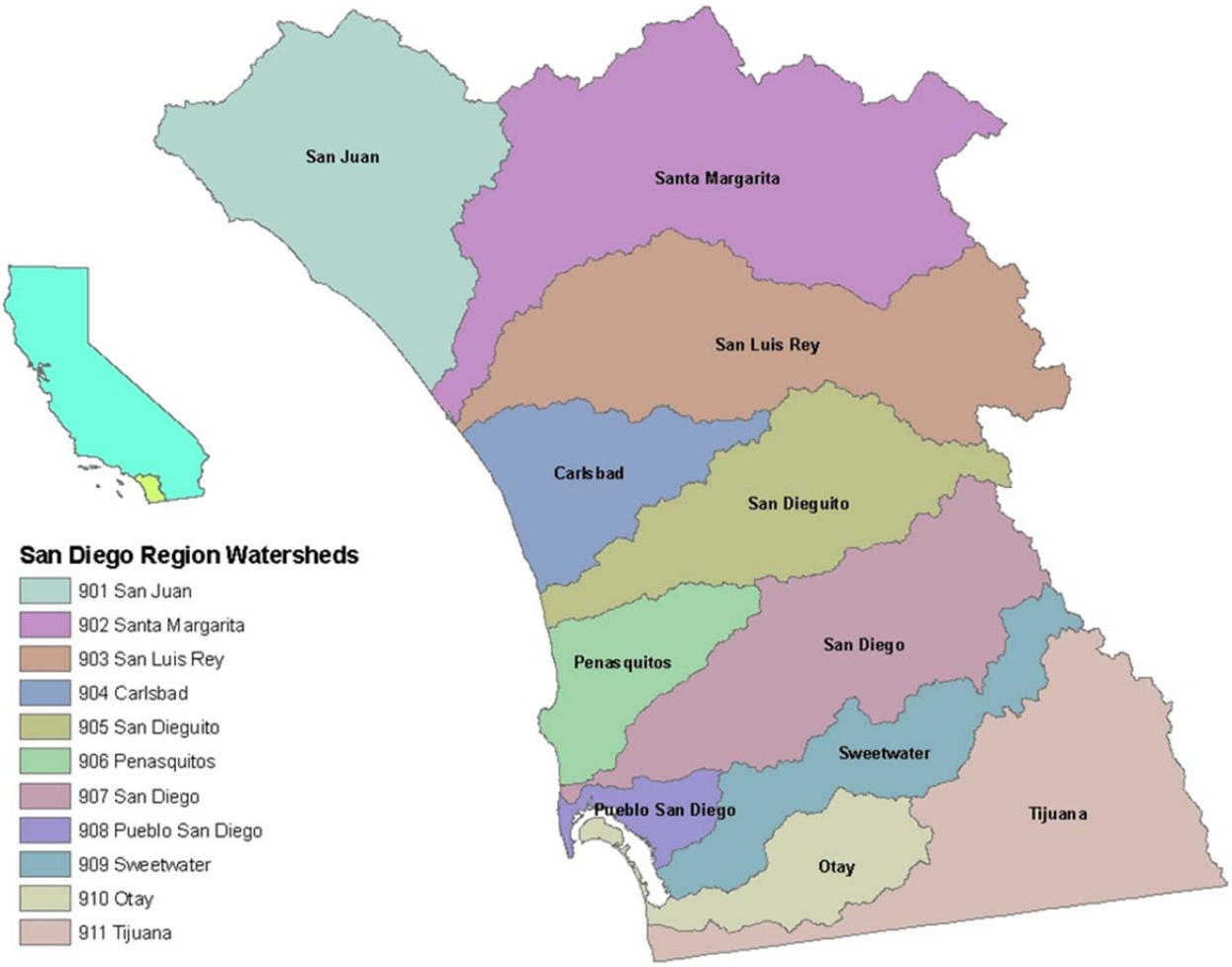
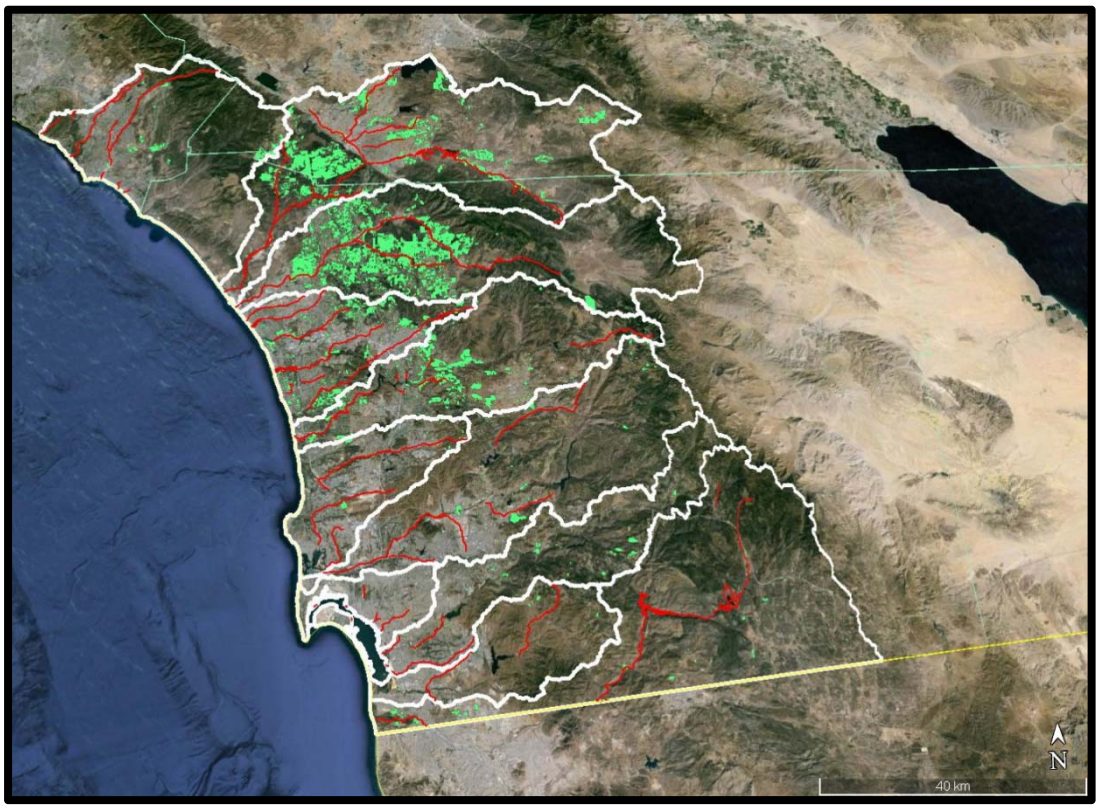


FIGURE D-2

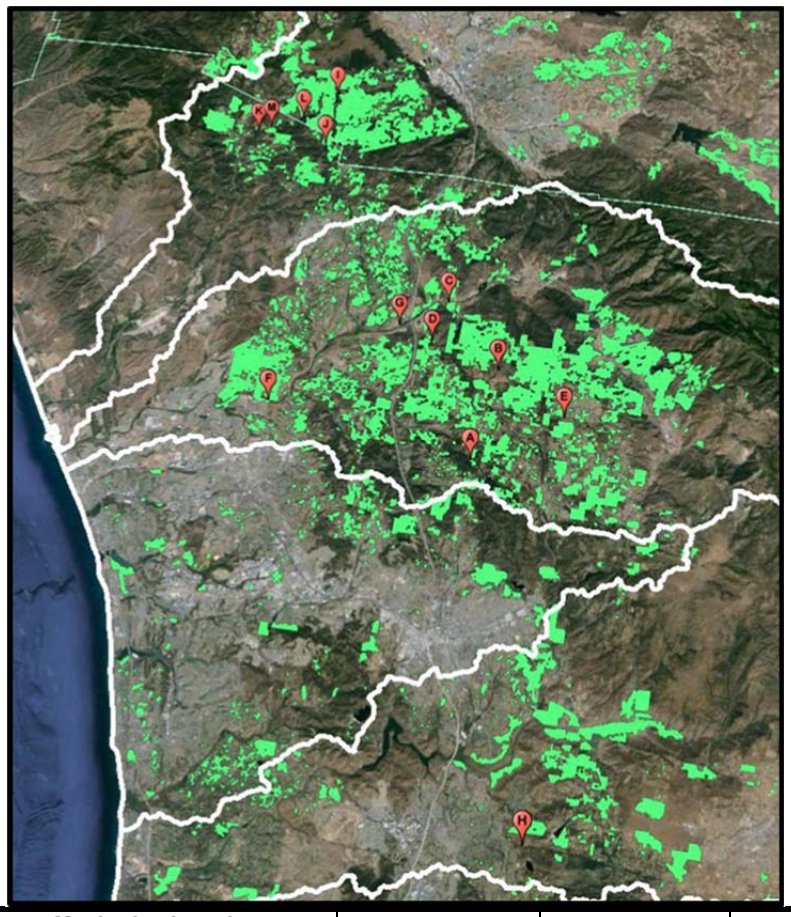
LOCATION OF AGRICULTURAL OPERATIONS AND CLEAN WATER ACT SECTION 303(D) LIST OF WATER QUALITY LIMITED SEGMENTS WITHIN THE SAN DIEGO REGION



Green shading indicates areas of agricultural activity as indicated on landuse maps prepared by the Counties of San Diego, Riverside, and Orange.
Red lines indicate location of CWA Section 303(d) Water Quality Limited Segments.
White lines indicate watershed boundaries.

FIGURE D-3

LOCATION OF REGIONAL BIOASSESSMENT MONITORING STATIONS



Map Location	Monitoring Location Designation	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

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 Board) and nine Regional Water Quality Control Boards (Regional 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 standards for waterbodies in the San Diego Region are primarily contained in the Water Quality Control Plan for the San Diego Basin (Basin Plan).

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 segments, which either do not meet, or not expected to meet, water quality standards. Impaired waterbodies, or segments on the 303(d) list, must be addressed through the development of TMDLs or by other means as described in the State's Water Quality Control Policy for Addressing Impaired Waters (Impaired Waters Policy).

The San Diego Water Board adopted the 2008 CWA Sections 305(b) and 303(d) Integrated Report on Evaluation of Surface Water Quality and Listing of Impaired Water Body Segments for the San Diego Region (2008 Integrated Report) on December 16, 2009. The final 2008 Integrated Report was incorporated into the statewide 2010 Integrated Report that was approved by the State Board on August 4, 2010. On November 12, 2010, USEPA approved the 2008-2010 CWA Section 303(d) List that includes listings for the San Diego Region. Table E-1 lists waterbodies on the 303(d) List where agriculture is listed as a pollutant source.

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

Watershed	Waterbody Name	Pollutant
San Juan	Arroyo Trabuco Creek	Diazinon
		Nitrogen
Santa Margarita	De Luz Creek	Nitrogen
	Redhawk Channel	Chlorpyrifos
	Santa Margarita Lagoon	Eutrophic
San Luis Rey	San Luis Rey River, Lower	Total Dissolved Solids
San Dieguito	Felicita Creek	Total Dissolved Solids
	Lake Hodges	Nitrogen
		Phosphorus
	Kit Carson Creek	Total Dissolved Solids
Penasquitos	Mission Bay North of Rose Creek	Eutrophic
San Diego	Forester Creek	Phosphorus
		Total Dissolved Solids
Tijuana	Morena Reservoir	Ammonia as Nitrogen
		Color
	Tijuana River	Pesticides

Table E-2 lists waterbodies on the 303(d) List where the pollutant is associated with agricultural activities; Agricultural Operations are known to be located in the vicinity of 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
	Arroyo Trabuco Creek	Phosphorus
	Prima Deshecha Creek	Phosphorus
	San Juan Creek	1,1-Dichloro-2,2-bis(p-chlorophenyl) ethylene (DDE)
		Phosphorus
		Nitrogen
Santa Margarita	Long Canyon Creek	Chlorpyrifos
	Murrieta Creek	Chlorpyrifos
		Nitrogen
		Phosphorus
	Redhawk Channel	Diazinon
		Nitrogen
		Phosphorus
	Santa Gertrudis Creek	Chlorprifos
		Phosphorus
	Santa Margarita River, Lower	Phosphorus
		Nitrogen
	Santa Margarita River, Upper	Phosphorus
	Temecula Creek	Chlorpyrifos
		Phosphorus
San Luis Rey	San Luis Rey River, Lower	Phosphorus
		Nitrogen
	San Luis Rey River, Upper	Nitrogen
Carlsbad	Agua Hedionda Creek	Phosphorus
		Nitrogen
	Buena Creek	Dichlorodiphenyltrichloroethane (DDT)
		Nitrate and Nitrite
		Phosphorus
	Buena Vista Lagoon	Nutrients
	Cottonwood Creek	DDT
		Phosphorus
	Encinitas Creek	Phosphorus
	Escondido Creek	DDT
		Phosphate
		Nitrogen
	San Marcos Creek	DDE
		Phosphorus
	San Marcos Lake	Ammonia as Nitrogen
		Nutrients
		Phosphates

II. TMDL OVERVIEW

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. Pollutant sources are characterized as either point sources that receive a wasteload allocation (WLA) or nonpoint sources that receive a load allocation (LA).

TMDLs must also account for seasonal variations in water quality, and include a margin of safety (MOS) to account for uncertainty in predicting how well pollutant reductions will result in meeting water quality standards.

There are five steps in developing a TMDL:

A. Involve Stakeholders

Stakeholders are involved at the beginning of the process in order to provide input to the Regional Boards on the development of TMDLs. Stakeholders can be the general public, business interests, government entities, environmental groups, or anyone concerned with a particular water body.

B. Assess Water Body

Pollution sources and amounts, or "loads," are identified for various times of the year, and the overall effect of these loads on the water body is determined.

C. Determine the Total Load and Develop Allocations

The total pollutant load and allocations of pollutant load for all sources are established to ensure water quality standards are met and beneficial uses are attained. TMDLs can address single pollutants or combinations of pollutants. The sum of the allocations must result in the water body attaining the applicable water quality standards.

D. Develop Implementation Plan

An Implementation Plan is developed which describes the approach and activities to be undertaken to ensure the allocations are met and identification of parties responsible for carrying out the actions. The Implementation Plan may include a Non-TMDL Alternative. A Non-TMDL Alternative includes actions, as required by other regulatory actions other than a TMDL that will result in the attainment of water quality objectives.

E. Amend the Basin Plan

As required by Federal law, TMDLs are incorporated into the Basin Plans. The Basin Plan is a legal document that describes how a Regional Board would manage water quality. The TMDLs must be formally incorporated into the Basin Plan to be part of the basis for Regional Board actions. Basin Plan amendments are adopted through a public process that requires approval of the TMDLs by a Regional Board, the State Board, the Office of Administrative Law, and USEPA Region 9.

III. TMDLS APPLICABLE TO DISCHARGES FROM AGRICULTURAL OPERATIONS IN THE SAN DIEGO REGION

A. Rainbow Creek TMDL

1. Administrative Record

The Rainbow Creek TMDL was adopted by the San Diego Water Board on February 9, 2005, and approved by the State Water Board on November 16, 2005; the Office of Administrative Law (OAL) on February 1, 2006; and the USEPA on March 22, 2006. The Rainbow Creek TMDL became effective on February 1, 2006.

2. Attainment Date

The attainment date contained in the Rainbow Creek TMDL is December 31, 2021.

3. Problem Statement

Nitrate concentrations in Rainbow Creek exceed the water quality objective for municipal supply (MUN), and total nitrogen and total phosphorus concentrations exceed the water quality objectives for biostimulatory substances threatening to unreasonably impair the warm freshwater habitat (WARM), cold freshwater habitat (COLD), and wildlife habitat (WILD) beneficial uses of Rainbow Creek. Excessive nutrients in Rainbow Creek promote the growth of algae in localized areas, creating a nuisance condition that unreasonably interferes with aesthetics and water contact (REC-1) and non-water contact (REC-2) beneficial uses and threatens to impair WARM, COLD and WILD beneficial uses. Runoff from agriculture, nursery, and residential land uses contribute to increased pollutant nutrients in Rainbow Creek as a result of storm water runoff, irrigation return flows, and groundwater contributions to the creek.

4. Numeric Targets

Numeric targets interpret and implement water quality standards (i.e., numeric and narrative water quality objectives and beneficial uses). Numeric targets are established at levels that will ensure attainment of water quality objectives and the protection of beneficial uses. The numeric targets for nutrients are intended to achieve the water quality objective for nitrates and the narrative water quality objective for stimulation of algal and emergent plant growth by nutrients. Water quality objectives are established for nitrates, total nitrogen, and total phosphorus to meet drinking water standards in the short-term, and to reduce existing periodic algal blooms and prevent future eutrophic conditions.

Table E-3 presents the applicable numeric targets.

Table E-3. Numeric Targets for Rainbow creek watershed

Constituent	Numeric Target milligrams per liter (mg/L)
Nitrate (as N)	10
Total Nitrogen	1
Total Phosphorus	0.1

5. Source Assessment

A source assessment was conducted to identify all known sources of nutrients that contribute to the loading of nutrients into Rainbow Creek. As shown on Table E-4, the primary source of nutrients into Rainbow Creek is from Agricultural Operations.

Table E-4. Calculated Annual Nutrient Surface Water Loads to Rainbow Creek

Land Use	Nitrogen		Phosphorus	
	Calculated Load (kg/yr)	% of Total Calculated Load	Calculated Load (kg/yr)	% of Total Calculated Load
Agriculture	1,974	74%	126	48%
Park	7	>1%	0.2	>1%
Residential	650	24%	125	48%
Urban	53	2%	11.2	4%
Total	**2,662**	**100%**	**262**	**100%**

6. Load Allocations (LAs) Assigned to Agriculture

The LAs for total nitrogen and total phosphorus for Rainbow Creek are shown in Table E-5.

Table E-5. Rainbow Creek TMDL LAs for Nutrients

Source	2009		2013		2017		2021	
	Load Allocation		Load Allocation		Load Allocation		Load Allocation	
	TN	TP	TN	TP	TN	TP	TN	TP
	kilograms per year (kg/yr)							
Commercial nurseries	390	20	299	16	196	10	116	3
Agricultural fields	504	28	386	21	253	14	151	4
Orchards	607	50	465	37	305	24	182	6

7. Implementation Plan

The Rainbow Creek TMDL includes an Implementation Plan for attainment of the required load allocations. Agricultural Operations within the Rainbow Creek Watershed must comply with the following requirements:

Agricultural Operations in the Rainbow Creek Watershed must report annually, through the Annual Report) the effectiveness of best management practice planning, implementation, and effectiveness in reducing nutrient loading to surface waters and groundwater.

Members located within the Rainbow Creek watershed, a tributary of the Santa Margarita River in hydrologic subareas 902.22 and 902.23, must implement applicable elements of the Rainbow Creek Nutrient Reduction Management Plan (Rainbow Creek NRMP; http://www.waterboards.ca.gov/sandiego/water_issues/programs/irrigated_lands/docs/Rainbow_Creek_Nutrient_Reduction_and_Management_Plan_June_2016.pdf) developed by the County of San Diego and incorporated by this reference as if set forth in full herein.

B. Bacteria TMDL

1. Administrative Record

   The Bacteria TMDL was adopted by the San Diego Water Board on February 10, 2010, and approved by the State Water Board on December 14, 2010; OAL on April 4, 2011; and USEPA on June 22, 2011. The Bacteria TMDL became Effective on April 4, 2011.

2. Attainment Date

   a. Attain Dry Weather TMDL: April 4, 2021.

   b. Attain Wet Weather TMDL: April 4, 2031.

3. Problem Statement

   Bacteria in the waters of the beaches and creeks addressed by this TMDL have exceeded numeric water quality objective 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 REC-1 and 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 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.

4. Numeric Targets

   Different REC-1 water quality objectives were used as the basis for wet weather and dry weather allowable load (i.e., TMDL) calculations because the bacteria transport mechanisms to receiving waters are different under wet and dry weather conditions. Because wet weather conditions, or storm flow, are episodic and short in duration, and characterized by rapid wash-off and transport of high bacteria loads, with short residence times, from all land use types to receiving waters, the single sample maximum water quality objective were appropriate for use as wet weather numeric targets. For dry weather conditions, because dry weather runoff is not generated from storm flows, is not uniformly linked to every land use, and is more uniform than stormflow, with lower flows, lower loads, and slower transport, making die-off and/or amplification processes more important, the geometric mean water quality objective were appropriate for use as dry weather numeric targets. Wet weather TMDL calculations were based on the REC-1 single sample maximum water quality objective while dry weather TMDL calculations were based on REC-1 geometric mean water quality objective. Table E-6 contains the wet weather numeric targets, and Table E-7 contains the dry weather numeric targets.

Table E-6. Bacteria TMDL Wet Weather Numeric Targets

Indicator Bacteria	Numeric Target (MPN/100 mL)[1,2]	Allowable Exceedance Frequency[1]
Fecal coliform	400[2]	22%
Total coliform	10,000[3]	22%
Enterococci	104[4] / 61[5]	22%

Notes:

1. MPN = Most Probable Number of bacteria colonies
2. mL = Milligrams per liter
3. Total coliform single sample maximum water quality objective for REC-1 use at beaches and the point in creeks that discharges to beaches.
4. Enterococci single sample maximum water quality objective for REC-1 use in creeks established and designated as "moderately or lightly used" in the Basin Plan and at beaches downstream of those creeks, as well as all other beaches.
5. Enterococci single sample maximum water quality objective for REC-1 use in creeks not established and designated as "moderately or lightly used" in the Basin Plan and at beaches downstream of those creeks ("designated beach" frequency of use; applicable to San Juan Creek and downstream beach, Aliso Creek and downstream beach, Tecolote Creek, Forrester Creek, San Diego River and downstream beach, and Chollas Creek).

Table E-7. Bacteria TMDL Dry Weather Numeric Targets

Indicator Bacteria	Numeric Target (MPN/100 ml)[1,2]	Allowable Exceedance Frequency[1]
Fecal coliform	200[2]	0%
Total coliform	1000[3]	0%
Enterococci	35[4] / 33[5]	0%

Notes:

1. Percent of dry days (i.e., days with less than 0.2 inch of rainfall observed on each of the previous 3 days) allowed to exceed the dry weather numeric targets.
2. Fecal coliform 30-day geometric mean water quality objective for REC-1 use in creeks and at beaches.
3. Total coliform 30-day geometric mean water quality objective for REC-1 at beaches and the point in creeks that discharges to beaches.
4. Enterococci 30-day geometric mean water quality objective for REC-1 at beaches.
5. Enterococci 30-day geometric mean water quality objective for REC-1 use in impaired creeks and beaches downstream of those creeks (applicable to San Juan Creek and downstream beach, Aliso Creek and downstream beach, Tecolote Creek, Forrester Creek, San Diego River and downstream beach, and Chollas Creek).

5. Load Allocations (LAs) Assigned to Agricultural Operations

The LAs for identified watersheds are shown in Tables E-8 and E-9.

Table E.8. Bacteria TMDL LAs for Indicator Bacteria

Watershed	Indicator Bacteria	Wet Weather Bacteria Load (Billion MPN/year) [1]		Dry Weather Bacteria Load (Billion MPN/month) [1]	
		Existing	Load Allocation	Existing	Load Allocation
Lower San Juan HSA (901.27)	Fecal Coliform	3,275,477	2,855,570	0	0
	Total Coliform	18,499,884	14,946,372	0	0
	Enterococcus[2]	1,151,266	839,040	0	0
San Luis Rey HU (903.00)	Fecal Coliform	20,687,954	20,041,659	0	0
	Total Coliform	117,360,800	110,768,160	0	0
	Enterococcus	6,881,755	6,077,514	0	0
San Marcos HA (904.50)	Fecal Coliform	11,199	9,073	0	0
	Total Coliform	122,414	99,809	0	0
	Enterococcus	7,825	6,246	0	0
San Dieguito HU (905.00)	Fecal Coliform	11,872,240	11,698,811	0	0
	Total Coliform	69,551,416	66,570,499	0	0
	Enterococcus	4,423,566	4,082,010	0	0

Notes:

1. MPN = Most probable number of bacteria colonies
2. See Table E.9 for Alternative Wet Weather Enterococcus Load Allocation for Agriculture

Table E-9. Bacteria TMDL Alternative Wet Weather Enterococcus Bacteria Load Allocation

Watershed	Existing Load (Billion MPN/year)[1]	Load Allocation (Billion MPN/year) [1]
Lower San Juan HSA (901.27)	1,151,266	841,564

Notes:

1. MPN = Most probable number of bacteria colonies

6. Implementation Plan

The Implementation Plan for the Bacteria TMDL specifies that when Waste Discharge Requirements are adopted for nonpoint source discharges, such as discharges from Agricultural Operations, that they be consistent with the TMDLs and LAs. Agricultural Operations in the identified watersheds must report annually, through the Annual Report, regarding the effectiveness of management practice planning, implementation, and effectiveness in reducing bacteria loading to surface waters and groundwater.

ATTACHMENT F – PROHIBITIONS

Discharges from Agricultural Operations shall not cause receiving waters to exceed the following limitations:

I. Ocean Plan Discharge Prohibitions

A. The Discharge of any radiological chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.

B. Waste shall not be discharged to designated Areas of Special Biological Significance (ASBS) except as provided in Chapter III.E. of the Ocean Plan.

C. Pipeline discharge of sludge to the ocean is prohibited by federal law; the discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.

D. The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table 1 or Table 2 [of the Ocean Plan] is prohibited.

II. Basin Plan Discharge Prohibitions

A. The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code (CWC) section 13050, is prohibited.

B. The discharge of waste to land, except as authorized by waste discharge requirements (WDRs) of the terms described in CWC section 13264 is prohibited.

C. The discharge of pollutants or dredged or fill material to waters of the U.S. except as authorized by an National Pollutant Discharge Elimination System (NPDES) permit or a dredged or fill material permit (subject to the exemption described in CWC section 13376) is prohibited.

D. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues an NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Water Board's Division of Drinking Water and the operating agency of the impacted reservoir; and the Discharger has an approved fail-safe long-term disposal alternative.

E. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include stream flow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if stream flow provided 100:1 dilution capability.

F. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the Discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

G. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.

H. Any discharge to a storm water conveyance system that is not composed entirely of stormwater is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR section 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR section 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to an NPDES permit and discharges resulting from fire fighting activities.] [Section 122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].

I. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.

J. The discharge of industrial wastes to conventional septic tank/ subsurface disposal systems, except as authorized by the terms described in CWC section 13264, is prohibited.

K. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the State is prohibited.

L. The discharge of any radiological, chemical, or biological warfare agent into waters of the State is prohibited.

M. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.

N. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

O. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

P. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

Q. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at MLLW is prohibited.

R. The discharge of treated sewage from vessels, which do not have a properly functioning U.S. Coast Guard certified Type 1 or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water is prohibited.

ATTACHMENT G – 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
http://www.waterboards.ca.gov/sandiego/

Notice of Intent Application Package for Coverage Under 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

This application package constitutes a Notice of Intent (NOI) pursuant to obtain coverage under General Order No. R9-2016-0004. You must provide complete factual information for each item requested below and include additional sheets as necessary to provide the information required under section III.C of the General Order.

PART A: AGRICULTURAL OPERATION INFORMATION

Name:		
Address:	City:	Zip:
Phone No.:	E-mail:	
Name of Third-Party Group:		
Assessor Parcel Number(s), use additional sheets if needed:		
Irrigated Acres:	Non-Irrigated Acres:	Irrigated and Non-Irrigated Acres:
Crop Types (check all that apply): ☐ Row Crops ☐ Orchard ☐ Vineyard ☐ Nursery ☐ Greenhouse ☐ Other (explain)		
Irrigation System Types (check all that apply): ☐ Microsprinkler ☐ Drip Emitter ☐ Drip Tape ☐ Sprinkler ☐ Furrow/Flood/Border ☐ Other (explain)		

PART A: AGRICULTURAL OPERATION INFORMATION (CONTINUED)

Pesticide Permit Information

Are pesticides used? ☐ Yes ☐ No

If yes, are they applied under a Department of Pesticide Regulation Permit? ☐ Yes ☐ No

Operator Identification Number:_____ Site ID _____

Name of Permit Holder: _____ Site ID _____

PART B: PROPERTY OWNER INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
Phone No.:	Email:	

PART C: AGRICULTURAL OPERATION OWNER INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
Phone No.:	Email:	

PART D: OPERATOR INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
Phone No.:	Email:	

PART E: DRINKING WATER SUPPLY WELLS

Are groundwater wells used for drinking water supply located at the Agricultural Operation?

❑ Yes ❑ No If yes, attach map showing location of drinking water supply wells.

Groundwater Monitoring will be done by the ❑ Agricultural Operation or ❑ Third-Party Group

PART F: WATER QUALITY PROTECTION PLAN

Is a complete Water Quality Protection Plan attached as required in section VII.C of the General Order?

❑ Yes ❑ No If no, provide explanation in the box below or in an attachment to this form.

PART G: WATERBODY INFORMATION

Are there waterbodies located within 100 feet of the perimeter of the Agricultural Operation?

❑ Yes ❑ No If yes provide name of waterbody: _____

Does a waterbody pass through or exist on the Agricultural Operation?

❑ Yes ❑ No If yes provide name of waterbody: _____

Is irrigation return flow or storm water discharged directly to a waterbody? ❑ Yes ❑ No

If yes, show discharge location on Site Plan per NOI Section VII.

PART H: MAPS

Attach the following maps:

1. A scaled topographic Site Location Map extending one mile past beyond the property boundary of the Agricultural Operation and depicting the following:
   a. Property boundaries, roads, structures, and drainage structures.
   b. Irrigation wells, domestic water supply wells, springs, and other surface water bodies listed in public records or otherwise known to the Discharger to be in the map area.
2. A scaled Site Plan depicting the following:
   a. Property boundaries, roads, structures, and drainage structures.
   b. Irrigation wells, domestic water supply wells, springs, surface water bodies listed, storm water and non-storm water conveyance systems located within the property.
   c. Approximate location of growing areas.
   d. Compost and manure management areas including storage and disposal sites.
   e. Chemical storage areas.
   f. Surface water flow directions and general topographic slope direction.
   g. Locations where irrigation return flow and/or storm water is discharged directly to a waterbody.
   h. The location and types of management practices employed.
   i. Groundwater wells used for domestic supply.

PART I: 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 H – 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
http://www.waterboards.ca.gov/sandiego/

Notice of Termination Application Package for Coverage Under 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

This form constitutes a Notice of Termination (NOT) pursuant to section III.G of Order No. R9-2016-0004. You must provide complete factual information on each item requested below and additional sheets as necessary to provide the information requested. If you have any questions on the completion of any part of the NOT, please contact the San Diego Water Board at 2375 Northside Drive, Suite 100, San Diego, CA 92108, Phone (619) 516-1990, or Fax (619) 516-1994.

AGRICULTURAL OPERATION INFORMATION

Name of Operation:	Address:	
Owner/Operator Name:	City	Zip
Mailing Address:	Phone No.:	
City:	State:	Zip:
Assessor Parcel Number(s):		

REASON FOR TERMINATION (check all that apply)

☐ A new owner or operator has taken over responsibility for the Agricultural Operation, and transfer of coverage under this General Order is not requested.

☐ The Discharger no longer owns or operates an Agricultural Operation that meets the enrollment criteria specified in sections I.G of the General Order.

☐ The Dischargerhas applied for and obtained coverage under individual Waste Discharge Requirements (WDRs) or other applicable WDRs for the Agricultural Operation.

☐ Joined New Third-Party Group as of _____.

Name of New Third-Party Group: _____.

CONTINUED ON NEXT PAGE

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 – QUARTERLY SELF-INSPECTION REPORT

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

AGRICULTURAL OPERATION INFORMATION

Name of Agricultural Operation:		
Address:	City:	Zip:
APN:		
Name of Third-Party Group:		
Owner/Operator:	Phone No.:	
Address:	City:	Zip:

INSPECTION INFORMATION

Inspection Conducted by:		Phone No:
Inspection Date:	Inspection Time:	Was it Raining?:

OBSERVATIONS – Attach photographs to form

Irrigation System Inspection Items	Yes	No	NA	Comments
Was irrigation system inspected?				
Was system operating when inspected?				
Were photos taken? (if yes please attach the photos)				
Were leaks/overspray observed?				
Does irrigation runoff remain on the property?				
Were repairs to irrigation system made?				
Other observations?				

Structural Management Practices	Yes	No	NA	Comments
Were management practices used to control runoff and erosion on the property inspected?				
Photos taken (if yes attach)?				
Does irrigation, non-storm water, and storm water runoff remain on the property?				
Are the management practices used to protect compost piles from oversaturation and leachate production in good operating condition?				
Is a 100 foot buffer between compost piles and waterbodies maintained?				
Was erosion observed on roadways?				
Are management practices implemented for proper handling, storage, disposal and management of pesticides, fertilizer, and other chemicals?				
Are pesticides, herbicides and fertilizers shall be applied in accordance with the manufacturer's label?				
Were repairs made?				
Other observations?				

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 J – ANNUAL SELF-ASSESSMENT REPORT

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

FOR YEAR ENDING: _____

PART A - FACILITY INFORMATION:

Name:		
Address:	City:	Zip:
Contact Person:	No. of Irrigated + Non-Irrigated Acres:	
Telephone:	Email:	
Name of Third-Party Group:		
Assessor Parcel Number(s):		
Type of crops grown on each parcel:		

PART B - PROPERTY OWNER

Name:		
Mailing Address:		
City:	State:	Zip:
Telephone:	Fax:	Email:

PART C - AGRICULTURAL OPERATION OWNER

Name:		
Mailing Address:		
City:	State:	Zip:
Telephone:	Fax:	Email:

PART D - AGRICULTURAL OPERATION - OPERATOR INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
County	State:	Zip:
Telephone:	Fax:	Email:

PART E - EDUCATIONAL REQUIREMENT SPECIFICATIONS

Name of Organization providing Water Quality Training:_____

Name of Individual taking Water Quality Training:_____

□ Owner □ Operator □ Other: _____

Date annual water quality management training completed: _____

Include copy of certification of completion.

PART F - QUARTERLY SELF-INSPECTIONS

Inspections were conducted on the following dates: Include copies of Inspection Reports_____

_____

PART G – WATER QUALITY PROTECTION PLAN AMENDMENTS

Were amendments made to the Water Quality Protection Plan? □ Yes □ No. If yes, attach copy.

PART H - RECORDS MANAGEMENT

Identify whether the following records are being maintained for the Agricultural Operation and are capable of being reviewed during an inspection by the San Diego Water Board. For any record marked "No" or "n/a", provide, as an attachment, a brief explanation/justification.

Pesticide use report	□ Yes □ No □ N/A
City/County agricultural inspection reports	□ Yes □ No □ N/A
National Organic Program certification inspection reports (if applicable)	□ Yes □ No □ N/A
Self-Inspection Forms	□ Yes □ No □ N/A
Groundwater quality monitoring data (well data, if applicable)	□ Yes □ No □ N/A

PART I - INCIDENTS OF NONCOMPLIANCE

Provide a listing of each incident of noncompliance during the annual monitoring period and, for each incident of noncompliance, provide the cause, the exact dates of non-compliance, and if the noncompliance has not been corrected, the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. Incidents of noncompliance include, but are not limited to 1) failure to pay annual WDR fees (Order No. R9 2016-0004, section III.J), 2) failure to comply with waste discharge prohibitions (Order No. R9 2016-0004, section IV), 3) failure to comply with waste discharge specifications (Order No. R9 2016-0004, section V), 4), failure to obtain the required two-hours of yearly water quality education (Order No. R9 2016-0004 section VII.B), 5) failure to conduct Quarterly Self-Inspection (Order No. R9 2016-0004 section VII.D), 6) a single monitoring result that exceeds either the narrative or numeric water quality objective for a Water Quality Benchmark (Order No. R9 2016-0004, section VI and MRP section VII), 7) the exceedance of a Water Quality Benchmark that triggers the development of a Water Quality Restoration Plan (WQRP), and 8) failure to submit and implement a WQRP(Order No. R9 2016-0004 section VIII.B and MRP section VII).

PART J - 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:_____

INSTRUCTIONS

Annual Self-Assessment Report

PART A – FACILITY INFORMATION

Complete all boxes in Part A. List all parcels enrolled in General Order No. R9-2016-0004. Include additional pages if needed

PART B – PROPERTY OWNER INFORMATION

Complete all boxes in Part B.

PART C – AGRICULTURAL OPERATION OWNER INFORMATION

Complete all boxes in Part C.

PART D – OPERATOR INFORMATION

Complete all boxes in Part D.

PART E – EDUCATIONAL REQUIREMENT

List name of Water Quality Education provider, date training complete, and attach copy of proof of completion of educational education. If the training was completed by the Owner or Operator listed in Parts C or D, check appropriate box. If training was not completed by the Owner or Operator listed in Parts C or D, include name of person taking training and relationship to the Agricultural Operation.

PART F – QUARTERLY SELF-INSPECTIONS

List dates that the Quarterly Self-Inspections were conducted and attach copies of the Quarterly Self-Inspections forms.

PART G – WATER QUALITY PROTECTION PLAN AMENDMENTS

Attach amendments made to the Water Quality Protection Plan.

PART H - RECORDS MANAGEMENT

Indicate what records have been received and are available for review by the San Diego Water Board.

PART I- INCIDENTS OF NONCOMPLIANCE

On a separate sheet include a list of all incidents of noncompliance the cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance..

PART J - CERTIFICATION

The Owner or Operation of the Agricultural Operation must complete, sign, and date where indicated

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
http://www.waterboards.ca.gov/sandiego/

REVISED TENTATIVE ORDER NO. 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

Discharges from commercial agricultural operations, including irrigation runoff, other non-storm water runoff, and storm water runoff to waters of the State in the San Diego Region are subject to waste discharge requirements (WDRs), as set forth in this General Order.

Tables 1 and 2 below provide summary information regarding the applicability of this General Order:

Table 1. General Information

Discharger	Any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region.
Agricultural Operation	Any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the intent to make a profit.
Eligibility for Coverage	Dischargers that are not members of a Third Party Group.
Waters of the State	Any surface water or groundwater, including saline waters, within the boundaries of the state.

Table 2. Discharge Location and Receiving Waters

Discharge Points	Locations throughout San Diego Region
Discharge Description	Agricultural Operation Waste Discharges
Receiving Waters	Inland Surface Waters, Enclosed Bays and Estuaries, Coastal Ocean Waters, and Groundwaters of the San Diego Region

Table 3. Administrative Information

This General Order was adopted by the California Regional Water Quality Control Board, San Diego Region on:	November 9, 2016
This General Order became effective on:	November 9, 2016

I, David W. Gibson, Executive Officer, do hereby certify that this General 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 November 9, 2016.

Tentative
David W. Gibson, Executive Officer

CONTENTS

TABLES

ATTACHMENTS

I. FINDINGS

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

Scope and Coverage of this General Order

A. This General Order serves as general WDRs for waste discharges from Agricultural Operations that are not covered by WDRs for Members of Third-Party Groups,[1] or other applicable WDRs. Agricultural discharges, including both irrigation water runoff and storm water running off of agricultural fields into surface waters or percolating to groundwater may carry waste constituents including but not limited to sediments, pesticides, nutrients, and pathogens that can affect the quality of waters of the State.

B. Owners and operators of an Agricultural Operation who enroll under this General Order are subject to its terms and conditions in their individual capacity. Either the owner or the operator may request enrollment under this this General Order on behalf of all Dischargers for the Agricultural Operation.

C. The San Diego Water Board also intends for this General Order to apply to all Dischargers who 1) fail to obtain WDRs coverage for Agricultural Operation waste discharges or 2) fail to enroll under and comply with applicable WDRs as members of a third-party group. Therefore, the San Diego Water Board may enroll a Discharger under this General Order following a San Diego Water Board hearing on the matter even though no application for coverage has been submitted by the Discharger.

D. This General Order is applicable to discharges from Agricultural Operations within the San Diego Region. The San Diego Region jurisdictional area forms the southwest corner of California and occupies approximately 3,900 square miles of surface area. The western boundary of the San Diego 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.

E. This General Order does not apply to discharges of waste that are regulated under other WDRs or conditional waivers of WDRs (Waivers). If the other WDRs or Waivers only regulate some of the waste discharge activities at the Agricultural Operation, the owner or operator shall obtain regulatory coverage for any discharges of waste that are not regulated by the other WDRs or Waivers. Such regulatory coverage may be sought through enrollment under this General Order, other applicable WDRs as a member of a third-party group, or by obtaining appropriate changes in the owner or operator's existing WDRs or Waivers.

Discharges Covered Under this General Order

F. This General Order regulates discharges from Agricultural Operations within the San Diego Region that could affect waters of the State. For the purposes of this General Order, an

[1] General Order No. R9-2016-0004 issued by the San Diego Water Board on November 9, 2016, establishes ~~waste discharge requirements~~WDRs for discharges from commercial Agricultural Operations for Dischargers that are Members of a Third-Party Group.

Agricultural Operation is any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the intent to make a profit. The San Diego Water Board presumes an intent to make a profit if at least one of the following criteria is met:

1. The owner or operator files a federal Department of Treasury Internal Revenue Service Form 1040 Schedule F *Profit or Loss from Farming* with their federal taxes.
2. The owner or operator receives agriculture water use rates or has been given an agricultural water use variance from their water purveyor.
3. The owner or operator ~~holds a current Operator~~is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting.

Discharges Not Covered Under this General Order

G. This General Order does not provide coverage for any of the following:

1. Discharges from Agricultural Operations that are adequately covered under other applicable WDRs.
2. Discharges from agricultural activities that do not meet the definition of an Agricultural Operation provided in Attachment C (Abbreviations and Definitions) and Table 1 of this General Order.
3. Discharges from medicinal cannabis operations.[2]
4. Discharges from agricultural activities not engaged in for profit, such as hobby farming or gardening.[3]
5. Discharges from Agricultural Operations into areas designated by the State Water Resources Control Board (State Water Board) as Areas of Special Biological Significance (ASBS).
6. Discharges from Agricultural Operations that are comingled with other non-agricultural wastes (e.g. industrial wastes, sewage).
7. Discharges from confined animal operations, including but not limited to animal feeding operations, or facilities where animals are corralled, penned, tethered, or otherwise enclosed or held.
8. Discharges from Agricultural Operations that are subject to National Pollution Discharge Elimination System (NPDES) permit requirements, as provided in Clean Water Act (CWA) section 402 and regulations and guidelines adopted thereunder.

[2] The Medical Marijuana Regulation and Safety Act (MMRSA) created a regulatory framework for licensing the cultivation and sale of medical marijuana. MMRSA added section 13276 to the Water Code which requires Regional Water Boards to adopt WDRs or a Waiver to address environmental impacts associated with cannabis cultivation. The San Diego Water Board will address discharges associated with cannabis cultivation in a separate order.

[3] Section 183(c) of the Internal Revenue Code defines an “activity not engaged in for profit” as any activity other than one for which deductions are allowable under section 162 (trade or business expenses) or section 212(1) or (2) (expenses for production of income) of the Internal Revenue Code.

9. Discharges of dredg~~ed~~ ~~and~~ or fill material from Agricultural Operations to waters of the State subject to regulation under CWA sections 401 and 404 and the California Water Code (Water Code).

10. Discharges from Agricultural Operations to a federally-owned, publicly-owned, or privately-owned treatment works regulated under WDRs or an NPDES permit, where such discharges are authorized by the entity that has jurisdiction over discharges to such treatment works.

11. Discharges from Agricultural Operations where all growing operations are conducted within buildings or in completely enclosed areas with no potential to discharge waste to waters of the State.

Reasons for Issuance of this General Order

H. There are more than 6,000 agricultural operations on approximately 70,000 acres of land in the San Diego Region. The production of crops on these lands requires disturbance to 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 waters of the State. The prohibitions and requirements of this General Order are intended to ensure that the discharge of wastes from Agricultural Operations are properly managed to protect, maintain, and improve water quality and prevent impairment of beneficial uses in waters of the State within the San Diego Region.

I. Nitrogen is an essential plant nutrient required to ensure robust crop growth. Management practices at agricultural operations vary with regard to nitrogen application based on the type of crop grown, soil type, irrigation method and other variables. Nitrogen fertilizer use, if not properly managed, can lead to nitrate levels in groundwater that exceed the water quality objective, including the safe drinking water maximum contaminate level (MCL)~~standard~~. A study conducted by the State Water Board Groundwater Ambient Monitoring and Assessment Program (GAMA)[4] in 2008 to 2009 involved the collection of groundwater samples from 137 domestic wells within San Diego County. The study concluded that 18% of the samples were reported to exceed the MCL ~~maximum contaminant level (MCL)~~ of 45 milligrams per liter (mg/L). In general, these wells were located in alluvial basins where agricultural activities, confined animal feeding operations, and on-site wastewater treatment systems are currently or were historically located.

J. In September 2013, an Agricultural Expert Panel was convened by the State Water Board to consider a variety of questions, including ones specific to the development of an agricultural nitrate control program. The Agricultural Expert Panel issued a final report of recommendations on September 9, 2014[5] concluding, in part, that because deep percolation of nitrates was universal within irrigated agriculture, a good regulatory program must

[4] Groundwater Ambient Monitoring and Assessment (GAMA), *Domestic Well Project Groundwater Quality Data Report, San Diego County Focus Area*, State Water Resources Control Board, March 2010, available at http://www.waterboards.ca.gov/water_issues/programs/gama/docs/sdreport.pdf (as of October 19, 2016).

[5] Conclusions of the Agricultural Expert Panel, Recommendations to the State Water Resources Control Board pertaining to the Irrigated Lands Regulatory Program (September. 9, 2014), available at <http://www.swrcb.ca.gov/water_issues/programs/agriculture/docs/ILRP_expert_panel_final_report.pdf> (as of April 26, 2016) (Agricultural Expert Panel Report).

encompass all irrigated areas, not only lands directly above high nitrate aquifers, those previously identified to be in a high vulnerability area, or those with a certain farm or field size. The San Diego Water Board agrees that groundwater in alluvial basins can be vulnerable to agricultural nitrate impacts, regardless of the time it takes for those impacts to appear in groundwater due to soil conditions, geologic conditions, and depth to groundwater. The San Diego Water Board also agrees that regulatory coverage for all agricultural lands is appropriate. However, the San Diego Water Board is not requiring compulsory nutrient management plans or reporting of crop-specific Nitrogen Applied/Nitrogen Removed (A/R) ratios[6] due to the reduced risk of nitrate percolation to groundwater presented by the unique soil conditions, geologic conditions, and crops grown in the San Diego Region as discussed in section I.D.2.d of the Fact Sheet (Attachment B).

K. Discharges from Agricultural Operations within the San Diego Region have adversely affected water quality, as documented by listings on the CWA section 303(d) List of Water Quality Limited Segments (303(d) List). The 2008 303(d) List identifies 12 water quality limited segments comprised of approximately 80 linear miles and 1,132 acres of surface waters within the San Diego Region where water quality standards were not attained and where agricultural activities were identified as a potential source of the impairment.

L. Past surface water monitoring conducted in accordance with the 2007 *Conditional Waiver of Waste Discharge Requirements for Discharges from Agricultural and Nursery Operations* (Agricultural Waiver) within the Santa Margarita River and San Luis Rey River watersheds in areas influenced by agricultural activities also documented water quality standards exceedances. Most samples exceeded water quality objectives for total dissolved solids, total nitrogen, and total phosphorus, constituents typically associated with agricultural activities. Likewise, regional biological monitoring has documented water quality impacts to the biological integrity of watersheds in the San Diego Region which are influenced by agriculture. The Southern California Index of Biological Integrity Scores – a multi-metric index based on the relative abundance of tolerant and sensitive benthic macroinvertebrates – for the bioassessment ranged from 5.7 (very poor condition) to 61 (good condition). The bioassessment data showed that 50% of streams were in poor or very poor condition, 0% in fair condition, and 50% in good or very good condition.

M. Total Maximum Daily Loads (TMDLs) are required to be established for surface waters placed on the 303(d) List for failure to attain applicable water quality standards. This General Order incorporates all applicable requirements for agricultural operations identified in the following approved TMDLs:

1. Resolution No. R9-2005-0036, *A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed, San Diego County* (Rainbow Creek TMDL).
2. Resolution No. R9-2010-0001, A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Bacteria TMDL).

Attachment E (Impaired Waterbodies and Applicable Total Maximum Daily Loads (TMDLs) of this General Order provides additional information regarding these TMDLs. This General

[6] The A/R ratio refers to the multi-year ratio of nitrogen applied to the field to nitrogen removed from the field.

Order may be considered for use as a non-TMDL solution to address other 303(d) listed waterbody impairments where agricultural activities are identified as the source of the pollutant(s) causing the impairment(s).

Legal and Regulatory Considerations

N. The San Diego Water Board regulates waste discharges that could affect the quality of the waters of the State, which includes both surface water and groundwater, pursuant to the Porter-Cologne Water Quality Control Act (division 7 of the Water Code commencing with section 13000).

O. This General Order adopts WDRs for discharges from Agricultural Operations. The Discharger is required to implement management practices, identified in a Water Quality Protection Plan (WQPP), that prevent or reduce waste discharges that cause or contribute to exceedances of applicable water quality objectives and criteria, unreasonably affect beneficial uses, or cause or contribute to a condition of pollution or nuisance in waters of the State. The Discharger must attend water quality training, prepare monitoring plans, conduct monitoring, perform inspections to evaluate management practice effectiveness, and report annually on monitoring and inspection results. If monitoring results identify exceedances of water quality standards, the Discharger must develop a Water Quality Restoration Plan (WQRP) to assess the effectiveness of implemented management practices and, when necessary, identify, implement, or upgrade management practices to meet water quality standards. This General Order also requires Dischargers in certain watersheds to implement TMDLs applicable to Agricultural Operations.

P. The issuance of this General Order is consistent with Water Code section 13263, which requires the San Diego Water Board to prescribe WDRs for proposed, existing, or material changes in discharges of waste that could affect water quality. Water Code section 13263 also allows the San Diego Water Board to issue WDRs although no report of waste discharge has been filed, and to issue general WDRs for a category of discharge, if appropriate.

Q. Water Code section 13263, subdivision (i) states that a Regional Water Board may prescribe general WDRs for a category of discharges if the Regional Water Board finds or determines that all of the following criteria apply to the discharges in that category:

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

Discharges from Agricultural Operations that are regulated under this General Order are consistent with the criteria listed above as described in section I.F of the Fact Sheet (Attachment B).

R. Water Code section 13267, subdivision (a), authorizes the San Diego Water Board to investigate the quality of any waters of the State within its region in connection with any action relating to the Basin Plan. Water Code section 13267, subdivision (b) provides that the San Diego Water Board, in conducting an investigation, may require Dischargers to furnish, under penalty of perjury, technical or monitoring program reports. The burden, including costs, of these reports must bear a reasonable relationship to the need for the report and the benefits

to be obtained from the reports. The requirements and prohibitions of this General Order implement the requirements of Water Code section 13276(b) for the reasons set forth below:

1. ~~The technical~~Technical and monitoring reports required by this General Order are necessary to ensure that the prior harm and future threat to water quality discharges associated with Agricultural Operations are properly assessed, abated, and controlled. This General Order requires the implementation of a monitoring and reporting program (MRP; Attachment A) that is intended to determine the effects of the waste discharges on water quality, to verify the adequacy and effectiveness of this General Order's conditions, and to evaluate the Discharger's compliance with the terms and conditions of this General Order. A Discharger who is covered under this General Order must comply with the MRP (Attachment A), and future revisions thereto.
2. The burden of preparing and submitting the technical and monitoring reports to the San Diego Water Board is reasonable. The reports are necessary to evaluate the Discharger's compliance with the terms and conditions of this General Order and to assure protection of waters of the State. The costs of monitoring and reporting were evaluated prior to adoption of this General Order and are included in section I.G.7 of the Fact Sheet (Attachment B).

S. The San Diego Water Board's *Water Quality Control Plan for the San Diego Basin* (Basin Plan) designates beneficial uses, establishes water quality objectives, contains programs of implementation needed to achieve water quality standards, and references the plans and policies adopted by the State Water Board. The water quality objectives are developed to protect the beneficial uses of waters of the State. Beneficial uses designated for groundwater and surface water in the Basin Plan which may be affected by discharges from Agricultural Operations are presented in Table 4.

Table 4. Beneficial Uses of Surface Waters and Groundwaters

Beneficial Use	Abbreviation
Surface Waters	
Agricultural Supply	AGR
Cold Freshwater Habitat	COLD
Commercial and Sport Fishing	COMM
Contact Water Recreation	REC-1
Estuarine Habitat	EST
Freshwater Replenishment	FRSH
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

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

T. This General Order implements the Basin Plan and other State Water Board water quality control plans and policies by requiring the implementation of management practices to achieve compliance with applicable water quality standards and the prevention of nuisance and pollution conditions. This General Order requires implementation of a MRP (Attachment A) to determine the effects of discharges on water quality and the effectiveness of management practices designed to comply with applicable water quality objectives.

U. The U.S. Environmental Protection Agency (USEPA) adopted the *National Toxics Rule* (NTR) on February 5, 1993, and the *California Toxics Rule* (CTR) on May 18, 2000, which was modified on February 13, 2001. The NTR and CTR contain water quality criteria which, when combined with beneficial use designations in the Basin Plan, constitute enforceable water quality standards for priority toxic pollutants in California surface waters.

V. The State Water Board adopted the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (Nonpoint Source Policy) in May 2004. The purpose of the Nonpoint Source Policy is to improve the Water Board's ability to effectively manage nonpoint source pollution and conform to the requirements of the federal CWA and the Federal Coastal Zone Act Reauthorization Amendments of 1990. The Nonpoint Source Policy requires that, among other key elements, a nonpoint source control implementation program's ultimate purpose to be explicitly stated. It also requires implementation programs to, 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. Consistent with the Nonpoint Source Policy, implementation of management practices may be used to measure nonpoint source control progress. However, implementation of management practices is not a substitute for meeting water quality objectives.

W. This General Order constitutes a Nonpoint Source Implementation Program for the discharges regulated by this General Order. Section I.G.3 of the~~The~~ Fact Sheet (Attachment B) describes the five key elements required by the Nonpoint Source Policy and provides an explanation of how the requirements of this General Order meet the requirements of the Nonpoint Source Policy.

X. Adoption of WDRs is the project for the purposes of the California Environmental Quality Act (CEQA; Public Resources Code section 21000 *et seq*). The San Diego Water Board is the Lead Agency for the development and adoption of this General Order. As the Lead Agency, the San Diego Water Board conducted an Initial Study in accordance with the CEQA Guidelines (California Code of Regulations (CCR) title 14, section 15063 *et seq*). Based on the Initial Study, the San Diego Water Board prepared a Negative Declaration. The San Diego Water Board provided notice of its intent to adopt a Negative Declaration for this General Order on November 9, 2016. The Negative Declaration/Initial Study was considered

concurrently with this General Order in Resolution No. R9-2016-0136. The Negative Declaration is appropriate because the San Diego Water Board has determined, in light of the whole record, that there is no substantial evidence that adoption of this General Order may cause a significant effect on the environment.

Y. The San Diego Water Board has considered Water Code section 106.3, which states that that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This General Order requires Dischargers to implement management practices to meet water quality standards intended to protect water for municipal and domestic uses.

Z. State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Antidegradation Policy) requires that high quality of waters be maintained unless degradation is consistent with the maximum benefit of people of the State; the degradation will not unreasonably affect present and anticipated beneficial uses; and the degradation will not result in violation of any applicable water quality control plan. This General Order is consistent with the Antidegradation Policy as described in section I.G.7 of the Fact Sheet (Attachment B).

AA. Pursuant to Water Code section 13263(a), the San Diego Water Board has considered the following factors found in section 13241 in establishing this General Order:

1. Past, present, and probable future beneficial uses of water.
2. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
3. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
4. Economic considerations.
5. The need for developing housing within the Region.
6. The need to develop and use recycled water within the Region.

The San Diego Water Board's consideration of these factors is described in section I.G.7 of the Fact Sheet (Attachment B).

BB. The Findings of this General Order, supplemental information and details in the Fact Sheet (Attachment B), and the administrative record of the San Diego Water Board relevant to the ~~Irrigated Lands Regulatory Program (ILRP)~~Commercial Agriculture Regulatory Program, were considered in establishing these WDRs. The Fact Sheet (Attachment B), which contains background information and rationale for the requirements in this General Order, is hereby incorporated into and constitutes Findings for this General Order. Attachment A and Attachments C through J are also incorporated into this General Order.

CC. The San Diego Water Board has notified interested agencies and persons of its intent to adopt this General Order for discharges of waste from Agricultural Operations within the San Diego Region, and has provided them with an opportunity for a public hearing and an opportunity to submit comments.

DD. The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to this General Order.

EE. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review this action in accordance with Water Code section 13320 and CCR title 23, sections 2050-2056. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of adoption of this General Order. If the thirtieth day after the adoption of this General Order falls on a Saturday, Sunday, or a State holiday, the petition may be submitted on the following business day. Copies of the law and regulations applicable to filing petitions may be found at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

FF. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any action authorized under this Order, the Discharger shall obtain authorization for an incidental take prior to construction or operation of the project. The Discharger shall be responsible for meeting all requirements of the applicable Endangered Species Act.

GG. The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under Water Code section 13223 or this Order explicitly states otherwise.

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13260, 13263, and 13267 and in order to meet the provisions contained in division 7 of the Water Code and regulations and policies adopted thereunder, Dischargers shall comply with the following:

II. APPLICATION FOR COVERAGE UNDER THIS GENERAL ORDER

A. Duty to Apply

New and existing Agricultural Operations without coverage under the General WDRS for Members of a Third Party Group or individual WDRs are required to enroll under this General Order, or obtain coverage under individual WDRs or other applicable WDRs. Either the owner or operator of an Agricultural Operation may enroll under this General Order by submitting a complete Notice of Intent (NOI) (Attachment G) to the San Diego Water Board. Regulatory coverage under this General Order is not effective until the San Diego Water Board approves the NOI as described in section II.D of this General Order.

B. Time to Apply

A Discharger shall request coverage under this General Order according to the following timeframes:

1. Existing Dischargers[7] without active coverage in other applicable general or individual WDRs shall submit a completed NOI (Attachment G) to enroll under this General Order no later than ~~180~~ 270 days following the effective date of this General Order.

[7] An Existing Discharger is any owner or operator who discharges, or proposes to discharge, waste from an Agriculture Operation that was in existence on the adoption date of this General Order.

2. Existing Dischargers with active coverage in other applicable general or individual WDRs may submit a completed NOI (Attachment G) to transfer enrollment to this General Order at any time in accordance with section II.F of this General Order.
3. New Dischargers[8] shall submit a complete NOI to enroll under this General Order at least 90 days before the discharge is to commence, unless permission for a later date has been granted by the San Diego Water Board.

C. Notice of Intent (NOI)

To obtain coverage under this General Order, a Discharger shall submit a completed NOI to the San Diego Water Board in accordance with the schedule provided in section II.B of this General Order. The NOI and any attachments may be submitted electronically if such method of submittal is approved by the San Diego Water Board in the future.[9] The NOI shall include all of the following items to be deemed complete:

1. A complete NOI (Attachment G). The NOI shall be signed and certified in accordance with the Signatory and Certification Requirements contained in section VII.E of this General Order.
2. A complete Water Quality Protection Plan (WQPP) in accordance with section VI.C of this General Order, including a copy of the Surface Water and Groundwater Monitoring Program Plan (Monitoring Program Plan), as required in section VI of the MRP (Attachment A).
3. Certification that the Discharger has provided notice to any unenrolled owner(s) or operator(s) of the Agricultural Operation and the landowner of their intent to obtain coverage under this General Order.

D. Notice of Applicability (NOA)

1. The NOI and WQPP are subject to San Diego Water Board approval. The San Diego Water Board will issue an NOA to the Discharger once the NOI application is deemed complete and eligible for coverage under this General Order. Regulatory coverage for the Agricultural Operation discharge, as described in the NOI application, commences with the date of issuance of the NOA. Coverage will not become effective until the San Diego Water Board issues an NOA to the Discharger. Upon receipt of an NOA, the Discharger shall comply with the terms and conditions of this General Order.
2. The San Diego Water Board reserves the authority to modify, revoke and reissue the NOA, and request an updated NOI based on new information or changed circumstances. New information and changed circumstances includes but is not limited to the following:
   a. Failure to fully disclose all relevant facts.
   b. Receipt of a request for modification of the NOA by the Discharger.
   c. Material and substantial alterations or additions to the Agricultural Operation.

[8] A New Discharger is any owner or operator who proposes a new discharge of waste from an Agricultural Operation that was not existence on the adoption date of this General Order.

[9] If documents described in section II.C of this General Order, Notice of Intent (NOI), are submitted electronically by or on behalf of the Discharger, any person providing the documents shall ensure that all of the relevant requirements of the San Diego Water Board are met for that submission.

E. Notice of Exclusion (NOEX)

An NOEX is a notice that indicates that the discharge is not eligible for coverage under this General Order. The San Diego Water Board may issue an NOEX for one or more of the following reasons:

1. The proposed discharge is not covered within the scope of this General Order.
2. The NOI is deemed incomplete.
3. The San Diego Water Board has determined that the Discharger must submit an application for coverage under individual WDRs or other applicable WDRs.

F. Enrollment Modification

There may be no gaps in coverage. A Discharger must submit an amended NOI at least 90 days prior to enrolling under other individual WDRs or other applicable WDRs.

G. Notice of Termination (NOT)

To terminate coverage under this General Order, a Discharger shall submit a completed NOT (Attachment H) to the San Diego Water Board. The NOT shall provide notice that the Discharger meets one or more of the following conditions, and shall be signed and certified by the Discharger in accordance with the Signatory and Certification Requirements contained in section VII.E of this General Order:

1. A new owner or operator has taken over responsibility for the Agricultural Operation, and transfer of coverage under this General Order is not requested.
2. The Discharger no longer owns or operates an Agricultural Operation that meets the enrollment criteria specified in section I.F of this General Order.
3. The Discharger has applied for and obtained coverage under other individual WDRs or other applicable WDRs for the Agricultural Operation.

The Discharger shall continue to comply with the requirements of this General Order until the San Diego Water Board notifies the Discharger in writing that the NOT has been accepted.

The Discharger's coverage under this General Order will terminate on the date specified in the NOT acceptance letter issued by the San Diego Water Board. San Diego Water Board acceptance of the NOT does not relieve the Discharger's responsibility for paying any outstanding annual fees, submitting any outstanding reports as specified in this General Order, or responding to enforcement actions pertaining to this General Order. The San Diego Water Board reserves the right to take any enforcement action for any violations of this General Order. Upon receipt of the San Diego Water Board's NOT acceptance letter, the Discharger will no longer be authorized to discharge under this General Order.

H. Termination of Coverage by the San Diego Water Board

Enrollment under this General Order may be terminated by the San Diego Water Board for cause including, but not limited to the following:

1. Violating any terms or conditions of this General Order.
2. Obtaining enrollment under this General Order by misrepresentation or failure to disclose all relevant facts.
3. The San Diego Water Board determining that individual WDRs would be more appropriate for the Agricultural Operation.

I. Transfer of Enrollment

Enrollment under this General Order is transferable with approval by the San Diego Water Board. Dischargers seeking to transfer enrollment under this General Order shall submit an amended NOI (Attachment G) indicating the change of information to the San Diego Water Board. The transfer request must also include a statement and signature that the new owner or operator assumes full responsibility for compliance with this General Order, including implementation of any WQPP and any WQRP prepared by the preceding owner or operator. The transfer of enrollment is not complete until the San Diego Water Board issues an amended NOA to the new Discharger, if enrolled in this General Order, or if enrolled under the Individual General Order.

J. Fees

Discharger enrollment under this General Order is conditioned upon total payment of any fee required under CCR title 23, division 3, chapter 9 (commencing with section 2200) and owed by the Discharger. The Discharger shall pay an annual fee to the State Water Board in compliance with the Agricultural and Irrigated Land Fee Schedule set forth at 23 CCR section 2200.6. The fee regulations can be accessed online at http://www.waterboards.ca.gov/resources/fees/water_quality/ ~~http://www.waterboards.ca.gov/resources/fees/docs/fy13_14_fee_schedule_ilrp.pdf:~~

III. PROHIBITIONS

A. The Discharger shall comply with the Discharge Prohibitions contained in chapter 4 of the Basin Plan and any other applicable statewide water quality control plan. All such prohibitions are incorporated in this General Order as if fully set forth herein and summarized in Attachment F as a condition of this General Order.

B. The discharge of waste at a location or in manner different from that described in the NOI is prohibited.

C. The discharge of wastes from any Agricultural Operation to waters of the State within the San Diego Region is prohibited, unless the Agricultural Operation is covered under this General Order, or other applicable general or individual WDRs.

D. The discharge of a hazardous waste as defined in CCR title 22, section 66261.3 is prohibited.

E. The discharge or deposition of oil, trash, rubbish, refuse, or other solid waste directly into surface waters, or in any manner which may permit it to be washed or transported into the surface waters is prohibited.

F. The discharge of residual pesticides, algaecides, herbicides and/or fumigants in a manner not described in this General Order and inconsistent with other permits for these discharges is prohibited.

G. The discharge of wastes (e.g., fertilizers, fumigants, pesticides) into groundwater via backflow through a water supply well is prohibited.

H. The discharge of any waste (e.g., fertilizers, fumigants, pesticides) down a groundwater well casing is prohibited.

IV. DISCHARGE SPECIFICATIONS

A. General Discharge Specifications

1. The waste discharge shall not cause or contribute to surface erosion or scouring of aquatic substrates.
2. The waste discharge shall not contain material or substances that cause or contribute to the occurrence or potential presence of pathogenic organisms or viruses, as identified by indicator bacteria levels, in surface waters or groundwater.
3. The waste discharge shall not contain materials or substances in amounts that cause or contribute to the occurrence of objectionable tastes or odors in surface waters or groundwater.
4. The waste discharge shall not contain material or substances in amounts that cause or contribute to foaming in surface waters or groundwater.
5. The waste discharge shall not contain material or substances in amounts that will accumulate to toxic levels in in surface waters, sediments, biota, or groundwater.
6. The waste discharge shall not contain material or substances in amounts that cause the pH to:
   a. ~~f~~Fall below ~~6.0~~6.5 or rise above ~~9.0~~8.5 in inland surface waters or groundwater.
   b. Fall below 7.0 or rise above 9.0 in bays and estuaries.
   c. Change at any time more than 0.2 units from that which occurs naturally in ocean waters.
   d. Fall below 6.5 or rise above 9.0 in groundwater.
7. The waste discharge shall not contain material or substances in amounts that result in vectors or other nuisances in surface waters or groundwater.
8. The waste discharge shall not contain material or substances in amounts that result in aesthetically undesirable discoloration of surface waters or groundwater.
9. The waste discharge shall not contain settleable material or substances in amounts that may form sediments which will degrade benthic communities or other aquatic life in surface waters.
10. The waste discharge shall not contain material or substances in amounts that significantly degrade the natural light to benthic communities and other aquatic life in surface waters.

B. Waste Discharge Control Requirements

To minimize or prevent the discharge of waste to waters of the State, the Discharger shall:

1. To the extent practical avoid the application of~~Not apply~~ fertilizers, pesticides, herbicides, algaecides, or fumigants within three days prior to a predicted rain event.
2. Not use soil amendments containing any of the following:
   a. Municipal solid waste except for biodegradable waste meeting the definition of "compost" as defined in Public Resources Code section 40116.
   b. Septage, liquid waste, oil, or grease.

c. Hazardous waste, designated waste, or any other waste determined by the San Diego Water Board to pose a potential threat to water quality.

3. Maintain a minimum 100 foot buffer zone between compost piles and all surface waterbodies.
4. Conduct all composting activities on a working surface that prevents ponding of water, infiltration of water and leachate to the underlying soil, and erosion.
5. Manage compost piles to prevent water oversaturation and leachate generation.
6. Implement proper handling, storage, disposal and management of pesticides, herbicides, fertilizer, and other chemicals. All pesticides, herbicides and fertilizers shall be applied in accordance with the manufacturer's label.
7. Implement management practices to prevent erosion, reduce storm water runoff quantity and velocity, and hold soil particles in place.
8. Implement and comply with management practices as described in the WQPP and any applicable WQRP.[10] The Discharger must (1) implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and (2) when effectiveness evaluation or 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, the Discharger must implement improved management practices.
9. Properly operate and maintain in good working order any facility, unit, system, or monitoring device installed to achieve compliance with this General Order.
10. Comply with any TMDL-based requirements set forth in Attachment E (Impaired Water Bodies and Applicable TMDLs) of this General Order.

V. RECEIVING WATER LIMITATIONS

~~Water Quality Standards~~

The discharge of waste shall not cause or contribute to exceedance~~s~~ of any ~~water quality standard, federal pollutant criteria, or other~~ applicable water quality standard in any surface water or groundwater; unreasonably affect any applicable beneficial use; or cause or contribute a condition of pollution or nuisance. ~~Applicable water quality standards include those contained in the following water quality control plans and policies and federal regulations:~~

~~The Basin Plan.~~

~~The *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan).~~

~~The *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries* (Thermal Plan).~~

[10] Pursuant to Water Code section 13260, this General Order does not specify the design, location, type of construction, or particular manner of management practice compliance and Dischargers can use any appropriate management practice to comply with the requirements of this General Order. In determining appropriate management practices, Dischargers are encouraged to consult the State Water Board's Non-Point Source Management Measures Encyclopedia at: http://www.waterboards.ca.gov/water_issues/programs/nps/edu_outreach.shtml (as of October 20, 2016) and the University of California Cooperative Extension listing of available management practices at http://ucanr.edu/sites/agwaterquality/Grower_Resources/ (as of October 20, 2019).

~~The *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* (Bays and Estuaries Policy).~~

~~The *Water Quality Control Plan for Enclosed Bays and Estuaries Plan, Part 1: Sediment Quality*~~

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

~~The National Toxics Rule (NTR).[11]~~

~~The California Toxics Rule (CTR).[12,13]~~

VI. REQUIREMENTS

A. General

1. Dischargers shall comply with the attached MRP (Attachment A) and future revisions as specified by the San Diego Water Board.
2. Dischargers shall 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 waters of the State.
3. Dischargers shall comply with all applicable provisions of the Water Code, the Basin Plan, and other State Water Board water quality control plans and policies.
4. Dischargers shall maintain a copy of this General Order and copies of all reports required by this General Order, either in hard copy or electronic format, at the primary place of business, or the Discharger's headquarters for its Agricultural Operation, unless otherwise stated in this General Order.

B. Education

1. By December 31 of each year, Dischargers shall complete at least ~~four~~ two hours of appropriate water quality training to maintain compliance with this General Order. Training should focus on the actions necessary to attain compliance with water quality standards in receiving waters by identifying water quality problems and implementing pollution prevention strategies and practices designed to protect water quality and resolve water quality problems, and to achieve compliance with this General Order. Water quality training options include formal classroom training, individual meetings with a qualified trainer, and/or internet-based training with the local Farm Bureau, University of California Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), Resource Conservation Districts (RCDs), or another comparable organization.
2. ~~Dischargers shall maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems~~.

~~[11] Title 40 of the Code of Federal Regulations (40 CFR) section 136.~~

~~[12] 65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR.~~

~~[13] If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.~~

C. Water Quality Protection Plan (WQPP)

1. Dischargers shall prepare a complete WQPP to identify the type and location of management practices[14] currently employed and additional management practices based on current conditions at their Agricultural Operation needed to minimize or prevent the discharge of waste to waters of the State either directly or indirectly through irrigation water runoff and infiltration, non-storm water runoff, and storm water runoff.
2. A copy of the WQPP shall be submitted with the NOI.
3. Dischargers shall commence implementation of the WQPP upon receipt of an NOA from the San Diego Water Board.
4. At least quarterly, Dischargers shall ~~periodically~~ evaluate the effectiveness of the management practices in the WQPP and make modifications to the WQPP as necessary.
5. The WQPP shall be kept current and available on the Agricultural Operation site and made available to the San Diego Water Board upon request.
6. The WQPP shall contain all of the following information to be deemed complete:
   a. Name, mailing address, Assessor's Parcel Number, size (in acres), and type of the Agricultural Operation.
   b. Name, mailing address, phone number, email address, and type (individual, corporation, partnership, governmental agency, other) of the owner of the Agricultural Operation.
   c. Name, mailing address, phone number, and email address of the operator of the Agricultural Operation.
   d. Name, mailing address, phone number, and email address of the landowner.
   e. Name, mailing address, phone number, and email address of the individual who prepared the WQPP.
   f. A brief description of the nature of the Agricultural Operation including the activities conducted by the Discharger which require coverage under this General Order .
   g. List of crops grown (i.e., orchard, vineyard, nursery products, row crops) at the Agricultural Operation and the acres dedicated for each type of crop ~~grown~~.
   h. List of agricultural chemicals typically applied to crops at the Agricultural Operation, including but not limited to fertilizers, organic amendments, pesticides, and fumigants.
   i. The name of the receiving surface waters (if known) to which irrigation runoff, storm water runoff, and non-storm water runoff from the Agricultural Operation is discharged.
   j. A scaled topographic Site Location Map~~map~~ extending one mile beyond the property boundary of the Agricultural Operation and depicting the following:
      i. Property boundaries, roads, structures, and drainage structures.
      ii. Irrigation wells, domestic water supply wells, springs, and other surface water bodies listed in public records or otherwise known to the Discharger to be in the map area.

[14] See Footnote 10 *Supra*

~~iii. Growing areas.~~

~~iv. Compost and manure management areas including storage and disposal sites.~~

~~v. Chemical storage areas.~~

~~vi. Topographic lines.~~

~~vii. Major pipes or other structures through which through which irrigation runoff, storm water runoff and non-storm water runoff from the Agricultural Operation is discharged to surface waters, if applicable.~~

~~viii. The location and types of management practices employed at the Agricultural Operation.~~

~~ix. The location of proposed surface water and groundwater monitoring stations.~~

k. A scaled Site Plan depicting the following:

i. Property boundaries, roads, structures, and drainage structures.

ii. Irrigation wells, domestic water supply wells, springs, surface water bodies, and storm water and non-storm water conveyance systems located within the property.

iii. Approximate location of growing areas.

iv. Compost and manure management areas including storage and disposal sites.

v. Chemical storage areas.

vi. Surface flow directions and general topographic slope direction.

vii. The location and types of management practices employed.

viii. The location of groundwater wells used for domestic supply.

l. A detailed description of each current and proposed management practice, including its purpose, operational status, ~~and~~ a time schedule for the operation and maintenance of current management practices, and a time schedule for the construction, ~~and~~ implementation, operation and maintenance of ~~if the~~ proposed management practice~~s is~~ not currently in use. This includes but is not limited to management practices related to irrigation efficiency and management, pesticide management, nutrient management, salinity management, and sediment and erosion control to achieve compliance with this General Order. This also includes management practices required to address applicable TMDLs, including but not limited to management practices identified in the Rainbow Creek Nutrient Management Plan. The time schedule for construction and implementation of proposed management practices shall reflect the shortest practicable time required to perform each task and shall include a final date for construction and implementation. The schedule may not be longer than that which is reasonably necessary to achieve compliance with the receiving water limitations contained in section V of this General Order.

m. ~~A detailed schedule for operation and maintenance of each current or proposed management practice~~.

n. A detailed visual observation monitoring program as required by section VI.E of this General Order~~and schedule~~ for evaluating whether management practices are

adequate, properly implemented and ~~the~~ effective~~ness of each current or proposed management practice.~~

o. A Surface Water and Groundwater Monitoring Program Plan (Monitoring Program Plan), as required in section VI of the MRP (Attachment A).

p. ~~Signatory and~~ Certification and Signature in accordance with Certification Requirements contained in section VII.E of this General Order.

7. Dischargers shall ensure that all management practices identified in the WQPP are properly operated and maintained. Dischargers shall periodically evaluate the effectiveness of the management practices and shall make modifications to the WQPP as necessary when visual observation monitoring indicates waste discharges have not been adequately addressed in the WQPP.

D. Water Quality Restoration Plan (WQRP)

1. If a ~~monitoring~~ Water Quality ~~b~~Benchmark described in section VI, Table A.2 of the MRP (Attachment A) is exceeded, Dischargers must promptly notify the San Diego Water Board and ~~thereafter~~ prepare a WQRP containing the information described in section VI.D.3 below. For the purposes of this General Order, an exceedance occurs when a) a sampling result for a constituent at a single surface water monitoring location exceeds the ~~applicable Surface Water Quality Benchmarks~~ monitoring benchmark more than 3 out of 4 times for the same constituent or b) a groundwater sampling result exceeds the nitrate benchmark in accordance with section III.C.b of the MRP (Attachment A) of this General Order. The San Diego Water Board may also require Dischargers to prepare a WQRP if a trend of water quality degradation is identified that threatens a beneficial use in receiving waters affected by the Discharger's Agricultural Operation.

2. Dischargers shall submit the WQRP to the San Diego Water Board within 90 days of the exceedance or determination of threatened degradation unless permission for a later submittal date has been granted by the San Diego Water Board.

3. The WQRP shall contain the following information:

   a. For each constituent that has exceeded a ~~Surface~~ Water Quality Benchmark or indicates a trend of water quality degradation that threatens a beneficial use, the WQRP shall include a graph showing the concentrations over time since 2016 and a trend analysis for the constituent.

   b. The WQRP shall include a description of the actual or suspected waste sources that may be causing or contributing to the exceedance or trend of water quality degradation that threatens a beneficial use(s).

   c. The WQRP shall identify management practices currently being implemented and additional or improved management practices that will be implemented to prevent or minimize the discharge of any waste that is causing or contributing to the exceedance or trend of water quality degradation. The WQRP shall also include a brief justification for selecting specific management practices.[15]

   d. The WQRP shall include a schedule for the implementation and completion of all tasks described in the WQRP. The schedule shall reflect the shortest practicable

[15] See Footnote 10 *Supra*

time required to perform each task, given the type of management practices planned or program being implemented, and the experience of commercial agriculture with the time required to implement similar management practices or programs. The schedule may not be longer than that which is reasonably necessary to achieve the receiving water limitations in section V of this General Order. If the schedule exceeds one year, the schedule must include interim annual milestones that demonstrate progress towards completion of the WQRP tasks and compliance with the applicable receiving water limitations of this General Order.

e. The WQRP shall include a monitoring and reporting plan ~~methodology for~~ to provide~~ing~~ feedback on WQRP progress and its effectiveness in achieving compliance with the applicable receiving water limitations of this General Order.

f. The WQRP shall provide for submittal of progress reports with annual ~~monitoring~~ reports to the San Diego Water Board.

g. The San Diego Water Board may require Dischargers to modify and resubmit the WQRP to include additional management practices, monitoring, or reporting conditions if the WQRP is not in conformance with the above criteria. Dischargers shall submit any modifications to the WQRP required by the San Diego Water Board within 30 days of written notification from the Board.

4. A WQRP is deemed approved 90 days after submission of the WQRP to the San Diego Water Board, unless the Board provides written notice to Dischargers that a WQRP has not been accepted or is conditionally accepted.

5. Dischargers shall commence implementation of the WQRP 90 days after submission of the WQRP in accordance with the accepted schedule, unless otherwise directed in writing by the San Diego Water Board. Before beginning these activities Dischargers shall:

   a. Notify the San Diego Water Board of the intent to initiate actions included in the WQRP.

   b. Comply with any conditions set by the San Diego Water Board.

6. If Dischargers have complied with the WQRP procedures set forth above and are implementing the actions required, Dischargers will not be required to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitation unless directed by the San Diego Water Board to develop and implement additional management practices.

7. The iterative WQRP implementation process shall continue until such time as compliance with the applicable water quality standard(s) is attained.

8. The San Diego Water Board will not require preparation and submittal of a WQRP if Dischargers can demonstrate one of the following conditions to the satisfaction of the San Diego Water Board:

   a. The exceedance is solely caused by discharges not associated with agricultural activity.

   b. The exceedance is solely attributable to pollutants from natural background sources.

   c. The exceedance is solely attributable to another Agricultural Operation(s).

The additional management practices required to achieve water quality standards are not technologically available or are economically impracticable.

E. Quarterly Self-Inspection Report

1. At least quarterly~~Quarterly~~ during the months of March, June, September, and December, Dischargers shall inspect the Agricultural Operation to assess the operation and maintenance of installed management practices and to correct any deficiencies.
2. Dischargers shall document the inspections by completing the Quarterly Self-Inspection Report (Attachment I).
3. The Quarterly Self-Inspection Report shall be signed and certified in accordance with Signatory and Certification Requirements contained in section VII.E of this General Order.
4. Dischargers shall include all Quarterly Self-Inspection Reports with the Annual ~~Surface Water and Groundwater Monitoring~~ Self- Assessment Report described in section VI.F ~~VII of the MRP (Attachment A)~~ of this General Order.

F. Annual Self-Assessment Report

1. By April 30 of each year, Dischargers shall submit a completed ~~conduct a self-assessment of the previous year. The Discharger shall document the self-assessment by completing the~~ Annual Self-Assessment Report (Attachment J) covering January 1 through December 31 of the prior year.
2. The purpose of the Annual Self-Assessment Report is to a) evaluate whether the ~~compliance with this General Order, the effectiveness of the~~ WQPP described in section VI.C, and the management practices used to control the discharge of pollutants from the Agriculture Operation are adequate, properly implemented and effective in accordance with the terms of this General Order and b) determine whether additional control measures are necessary.
3. The Annual Self-Assessment Report shall include as attachments copies of the Quarterly Self-Inspection Reports (Attachment I) and evidence that the Discharger completed the annual water quality training.
4. The Annual Self-Assessment Report shall also include a listing of each incident of noncompliance during the annual monitoring period and, for each incident of noncompliance, the cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
5. Dischargers shall include the Annual Self-Assessment Report (Attachment J) and the Quarterly Self-Inspection Reports (Attachment I) with the Annual Surface Water and Groundwater Monitoring Report described in section VII of the MRP (Attachment A).

VII. PROVISIONS

A. General Order Compliance Provisions

1. Duty to Comply

The Discharger shall comply with the terms and conditions of this General Order. Any noncompliance with this General Order constitutes a violation of the Water Code and is

grounds for a) enforcement action; b) termination, revocation and reissuance, or modification of the NOA for this General Order; or c) denial of a report of waste discharge in application for new or revised WDRs, or a combination thereof.

2. Need to Halt or Reduce Activity Not a Defense

   It shall not be a defense for the Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Order.

3. Duty to ~~Mitigate~~Minimize or Prevent Discharges

   The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this General Order that has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

4. Proper Operation and Maintenance

   The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this General Order.

5. Effect of this General Order

   This General Order does not convey any property rights of any sort or any exclusive privileges. The issuance of this General Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, State, or local law or regulations.

6. 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 Agricultural Operations subject to this General Order. The inspection must be made with the consent of the owner or possessor of the facilities, 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.

   The Discharger shall allow the San Diego Water Board or the State Water Board and/or their authorized representative(s) (including an authorized contractor acting as their representative) upon the presentation of credentials and other documents, as may be required by law, to:

   a. Enter upon Discharger's premises, where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this General Order.

   b. Access and copy, at reasonable times, any records that shall be kept under the conditions of this General Order.

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

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

B. Permit Action Provisions

~~Reopener Provision~~

This General Order may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:

1. Violation of any terms or conditions of this General Order.
2. Obtaining this General Order by misrepresentation or failure to disclose fully all relevant facts.
3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
4. Adoption of a TMDL amendment, new TMDL, or TMDL alternative.

The filing of a request by the Discharger for the modification, revocation, reissuance, or termination of this General Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this General Order.

C. Monitoring Provisions

1. Monitoring

   Monitoring and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Test Procedures

   Monitoring shall be conducted according to test procedures approved under the 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*, as amended for the analyses of pollutants unless another method is required under 40 CFR subchapters N or O. In the case of pollutants for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR subchapters N or O, monitoring shall be conducted according to a test procedure specified in this General Order for such pollutants.

3. Monitoring Results

   Monitoring results shall be reported at the intervals specified in the MRP (Attachment A) in this General Order.

4. Duty to Provide Monitoring Information

   If the Discharger monitors any pollutant more frequently than required by this General Order 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, the results of such monitoring shall be included in the calculation and reporting of the data to the San Diego Water Board.

D. Records Provisions

1. Access to Records

   The Discharger shall allow the San Diego Water Board to access and copy, at reasonable times, any records that are kept under the conditions of this General Order.

2. Retention of Records

   The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this General Order, and records of all data used to complete the NOI application package for this General Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or NOI application package. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the San Diego Water Board.

3. Monitoring Records

   Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements.
   b. The individual(s) who performed the sampling or measurements.
   c. The date(s) analyses were performed.
   d. The individual(s) who performed the analyses.
   e. The analytical techniques or methods used.
   f. The results of such analyses.

4. Confidentiality Claims[16]

   Claims of confidentiality for the following information will be denied:

   a. The name and address of any Discharger.
   b. NOIs, NOAs, reports, attachments, and monitoring data.

5. Confidentiality Claim Assertion and Evaluation

   All reports prepared and submitted to the San Diego Water Board in accordance with the terms of this General Order will be made available for public inspection at the offices of the San Diego Water Board, except for reports, or portions of such reports, subject to an exemption from public disclosure in accordance with California law and regulations, including the Public Records Act, Water Code section 13267(b)(2), and the California Food and Agriculture Code. If the Discharger asserts that all or a portion of a report is subject to an exemption from public disclosure, it must clearly indicate on the cover of the report that it asserts that all or a portion of the report is exempt from public disclosure. The complete report must be submitted with those portions that are asserted to be exempt in redacted form, along with separately-bound unredacted pages (to be

[16] Water Code section 13267, subdivision (b)(2) authorizes the San Diego Water Board to review business information that may constitute trade secrets or secret processes. However, portions of a report that might disclose trade secrets or secret processes may be exempt from public disclosure pursuant to Government Code section 6254, subdivision (k).

maintained separately by San Diego Water Board). The Discharger shall identify the basis for the exemption. If the San Diego Water Board cannot identify a reasonable basis for treating the information as exempt from disclosure, the Executive Officer will notify the Discharger that the information will be placed in the public file unless the San Diego Water Board receives, within 10 calendar days, a satisfactory explanation supporting the claimed exemption. Data on waste discharges, water quality, meteorology, geology, and hydrogeology shall not be considered confidential. NOIs, WQPPs and WQRPs shall generally not be considered exempt from disclosure.

E. Reporting Provisions

1. Duty to Provide Information

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

2. Signatory Requirements

   a. NOIs must be signed by a Legally Responsible Person. For the purposes of this General Order 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.

      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. Plans and Reports: must be signed by a Legally Responsible Person or by a Duly Authorized Representative. A person is Duly Authorized Representative only if:

      iv. The authorization is made in writing by a Legally Responsible Person, as described above.

      v. The authorization specifies either an individual or position having responsibility for the overall operation of the Agricultural Operation, or an individual having overall responsibility for environmental matters for the Agricultural Operation.

      vi. The written authorization is submitted to the San Diego Water Board.

      If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Agricultural Operation, a new authorization satisfying the above requirements shall be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by the Duly Authorized Representative.

3. Signature and Certification

   Reports and information required under this General Order may be signed and certified 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 General Order shall 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

Dischargers shall submit all reports and information required under this General Order in electronic format via e-mail to sandiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and shall be placed on a disc and delivered to:

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

Each electronic document shall be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). ~~All electronic documents shall include scanned copies of all signature pages; electronic signatures will not be accepted.~~ Electronic documents submitted to the San Diego Water Board shall include the following identification numbers in the header or subject line: CW-803119.

5. Noncompliance Reports

The Discharger shall report to the San Diego Water Board any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the incident and its cause, the period of the noncompliance including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The San Diego Water Board may waive the above-required written report under this provision on a case by case basis if an oral report has been received within 24 hours. The following incidents of noncompliance must be reported within 24 hours under this provision:

a. Any discharge of treated or partially treated sewage wastewater that reaches surface waters of the State.

b. Groundwater monitoring results indicate that water in any well that is used or may be used for drinking water exceeds 45 mg/L nitrate as NO_3.

6. Hazardous Substance Discharge

Except as provided in Water Code section 13271(b), any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be

discharged in or on any waters of the State, shall as soon as a) that person has knowledge of the discharge, b) notification is possible, and c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services (OES) of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code title 2, division 1, chapter 7, article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Discharger is in violation of a Basin Plan prohibition.

7. Oil or Petroleum Product Discharge

   Except as provided in Water Code section 13272(b), any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as a) such person has knowledge of the discharge, b) notification is possible, and c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California OES of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code title 2, division 1, chapter 7, article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to CWA section 311, or the discharge is in violation of a Basin Plan prohibition.

8. Anticipated Noncompliance

   The Discharger shall give advance notice to the San Diego Water Board of any planned changes in the Agricultural Operation which may result in noncompliance with the terms and requirements of this General Order.

9. Other Information

   The Discharger shall report all instances of noncompliance not reported under Reporting Provision 6, 7 or 8 above at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Provision 5.

10. Duty to Provide Information

    When the Discharger becomes aware that it failed to submit any relevant facts in a NOI or submitted incorrect information in a NOI in application for coverage under this General Order or in any report to the San Diego Water Board, it shall promptly submit such facts or information.

F. Compliance and Enforcement Provisions

1. Enforcement Authority

   Enrolled Dischargers are primarily responsible for meeting the conditions of this General Order. However, owners and operators that are not enrolled may be held responsible for

the conduct of operations on the Discharger's enrolled parcel.[17] In the event of any violation or threatened violation of the conditions of this General Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under State law.

2. Provision Severability

   The provisions of this General Order are severable, and if any provision of this General Order, or the application of any provision of this General Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this General Order, shall not be affected thereby.

3. Payment of Fees

   This General Order is conditioned upon total payment of any fee required under CCR title 23 sections 2200.6(a) and (b), and owed by the Discharger.

4. Investigation of Violations

   In response to a suspected violation of any condition of this General Order, the San Diego Water Board may, pursuant to Water Code section 13267, require the Discharger to investigate, monitor, and report information on the violation. The only restriction is that the burden, including costs of preparing the reports, shall bear a reasonable relationship to the need for and the benefits to be obtained from the reports.

[17] The person with day-to-day control of the discharge typically has the primary responsibility for compliance; however, if this person fails to clean up or control a discharge, or threatened discharge, or comply with the MRP (Attachment A), the landowner must assume responsibility for compliance (See Vallco Park, State Water Board WQO 86-18).

ATTACHMENT A – MONITORING AND REPORTING PROGRAM

CONTENTS

TABLES

ATTACHMENT A – MONITORING AND REPORTING PROGRAM (MRP)

I. INTRODUCTION

California Water Code (Water Code) section 13267 authorizes the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to establish monitoring, reporting, and recordkeeping requirements. Pursuant to this authority and consistent with the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (Nonpoint Source Policy) and the *Framework for Monitoring and Assessment in the San Diego Region* as detailed in the San Diego Water Board's *Practical Vision*, this monitoring and reporting program (MRP) establishes conditions for the Discharger to conduct routine monitoring activities and to submit technical and monitoring reports to the San Diego Water Board consistent with this General Order. The purpose of the MRP is as follows:

- Determine compliance with discharge specifications, receiving water limitations, and other requirements established in this General Order.
- Assess the effectiveness of management practices required by this General Order.
- Characterize the effects of discharges from Agricultural Operations on waters of the State.

Each section contains the key monitoring and assessment questions the monitoring is designed to answer. In developing the list of key monitoring and assessment questions, the San Diego Water Board considered four basic types of information for each question:

- Information Need – Why does the San Diego Water Board need to know the answer?
- Monitoring Criteria – What monitoring will be conducted for deriving an answer to the question?
- Expected Product – How should the answer be expressed and reported?
- Possible Follow-up Actions – What actions shall be taken to address any impairment in the receiving water?

The framework for this monitoring program has three components that comprise a range of spatial and temporal scales: 1) core monitoring, 2) regional monitoring, and 3) special studies.

1) Core Monitoring

Core monitoring consists of the basic site-specific monitoring necessary to measure compliance with the requirements of this General Order and impacts to receiving water quality from the Discharger's Agricultural Operation. Core monitoring is typically conducted in the immediate vicinity of the discharge by examining local scale spatial effects.

2) Regional Monitoring

Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs, including commercial agriculture, on the ecological health of water bodies in the San Diego Region. This MRP relies on biological assessment techniques to evaluate the biological condition of waterbodies receiving waste discharges from agricultural operations from a regional perspective. Biological assessment, or "bioassessment," is a way to measure ecosystem health based on the living organisms at a given location. To achieve this, scientists examine communities of organisms such as invertebrates (e.g., insects, crustaceans), fish, algae, and plants to quantify their numbers and species. Summarized community data provides key information about the condition of aquatic ecosystems, such as streams, wetlands, and oceans.

Regional monitoring can include ambient monitoring. Under the San Diego Water Board's *Commercial ~~Agricultural Operation~~Agriculture Regulatory Program*, Third-Party Groups will take the lead role in coordinating and carrying out regional monitoring. Individual Dischargers, however, are encouraged to participate in regional monitoring programs as these programs can assist in the interpretation of core monitoring data by providing a more complete picture of natural variability and cumulative impacts in the receiving waters. This assessment in turn allows Individual Dischargers to more effectively use core monitoring data in prioritizing actions targeting pollutants and pollutant sources.

3) Special Studies

Special studies are directed monitoring efforts designed in response to specific management or research questions identified through either core or regional monitoring programs. Oftentimes, special studies are used to help understand core or regional monitoring results where a specific environmental process is not well understood, or to address unique issues of local importance.

II. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. Samples and measurements taken for the purposes of monitoring shall be representative of the volume and nature of the discharge, and shall be collected at the monitoring points approved by the San Diego Water Board. Monitoring locations shall not be changed without prior notification to and approval by the San Diego Water Board.

B. All monitoring instruments and devices shall be properly maintained and calibrated as necessary to ensure their continued accuracy. Any flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

C. Monitoring shall be conducted 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*, as amended, for the analyses of pollutants, unless another method is specified in this General Order. The San Diego Water Board may approve equivalent test procedures at its discretion.

D. Groundwater monitoring, sample preservation, and analyses shall be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, USEPA.

E. All analyses shall be performed in a laboratory certified to perform such analyses by the State Water Resources Control Board's (State Water Board) Division of Drinking Water (DDW), or by a laboratory approved by the San Diego Water Board. The laboratory shall be accredited under the DDW Environmental Laboratory Accreditation Program (ELAP) to ensure the quality of analytical data used for regulatory purposes to meet the requirements of this Order.

Additional information on ELAP can be accessed at: http://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml.

F. Each monitoring report shall affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the Environmental Laboratory Accreditation Program, and in accordance with current USEPA guideline procedures, or as specified in this Monitoring Program."

G. All plans and reports required under this MRP shall be prepared by professionals qualified to prepare such plans and reports. Professionals shall be qualified, licensed where applicable, and competent and proficient in the fields pertinent to the required activities. California

Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of registered professionals. A statement of qualifications of the responsible lead professionals shall be included in all plans and reports submitted by the Discharger.

H. For any monitoring period in which ~~no discharge occurred~~ there is insufficient water to collect samples at a given monitoring location, the monitoring report shall include a statement certifying that observation and adequate documentation to support the statement.~~no discharge occurred during the monitoring period.~~

I. Monitoring results shall be reported at intervals and in a manner specified in this General Order.

J. This MRP may be modified by the San Diego Water Board, as appropriate.

III. CORE MONITORING REQUIREMENTS

A. Core Monitoring Questions

The Core Monitoring requirements have been designed to answer the following questions:

1. How effective are the management practices at preventing or reducing discharges of waste from the Agricultural Operation that are causing or contributing to exceedances of applicable water quality standards in surface water and groundwater?
2. What effect, if any, has the Agricultural Operation had on surface water and groundwater quality?

B. Core Monitoring – Surface Water

1. Surface Water Core Monitoring Locations

   a. If the Agricultural Operation is hydraulically connected to surface waters:

      The Discharger shall establish monitoring locations in surface waters that receive direct or indirect discharges from the Agricultural Operation. Monitoring locations shall meet the following minimum requirements:

      i. The number and location of monitoring locations shall be based on site-specific characteristics and shall be supported by scientific rationale and the drainage characteristics of the Agricultural Operation. Monitoring locations shall be selected to adequately characterize the majority of the discharges from the Agricultural Operation site, based on its typical discharge patterns, including tail water discharges, discharges from tile drains, and storm water runoff.

      ii. Monitoring locations shall be in areas influenced by the Discharger's Agricultural Operation.

      iii. Monitoring locations shall have sufficient spatial density or distribution within the region of interest to provide data to meet the Core Monitoring questions.

      iv. Monitoring locations shall be readily accessible (defined as sites that can be safely reached and sampled within one day) during both dry and wet weather.

      v. If possible, monitoring locations shall be in wadeable stream reaches with surface flow during the sampling period. A wadeable reach is defined as that which is less than one meter deep for at least 50% of its length.

b. If the Agricultural Operation is not hydraulically connected to surface waters:

The number and location of monitoring locations shall be based on site-specific characteristics and shall be supported by scientific rationale and the drainage characteristics of the Agricultural Operation. Monitoring locations shall be selected to adequately characterize the majority of individual discharges (e.g. irrigation water runoff, storm water and non-storm water flows) that are conveyed beyond the property limits of the Agricultural Operation through outfalls (e.g. pipes, ditches, constructed swales, tile drains, or other discrete structures or features that transport the water).

2. **Surface Water Monitoring Requirements**

a. The Discharger shall conduct surface water monitoring at approved monitoring locations for the constituents and sampling frequency set forth in Table A-1 below:

Table A-1. Surface Water Monitoring Requirements

Parameter	Units	Frequency
Stream Width	ft	Once during the dry season (May 15 to October 15) and once during the wet season (October 15 to May 15)
Stream Depth	ft	
Stream Cross Sectional Area	ft^2	
Stream Velocity	ft/sec	
Stream Flow[1]	ft^3/~~day~~sec	
pH	standard units	
Temperature	°C	
~~Stream Width~~	~~ft~~	
~~Depth~~	~~ft~~	
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	
Total Phosphorus	mg/L	
Sulfate	mg/L	
E. coli – Freshwater and Saltwater	MPN/100 mL	
Enterococci – Freshwater and Saltwater	MPN/100 mL	
Fecal Coliform	MPN/100 mL	
Total Coliform	MPN/100 mL	

[1] Dischargers may wish to consult the State Water Board's website for guidance on how to measure stream flows at: http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/cwt/guidance/4113.pdf (as of October 20, 2016).

Parameter	Units	Frequency
Chronic Toxicity	TUc	

b. The wet season samples shall be collected within the first 24 hours of a storm with greater than 0.5-inch rain as measured by the nearest National Weather Service rain gauge, to the extent practicable. Practical constraints on wet season sampling events include but are not limited to 1) laboratory closures on weekends and holidays, 2) sample holding times, and 3) safety of the monitoring team. If there is no runoff at the monitoring site, then the observation shall be documented with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site.

c. ~~Dry season samples shall be collected after the site has applied pesticides or fertilizers and during an irrigation event.~~ If there is ~~no runoff~~ insufficient water to collect samples at the monitoring site, ~~then~~ the observation shall be adequately documented. ~~with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site.~~

d. All surface water monitoring data shall be submitted to the California Environmental Data Exchange Network (CEDEN).[2]

e. The San Diego Water Board may increase the frequency of surface water sampling based on information in the Notice of Intent (NOI), Surface Water Monitoring Program Plan, or Annual ~~Surface Water Monitoring~~ Reports. Factors that may result in an increased sampling frequency include, but are not limited to: crop type, frequency of crop rotation, and trends of water quality degradation.

C. Core Monitoring – Groundwater Monitoring Requirements (if applicable)

The purpose of groundwater monitoring is to assess trends in groundwater quality beneath Agricultural Operation lands and to confirm that management practices implemented to protect and improve groundwater quality are effective. As an initial step towards developing a groundwater quality program for Agricultural Operations, groundwater quality monitoring will be limited to areas in the San Diego Region where groundwater is a significant drinking water source. At this time the groundwater monitoring requirements of this General Order only apply to Agricultural Operations with drinking water supply wells.

The purpose of the drinking water supply well program outlined below is to identify wells that have nitrate concentrations that threaten to exceed the maximum contaminant level (MCL) of 45 mg/L as NO_3 [3] and notify any well users of the potential for human health impact.

1. *Water Supply Well Sampling and Monitoring Frequency.* Due to the potential severity and urgency of health issues associated with drinking groundwater with high concentrations of nitrates, the Discharger is required to 1) collect an initial groundwater sample at all drinking water supply wells located on the Agricultural Operation site within

[2] Information on CEDEN data submission requirements may be found at http://www.ceden.org/ (as of October 20, 2016) and a copy of the CEDEN electronic tabular format can be found at http://www.ceden.org/ceden_datatemplates.shtml (as of October 26, 2016).

[3] The MCL is also expressed as 10 mg/L of nitrate + nitrite as N. The authority to set the MCL for nitrate previously resided with the California Department of Public Health (CDPH) (and the Department of Health Services prior to the establishment of CDPH), but the authority to set the MCL for nitrate is now within the purview of the State Water Board.

the first year following issuance of the Notice of Applicability (NOA); or 2) submit existing drinking water supply well sampling data, provided sampling and testing for nitrates was completed using USEPA-approved methods at least twice within the last 5 years.

a. Drinking water supply wells with samples reported to have a nitrate concentration less than 36 mg/L NO_3 [4] shall thereafter be monitored for nitrates once every five years beginning in 2020. All further sampling shall be conducted at the time when nitrate concentration was at its maximum, based on initial monitoring. Sampling may cease if a drinking water well is taken out of service and no longer provides drinking water.

b. Drinking water supply wells with samples reported to have a nitrate concentration equal to or above 36 mg/L as NO_3 shall be resampled within 30 days of receipt of the laboratory test result to confirm the result. Based on the retest results, the Discharger shall do one of the following:

   i. If the retest is equal to or above 36 mg/L as NO_3:

      The Discharger shall thereafter monitor the drinking water supply well for nitrate levels on an annual basis, unless an alternative sampling schedule based on trending data for the well is approved by the San Diego Water Board. All further sampling shall be conducted at the time when the nitrate concentration was at its maximum, based on initial monitoring. Sampling may cease if a drinking water well is taken out of service and no longer provides drinking water.

   ii. If the retest is equal to or above 45 mg/L as NO_3:

      (a) Within 24 hours of receipt of the laboratory test results, the Discharger shall notify the San Diego Water Board pursuant to section VII.E.5 of the General Order and the applicable County Health Department to determine if additional actions are needed.

      (b) Within 10 days of receipt of the laboratory test results the Discharger shall immediately notify all individuals using the water supply well for a drinking source of the nitrate test results and actions to be taken.[5] Where the Discharger is not the property owner, the San Diego Water Board will promptly notify the property owner and the well users.

      (c) The Discharger shall thereafter monitor the drinking water supply well for nitrate levels on an annual basis, unless an alternative sampling schedule based on trending data for the well is approved by the San Diego Water Board. All further sampling shall be conducted at the time when nitrate concentration was at its maximum, based on initial monitoring. Sampling may cease if a drinking water well is taken out of service and no longer provides drinking water.

[4] The nitrate level of 36 mg/L is 80% of the MCL and is presumed to be the benchmark defining when wells have a high potential for exceeding the MCL in a short time frame.

[5] The notification should include the information provided in the State Water Board's Nitrate MCL Exceedance template, which is available on the State Water Board website at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Notices.shtml (as of October 20, 2016).

iii. If the retest is less than 36 mg/L as NO_3, the Discharger shall collect a sample from the drinking water supply well for a confirmation test within 30 days of receipt of the retest result, and shall submit a copy of the confirmation test report to the San Diego Water Board within 10 days of receipt of results. If the confirmation test result is less than less than 36 mg/L as NO_3, the Discharger shall continue to monitor the groundwater well once every five years beginning 2020. Sampling may cease if a drinking water well is taken out of service and no longer provides drinking water.

2. *Drinking Water Well Sample Protocols.* Groundwater samples shall be collected using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols. Groundwater samples shall be collected at or near the well head before the pressure tank and prior to any well head treatment. In cases where this is not possible, the water sample shall 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.

3. *Drinking Water Well Sample Results.* The results of all drinking water well sampling shall be included in the Annual Surface Water and Groundwater Monitoring Report described in section VII of this MRP.

4. *Monitoring Frequency Changes.* Based on a review of groundwater monitoring reports, the San Diego Water Board may increase or decrease the frequency of groundwater water supply well monitoring. Factors that may inform the San Diego Water Board's evaluation of the monitoring frequency include, but are not limited to the exceedances or attainment of the nitrate MCL and the effectiveness of any management measures as a result of Water Quality Restoration Plan (WQRP) implementation.

IV. REGIONAL MONITORING REQUIREMENTS

Under the San Diego Water Board's *Commercial Agricultural Operation Regulatory Program*, Third-Party Groups will take the lead role in coordinating and carrying out regional monitoring. Individual Dischargers, however, are encouraged to participate in regional monitoring programs as these programs can assist in the interpretation of core monitoring data by providing a more complete picture of natural variability and cumulative impacts in the receiving waters. This assessment in turn allows Individual Dischargers to more effectively use core monitoring data in prioritizing actions targeting pollutants and pollutant sources.

V. SPECIAL STUDIES - WATER QUALITY RESTORATION PLAN (WQRP)

If water quality monitoring data, collected as described in this MRP indicate exceedances of applicable ~~Surface~~ Water Quality Benchmarks (see table A-2 of this MRP), the Discharger shall develop a WQRP as described in section VI.D of this General Order. Upon approval of the WQRP by the San Diego Water Board, the Discharger shall implement targeted management practices intended to attain the ~~Surface~~ Water Quality Benchmarks. Management practices may include those recommended by organizations such as Natural Resources Conservation Service (NRCS) and University of California Cooperative Extension (UCCE).

VI. SURFACE WATER AND GROUNDWATER MONITORING PROGRAM PLAN

The Discharger shall prepare and submit a detailed Surface Water and Groundwater Monitoring Program Plan (Monitoring Program Plan) to implement the surface water and groundwater (if applicable) monitoring requirements specified in this MRP. The Monitoring Program Plan is an element of the Water Quality Protection Plan (WQPP) required under section VI.C of this General Order and shall be submitted with the WQPP. At a minimum the Monitoring Program Plan shall contain the following:

A. Monitoring Event Preparation and Protocols

The Monitoring Program Plan shall include a description of monitoring event preparation and field protocols for sample collection and sample handling (including chain of custody requirements). The Monitoring Program Plan shall also describe protocols for ensuring that all monitoring instruments and devices used by the Discharger for the prescribed monitoring and sample collection are properly maintained and calibrated to ensure proper working condition and continued accuracy.

B. Quality Assurance Project Plan (QAPP)

The Monitoring Program Plan shall include a QAPP describing the objectives and organization of the Surface Water and Groundwater (if applicable) Monitoring Program, functional activities, and quality assurance/quality control to be conducted. 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 shall meet the State Water Board Surface Water Ambient Monitoring Program (SWAMP) requirements and shall include at least the following four sections: 1) Project Management, 2) Data Generation and Acquisition, 3) Assessment and Oversight, and 4) Data Validation and Usability. Laboratory analytical methods shall be included as an appendix of the QAPP. A QAPP template is available at http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml.

C. Monitoring Locations

The Monitoring Program Plan shall include a list of the monitoring locations. The monitoring locations shall meet the monitoring location requirements listed in sections III.B and III.C of this MRP. The Monitoring Program Plan shall describe the characteristics of each sampling site, including crop type and cultivation practices, and shall provide an appropriately scaled map of the monitoring locations and GPS coordinates for each monitoring location. The Monitoring Program Plan shall also provide the supporting scientific rationale for the selection of each surface water monitoring location including a demonstration that the proposed locations are appropriate for evaluating the effects of irrigation runoff, storm water, and non-storm water discharges from the Agricultural Operation, and for evaluating the success of management practices.

D. Monitoring Constituents

The Monitoring Program Plan shall include a list of the constituents to be monitored at each monitoring location. The list shall include, but need not be limited to, the parameters listed in Table A.1 and section III.C of this MRP.

E. Monitoring Frequency

The Monitoring Program Plan shall include the frequency and approximate dates of monitoring. Surface water monitoring shall be conducted during the dry season and wet season and at the frequency specified in in Table A.1 and section III.C of this MRP.

F. 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 should be included in the Annual Monitoring Report (MRP section VII.L).

VII. ANNUAL SURFACE WATER AND GROUNDWATER MONITORING REPORT (ANNUAL MONITORING REPORT)

Annually by April 30 (beginning the year following issuance of the NOA), the Discharger shall prepare and submit to the San Diego Water Board an Annual Surface Water and Groundwater Monitoring Report (Annual Monitoring Report), covering January 1 through December 31 of the prior year. For any monitoring period in which no discharge occurred, the monitoring report shall include a statement certifying that no discharge occurred during the monitoring period. The Annual Monitoring Report shall include the following elements:

A. Title Page and Table of Contents

B. Summary

The Annual Monitoring Report shall briefly outline what surface water and groundwater (if applicable) monitoring was done in the prior year, describe the significance of key findings, and list important recommendations.

C. Introduction

The Annual Monitoring Report shall identify the objectives and the issues being addressed.

D. Monitoring Area Description

The Annual Monitoring Report shall include a summary of the monitoring area geography, hydrology, the location of the Agricultural Operation, the size of the Agricultural Operation, the crop type(s) being grown at the Agricultural Operation, the irrigation and cultivation method(s) utilized at the Agricultural Operation, and the waste discharge sources in the area being monitored. All monitoring locations and features including Agricultural Operation property boundaries, waters of the State, and other features which may affect water quality should be provided on an appropriately scaled map.

E. Monitoring Methods

The Annual Monitoring Report shall provide details on the methods and procedures used for conducting the surface water and groundwater (if applicable) monitoring including a summary of the procedures followed for quality assurance.

F. Monitoring Results

The Annual Monitoring Report shall include the monitoring results of all surface water and groundwater samples collected during the period January 1 through December 31 of the prior year, in electronic tabular format using available data submission templates for CEDEN.[6]

[6] 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 May 31, 2016).

Laboratory data sheets, and completed chain of custody forms shall be attached to the ~~report~~Annual Monitoring Report.

G. Surface Water Monitoring Data Analysis

The Annual Report shall include an analysis of the surface water monitoring data including:

1. Interpretations and conclusions as to whether applicable receiving water limitations in section V of this General Order were exceeded during the monitoring period ~~attained~~ at each monitoring location. For the purposes of this analysis, means a single exceedance of a Water Quality Benchmark listed on Table A-2 below.
2. Interpretations and conclusions regarding any change in receiving water quality related to agricultural activities at the Agricultural Operation (i.e., a comparison of water quality at upstream and downstream monitoring locations).
3. Identification of all repeated exceedances of applicable ~~Surface~~ Water Quality Benchmarks[7] contained in Table A-2 of this MRP at any monitoring location. For the purposes of this General Order, a~~n~~ repeated exceedance occurs when a surface water sampling result for a constituent at a single monitoring location exceeds the applicable ~~Surface~~ Water Quality Benchmarks more than 3 out of 4 times for the same constituent. If water quality monitoring data indicate such repeated exceedances of applicable ~~Surface~~ Water Quality Benchmarks, the Discharger shall prepare and submit a ~~Water Quality Restoration Plan (~~WQRP~~)~~ pursuant to section VI.D of this General Order.

H. Groundwater Monitoring Data Analysis (if applicable)

If applicable, the Annual Monitoring Report shall include an analysis of the groundwater monitoring data including:

1. Interpretations and conclusions as to whether the collected groundwater samples are reported to have nitrate concentrations that exceed the nitrate MCL.~~is safe to drink.~~
2. Interpretations and conclusions regarding any change in groundwater quality related to agricultural activities at the Agricultural Operation (i.e., a trend analysis comparing of groundwater quality data over time for the same constituent).
3. Identification of all exceedances of the applicable nitrate benchmark of 36 mg/L as NO_3 at any water supply well monitoring location.[8] If groundwater quality monitoring data indicate an exceedance~~s~~ of the nitrate benchmark in accordance with section III.C.b. of this MRP, the Discharger shall prepare and submit a ~~Water Quality Restoration Plan (WQRP)~~WQRP pursuant to section VI.D of this General Order.

[7] "Water Quality Benchmark" means discharge prohibitions and narrative or numeric ~~surface~~ 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 pursuant to a total maximum daily load (TMDL) (whether established in the Basin Plan or other lawful means).

[8] Section III.C of this MRP defines when an exceedance of the Nitrate groundwater is exceeded.

I. CEDEN Data Submission

All surface water quality data shall be reported to CEDEN. The Annual ~~Monitoring~~ Report shall include documentation that all surface water monitoring data was successfully uploaded to CEDEN.[9]

J. Geotracker Data Submission (if applicable)

If groundwater quality monitoring is conducted, all groundwater quality data shall be reported to Geotracker. The Annual Monitoring Report shall include documentation that all groundwater monitoring data was successfully uploaded to Geotracker.[10]

K. Recommendations

The Annual Monitoring Report shall include recommendations for proposed future monitoring activities listed in order of priority.

L. Monitoring Team

The ~~report~~ Annual Monitoring Report shall include a description of the monitoring team, including names, titles, qualifications, and contact information.

M. Identification of Discharger

The ~~report~~ Annual Monitoring Report shall include the Discharger's contact information.

N. Quarterly Self-Inspection Reports

The Annual Monitoring Report shall include Quarterly Self-Inspection Reports as required by section VI.~~E~~ F.5 ~~of~~ of this General Order.

O. Annual Self-Assessment Report

The Annual Monitoring Report shall include the Annual Self-Assessment Report as required by section VI.F.5. of this General Order.

P. Certification

The Annual Monitoring Report shall be signed and certified in accordance with Signatory and Certification Requirements contained in section VII.E of this General Order.

Table A-2. ~~Surface~~ Water Quality Benchmarks

Parameter	Units	Water Quality Benchmark
pH	standard units	Note 1
Temperature	°C	Note 1
Dissolved Oxygen	mg/L	Note 1
Turbidity	NTU	Note 2
Total Dissolved Solids	mg/L	Note 2

[9] CEDEN is the State Water Board's data system for surface water quality in California. Information on CEDEN data submission requirements may be found at http://www.ceden.org/, and a copy of the CEDEN electronic tabular format can be found at http://www.ceden.org/ceden_datatemplates.shtml (as of May 31, 2016).

[10] GeoTracker is the State Water Board statewide database and geographic information system that provides online access to environmental data. The Geotracker on-line database can be accessed on the State Water Board website at http://www.waterboards.ca.gov/gama/geotracker_gama.shtml (as of May 31, 2016).

Parameter	Units	Water Quality Benchmark
Total Suspended Solids	mg/L	Note 1
Ammonia	mg/L	0.025, Note 1
Nitrate (as NO_3)	mg/L	45, Note 3
Nitrate (as NO_3) - Groundwater	mg/L	36/45, see section III.C of this MRP.
Nitrate + Nitrite (as Nitrogen)	mg/L	10, Notes 3 and 4
Nitrite (as Nitrogen)	mg/L	1.0 Note 3
Total Nitrogen	mg/L	1.0, Notes 1 and 4
Total Phosphorus	mg/L	0.1, Notes 1 and 4
Sulfate	mg/L	Note 2
E. coli	MPN/100 mL	Note 1
Enterococci	MPN/100 mL	Notes 1 and 5
Fecal Coliform	MPN/100 mL	Notes 1 and 5
Total Coliform	MPN/100 mL	Notes 1 and 5
Chronic Toxicity	TUc	1.0, Note 6

Note 1. Water Quality Benchmarks shall be 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 Water Quality Control Plan for the San Diego Basin (9) (Basin Plan), b) ocean waters contained in the California Ocean Plan or c) other applicable water quality standards for the San Diego Region.

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

Note 3. Water Quality Benchmarks shall be based on based on designated water quality objectives for inland surface waters and groundwater contained in Chapter 3, Table 3-4 of the Basin Plan.

Note 4. For Agricultural 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 5. For Agricultural 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 6. 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.

ATTACHMENT B – FACT SHEET

CONTENTS

TABLES

ATTACHMENT B – FACT SHEET

As described in section I.BB of this General Order, the San Diego Regional Water Quality Control Board (San Diego Water Board) incorporates this Fact Sheet as findings of the San Diego Water Board supporting the issuance of this General Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this General Order.

I. BACKGROUND

A. Definitions

1. Discharger

   A Discharger is any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region.

2. Agricultural Operation

   For the purposes of this General Order, an Agricultural Operation is any agricultural business or trade activity (including farms, nurseries, and orchards), that produces crops with the intent to make a profit. The San Diego Water Board presumes intent to make a profit if the Agricultural Operation meets at least one of the following criteria:

   a. The owner or operator files the federal Department of Treasury Internal Revenue Service (IRS) Form 1040 *Schedule F Profit or Loss from Farming* with their federal taxes.

   b. The owner or operator receives agricultural water rates or has been given an agricultural water use variance from their water purveyor.

   c. The owner or operator ~~holds a current~~is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting.

   The IRS presumes an agricultural operation was carried on for profit if it produced a profit in at least 3 of the last 5 tax years. It's a subjective judgment and the IRS considers the nine factors listed below for determining a profit motive with no one factor being decisive to distinguish farm businesses from hobby farms. These concepts are described in the IRS Farmers Tax Publication 225 at https://www.irs.gov/pub/irs-pdf/p225.pdf.

   - The manner in which the owner/operator carried on the agricultural activity.
   - The expertise of the owner/operator or his or her advisers.
   - The time and effort expended by the owner/operator in carrying on the agricultural activity.
   - The expectation that the assets used in the agricultural activity may appreciate in value (e.g. the degree to which assets may increase in value and cover the costs of the agricultural activity).
   - The success of the owner/operator in carrying on other similar or dissimilar activities.
   - The owner/operator's history of income or loss with respect to the agricultural activity.
   - The amount of occasional profits, if any, which are earned.

- The financial status of the owner/operator (e.g. how much of income of owner/operator comes from agricultural operation).
- Elements of personal pleasure or recreation (Does owner and/or operator enjoy what they do and are there aspects of that which show a profit motive?).

B. Applicability

1. This General Order applies to any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region who is not a member of a Third-Party Group. To apply for coverage under this General Order, either the owner or the operator must submit a Notice of Intent (NOI) to the San Diego Water Board. Coverage under this General Order will not become effective until the San Diego Water Board issues a Notice of Applicability (NOA) signed by the Executive Officer to the Discharger.
2. This General Order does not apply to discharges of waste that are regulated under other waste discharge requirements (WDRs) or conditional waiver of WDRs (Waivers). If the other WDRs/Waivers only regulate some of the waste discharge activities at the regulated site, the owner/operator shall obtain regulatory coverage for any discharges of waste that are not regulated by the other WDRs/Waivers. Such regulatory coverage may be sought through enrollment under this General Order, applicable WDRs, including the Third-Party General Order ~~as a member of a Third-Party Group~~, or by obtaining appropriate changes in the owner and/or operator's existing WDRs/Waivers.

C. Agricultural Activities in the San Diego Region

The San Diego Region jurisdictional area forms the southwest corner of California and occupies approximately 3,900 square miles of surface area. The western boundary of the San Diego 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 following is a summary of Agricultural Operations in the San Diego Region.

1. Agricultural Operations in San Diego County

   There are approximately 5,700 Agricultural Operations on approximately 70,000 acres of land in San Diego County within the jurisdictional boundaries of the San Diego Water Board. The Agricultural Operations specialize in producing cut flowers, fruit, vegetables, and nuts.

2. Agricultural Operations in Riverside County

   There are approximately 300 Agricultural Operations on approximately 33,000 acres of land in Riverside County within the jurisdictional boundaries of the San Diego Water Board. The Agricultural Operations specialize in producing fruit and wine grapes.

3. Agricultural 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.[1] There are few remaining farms, orchards, and nurseries in Orange County within the jurisdictional boundaries of the San Diego Water Board, which are generally located along San Juan and Chiquita Creeks.

Unlike other areas of the State, the majority of the Agricultural Operations within the jurisdictional boundaries of the San Diego Water Board are relatively small, with the median size being approximately 4 acres. Moreover, the types of crops grown, the methods used to grow them, the climate, and the hydrogeology are all unique to the San Diego Region. The San Diego Water Board considered these differences in developing this General Order.

D. 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 and fertilizers, sediment, and salts from growing areas into surface waters and groundwater of the State. The following is a discussion of pollutants typically associated with Agricultural Operation discharges.

a. Nutrients

Agricultural fertilizers applied to produce crops may contain nitrogen and phosphorus in multiple chemical forms (nitrogen, nitrate, 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 methemoglobinaemia, 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.

i. Surface waters within the San Diego Region known to be impaired for nitrogen include:

(a) Arroyo Trabuco Creek

(b) De Luz Creek

(c) Santa Margarita Lagoon

(d) Lake Hodges

(e) Morena Reservoir

(f) Rainbow Creek

(g) Loma Alta Slough

[1] Orange County Important Farmland 2012 Map, prepared by the California Department of Conservation Farmland Mapping and Monitoring Program, dated January 2015, available at ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/ora12.pdf (as of October 20, 2016).

ii. Surface waters within the San Diego Region known to be impaired for phosphorus include:

(a) Santa Margarita Lagoon

(b) Lake Hodges

(c) Rainbow Creek

(d) Loma Alta Slough

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.

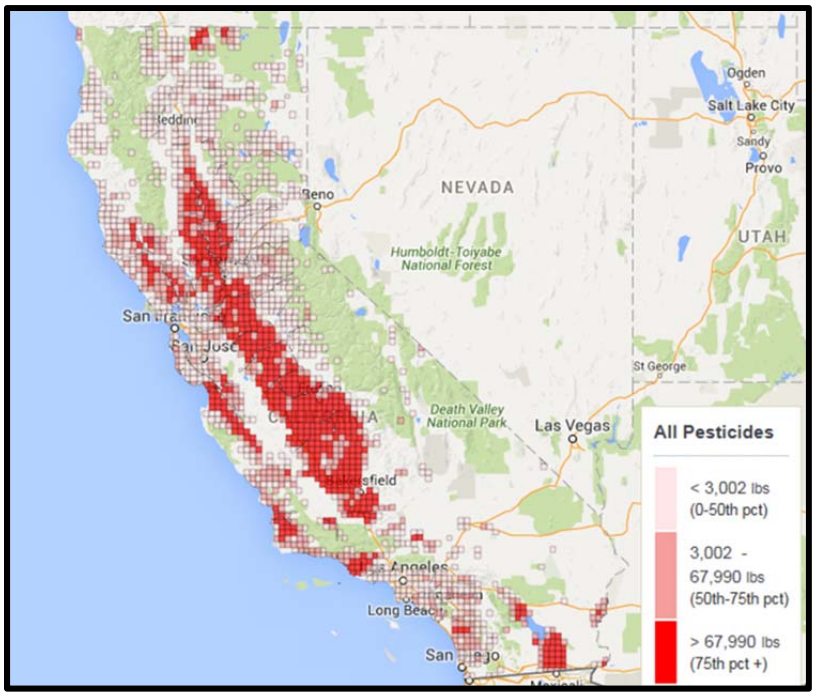
b. Agricultural Chemicals

Pesticides, herbicides, algaecides, and fumigants are applied to agricultural land to control pests, weeds, and fungus. If not properly managed, these chemicals can migrate into surface waters of the State and cause toxic conditions that threaten the viability of the water bodies to support aquatic and other species.

The California Department of Pesticide Regulation (DPR) publishes summaries of pesticide use in California. The following is a summary of data of pesticide use reported by the DPR for 2014.

i. The San Diego Region uses less agricultural chemicals than other areas of the State. As shown on Figure B-1, agricultural pesticides (including carcinogens, cholinesterase inhibitors, endocrine disruptors, fumigants, neonicotinoids, reproductive and development toxicants, and toxic air contaminates) are used throughout the State. Figure B-1 also illustrates that most of the Townships located in agricultural areas of the San Diego Region had a reported pesticide use ranging between the 0 and 75th percentile of all Townships in the State.

Figure B-1. Agricultural Pesticide Use in California[2]



ii. Table B-1 lists the reported pesticide use in agricultural counties in California. As shown in Table B-1, the San Diego Region uses significantly less pesticides as the other major agricultural counties in the State.

Table B-1. 2014 Reported Pesticide Use for Agricultural Counties in California[3]

County	Reported Pesticide Use in Pounds
Fresno	31,828,231
Kern	27,181,424
San Joaquin	14,908,389
Monterey	9,389,189
Stanislaus	7,076,488
Ventura	6,532,477
Imperial	5,005,430
Orange	919,351
Riverside	2,234,831
San Diego	1,617,591

[2] California Environmental Health Tracking Program, California Department of Public Health. Agricultural Pesticide Mapping Tool. Data from California Department of Pesticide Regulation Pesticide Use Reporting 2016, available at: www.cehtp.org/pesticidetool (as of October 20, 2016).

[3] Data from the *California Department of Pesticide Regulation – 2014 Summary Data*, available at http://www.cdpr.ca.gov/docs/pur/pur14rep/lbsby_co_14.pdf (as of October 20, 2016).

iii. The DPR compiled a list of the top five pesticides used in San Diego County in 2014. 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 Agricultural 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 B-2 lists the top five pesticides used in San Diego County in 2014.

Table B-2. Top Five Pesticides Used in San Diego Region in 2014[4]

Pesticide	Representative Crops	Pounds Applied	Acres Treated
Glyphosate, Isopropylamine Salt	Avocados Outdoor Container Plants Citrus	99,796.	27,032
Glyphosate, Potassium Salt	Avocados Outdoor Container Plants Citrus	27,448	21,271
Mineral Oil	Avocados Outdoor Container Plants Citrus	263,448	12,638
Alpha-(Para-Nonylphenyl)-Omega-Hydroxypoly(Oxyethylene)	Avocados Outdoor Container Plants Outdoor Flowers Citrus	3,809	9,306
Abamectin	Avocados Outdoor Container Plants Greenhouse Container Plants Outdoor Flowers Citrus	151	8,356

Surface waters within the San Diego Region known to be impaired for agricultural chemicals include Tijuana River and Tijuana River Estuary.

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 waters of the State and pose a public health risk if ingested.

Waterbodies within the San Diego Region known to be impaired[5] for pathogens include:

i. Agua Hedionda Creek

ii. Agua Hedionda Lagoon

[4] Data obtained from California Department of Pesticide Regulation available at http://www.cdpr.ca.gov/docs/pur/pur14rep/top_5_ais_sites_acres14.pdf as of October 20, 2016.

[5] The Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region Including Tecolote Creek (Bacteria TMDL) was adopted to address fecal indicator bacteria impairments in the San Diego Region.

iii. Aliso Creek
iv. Buena Vista Lagoon
v. Chollas Creek
vi. Dana Point Harbor
vii. Escondido Creek
viii. Forester Creek
ix. Loma Alta Slough
x. Long Canyon Creek (tributary to Murrieta Creek)
xi. Los Penasquitos Creek
xii. Murray Reservoir
xiii. Murrieta Creek
xiv. Pine Valley Creek (Upper)
xv. Redhawk Channel
xvi. San Diego River (Lower)
xvii. San Dieguito River
xviii. San Elijo Lagoon
xix. San Juan Creek
xx. San Luis Rey River, Lower (west of Interstate 15)
xxi. Santa Gertrudis Creek
xxii. Santa Margarita River (Lower)
xxiii. Sweetwater River, Lower (below Sweetwater Reservoir)
xxiv. Tecolote Creek
xxv. Temecula Creek
xxvi. Tijuana River and Estuary
xxvii. Warm Springs Creek (Riverside County)
xxviii. The majority of Mission Bay, San Diego Bay, and Pacific Ocean Shoreline

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.

Surface waters within the San Diego Region known to be impaired for sediments include:[6]

[6] The 303(d) list of Water Quality Limited Segments is available at http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/docs/updates_020910/App_B_All_Decisions.pdf (as of October 20, 2016).

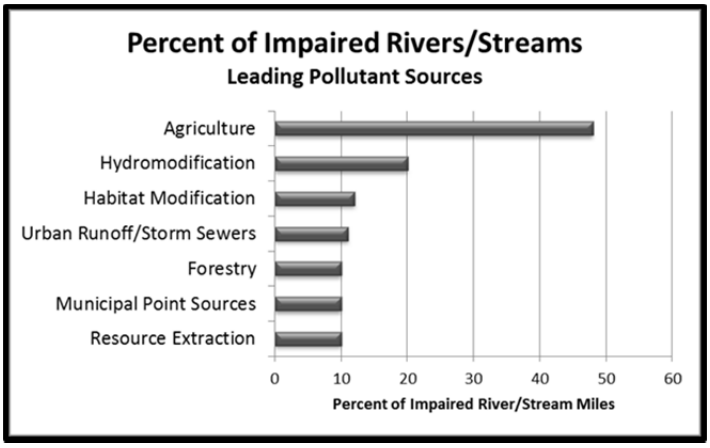
i. Agua Hedionda Lagoon
ii. Buena Vista Lagoon
iii. Los Penasquitos Lagoon
iv. San Diego River (Upper)
v. San Elijo Lagoon
vi. Tijuana River

2. Water Quality Impacts Associated with Agricultural Activities

a. Surface Water Impacts Associated with Agricultural Activities

The production practices used by agriculture can result in a number of pollutants entering water resources, including sediment, nutrients, pathogens, pesticides, and salts. The U.S. Environmental Protection Agency (USEPA) reports[7] that nationwide, agriculture is the listed source of pollution for 128,859 miles of rivers and streams. This amounts to 48% of the assessed rivers and streams found to have impaired conditions. Figure B-2, using data from the USEPA *National Water Quality Inventory 2000 Report*, illustrates the leading pollutant sources and their corresponding percentage of impaired rivers/streams.

Figure B-2. Percent of Impaired Rivers/Streams



Statewide, approximately 9,493 miles of rivers/streams and 513,130 acres of lakes/reservoirs are listed on the federal Clean Water Act (CWA) section 303(d) *List of Water Quality Limited Segments* (303(d) List) as being impaired by irrigated agriculture. Of these, approximately 2,800 miles, or approximately 28%, have been identified as impaired by pesticides.[8]

[7] USEPA, National Water Quality Inventory 2000 Report, available at https://www.epa.gov/sites/production/files/2015-09/documents/2000_national_water_quality_inventory_report_to_congress.pdf, as of October 20, 2016.

[8] State Water Board Irrigated Regulatory Program FAQ, available at http://www.swrcb.ca.gov/water_issues/programs/agriculture/docs/about_agwaivers.pdf, as of October 20, 2016.

b. 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)[9] 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.

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 Resolution No. R9-2007-0104, *Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge Within the San Diego Region* (2007 Waiver)

The 2007 Waiver required that surface water monitoring be conducted. Surface water monitoring was conducted by the San Diego Regional Irrigated Lands Group, the San Mateo Irrigated Lands Group, and the Upper Santa Margarita Irrigated Lands Group. The purpose of the monitoring was to evaluate the condition of surface water in the San Luis Rey and Santa Margarita Watersheds in areas of agricultural activity. In addition to collecting and analyzing surface water samples for nutrients and general chemistry parameters, biological assessments were conducted.

Table B-3 summarizes the results of surface water monitoring performed in 2012 and 2013 in the San Luis Rey and Santa Margarita Watersheds by the Irrigated Lands Monitoring Groups, as a requirement of the 2007 Waiver.

As shown in Table B-3, a majority of samples had concentrations of total

[9] 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.

dissolved solids, nitrogen, phosphorous, sulfate, and chloride that exceeded water quality objectives for those parameters.

Table B-3. Surface Water Monitoring Results, 2012 and 2013

Parameter	Units	Water Quality Objective	San Luis Rey Watershed	Santa Margarita Watershed
			6/27/13 - 7/18/13 (6 sampling events)	12/13/12 - 9/27/13 (6 sampling events)
pH	standard units	6.5 – 8.5	7.4-8.1	7.9-8.2 (4 samples)
Dissolved Oxygen	milligram per litter (mg/L)	>5.0	6.8-8.9	--
Total Dissolved Solids	mg/L	750	1545-2141	940-2568
Total Nitrogen	mg/L	1	5.7-41	not detected (ND)-14
Nitrate + Nitrite as N	mg/L	10	42 (1 sample)	--
Nitrate as N	mg/L	10	5.2-18.3 (5 samples)	ND-5.2
Nitrite as N	mg/L	1	ND-0.1 (5 samples)	ND-0.2
Un-ionized Ammonia	mg/L	0.025	0.0013 (1 sample)	--
Ammonia as N	mg/L	0.025	ND-0.06 (5 samples)	ND-0.42
Total Phosphorus	mg/L	0.1	0.03-0.24	0.03-0.26
Sulfate	mg/L	250	517-694	312-537
Chloride	mg/L	250	230-455	198-918

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 (e.g., 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 an Indicator of Biological Integrity (IBI) score based on a standard, or reference condition, representative of the area assessed, such as the Southern California IBI (SoCal IBI). There are five SoCal IBI ranks: Very Poor, Poor, Fair, Good, and Very Good.

Table B-4 summarizes the results of bioassessment monitoring performed between June and July, 2013, in surface waters in the vicinity of Agricultural Operations in the San Diego Region.

The results of the bioassessment indicates that 50% of the streams were in good or very good condition, 0% were in fair condition, and 50% were in poor or very poor condition.

Table B-4. Bioassessment Monitoring Results, June and July 2013

Watershed	SoCal IBI Score	SoCal IBI Rank
Santa Margarita Watershed	5.7	Very Poor
San Luis Rey Watershed	6-61	Very Poor - Good

c. Groundwater Impacts Associated with Agricultural Activities

In 2008, Senate Bill SBX2 1 (Perata) was signed into law (Water Code section 83002.5), requiring the State Water Resources Control Board (State Water Board), in consultation with other agencies, to prepare a report to the State Legislature to "improve understanding of the causes of [nitrate] groundwater contamination, identify potential remediation solutions and funding sources to recover costs expended by the State…to clean up or treat groundwater, and ensure the provision of safe drinking water to all communities."

In September 2013, an Agricultural Expert Panel was convened by the State Water Board to consider a variety of questions, including ones specific to the development of an agricultural nitrate control program. The Agricultural Expert Panel issued a final report of recommendations on September 9, 2014[10] concluding, in part, that because deep percolation of nitrates was universal within irrigated agriculture, a good regulatory program must encompass all irrigated areas, not only lands directly above high nitrate aquifers, those previously identified to be in a high vulnerability area, or those with a certain farm or field size. The San Diego Water Board agrees that groundwater in alluvial basins can be vulnerable to agricultural nitrate impacts, regardless of the time it takes for those impacts to appear in groundwater due to soil conditions, geologic conditions, and depth to groundwater.

d. Groundwater Quality in the San Diego Region

The Groundwater Ambient Monitoring and Assessment (GAMA) *Domestic Well Project, Groundwater Quality Data Report, San Diego County Focus Area Report* issued by the State Water Board's GAMA Program[11] stated that 18 percent of the 137 domestic water supply wells sampled (25 wells) were reported to have groundwater samples that exceeded the nitrate maximum contaminate level (MCL) of 45 mg/l. Additionally, the *Temecula Valley Basin Salt and Nutrient Management Plan* (Temecula SNMP)[12] found that nitrate as NO_3 concentrations in Temecula

[10] Conclusions of the Agricultural Expert Panel, Recommendations to the State Water Resources Control Board pertaining to the Irrigated Lands Regulatory Program (September. 9, 2014), available at <http://www.swrcb.ca.gov/water_issues/programs/agriculture/docs/ILRP_expert_panel_final_report.pdf> (as of April 26, 2016) (Agricultural Expert Panel Report).

[11] State Water Board, Groundwater Ambient Monitoring and Assessment Domestic Well Project, Groundwater Quality Data Report, San Diego County Focus Area, dated March 2010, available at http://www.swrcb.ca.gov/gama/docs/sdreport.pdf (as of October 20, 2016).

[12] Temecula Valley Basin Salt and Management Plan, prepared by RMC Water and Environment, dated March 2014, available at http://www.ranchowater.com/DocumentCenter/View/1132 (as of October 20, 2016).

Valley (an area that includes Agricultural Operations) ranges between 1 to 7.5 mg/L, and groundwater model results for a 20 year projection considering an expansion of 4,000 acres of irrigation using recycled water would result in nitrate as NO_3 concentrations ranging between 1.5 and 10 mg/L.

In the San Diego Region, the types of crops grown, the typical irrigation methods used, and the soil types typically found in agricultural areas present a reduced risk of nitrate contamination of groundwater as compared to the conditions encountered in the Central Valley Region for the following reasons:

i. Wine grapes, avocados, and citrus fruits are the most prevalent crops grown in the San Diego Region. According to California Institute for Water Resources[13] production of wine grapes have a nitrate hazard rating of 1 (low), and avocados and citrus fruits have a nitrate hazard rating of 2 (low to moderate).

ii. Most of the Agricultural Operations in the region use drip or micro sprinkler irrigation, not flood or overhead spray irrigation, significantly limiting the amount of irrigation water that reaches groundwater aquifers.

iii. The soil type typically found in agricultural areas in the San Diego Region is Cretaceous-aged granitic and gabbroic rock (igneous rock). The terrains tend to be moderately to steeply sloping, and the soils generally overlaying them are thin and have a rocky to sandy loam texture (e.g. Fallbrook soil series). Areas overlain with thin soils over igneous rock are less prone to be areas where water infiltrates to groundwater.

These regional conditions warrant a modified approach to the groundwater protection and monitoring requirements recommended in the 2014 Agricultural Expert Panel Report. The development of detailed Nutrient Management Plans and crop-specific A/R ratios (the multi-year ratio of nitrogen applied to the field to nitrogen removed from the field) called for in the 2014 Agricultural Expert Panel Report will only be required for those areas of the San Diego Region that warrant a greater degree of groundwater protection.

E. State Water Board ~~and Regional~~ Irrigated Lands Program~~s~~ (ILRP~~s~~) and San Diego Water Board Commercial Agriculture Regulatory Program

1. State Water Board~~'s~~ 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 or make water unusable for drinking water or agricultural uses. Across the nine Regional Water Quality Control Boards (Regional Boards) there are significant differences in the approaches for regulating 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 can be explained by the need for more stringent requirements to protect vulnerable or impaired receiving waters.

[13] University of California, Nitrate Groundwater Pollution Hazard Index, availale at http://ciwr.ucanr.edu/Tools/Nitrogen_Hazard_Index/ (as of October 20, 2016).

Currently, the State Water Board formally coordinates with all 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:

a. Program coordination

b. Public outreach

c. Multi-agency coordination with agricultural agencies/entities/academia/coalitions and third-party groups

d. Information management

e. Fee development and collection

f. Petitions and Enforcement

g. Adaptive management - Team Concept Demonstration Projects

On February 8, 2016, the State Water Board issued a draft order in the matter 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* (State Water Board Order). The State Water Board Order, if adopted, is expected to provide precedential direction to Regional Boards regarding the requisite elements of WDRs issued to regulate agricultural operations in the State. As drafted, the State Water Board Order incorporates many of the recommendations of the Agricultural Expert Panel convened by the State Water Board in 2013 to consider a variety of questions, including the appropriate regulatory structure for irrigated lands. The San Diego Water Board incorporated requirements consistent with the State Water Board Order to the extent these recommendations were applicable to regional conditions in San Diego.[14]

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

The San Diego Water Board's ~~agricultural regulatory program~~Commercial Agriculture Regulatory Program commenced with the adoption of a conditional waiver of WDRs for agricultural lands in 1983 (1983 Waiver) pursuant to Water Code section 13269. The 1983 Waiver conditionally waived the requirement for submittal of a permit application (report of waste discharge or 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.

[14] The Agricultural Expert Panel issued a final report of recommendations on September 9, 2014 concluding, in part, that because deep percolation of nitrates was universal within irrigated agriculture, a good regulatory program must encompass all irrigated areas, not only lands directly above high nitrate aquifers, those previously identified to be in a high vulnerability area, or those with a certain farm or field size. The San Diego Water Board agrees that regulatory coverage for all agricultural lands is appropriate. However, the San Diego Water Board is not requiring compulsory nutrient management plans due to the reduced risk of nitrate percolation to groundwater presented by the unique soil conditions, geologic conditions, and crops grown in the San Diego Region as discussed in section ~~D.2.h.~~I.D of this Fact Sheet.

The 2007 Waiver allowed growers to form discharger coalitions with a third-party representative responsible for outreach, education, and implementation of a number of 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. This General Order extends regulatory coverage to both irrigated and non-irrigated Agricultural Operations, set forth conditions that will require dischargers to implement management practices to protect water quality, and ensure through monitoring and reporting that these practices are sufficiently protective of water quality.

F. Rationale for General WDRs

This General Order was developed to regulate discharges from a large number of Agricultural Operations within the San Diego Region. Agricultural discharges, including both irrigation water and storm water running off of agricultural fields into surface waters or percolating to groundwater, may carry constituents considered to be waste as defined under Water Code section 13050(d).[15] Water Code sections 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. This General Order must primarily implement the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) 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.[16] This General Order must also conform to State Water Board Policies including the *Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program*[17] (Nonpoint Source Policy) and the *Statement of Policy with Respect to Maintaining High Quality Waters, State Water Board Resolution No. 68-16*[18] (Antidegradation Policy). 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 this General Order complies with Water

[15] 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).

[16] The Basin Plan is available on the San Diego Water Board website at http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml (as of May 31, 2016).

[17] The Non-Point Source Policy is available on the State Water Board website at http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf (as of May 31, 2016).

[18] The Antidegradation Policy is available on the State Water Board website at http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf (as of May 31, 2016).

Code section 13263(i) criteria for the issuance of General WDRs which allows the San Diego Water Board to prescribe General WDRs if:

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

General WDRs are an effective and efficient method to regulate the more than 6,000 Agricultural Operations that meet the enrollment criteria in the San Diego Region because the discharges are similar and discharge requirements would be similar if individual WDRs were issued.

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."

G. 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 Water Quality Control Plan for the San Diego Basin (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 operations. The State Water Board has adopted water quality control plans and policies that are also applicable to discharges of waste from agricultural operatons. The USEPA has adopted the National Toxics Rule and the California Toxics Rule which constitute water quality criteria that apply to waters of the United States.

1. Basin Plan

The ~~San Diego Water Board's Water Quality Control Plan for the San Diego Basin (~~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 88-63 (Sources of Drinking Water Policy), and consistent with the CWA, existing and potential beneficial uses of waters in the San Diego Region have been identified (see Table B-5).

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

Beneficial Use	Abbreviation
Surface Waters	
Agricultural Supply	AGR
Cold Freshwater Habitat	COLD
Commercial and Sport Fishing	COMM
Contact Water Recreation	REC-1
Estuarine Habitat	EST

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

This General Order implements the Basin Plan and other applicable statewide water quality control plans and polices 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 Total Maximum Daily Loads (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:

a. *Total Maximum Daily Load for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed* (Rainbow Creek TMDL)

b. *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)*

This General Order implements these TMDLs. Like all other water quality standards in this General 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 this General 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 this General Order may serve as an alternative, non-TMDL solution to address other water bodies on the 303(d) List. The intent of this General Order is to reduce the loading of nutrients, agricultural chemicals, bacteria, and sediment from discharging to the waters of the State from Agricultural Operations. Not only will the installation and maintenance of effective management practices reduce the loading of pollutants from Agricultural Operations to the waters of the State, they also incorporate the same types of implementation measures that would be required under a TMDL to reduce the loading of pollutants to the waters of the State.

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). 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.

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.

This General Order regulates waste discharges from Agricultural 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 Implementation and Enforcement 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. This General Order incorporates all five key elements of the Nonpoint Source Policy:

a. *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 this General Order is to minimize or eliminate waste discharges from Agricultural Operations into waters of the State 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, this General Order sets out its ultimate purpose by establishing water quality requirements in section V. Receiving Water Limitations that 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. These receiving water limitations are effective immediately except where the Discharger is implementing a Water Quality Restoration Plan (WQRP) for specified waste parameters with an approved time schedule.

To ensure that receiving water limitations are achieved and maintained, this General Order requires that Dischargers must (1) implement 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, the Discharger must implement improved management practices in accordance with any applicable WQRP as described in section VI.D of this General Order.

b. *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.*

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),[19] 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.

[19] California's Management Measures for Polluted Runoff can be accede on the State Water Board website at http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_progplan_vii.pdf (as of May 31, 2016)

Under this General Order, Dischargers are required 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, this General Order requires each Discharger to develop and implement a Water Quality Protection Plan (WQPP) (section VI.C of this General Order) that describes and documents implemented and planned management practices to protect surface water and groundwater quality. Dischargers must implement management practices in accordance with the WQPP. If the selected management practices in the WQPP are not meeting applicable water quality standards, the Discharger must implement improved management practices in accordance with a WQRP.

c. *Key Element 3: Where a Regional Board determines it is necessary to allow time to achieve water quality requirements, the nonpoint source control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.*

This General Order requires in section VI.D that Dischargers include a proposed time schedule in the WQRP that is as short as practicable. The schedule must include quantifiable milestones designed to measure progress toward achieving the water quality requirements. The schedule may not be longer than that which is reasonably necessary to achieve compliance with the receiving water limitations contained in section V of this General Order. Once the San Diego Water Board approves the WQRP, the Discharger must implement management practices in accordance with the proposed time schedule. This General Order also includes specific time schedules to comply with the requirements of the Rainbow Creek TMDL and the Bacteria TMDL.

d. *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.*

Pursuant to Key Element 4 this General Order requires sufficient monitoring and reporting to determine if existing management practices are leading to compliance with water quality requirements and requires implementation of improved water quality practices where they are not. Water Code section 13267 authorizes the San Diego Water Board to establish monitoring, reporting, and recordkeeping requirements. The monitoring and reporting program (MRP) is contained in Attachment A of this General Order. The monitoring is at the individual agricultural operation scale. 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 Agricultural Operations by comparing water quality at the monitoring sites against water quality benchmarks.

This General Order MRP requires Dischargers to report all data to the San Diego Water Board and to electronically upload monitoring reports to databases which may be accessed by the public either through a public records request, the Geotracker website, and/or the California Environmental Data Network (CEDEN).

e. *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.*

This General Order requires Dischargers to develop a (WQRP (section VI.D of this General Order) to identify the source(s) of the exceedance and identify actions to address the exceedance(s). Also, section VII.F of this General Order makes clear that progressive enforcement will be taken by the San Diego Water Board for violations of this General Order.

4. California Environmental Quality Act (CEQA)

The San Diego Water Board is the lead agency for the development of this General 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 this General Order. Based on the initial study, Staff prepared a Negative Declaration (Tentative Order R9-2016-0136) because it concluded that this project would have less than significant impacts on the environment. The San Diego Water Board has reviewed the contents of the Negative Declaration and the Initial Study, written public comments, and testimony at the hearing. 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 this General Order. This General Order advances the human right expressed in Water Code section 106.3 because it 1) requires implementation of 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 wells that are or may be used for drinking water; and 3) requires reporting 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 this General 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* (Resolution 68-16 or Antidegradation Policy). Resolution 68-16 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 (e.g., 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. Resolution 68-16 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. Resolution 68-16 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 Resolution 68-16 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 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 (BPTC)

The Antidegradation Polity 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 Antidegradaton 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 Resolution 68-16,[20] 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 State 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

[20] See Questions and Answers, State Water Resources Control Board, Resolution 68-16 (February 16, 1995) (http://www.waterboards.ca.gov/water_issues/programs/dept_of_defense/docs/5g.pdf (as of May 31, 2016)

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 high quality water and is not subject to the requirements of the State Antidegradation policy. As stated previously, data collected by the San Diego Water Board, dischargers, educational institutions, and others demonstrate that many water bodies in the San Diego Water Board are already impaired for various constituents associated with irrigated agricultural activities. This General 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 Resolution 68-16 Requirements to this General 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.[21] 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, sediment, and pathogens (see section I.D.1.b 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.D.1 of this Fact sheet discussing surface water impacts associated with agricultural activities).

Similarly, as described in section I.D.2.d of this Fact Sheet, approximately 18% of the wells sampled under the State Water Board's GAMA had a maximum nitrate level above the MCL of 45 mg/L for nitrate as NO_3. It is unknown when the degradation occurred. However, available data show 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.

[21] Agricultural Operation discharges were regulated under a conditional waiver from 1983 through 2014, but comprehensive data as to trends under the waiver are not available.

Given the significant variation in conditions over the broad areas covered by this General 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 this General Order is consistent with the Antidegradation Policy because it does not authorize any further degradation of the waters of the State, or require the change of any water quality standard. Dischargers who enroll in this General Order are required to protect beneficial uses, and prevent nuisance by implementing management practices. Any degradation of an existing high quality water to water that 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 that 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 management practices that best achieve a management practice's performance expectations given their own unique circumstances.

There is no specific set of technologies, practices, or treatment devices that can be described as achieving BPTC universally in the San Diego Region. 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.

This General 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 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. Agricultural Operation Performance Standards

This General Order establishes water quality benchmarks for implementation of management practices that all Dischargers must achieve. The selection of

appropriate 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 not specify the manner of compliance with its requirements, the selection of the management practice must be done by the Discharger for the agricultural operation. Following are the performance standards that all Dischargers must achieve:

i. Minimize waste discharge offsite in surface water.

ii. Minimize or eliminate the discharge of sediment above background levels.

iii. Minimize percolation of waste to groundwater.

iv. Minimize excess nutrient application relative to crop need.

v. Prevent pollution and nuisance conditions in waters of the State.

vi. Achieve and maintain water quality objectives and beneficial uses.

vii. Protect wellheads from surface water intrusion.

e. Additional Planning and Implementation Measures

This General 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 and WQRP processes will result in the identification of management practices that meet the performance standards and represent BPTC. The WQPP and WQRP implements 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.

In addition to the WQPP and WQRP, this General Order includes a comprehensive suite of reporting requirements that should provide the San Diego Water Board with the information it needs to determine whether the necessary actions are being taken to achieve BPTC and protect water quality, where applicable. (MRP section VI.E Quarterly Self Inspection Report and section VI.F. Annual Self-Assessment Report.)

f. Maximum Benefit to People of the State

This General 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 agricultural in the San Diego Region is paramount to the economic vitality of the San Diego Region. San Diego Region communities depend on agricultural operations for employment. Agriculture is key contributor to the economy in the San Diego Region. In San Diego County alone, Agricultural Operations produce more than 200 agricultural commodities, export crops to 51 nations around the world, and generate more than 1.8 billion dollars in annual value to the economy.

Moreover, this General Order includes conditions and performance standards that will work to prevent further degradation of surface and groundwater quality. The receiving water limitations (section V), the WQPP and the WQRP (section VI) of this General Order and the MRP's requirements to track compliance with this General 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 13241

In issuing WDRs, the Water Code requires the San Diego Water Board to take the factors listed in Water Code section 13241 into consideration, including, but not limited to "(a) Past, present, and probable future beneficial uses of water; (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto; (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area; (d) Economic considerations; (e) The need for developing housing within the region; (f) The need to develop and use recycled water."

a. This General Order protects the beneficial uses identified in the Basin Plan. Applicable past, present, and probable future beneficial uses of waters within the San Diego Region were considered as part of the Basin Planning process and are reflected in the Basin Plan itself. Because this General Order is applicable to a wide geographic area, it is appropriate to consider beneficial uses as identified in the Basin Plan and other applicable policies, rather than those identified through a site-specific evaluation that might be appropriate for WDRs applicable to a single discharger.

b. Environmental characteristics of San Diego Region's waters have been considered in the development of this General Order.

c. This General Order provides a process to review water quality conditions that could reasonably be achieved through coordinated control of all factors which affect water quality in the area as a part of the development and implementation of the WQRP.

d. Economic Considerations

i. WDR Fees

Agricultural Operations enrolled in this General Order will pay annual WDR fees to the State Water Board. Annual WDR fees are established by the State Water Board and can be found in the California Code of Regulations (CCR) title 23, section 2200.6. The fees are assessed based on the acreage of the Agricultural Operation. The 2015-16 annual fee for Individual Dischargers are presented in Table B-6.

Table B-6. FY 2015-16 Annual Fees for Dischargers Enrolled as Individuals

Acres	Fee Rate	Minimum Fee	Maximum Fee
0 – 10	$404 + $13.50/Acre	$404	$538
11 – 100	$1,084 + $6.70/Acre	$1,084	$1,756
101 – 500	$3,033 + $3.40/Acre	$3,033	$4,715
501 or more	$6,733 + $2.70/Acre	$6,733	No Maximum Fee

ii. Structural Management Practices

Structural management practices will likely be installed to implement irrigation management, storm water management, nutrient management, and erosion control. Many Agricultural Operations have already installed relevant management practices. During inspections of Agricultural Operations in 2013, the San Diego Water Board found that 82% of the Agricultural Operations enrolled in the 2007 Waiver, and 58% of Agricultural Operations not enrolled in the 2007 Waiver had implemented management practices. Additionally, due to the high cost of water, Agricultural Operations generally use low-flow drip or micro-sprinklers. Because many Agricultural Operations have already installed appropriate structural management practices, the San Diego Water anticipates many will have relatively minor construction costs associated with management practice implementation. Therefore, the cost of construction of new management practices will only be incurred by a portion of Agricultural Operations within the San Diego Region. Table B-7 lists the anticipated structural management practices that may be installed and the cost range for design, implementation, and annual maintenance costs (assumed to be 30% of the installation 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* (FOTG).[22]

The selection of the most appropriate and cost effective structural management practices will be made by the Agricultural Operation and will be based on site-specific conditions such as existing structural management practices (for example, almost all of the avocado orchards in San Diego County currently use mini-sprinklers irrigation),[23] crop type, site location, slope, soil and geology, and distance to surface water bodies. Furthermore, it is likely that the site-specific conditions may not require the construction of structural management practices, and that the structural management practices have already been deployed, either for compliance under the 2007 Waiver or as a normal operating activity.

Table B-7. Anticipated Structural Management Practices Costs

Structural Management Practice[24]	NRCS FOTG No.	Design and Implementation Cost (per acre)	Annual Maintenance Cost
Mini-Sprinkler Irrigation System	441-2	$0 to $2,600	$0 to $780
Mulching with Natural Materials	484-1	$0 to $290	$0 to $87
Silt Fence	570-2	$0 to $770	$0 to $231
Straw Bales	570-2	$0 to $1,892	$0 to $567

[22] USDA Practice Payment Scenarios, available at https://efotg.sc.egov.usda.gov/references/public/CA/FY16_Practice_Payment_Scenarios_wBookmarks.pdf (as of October 20, 2016).

[23] Per e-mail from Gary Bender, Ph.D., Farm Adviser Emeritus, University of California Agriculture and Natural Resources, dated May 16, 2016.

[24] The list presented in Table 3 is based on the type of agricultural activities in the San Diego Region and observations of implemented management practices made during Agricultural Operation inspections.

Structural Management Practice[24]	NRCS FOTG No.	Design and Implementation Cost (per acre)	Annual Maintenance Cost
Straw Wattles or Fiber Rolls	570-2	$0 to $789	$0 to $264
Filter Strip – Native Species	393-3	$0 to $345	$0 to $103
Sedimentation Basin	350-3	$0 to $12,160[25]	$0 to $3,648

iii. Monitoring and Reporting Costs

Table B-8 summarizes the estimated costs for compliance with the monitoring and reporting requirements detailed in the MRP, Attachment B.

Table B-8. Estimated Water Quality Monitoring and Reporting Costs

Task	One-Time Cost	Annual Cost
Surface Water and Groundwater Monitoring Program Plan[26]	$2,000	--
Groundwater Monitoring, if needed	$0 - $100	--
Surface Water/Edge of Field Monitoring	--	$8,000
Prepare and Implement a WQRP, if needed[27] [28]	$2,000	$10,000
Annual Reporting[29]	--	$1,000

iv. Anticipated Costs in Relationship to Revenue

The analysis includes the economic burden of the fees and the costs associated with the installation and maintenance of new structural management practices, monitoring, and reporting.[30] These costs are summarized in Table B-9. The estimated one-time cost for a median-sized (4 acre) Agricultural Operation to comply with this General Order ~~is approximately~~ranges between $2,050 to $4,100, and the estimated annual cost for a median-sized (4 acre) Agricultural Operation to comply with this General Order is $~~8,000~~9,458 to $24,468.

The agricultural products most commonly grown in the San Diego Region can be broadly grouped into three categories: 1) nursery and cut flower products, 2) fruit and nuts, and 3) vegetables. Table B-10 summarizes the acres planted

[25] The cost provided in NRCS FOTG 350-3 is based on one, 1,500 cubic yard earthen embankment to construct a sedimentation basin. The cost presented in Table 3 is per embankment, and not per acre.

[26] Cost assumes a qualified consultant prepares the Surface Water and Groundwater Monitoring Program Plan.

[27] Cost assumes a qualified consultant prepares and implements the WQRP.

[28] Cost assumes the WQRP is prepared to address an exceedance of nutrients with additional monitoring to be conducted for nutrients.

[29] Cost assumes a qualified consultant prepare the Annual Report.

[30] The estimated annual maintenance costs for items that would likely be part of the normal operational activities and not specifically required by this General Orders, such as maintenance of a mini-sprinkler irrigation system is not included. Also, the maintenance for a sedimentation basin is not included as only a limited number of Agricultural Operations would likely require the construction of a sedimentation basin to comply with this General Orders.

and the revenue from these crops in San Diego County according to the 2014 County of San Diego Crop Report.[31] Table B-10 also lists the average per acre revenue and the estimated average revenue for a median-sized (4 acre) Agricultural Operation.

Table B-9. Summary of Estimated Costs

Cost	Individual (4 Acres)	
	One-Time Cost	Annual Cost
Enrollment Fee	$50	--
Annual Fee	--	~~$0 to~~ $458--
Mulching with Natural Materials	--	$0 to $348
Silt Fence	--	$0 to $924
Straw Bales	--	$0 to $2,268
Straw Wattles or Fiber Rolls	--	$0 to $1,056
Filter Strip	--	$0 to $414
Surface Water and Groundwater Monitoring Program Plan	$2,000	--
Groundwater Monitoring, if needed	$0 - $100	--
Surface Water/Edge of Field Monitoring	--	$8,000
Prepare WQRP, if needed	$0 - $2,000	--
Implement a WQRP, if needed	--	$0 - $10,000
Annual Reporting	--	$1,000
Totals	**$2,050 - $4,100**	**$~~8,000~~9,458 to $24,468**

Table B-10. Summary of Estimated Revenue

Crop	Harvested Acres	Annual Revenue	Annual Revenue/Acre	Annual Revenue for a 4 Acre Agricultural Operation
Nursery & Cut Flowers	12,702	$1,182,613,913	$93,105	$372,418
Fruits & Nuts	34,811	$385,988,806	$11,088	$44,353
Vegetables	4,631	$6,644,917	$1,435	$5,740

[31] County of San Diego 2014 Crop Statistics & Annual Report, available at http://www.sandiegocounty.gov/content/dam/sdc/awm/docs/Crop%20Report-Final.pdf (as of October 20, 2016).

v. Opportunities for Cost Reduction

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

(a) Selection of Cost-Effective Management Practices

This analysis includes an array of possible management practices. The actual cost will be dependent on the selection made by the Agricultural Operation 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 management practices.

(b) The Agricultural Operation Could Join a Third-Party Group

Agricultural Operations have the option of joining a Third-Party Group. By doing so, the cost of compliance with the MRP will be distributed amongst all of the Members of the Third-Party Group, thus vastly reducing the cost.

(c) Funding Opportunities

The San Diego Water Board and 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 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 this General 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) Federal Farm Bill

Title II of the 2014 Farm Bill (the Agricultural Act of 2014), in effect through 2018, authorizes funding for conservation programs such as the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP). Both of these programs provide financial and technical assistance for activities that improve water quality on agricultural lands.

(2) 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.

(3) 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.

II. APPLICATION FOR COVERAGE UNDER THIS GENERAL ORDER

New and existing Agricultural Operations without coverage under Order No. R9-2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of Third-Party Group in the San Diego Region* or individual WDRs are required to enroll under this General Order. Either the owner or operator of an Agricultural Operation may enroll under this General Order by submitting a complete NOI (Attachment G) to the San Diego Water Board. Regulatory coverage under this General Order is not effective until the San Diego Water Board approves the NOI as described in section II.D of this General Order.

Section 2200 (Annual Fee Schedule) of title 23 of the CCR requires that all discharges subject to WDRs pay an annual fee to the State Water Board.

III. RATIONALE FOR PROHIBITIONS

The Prohibitions in this General 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 including the Ocean Plan. This General Order does not authorize any discharges not covered under this General Order or other WDRs.

IV. RATIONALE FOR DISCHARGE SPECIFICATIONS

A. General Discharge Specifications

Discharge specifications in this General Order are based on the Water Code, Basin Plan, and applicable State Water Board plans and policies. This General Order does not authorize any discharges not covered under this General Order or that are covered under other WDRs.

B. Waste Discharge Control Requirements

This General Order requires Dischargers to implement management practices to prevent adverse impacts to water quality from Agricultural Operations, consistent with the Nonpoint Source Policy and the Agricultural Expert Panel Report. Dischargers must 1) implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and 2) when effectiveness evaluation or 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 management practices.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in section V. of this General Order are based on existing water quality standards requirements found in the following water quality control plans and policies and federal regulations:

A. The Basin Plan, including beneficial uses, water quality objective, and implementation plans.

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

~~**C.** The *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries* (Thermal Plan).~~

~~**D.**~~**C.** The *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* (Bays and Estuaries Policy).

~~**E.**~~**D.** The *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Part 1* Sediment Quality including beneficial uses, water quality objective, and implementation plans.

~~**F.**~~**E.** The *Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP).

~~**G.**~~**F.** The *National Toxics Rule* (NTR).[32]

~~**H.**~~**G.** The *California Toxics Rule* (CTR).[33,34]

The receiving water limitations of this General 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. The Discharger must show immediate compliance with the receiving water limitations except where the Discharger is implementing a WQRP for specified waste parameters in accordance with an approved time schedule.

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…". This General Order protects the beneficial uses of receiving waters in part through the requirements of section VI of this General Order to comply with applicable water quality standards contained in the water quality control plans and policies and federal regulations listed in section V. A though H of the Fact Sheet (Attachment B to this General Order) above.

To facilitate compliance, the San Diego Water Board has identified Water Quality Benchmarks in Table A-2 of the MRP in Attachment A of this General Order for specific waste constituents required to be monitored. The Water Quality Benchmarks provide a measure and reliable indicator for determining compliance with applicable water quality standards. Table B-11 below lists specific key narrative and numeric water quality objectives and federal water quality criterion applicable to agricultural discharges.

[32] 40 CFR section 136.

[33] 65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR.

[34] If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.

Table B-11 Rationale for Water Quality Benchmarks

WATER QUALITY BENCHMARK (Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)	WATERBODY BENEFICIAL USES
Hydrogen Ion Concentration (pH)	
Narrative Objectives:	
Changes in normal ambient pH levels shall not exceed 0.2 pH units. (Basin Plan)	Surface Water MAR, EST, SAL
Changes in normal ambient pH levels shall not exceed 0.5 pH units. (Basin Plan)	Surface Water COLD, WARM
The pH shall not be changed at any time more than 0.2 units which occur naturally (Ocean Plan)	Ocean Waters
Numeric Objectives:	
The pH shall not be depressed below 7.0 nor raised above 9.0. (Basin Plan)	Bays and Estuaries
The pH shall not be depressed below 6.5 nor raised above 8.5. (Basin Plan)	All Surface Waters
Temperature	
Narrative Objectives:	
The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. (Basin Plan)	Surface Waters
At no time or place shall the temperature of be increased more than 5°F above the natural receiving water temperature. (Basin Plan)	Surface Waters COLD
Dissolved Oxygen	
Numeric Objectives:	
The dissolved oxygen concentration shall not at any time be less than 5.0 mg/L. The annual mean dissolved oxygen concentration shall not be less than 7 mg/L more than 10% of the time. (Basin Plan)	Inland Surface Waters and Bays and Estuaries MAR, WARM
Narrative Objectives:	
The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials (Ocean Plan)	Ocean Waters
Turbidity	
Narrative Objectives:	
Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)	Surface Waters
Within San Diego Bay, the transparency of bay waters, insofar as it may be influenced by any controllable factor, either directly or through induced conditions, shall not be less than 8 feet in more than 20 percent of the readings in any zone, as measured by a standard Secchi disk. Wherever the water is less than 10 feet deep, the Secchi disk reading shall not be less than 80 percent of the depth in more than 20 percent of the readings in any zone. (Basin Pan)	San Diego Bay
The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of a standard Secchi disk, except where lesser transparency is caused by rainfall runoff from	Lagoons and Estuaries

<table>
<tr><th>WATER QUALITY BENCHMARK
(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)</th><th>WATERBODY BENEFICIAL USES</th></tr>
<tr><td>undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the following limits: (Basin Plan)
<table>
<tr><th>Natural Turbidity</th><th>Maximum Increase</th></tr>
<tr><td>0 – 50 NTU</td><td>20% over natural turbidity</td></tr>
<tr><td>50 – 100 NTU</td><td>10 NTU</td></tr>
<tr><td>Greater than 100 NTUs</td><td>10% over natural turbidity</td></tr>
</table></td><td></td></tr>
<tr><td>Natural light shall not be significantly reduced at any point. (Ocean Plan)</td><td>Ocean Waters</td></tr>
<tr><td colspan="2">Numeric Objective:</td></tr>
<tr><td>Inland surface waters shall not contain turbidity in concentrations in excess of the numerical objectives described in Table 3-2 of the Basin Plan. These values are presented in Table B-12 below for reference purposes. (Basin Plan)</td><td>Inland Surface Waters</td></tr>
<tr><td colspan="2">Total Dissolved Solids</td></tr>
<tr><td>Numeric Objective:
Inland surface waters shall not contain total dissolved solids in concentrations in excess of the numerical objectives described in Table 3-2 of the Basin Plan. These values are presented in Table B-12 below for reference purposes. (Basin Plan)</td><td>Inland Surface Waters</td></tr>
<tr><td>Numeric Objective:
Groundwaters shall not contain total dissolved solids in concentrations in excess of the numerical objectives described in Table 3-3 of the Basin Plan. These values are presented in Table B-13 below for reference purposes. (Basin Plan)</td><td>Groundwaters</td></tr>
<tr><td colspan="2">Total Suspended Solids</td></tr>
<tr><td>Narrative Objective:
Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses. (Basin Plan)</td><td>Surface Waters</td></tr>
<tr><td>Narrative Objective:
The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. (Basin Plan)</td><td>Surface Waters</td></tr>
<tr><td>Narrative Objective:
Floating particulates and grease and oil shall not be visible. (Ocean Plan)</td><td>Ocean Waters</td></tr>
<tr><td>Narrative Objective:
The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded loating particulates and grease and oil shall not be visible. (Ocean Plan)</td><td>Ocean Waters</td></tr>
<tr><td colspan="2">Ammonia</td></tr>
<tr><td>Numeric Objective:
Not greater than 0.025 mg/L of un-ionized ammonia (NH_3) as Nitrogen. (Basin</td><td>Inland Surface Waters and Bays and Estuaries</td></tr>
</table>

WATER QUALITY BENCHMARK (Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)	WATERBODY BENEFICIAL USES
Plan)	
Color	
Narrative Objective: The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface. (Ocean Plan)	Ocean Waters
Narrative Objective~~t~~: Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. (Basin Plan)	Inland Surface Waters, Bays and Estuaries and Groundwaters
Nitrate as NO_3	
Numeric Objective: Not greater than 45 mg/L (Basin Plan)	Inland Surface Waters MUN
Numeric Objective: Groundwaters shall not contain total nitrate in concentrations in excess of the numerical objectives described in Table 3-3 of the Basin Plan. These values are presented in Table B-13 for reference purposes. (Basin Plan)	Groundwaters
Nitrate + Nitrite (as Nitrogen)	
Numeric Objective: Not greater than 10 mg/L (Basin Plan)	Inland Surface Waters MUN
Biostimulatory Substances – Total Nitrogen and Total Phosphorus	
Narrative Objective: Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorus concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of total nitrogen:total phosphorus = 10:1, on a weight to weight basis shall be used. (Basin Plan)	Inland Surface Waters and Coastal Lagoons
Numeric Objective: Total Nitrogen: 1 mg/L Total Phosphorus: 0.1 mg/L (Basin Plan)	Inland Surface Waters and Coastal Lagoons
Rainbow Creek TMDL (Hydrologic Basin Numbers 2.22 and 2.23): The Basin Plan also establishes Numeric Targets for total nitrogen and total	All Inland Surface Waters within the

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
phosphorus for the Rainbow Creek watershed (Hydrologic Unit Basin Numbers 2.22 and 2.23). The Rainbow Creek TMDL was adopted to address excessive nitrogen and phosphorus concentrations in the Rainbow Creek Watershed. The Rainbow Creek TMDL established Numeric Targets for total nitrogen and total phosphorus, which are set equal to the numeric goals of the biostimulatory substances water quality objective as defined in the Basin Plan and shown below: Total Nitrogen: 1.0 mg/L Total Phosphorus: 0.1 mg/L (Basin Plan)	Rainbow Creek Watershed
Narrative Objective: Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota. (Ocean Plan)	Ocean Waters
Sulfate	
Narrative Objective Inland surface waters shall not contain sulfate in concentrations in excess of the numerical objectives described in Table 3-2 of the Basin Plan. These values are presented in Table B-12 below for reference purposes. (Basin Plan)	Inland Surface Waters
Dissolved Sulfide	
Narrative Objective: The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above the present under natural conditions. (Ocean Plan)	Ocean Waters
E. Coli	
Numerical Objectives:	
Steady State - All Areas: 126 colonies per 100 mL (Basin Plan)	Surface Water REC-1 Freshwater
Maximum – Designated Beaches: 235 colonies per 100 mL (Basin Plan)	
Maximum – Moderately or Lightly Used Areas: 406 colonies per 100 mL (Basin Plan)	
Maximum – Infrequently Used Areas: 576 colonies per 100 mL (Basin Plan)	
In San Diego Bay where bay waters are used for whole fish handling, the density of E. coli shall not exceed 7 organisms per mL in more than 20 percent of any 20 daily consecutive samples of bay water. (Basin Plan)	San Diego Bay
Enterococci	
Numerical Objectives:	
Steady State - All Areas: 33 colonies per 100 mL (Basin Plan)	Surface Water REC-1 Freshwater
Maximum – Designated Beaches: 61 colonies per 100 mL (Basin Plan)	
Maximum – Moderately or Lightly Used Areas: 108 colonies per 100 mL (Basin Plan)	
Maximum – Infrequently Used Areas: 152 colonies per 100 mL (Basin Plan)	
Steady State - All Areas: 35 colonies per 100 mL (Basin Plan)	Surface Water REC-1 Saltwater
Maximum – Designated Beaches: 104 colonies per 100 mL (Basin Plan)	
Maximum – Moderately or Lightly Used Areas: 276 colonies per 100 mL (Basin Plan)	
Maximum – Infrequently Used Areas: 500 colonies per 100 mL (Basin Plan)	

WATER QUALITY BENCHMARK (Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)	WATERBODY BENEFICIAL USES
Bacteria TMDL (Hydrologic Basin Numbers 901.11, 901.12, 901.13, 901.14, 901.27, 901.27, 901.30, 903.00, 904.50, 905.00, 906.10, 906.30, 906.50, 907.11, 907.12, 908.22) The Basin Plan also establishes Numeric Targets for enterococci for waterbodies under the Bacteria TMDL as follows: For moderately or lightly used creeks and beaches: Wet Weather: 104 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 35 MPN/100 mL, 30-day geometric mean For designated creeks and beaches: Wet Weather: 61 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 33 MPN/100 mL, 30-day geometric mean (Basin Plan)	Surface Water REC-1
Fecal Coliform	
Numeric Objectives:	
The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 organisms per 100 mL. (Basin Plan)	Surface Water REC-1
In addition, the fecal coliform concentration shall not exceed 400 organisms per 100 mL for more than 10 percent of the total samples during any 30-day period. (Basin Plan)	
The average fecal coliform concentrations for any 30-day period shall not exceed 2,000 organisms per 100 mL nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 organisms per 100 mL. (Basin Plan)	Surface Water REC-2
The median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 organisms per 100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 organisms per 100 mL for a five-tube decimal dilution test or 330 organisms per 100 mL when a three-tube decimal dilution test is used. (Basin Plan)	Surface Water SHELL, COMM
Bacteria TMDL (Hydrologic Basin Numbers 901.11, 901.12, 901.13, 901.14, 901.27, 901.27, 901.30, 903.00, 904.50, 905.00, 906.10, 906.30, 906.50, 907.11, 907.12, 908.22) The Basin Plan also establishes Numeric Targets for Fecal Coliform for waterbodies under the Bacteria TMDL as follows: Wet Weather: 400 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 200 MPN/100 mL, 30-day geometric mean (Basin Plan)	Surface Water REC-1
Total Coliform	
Numeric Objectives:	
The most probable number of total coliform organisms in the upper 60 feet of the water column shall be less than 1,000 organisms per 100 mL (10 organisms per mL); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 organisms per 100 mL (10 per mL); and provided further that no single sample as described below is	Bays and Estuaries REC-1

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
exceeded. (Basin Plan) The most probable number of total coliform organisms in the upper 60 feet of the water column in no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 organisms per 100 mL (100 organisms per mL). (Basin Plan)	
The average fecal coliform concentrations for any 30-day period shall not exceed 2,000 organisms per 100 mL nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 organisms per 100 mL. (Basin Plan)	Surface Water REC-2
The median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 organisms per 100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 organisms per 100 mL for a five-tube decimal dilution test or 330 organisms per 100 mL when a three-tube decimal dilution test is used. (Basin Plan)	Surface Water SHELL, COMM
Bacteria TMDL (Hydrologic Basin Numbers 901.11, 901.12, 901.13, 901.14, 901.27, 901.27, 901.30, 903.00, 904.50, 905.00, 906.10, 906.30, 906.50, 907.11, 907.12, 908.22) The Basin Plan also establishes Numeric Targets for Total Coliform for waterbodies under the Bacteria TMDL as follows: Wet Weather: 10,000 MPN/100 mL, 22% allowable exceedance frequency Dry Weather: 1,000 MPN/per 100 mL, 30-day geometric mean (Basin Plan)	Surface Water REC-1
Bacteria Water Quality Standards for Ocean Waters	
Bacterial Characteristics For discharges of waste to the Pacific Ocean, within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the San Diego Water Board (waters designated as REC-1), the following bacterial objectives shall be maintained throughout the water column [Ocean Plan]: i. 30-day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each site: 1. Total coliform density shall not exceed 1,000 per 100 ml; 2. Fecal coliform density shall not exceed 200 per 100 ml; and 3. Enterococcus density shall not exceed 35 per 100 ml. ii. Single Sample Maximum 1. Total coliform density shall not exceed 10,000 per 100 ml; 2. Fecal coliform density shall not exceed 400 per 100 ml; 3. Enterococcus density shall not exceed 104 per 100 ml; and 4. Total coliform density shall not exceed 1,000 per 100 ml when the fecal coliform/total coliform ratio exceeds 0.1.	Ocean Waters
Physical Characteristics	
Narrative Objective: Waters shall not contain oils, greases, waxes, or other materials in	Inland Surface Waters, Bays and Estuaries and

WATER QUALITY BENCHMARK (Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)	WATERBODY BENEFICIAL USES
concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses. (Basin Plan) Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses. (Basin Plan) Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. (Basin Plan)	Groundwater
Organic Materials	
Narrative Objective: The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life. (Ocean Plan)	Ocean Waters
Biological Characteristics	
Narrative Objective: Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (Ocean Plan) The natural taste, odor, color of fish, shellfish, or other marine resources used for human consumption shall not be altered. (Ocean Plan) The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health. (Ocean Plan)	Ocean Waters
Chemical Characteristics	
Narrative Objective: The concentration of substances set forth in chapter II, table 1 of the Ocean Plan in marine sediments shall not be increased to levels which would degrade indigenous biota. (Ocean Plan) Numerical water quality objectives contained in chapter II, table 1 of the Ocean Plan shall not be exceeded. (Ocean Plan)	Ocean Waters
Pesticides	
Narrative Objective: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)	Inland Surface Waters, Bays and Estuaries and Groundwater
Toxicity Characteristics	
Narrative Objective: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate	Inland Surface Waters, Bays and Estuaries and Groundwater

WATER QUALITY BENCHMARK *(Based on Water Quality Objectives in the Basin Plan and other Applicable Statewide Water Quality Control Plans and Policies)*	WATERBODY BENEFICIAL USES
methods as specified by the Regional Board. (Basin Plan)	
Indicators of Numeric Objective: Chronic toxicity unit (TUc): 1.0 At 1.0 TUc, there is no observable detrimental effect when the indicator organism is exposed to 100 percent effluent; therefore, 1.0 TUc is a direct translation of the narrative objective into a number. (Basin Plan)	
Narrative Objective: Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities. (Bays and Estuaries Plan)	Bays and Estuaries
Narrative Objective: Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human. (Bays and Estuaries Plan)	Bays and Estuaries
Numeric Federal Water Criterion National Toxics Rule (40 CFR section 136) and California Toxics Rule (65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR). The NTR and CTR establish federal water quality criteria that implement the Basin Plan narrative toxicity water quality objective. The Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) provides in section 5.1 that it is the intent of the State Water Board, in adopting this Policy, that the implementation of the priority pollutant criteria/objectives and other requirements of this Policy for nonpoint source discharges shall be consistent with the State's " Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program, 2004.	Inland Surface Waters and Bays and Estuaries

Table B-12. Surface Water Numeric Water Quality Objectives

Inland Surface Waters	Hydrologic Unit Basin Number	TDS (mg/L)	SO_4 (mg/L)	Turbidity (NTU)
SAN JUAN HYDROLOGIC UNIT (901.00)				
Laguna HA	1.10	1,000	500	20
Mission Viejo HA	1.20	500	250	20
San Clemente HA	1.30	500	250	20
San Mateo Canyon HA	1.40	500	250	20
San Onofre HA	1.50	500	250	20
SANTA MARGARITA HYDROLOGIC UNIT (902.00)				
Ysidora HA	2.10	750	300	20
Deluz HA	2.20	500	250	20
Deluz Creek HSA[4]	2.21	750	250	20
Gavilan HSA[4]	2.22	750	250	20
Murrieta HA	2.30	750	300	20
Auld HA	2.40	500	250	20
Pechanga HA	2.50	500	250	20

Inland Surface Waters	Hydrologic Unit Basin Number	TDS (mg/L)	SO_4 (mg/L)	Turbidity (NTU)
SAN JUAN HYDROLOGIC UNIT (901.00)				
Wolf HSA[4]	2.52	750	250	20
Wilson HA	2.60	500	250	20
Cave Rocks HA	2.70	750	300	20
Aguanga HA	2.80	750	300	20
Oakgrove HA	2.90	750	300	20
SAN LUIS REY HYDROLOGIC UNIT (903.00)				
Lower San Luis HA	3.10	500	250	20
Monserat HA	3.20	500	250	20
Warner Valley A	3.30	500	250	20
CARLSBAD HYDROLOGIC UNIT (904.00)				
Loma Alta HA	4.10	-	-	20
Buena Vista Creek HA	4.20	500	250	20
Agua Hedionda HA	4.30	500	250	20
Encinas HA	4.40	-	-	20
San Marcos HA	4.50	500	250	20
Escondido Creek HA	4.60	500	250	20
SAN DIEGUITO HYDROLOGIC UNIT (905.00)				
Solana Beach HA	5.10	500	250	20
Hodges HA	5.20	500	250	20
San Pasqual HA	5.30	500	250	20
Santa Maria Valley HA	5.40	500	250	20
Santa Ysabel HA	5.50	500	250	20
PENASQUITOS HYDROLOGIC UNIT (906.00)				
Miramar Reservoir HA	6.10	500	250	20
Poway HA	6.20	500	250	20
Scripps HA	6.30	-	-	20
Miramar HA	6.40	500	250	20
Tecolote HA	6.50	-	-	20
SAN DIEGO HYDROLOGIC UNIT (907.00)				
Lower San Diego HA	7.10	1,000	500	20
Mission San Diego HSA	7.11	1,500	500	20
Santee HSA[5]	7.12	1,000	500	20
Santee HSA[6]	7.12	1,500	500	20
San Vicente HA	7.20	300	65	20
El Capitan HA	7.30	300	65	20
Boulder Creek HA	7.40	300	65	20
PUEBLO SAN DIEGO HYDROLOGIC UNIT (908.00)				
Point Loma HA	8.10	-	-	20
San Diego Mesa HA	8.20	-	-	20
National City HA	8.30	-	-	20
SWEETWATER HYDROLOGIC UNIT (909.00)				
Lower Sweetwater HA	9.10	1,500	500	20
Middle Sweetwater HA	9.20	500	250	20
Upper Sweetwater HA	9.30	500	250	20
OTAY HYDROLOGIC UNIT (910.00)				
Coronado HA	10.10	-	-	-
Otay Valley HA	10.20	1,000	500	20
Dulzura HA	10.30	500	250	20

Inland Surface Waters	Hydrologic Unit Basin Number	TDS (mg/L)	SO_4 (mg/L)	Turbidity (NTU)
SAN JUAN HYDROLOGIC UNIT (901.00)				
TIJUANA HYDROLOGIC UNIT (911.00)				
Tijuana Valley HA	11.10	-	-	-
San Ysidro HSA	11.11	2,100	-	20
Potrero HA	11.20	500	250	20
Barrett Lake HA e	11.30	500	250	20
Monument HA	11.40	500	250	20
Morena HA	11.50	500	250	20
Cottonwood HA	11.60	500	250	20
Cameron HA	11.70	500	250	20
Campo HA	11.80	500	250	20

Endnotes for Table B-12

1. Modified from Table 3.2 of the Basin Plan
2. HA = Hydrologic Area
3. HAS= Hydrologic Subarea
4. These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
5. Sycamore Canyon Subarea, a portion of the Santee Hydrologic Subarea, includes the watersheds of the following north-south trending canyons: Oak Creek, Spring Canyon, Little Sycamore Canyon, Quail Canyon, and Sycamore Canyon. The Sycamore Canyon subarea extends eastward from the Mission San Diego HSA to the confluence of the San Diego River and Forester Creek, immediately south of the Santee Lakes.
6. These objectives apply to the Lower Sycamore Canyon portion of the Santee Hydrologic Subarea described as all of the Sycamore Canyon watershed except that part which drains north of the boundary between sections 28 and 33, Township 14 South, Range 1 West.

Table B-13. Groundwater Numeric Water Quality Objectives

Groundwater	Hydrologic Unit Basin Number	TDS (mg/L)	Nitrate as NO_3 (mg/L)
San Juan Hydrologic Unit (901.00)			
San Joaquin Hills HSA	1.11	1,200	45
Laguna Beach HSA	1.12	1,200	45
Aliso HSA	1.13	1,200	45
Dana Point HSA	1.14	1,200	45
Oso HSA	1.21	1,200	45
Upper Trabuco HSA	1.22	500	45
Middle Trabuco HSA	1.23	750	45
Gobernadora HSA	1.24	1,200	45
Upper San Juan HSA	1.25	500	45
Middle San Juan HSA	1.26	750	45
Lower San Juan HSA	1.27	1,200	45
Ortega HSA	1.28	1,100	45
Prima Deshecha HSA	1.31	1,200	45
Segunda Deshecha HSA	1.32	1,200	45
San Mateo Canyon HA[1]	1.40	500[9]	45[9]

Groundwater	Hydrologic Unit Basin Number	TDS (mg/L)	Nitrate as NO_3 (mg/L)
San Onofre HA[1]	1.50	500[9]	45[9]
SANTA MARGARITA HYDROLOGIC UNIT (902.00)			
Ysidora HA[1]	2.10	750[2]	45[2]
Deluz HA	2.20	500	45
Deluz Creek HSA[3]	2.21	750	45
Gavilan HSA[3]	2.22	750	45
Murrieta HA	2.30	750[2]	45[2]
Domenigoni HSA	2.35	2,000	45
Auld HA	2.40	500	45
Pechanga HA	2.50	500	45
Pauba HSA[4]	2.51	750	45
Wolf HSA[5]	2.52	750	45
Wilson HA	2.60	500	45
Cave Rocks HA	2.70	500	45
Aguanga HA	2.80	500	45
Oakgrove HA	2.90	500	45
SAN LUIS REY HYDROLOGIC UNIT (903.00)			
Lower San Luis HA	3.10	800	45
Mission HSA[1]	3.11	1,500[2,7]	45[2,7]
Bonsall HSA	3.12	1,500[2,7]	45[2,7]
Moosa HSA	3.13	1,200[6]	45
Valley Center HSA	3.14	1,000[6]	45
Pala HSA	3.22	900[2]	45[2,7]
Pauma HSA	3.23	800[2]	45[2,7]
La Jolla Amago HSA	3.23	500	45
Warner Valley HA	3.30	500	5
CARLSBAD HYDROLOGIC UNIT (904.00)			
El Salto HSA[1]	4.21	3,500	45[9]
Vista HSA[1]	4.22	1,000[9]	45
Agua Hedionda HA[1]	4.30	1,200	45
Los Monos HSA[1,8]	4.31	3,500	45
Encinas HA[1]	4.40	3,500[9]	45[9]
San Marcos HA[1,10,11]	4.50	1,000	45
Batiquitos HSA[1,10,11]	4.51	3,500	45
Escondido Creek HA[1]	4.60	750	45
San Elijo HSA[1]	4.61	2,800	45
Escondido HSA	4.62	1,000	45
SAN DIEGUITO HYDROLOGIC UNIT (905.00)			
Solana Beach HA[1]	5.10	1,500[9]	45[9]
Hodges HA	5.20	1,000	45[9]
San Pasqual HA	5.30	1,000[9]	45[9]
Santa Maria Valley HA	5.40	1,000	45
Santa Ysabel HA	5.50	500	45
PENASQUITOS HYDROLOGIC UNIT (906.00)			
Miramar Reservoir HA[1,2]	6.10	1,200	45
Poway HA	6.20	750[3]	45
Miramar HA[14]	6.40	750	45
SAN DIEGO HYDROLOGIC UNIT (907.00)			
Mission San Diego HSA[1]	7.11	3,000[9]	45[9]

Groundwater	Hydrologic Unit Basin Number	TDS (mg/L)	Nitrate as NO_3 (mg/L)
Santee HSA	7.12	1,000[9]	45[9]
Santee HSA(alluvial aquifer for lower Sycamore Canyon)	7.12	2,000	45[9]
El Cajon HSA	7.13	1,200[9]	45[9]
Coches HSA	7.14	600[9]	45[9]
El Monte HSA	7.15	600[9]	45[9]
San Vicente HA	7.20	600	45
El Capitan HA	7.30	1,000	45
Conejos Creek HSA	7.31	350	45
Boulder Creek HA	7.40	350	45
PUEBLO SAN DIEGO HYDROLOGIC UNIT (908.00)			
National City HA	8.30	750	45
SWEETWATER HYDROLOGIC UNIT (909.00)			
Telegraph HSA	9.11	3,000[9]	45[9]
La Nacion HSA	9.12	1,500[9]	45[9]
Middle Sweetwater HA	9.20	1,000	45
Upper Sweetwater HA	9.30	500	45
OTAY HYDROLOGIC UNIT (910.00)			
Otay Valley HA	10.20	1,500[9]	45[9]
Dulzura HA	10.30	1,000	45
TIJUANA HYDROLOGIC UNIT (911.00)			
Tijuana Valley HA[16]	11.10	2,500[9]	--
Potrero HA	11.20	500	45
Barrett Lake HA	11.30	500	45
Monument HA	11.40	500	45
Morena HA	11.50	500	45
Cottonwood HA	11.60	500	45
Cameron HA	11.70	500	45
Campo HA	11.80	500	45

Notes:
Modified from Table 3.3 of the Basin Plan
HA = Hydrologic Area
HSA= Hydrologic Subarea

Endnotes for Table B-13

1. The water quality objectives do not apply westerly of the easterly boundary of Interstate Highway 5. The objectives for the remainder of the Hydrologic Area (Subarea) are as shown.
2. The recommended plan would allow for measurable degradation of ground water in this basin to permit continued agricultural land use. Point sources, however, would be controlled to achieve effluent quality corresponding to the tabulated numerical values. In future years, demineralization may be used to treat ground water to the desired quality prior to use.
3. These objectives apply to the alluvial ground water beneath the Santa Margarita River from the confluence of Murrieta and Temecula Creeks through the Gavilan and DeLuz HSAs to a depth of 100 feet and a lateral distance equal to the area of the floodplain covered by a10 year flood event. These objectives do not apply to ground water in any of the basins beneath DeLuz, Sandia, and Rainbow Creeks and other unnamed creeks, which are tributaries of the Santa Margarita River.
4. These objectives apply to ground waters within 250 feet of the surface for the most downstream 4,200 acres of the Pauba HSA (2.51) which drain directly to the most downstream 2.7 mile

segment of Temecula Creek. Excluded from this area are all lands upgradient from a point 0.5 miles east of the intersection of Butterfield Stage Road and Highway 79.

5. These objectives apply to ground waters within 250 feet of the surface for the most downstream 2,800 acres of the Wolf HSA (2.52) including those portions of the HSA which drain directly to the most downstream 1.5 mile segment of Pechanga Creek. Excluded from this area are all lands of HSA 2.52 which are upgradient of the intersection of Pala Road and Via Eduardo.
6. The total dissolved solids (TDS) objective for the alluvial aquifer in the Moosa Hydrologic Subarea (903.13) is 1,200 mg/l. The TDS objective for the alluvial aquifer in the Valley Center Hydrologic Subarea (903.14) is 1,100 mg/l.
7. A portion of the Upper Mission Basin is being considered as an underground potable water storage reservoir for treated imported water. The area is located north of Highway 76 and the boundary of hydrologic subareas 3.11 and 3.12. If this program is adopted, local objectives approaching the quality of the imported water would be set and rigorously pursued.
8. The water quality objectives apply to the portion of Subarea 4.31 bounded on the west by the easterly boundary of the Interstate 5 right-of way and on the east by the easterly boundary of El Camino Real.
9. Detailed salt balance studies are recommended for this area to determine limiting mineral concentration levels for discharge. On the basis on existing data, the tabulated objectives would probably be maintained in most areas. Upon completion of the salt balance studies, significant water quality objective revisions may be necessary. In the interim period of time, projects of ground water recharge with water quality inferior to the tabulated numerical values may be permitted following individual review and approval by the Regional Board if such projects do not degrade existing ground water quality to the aquifers affected by the recharge.
10. The water quality objectives do not apply to hydrologic subareas 4.51 and 4.52 between Highway 78 and El Camino Real and to all lands which drain to Moonlight Creek, Cottonwood Creek and Encinitas Creek. The objectives for the remainder of the Hydrologic Area are as shown.
11. The water quality objectives apply to the portion of Subarea 4.51 bounded on the south by the north shore of Batiquitos Lagoon, on the west by the easterly boundary of the Interstate 5 right-of-way and on the east by the easterly boundary of El Camino Real.
12. The water quality objectives do not apply to all lands which drain to Los Penasquitos Canyon from 1.5 miles west of Interstate Highway 15. The objectives for the remainder of the Hydrologic Area are as shown.

VI. RATIONALE FOR ORDER REQUIREMENTS

A. General

This General Orders includes requirements and conditions in accordance with the Water Code, the Basin Plan, the Nonpoint Source Policy, and other applicable federal, State, and regional law and regulations.

B. Education

This General Order requires the Discharger to attend water quality training annually, to ensure that the Discharger is familiar with the most current information regarding management practices, water quality monitoring, and reporting. Dischargers can also maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems.

C. Water Quality Protection Plan (WQPP)

This General Order requires the Discharger to prepare and periodically update a WQPP to document the type and location of management practices being implemented an planned to minimize or prevent the discharge of pollutants to waters of the State either directly or indirectly through irrigation water runoff and infiltration, non-storm water runoff, and storm

water runoff from agricultural operations. A copy of the WQPP is required to be submitted with the NOI.

D. Water Quality Restoration Plan (WQRP)

This General Order requires the Discharger to prepare a WQRP within 90 days of exceeding a ~~Surface~~ Water Quality Benchmark (section V of the MRP). The WQRP is an iterative and adaptive plan intended to identify and address sources of water quality impairment. When effectiveness evaluation or 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, the WQRP imposes requirements on the Discharger to implement improved management practices at the Agricultural Operation.

E. Quarterly Self-Inspection Report

This General Order requires the Discharger to perform and record quarterly self-inspections to assess the operation and maintenance of installed management practices.

F. Annual Self-Assessment Report

This General Order requires the Discharger to submit Annual Self-Assessment Reports, including copies of the Quarterly Self-Inspection Reports, evidence that the Discharger completed the annual water quality training, and the Annual Surface Water and groundwater Monitoring Report to evaluate compliance with the requirements of this General Order.

VII. RATIONALE FOR MONITORING AND REPORTING PROGRAM (MRP; ATTACHMENT A)

Water Code section 13267 authorizes the San Diego Water Board to require technical and monitoring program reports. The MRP for this General Order provides the San Diego Water Board information to determine the effectiveness of the management practices and the effect on the quality of the waters of the State. The MRP requires Dischargers to conduct groundwater and surface water monitoring and to develop and implement WQRPs to identify the source of a water quality standard exceedance and implement appropriate management practices to achieve compliance with the water quality standard.

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

A. Rationale for Core Monitoring

1. Surface Water Monitoring

   The Discharger is required to monitor locations where discharges from Agricultural Operations enter waters of the State according to a monitoring program approved by the Executive Officer. To the greatest extent practicable, Agricultural Operations will be required to monitor in receiving surface water (stream, creek, lake, etc.). Where Agricultural Operations do not directly or indirectly discharge into surface waters, edge-of-field monitoring is required. The parameters required to be monitored are representative of typical discharges from Agricultural Operations, and will provide an evaluation of the effectiveness of the employed management practices.

   Dischargers are required to compare monitoring results and to compare the 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 results from the surface water monitoring programs indicate that applicable Water Quality Benchmarks are exceeded, the Discharger is required to prepare and submit a WQRP, as described in section VI.D of this General Order. The WQRP requires improved management practices and additional monitoring, if necessary, to achieve and document compliance with Water Quality Benchmarks.

The MRP (Attachment A) requires monitoring for chronic toxicity in surface waters in order to determine if the application of pesticides, herbicides, algaecides, and fumigants is causing or contributing to exceedances of the Basin Plan narrative water quality objective for toxicity in surface waters.

The MRP (Attachment A) requires monitoring for indicators of pathogens (known as fecal indicator bacteria) in surface waters. Compost and manure are applied to crop land to improve soil texture, add organic matter and nutrients to the soil. If not properly managed, these materials can migrate into surface waters of the State and pose a public health risk if ingested.

The MRP (Attachment A) requires monitoring for turbidity in surface waters at risk of Agricultural Operation activities like tilling and grading. These activities can lead to an increase in the migration of sediment discharges to surface waters that would violate the turbidity water quality objective, causing impacts to wildlife and aquatic habitat.

2. Groundwater Monitoring

As an initial step towards developing a groundwater quality program for Agricultural Operations, groundwater quality monitoring under this General Order is limited to areas in the San Diego Region where groundwater is a significant drinking water source. At this time, the groundwater monitoring requirements of this General Order only applies to Dischargers with drinking water supply wells located on the property of the Agricultural Operation. The purpose of the drinking water supply well program outlined below is to identify wells that have nitrate concentrations that threaten to exceed the MCL of 45 mg/L as NO_3 and notify any well users of the potential for human health impact.

Due to the potential severity and urgency of nitrates, the Discharger is required to 1) collect an initial groundwater sample of all drinking water supply wells on the Agricultural Operation within one year of receipt of a NOA; or 2) submit existing drinking water supply well sampling data, provided sampling and testing for nitrates was completed using USEPA-approved methods at least twice during the previous five years.

Where existing data or sampling data from initial rounds of sampling indicate nitrate concentration is at or above 36 mg/L nitrate as NO_3, [35] a repeat sample must be taken within 30 days. If the retest is at or above 36 mg/L nitrate as NO_3, the Discharger must thereafter monitor the drinking water supply well for nitrate levels on an annual basis, unless an alternative sampling schedule based on trending data for the well is approved by the San Diego Water Board. If the retest is at or above 45 mg/L nitrate as NO_3, the Discharger must provide notification to the San Diego Water Board within 24 hours of learning of the exceedance and monitor the well annually for nitrate thereafter unless an alternative sampling schedule is approved by the San Diego Water Board. For drinking water wells on the Discharger's property, within 10 days of receipt of the laboratory test results over 45 mg/L, the Discharger must immediately notify all individuals using the

[35] This concentration is 80% of the MCL for nitrate as NO_3 and is presumed to be a conservative measure of the potential for exceedances of the MCL.

water supply well for a drinking source of the nitrate test results and the actions to be taken. Where the Discharger is not the property owner, the San Diego Water Board will notify the users promptly.

Where existing data or sampling data from initial rounds of sampling indicate the nitrate concentration is below 36 mg/L nitrate as NO_3, the well must be resampled once every five years from that point forward unless an alternative sampling schedule is approved by the Executive Officer.

Results of the drinking water supply well monitoring must be included in the Annual ~~Monitoring~~ Report submitted to the San Diego Water Board. The groundwater monitoring requirement will provide the San Diego Water Board with additional information on existing conditions, identify on-site drinking water wells with nitrate concentrations that are detrimental to public health, and provide a long-term evaluation on the effectiveness of management practices in preventing or reducing the discharge of nitrates to groundwater. ~~As with other exceedances of a water quality standard in a groundwater well, any reported nitrated exceedances may~~The exceedance of the groundwater nitrate Water Quality Benchmark as detailed above and in sections III.C and section VII.H of the MRP (Attachment A) ~~-~~triggers the requirement for the Discharger to develop a WQRP. Sampling may cease at any drinking water well if it is taken out of service and no longer provides drinking water.

B. Rationale for Regional Monitoring

Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs from commercial agriculture. Regional monitoring can include ambient monitoring. Under the San Diego Water Board's Commercial ~~Agricultural Operation~~Agriculture Regulatory Program, Third-Party Groups will take the lead role in coordinating and carrying out regional monitoring. Individual Dischargers, however, are encouraged to participate in regional monitoring programs, as these programs can assist in the interpretation of core monitoring data by providing a more complete picture of natural variability and cumulative impacts in the receiving waters. This assessment in turn allows Individual Dischargers to more effectively use core monitoring data in prioritizing actions targeting pollutants and pollutant sources.

Under this the Third-Party General Order (Order No. R9-2016-0004, regional monitoring is conducted in the form of 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. This data is expected to supplement the core surface water monitoring information conducted by dischagrers to provide a holistic picture of the biological, chemical, and physical integrity of waters of the State in the San Diego Region.

Bioassessment monitoring 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 (e.g., 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 Causal Analysis/Diagnosis Decision Information System (CADDIS), an on-line decision support system supported by the U.S. Environmental Protection Agency (USEPA) can also be used by technically qualified biologists to help identify the specific causes (stressors)

responsible for degraded biological conditions in streams and rivers that have been classified as impacted by the IBI score. CADDIS is available on-line on the USEPA website at http://www.epa.gov/caddis. The framework is largely based on five steps of stressor identification using a weight of evidence approach to either diagnose or refute a stressor. Additional information regarding the use of CADDIS is available in a Southern California Coastal Water Research Project Report (SCCWRP) entitled Casual Assessment Evaluation and Guidance for California, Technical; Report 750-April 2015. The report is available on the SCCWRP website at http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/750_CausalAssessmentGuidance041515wCov.pdf

C. Rationale for Special Studies

Special studies are directed monitoring efforts designed in response to specific management or research questions identified through either core or regional monitoring programs. Oftentimes, special studies are used to help understand core or regional monitoring results where a specific environmental process is not well understood, or to address unique issues of local importance.

If water quality monitoring data, collected as described in the MRP, indicate exceedances of applicable Water Quality Benchmarks, the Discharger must develop a WQRP as described in section VI.D of this General Order. Upon approval of the WQRP by the San Diego Water Board, the Discharger must implement targeted management practices intended to attain the Water Quality Benchmarks. Management practices may include those recommended by organizations such as NRCS and UCCE.

Examples of additional or upgraded management practices that may be implemented to address Water Quality Benchmark exceedances include, but are not limited to:

1. Nutrients
    a. Improved irrigation efficiency to reduce runoff.
    b. Certified nutrient management plans, including crop-specific applied/removed ratios for nitrogen.[36]
2. Legacy pesticides (e.g. DDT, DDE, chlordane, and dieldrin).
    a. Improved irrigation efficiency to reduce runoff.
    b. Erosion and runoff control measures.
    c. Storm water runoff filtration and/or infiltration.
3. Current use pesticides (e.g. chlorpyrifos, diazinon, and pyrethroids)
    a. Pesticide management plans.
    b. Improved irrigation efficiency to reduce runoff.
    c. Erosion and runoff control measures.
    d. Storm water runoff filtration and/or infiltration.

[36] The American Society of Agronomy and The National Resource Conservation Service (NRCS) certifies professionals in the preparation of nutrient management plans.

VIII. PUBLIC PARTICIPATION

The San Diego Water Board has considered the issuance of this General Order that will provide regulatory coverage for Agricultural Operations located within the San Diego Region. As a step in the adoption process of this General Order, the San Diego Water Board developed a Tentative General Order and encouraged public participation in the Board's proceedings to consider adoption of the Tentative General Order in accordance with the requirements of Water Code section 13167.5.

A. Notification of Public Hearing and Public Comment Period

By electronic mail dated June 13, 2016, the San Diego Water Board notified the public, stakeholders, and interested agencies of its intent to consider adoption of the Tentative General Order in a public hearing during a regularly scheduled Board Meeting ~~on DATE~~. The San Diego Water Board also provided notice that the Tentative General Order was posted on the San Diego Water Board website and provided a period of 45 days for public review and comment.

The public also had access to the San Diego Water Board meeting agenda including all supporting documents and any changes in meeting dates and locations through the San Diego Water Board's website at: http://www.waterboards.ca.gov/sandiego/

B. Written Comments and Responses

Interested persons were invited to submit written comments concerning the Tentative General Order as provided through the notification process. Written comments or emailed comments were required to be received in the San Diego Water Board office at 2375 Northside Drive, Suite 100, San Diego, California 92108.

To be fully responded to by staff and considered by the San Diego Water Board, the written or emailed comments were due at the San Diego Water Board office not later than 5:00 p.m. on July 29, 2016. The San Diego Water Board provided written responses to all timely received public comments on the Tentative General Order and posted the response to comments document on the San Diego Water Board's website in advance of the public hearing date.

C. Public Hearing

The San Diego Water Board held a public hearing on the Tentative General Order during its regular Board meeting on the following date and time and at the following location:

Date: November 9, 2016

Time: 9:00 AM

Location: California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108

Interested persons were invited to attend. At the public hearing, the San Diego Water Board heard and considered all comments and testimony pertinent to the discharge and the Tentative General Order. For accuracy of the record, important testimony was requested in writing.

D. Public Access to Records

Records pertinent to the San Diego Water Board's proceedings to adopt this General Order including but not limited to public notices, draft and finalized versions of the Tentative General 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.

The San Diego Water Board website contains information and instructions on how to request access and obtain copies of these records at: http://www.waterboards.ca.gov/sandiego/about_us/contact_us/records.shtml

Before making a request to view public records in the San Diego Water Board office you may wish to determine if the information is already available on the San Diego Water Board's website at http://www.waterboards.ca.gov/sandiego/.

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 July 23, 2015 and December 22, 2015, the San Diego Water Board provided written notice of its intent to adopt the Tentative General Order to Tribes that requested such notice. No Tribes requested consultation on this General Order.

F. Stakeholder Meetings and Public Workshops

Numerous Public Workshops were held during the development of this General Order (Table B-~~11~~13~~14~~). The Public Workshops were announced via postings on the San Diego Water Board's webpage and via the emails, letters, and telephone conversations.

Table B-~~14~~13~~14~~. Summary of Stakeholder Meetings and Public Workshops

Meeting	Topic	Date
Informal Stakeholder Workgroup	Renewal of the *Conditional Waiver of Waste Discharge Requirements for Agricultural an Nursery Operations*	July 30, 2012
Informal Stakeholder Meeting	Draft Initial Study and Environmental Checklist for *Tentative General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	January 22, 2014
Informal Stakeholder Meeting	*Tentative General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	February 19, 2014
Public Workshop No. 1	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	July 14, 2015
Public Workshop No. 2	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	July 15, 2015
Public Workshop No. 3	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	August 18, 2015
Public Workshop No. 4	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge*	September 10, 2015

Meeting	Topic	Date
	Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region	
Public Workshop No. 5	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	September 15, 2015
Public Workshop No. 6	Administrative Draft of Tentative General Order No. R9-2015-0003, *General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region*	September 17, 2015
Public Workshop No. 7	Tentative General 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*, and Tentative General Order No. R9-2016-0005, *General Waste Discharge Requirements for Discharges Commercial Agricultural Operations for Dischargers Not Participating in a Third-Party Group in the San Diego Region*	June 22, 2016

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 this General 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 this General Order, except that if the thirtieth day following the adoption date of this General 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: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml

For instructions on how to file a petition for review, see the State Water Board's website at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

H. Additional Information

Requests for additional information or questions regarding this General Order should be directed to Barry Pulver at (619) 521-3381 or barry.pulver@waterboards.ca.gov.

ATTACHMENT C – ABBREVIATIONS AND DEFINITIONS

ABBREVIATIONS

Abbreviation	Definition
303(d) List	CWA section 303(d) List of Water Quality Limited Segments
40 CFR	title 40 of the Code of Federal Regulations
AGR	Agricultural Supply
Agricultural Waiver	2007 Conditional Waiver of Waste Discharge Requirements for Discharges from Agricultural and Nursery Operations
Antidegradation Policy	State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California
A/R	Multi-year ratio of nitrogen applied to the field to nitrogen removed from the field
ASBS	Areas of Special Biological Significance
Bacteria TMDL	*A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region*
Basin Plan	Water Quality Control Plan for the San Diego Basin
Bays and Estuaries Policy	Water Quality Control Policy for the Enclosed Bays and Estuaries of California
BIOL	Preservation of Biological Habitats of Special Significance
BMP	Best Management Practice
CCR	California Code of Regulations
CEDEN	California Environmental Data Exchange Network
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
COLD	Cold Freshwater Habitat
COMM	Commercial and Sport Fishing
CTR	California Toxics Rule
CWA	Clean Water Act
DDW	Division of Drinking Water
ELAP	Environmental Laboratory Accreditation Program
EST	Estuarine Habitat
FRSH	Freshwater Replenishment
GAMA	Groundwater Ambient Monitoring and Assessment Program
GWR	Groundwater Recharge
HA	Hydrologic Area
HAS	Hydrologic Subarea
HU	Hydrologic Unit
ILRP	Irrigated Lands Regulatory Program
IND	Industrial Service Supply
lbs/day	Pounds per Day
MCL	maximum contaminate level
mg/kg	Milligrams per kilogram
mg/L	milligrams per liter
MMRSA	Medical Marijuana Regulation and Safety Act
MP	Management Measure
MPN	Most probable number of bacterial colonies
MRP	Monitoring and Reporting Program
mS/cm	Micro siemens per cubic meter
MUN	Municipal and Domestic Supply
NOA	Notice of Applicability
NOEX	Notice of Exclusion

Abbreviation	Definition
NOI	Notice of Intent
NOT	Notice of Termination
NOV	Notice of Violation
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Units
Ocean Plan	Water Quality Control Plan for Ocean Waters of California
OCR	Optical Character Recognition
OES	Office of Emergency Services
PDF	Portable Document Format
PROC	Industrial Process Supply
QAPP	Quality Assurance Project Plan
Rainbow Creek TMDL	*A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed, San Diego County*, Resolution No. R9-2005-0036
RARE	Rare, Threatened, or Endangered Species
RCDs	Resource Conservation Districts
REC-1	Contact Water Recreation
REC-2	Noncontact Recreation
ROWD	Report of Waste Discharge
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SCCWRP	Southern California Coastal Waters Research Project
SHELL	Shellfish Harvesting Beneficial Use
SIP	State Implementation Policy
SMC	Southern California Storm Water Monitoring Coalition
SPWN	Spawning, Reproduction, and/or Early Development
State Implementation Policy	Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California
State Water Board	State Water Resources Control Board
SWAMP	Surface Water Ambient Monitoring Program
SWRCB	State Water Resources Control Board
Thermal Plan	*Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries*
TMDLs	Total Maximum Daily Loads
TSS	Total Suspended Solids
U.S.	United States
UCCE	University of California Cooperative Extension
USEPA	U.S. Environmental Protection Agency
Waivers	conditional waiver of WDRs
WARM	Warm Freshwater Habitat
Water Code	California Water Code
WDID	Waste Discharge Identification
WDRs	waste discharge requirements
WILD	Wildlife Habitat
WLA	Waste Load Allocation
WQO	Water Quality Objective
WQPP	Water Quality Protection Plan
WQRP	Water Quality Restoration Plan
WQS	Water Quality Standard
µg/l	Micrograms per Liter

~~ABBREVIATIONS~~DEFINITIONS

Acute Toxicity

A measurement of the adverse effect (usually mortality) of a waste discharge or ambient water sample on a group of test organisms during a short-term exposure.

Agricultural Operation

Any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the intent to make a profit. The San Diego Water Board presumes an intent to make a profit if at least one of the following criteria is met:

1. The owner or operator files a federal Department of Treasury Internal Revenue Service Form 1040 Schedule F Profit or Loss from Farming with their federal taxes.
2. The owner or operator receives agriculture water use rates or has been given an agricultural water use variance from their water purveyor.
3. The owner or operator of the Agricultural Operation ~~holds a current~~is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting.

Areas of Special Biological Significance (ASBS)

Those areas designated by the State Water Resources Control Board (State Water Board) as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Chlordane

Shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity Tests

A measurement of the sub-lethal effects of a discharge or ambient water sample (e.g. reduced growth or reproduction). Certain chronic toxicity tests include an additional measurement of lethality.

Clean Water Act (CWA)

The Federal Water Pollution Control Act enacted by Public Law 92-500 as amended by Public Laws 95-217,95-576,96-483, and 97-117; 33 USC 1251 et seq.

Compost

Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or which are separated at a centralized facility. "Compost" includes vegetable, yard, and wood wastes which are not hazardous waste.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.
For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

DDT

Shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Degradation

Any measurable adverse change in water quality.

Detected, but Not Quantified (DNQ)

Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dichlorobenzenes

Shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Discharger

Any owner or operator of an Agricultural Operation that discharges, or threatens to discharge, wastes associated with agricultural activities into waters of the State in the San Diego Region.

Dredged Material

Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil."

Enclosed Bays

Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero,

San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estuaries and Coastal Lagoons

Estuaries and Coastal Lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Groundwater

Water in the ground that is in the zone of saturation. The upper surface of the saturate zone is called the water table.

Halomethanes

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Impaired Water Body

A surface water body that is not attaining water quality standards and is identified on the State Water Board's Clean Water Act section 303(d) list.

Initial Dilution

The process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or

the diluting plume reaches a fixed distance from the discharge to be specified by the San Diego Water Board whichever results in the lower estimate for initial dilution.

Inland Surface Waters

The surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Irrigated Lands

Land irrigated to produce crops~~,~~ or agricultural products for commercial purposes. Irrigated lands do not include lands used solely for grazing.

Irrigation Return Flow or Runoff

Surface and subsurface water which leaves the field following application of irrigation water.

Kelp Beds

For purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

Management Practices

A practice or combination of practices that is the most effective and practicable (including technological, economic, and institutional considerations) means of controlling nonpoint pollutant sources at levels protective of water quality.

Mariculture

The culture of plants and animals in marine waters independent of any pollution source.

Material

(a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant.

Member

A Discharger who belongs to a Third-Party Group.

Method Detection Limit (MDL)

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B.

Minimum Level (ML)

The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Monitoring

Monitoring undertaken in connection with assessing water quality conditions, and factors that may affect water quality conditions. Monitoring includes, but is not limited to, water quality monitoring undertaken in connection with agricultural activities, monitoring to identify short and long-term trends in water quality, nutrient monitoring, active inspections of operations, and management practice implementation and effectiveness monitoring. The purposes of monitoring include, but are not limited to, verifying the adequacy and effectiveness of the General Order's requirements, and evaluating each Discharger's compliance with the requirements of the General Order.

Natural Light

Reduction of natural light may be determined by the San Diego Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the San Diego Water Board.

Non-Irrigated Agriculture

Land that employs dryland farming techniquesto produce crops or agricultural products for commercial purposes. Non-irrigated lands do not include lands used solely for grazing.

Non-Storm Water Discharge

Any discharge that is not composed entirely of storm water.

Nuisance

"Nuisance" means anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as a result of, the treatment or disposal of waste. [Water Code section 13050(m)]

Nutrient

Any element taken in by an organism which is essential to its growth and which is used by the organism in elaboration of its food and tissue.

Not Detected (ND)

Those sample results less than the laboratory's MDL.

Ocean Waters

The territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

Off-Property Discharge

The discharge or release of waste beyond the boundaries of the agricultural operation or to water bodies that run through the agricultural operation.

Perched groundwater

Groundwater separated from an underlying body of groundwater by an unsaturated zone**.**

PAHs (polynuclear aromatic hydrocarbons)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls)

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

Pollutant

"Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean: (a) Sewage from vessels; or (b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources. NOTE: Radioactive materials covered by the Atomic Energy Act are those encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include radium and accelerator-produced isotopes. See Train v. Colorado Public Interest Research Group, Inc., 426 U.S. 1 (1976). (40 CFR 122.2).

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table 1 pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent

bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The San Diego Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution

Pollution" means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses. "Pollution" may include "contamination." [Water Code section 13050(l)].

Receiving Waters

Surface water or groundwater that receives or has the potential to receive discharges of waste from agricultural operations.

Reported Minimum Level

The reported ML (also known as the Reporting Level or RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the San Diego Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

Requirements of Applicable Water Quality Control Plans

Water quality objectives, prohibitions, total maximum daily load implementation plans, or other requirements contained in water quality control plans adopted by the San Diego Water Board or the State Water Board and approved according to applicable law.

San Diego Water Board

As used in the General Order the term "San Diego Water Board" is synonymous with the term "Regional Board" as defined in Water Code section 13050(b) and is intended to refer to the California Regional Water Quality Control Board for the San Diego Region as specified in Water Code Section 13200.

Shellfish

Organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference

Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation

The highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs)

Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolutions 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

Storm Water

Includes storm water runoff, snowmelt runoff, and storm water surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

TCDD Equivalents

The sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

Third-Party Group

An organization approved by the San Diego Water Board to represent and assist Dischargers in carrying out the terms and conditions of this General Order.

Total Maximum Daily Load (TMDL)

From the Code of Federal Regulations (CFR), 40 CFR 130.2(i), a TMDL is: “The sum of the individual WLAs [wasteload allocations] for point sources and LAs [load allocations] for nonpoint sources and natural background. … TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. …”.

Toxicity

Refers to the toxic effect to aquatic organisms from waste contained in an ambient water quality sample.

Toxicity Reduction Evaluation (TRE)

A study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

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 as defined in Water Code section 13050(d). Wastes from agricultural operations that conform to this definition include, but are not limited to, earthen materials (such as soil, silt, sand, clay, and rock), inorganic materials (such as metals, salts, boron, selenium, potassium, nitrogen, and phosphorus), organic materials such as pesticides, and biological materials, such as pathogenic organisms.

Waste Discharges from Agricultural Operations

The discharge or release of waste to surface water or groundwater. Waste discharges to surface water include, but are not limited to, irrigation return flows, tailwater, drainage water, subsurface (tile) drains, storm water runoff flowing from irrigated lands, aerial drift, and overspraying of pesticides. Waste can be discharged to groundwater through pathways including, but not limited to, percolation of irrigation or storm water through the subsurface, backflow of waste into wells (e.g., backflow during chemigation), discharges into unprotected wells and dry wells, and leaching of waste from tailwater ponds or sedimentation basins to groundwater. A discharge of waste subject to the General Order is one that could directly or indirectly reach waters of the State, which includes both surface waters and groundwaters.

Water Quality Benchmark

Discharge prohibitions and narrative or numeric ~~surface~~ 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 pursuant to a total maximum daily load (TMDL) (whether established in the Basin Plan or other lawful means).

Water Quality Criteria

Levels of water quality required under section 303(c) of the Clean Water Act that are expected to render a body of water suitable for its designated uses. Criteria are based on specific levels of pollutants that would make the water harmful if used for drinking, swimming, farming, fish production, or

industrial processes. The California Toxics Rule adopted by USEPA in April 2000 sets numeric water quality criteria for non-ocean surface waters of California for a number of toxic pollutants.

Water Quality Objectives

Defined in Water Code section 13050 as “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 specified area.” Water quality objectives may be either numerical or narrative and serve as water quality criteria for purposes of section 303 of the Clean Water Act.

Water Quality Problem

Exceedance of an applicable water quality standard or a trend of degradation that may threaten applicable Basin Plan beneficial uses.

Water Quality Standards

Provision of state or federal law that consist of the designated beneficial uses of a waterbody, the numeric and narrative water quality criteria that are necessary to protect the uses of that particular waterbody, and an antidegradation statement. Water quality standards include water quality objectives in the San Diego Water Board Basin Plan, water quality criteria in the California Toxics Rule and National Toxics Rule adopted by USEPA, and/or water quality objectives in other applicable State Water Board plans and policies. Under section 303 of the Clean Water Act, each state is required to adopt water quality standards.

Water Recycling

The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

Waters of the State

Any surface water or groundwater, including saline waters, within the boundaries of the State. [Water Code section 13050(e)]

ATTACHMENT D – MAP

FIGURE D-1

MAP OF THE SAN DIEGO REGION AND WATERSHEDS

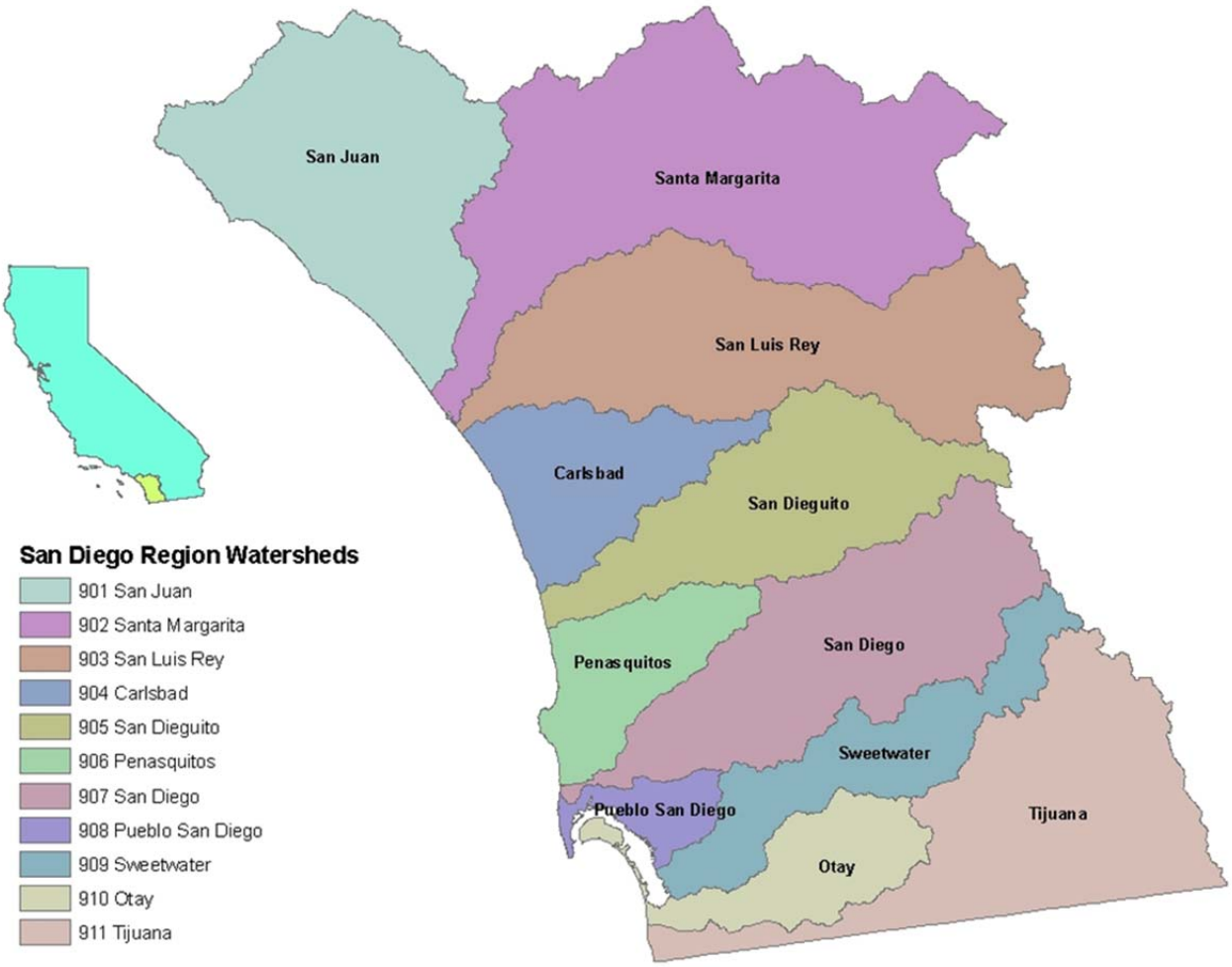
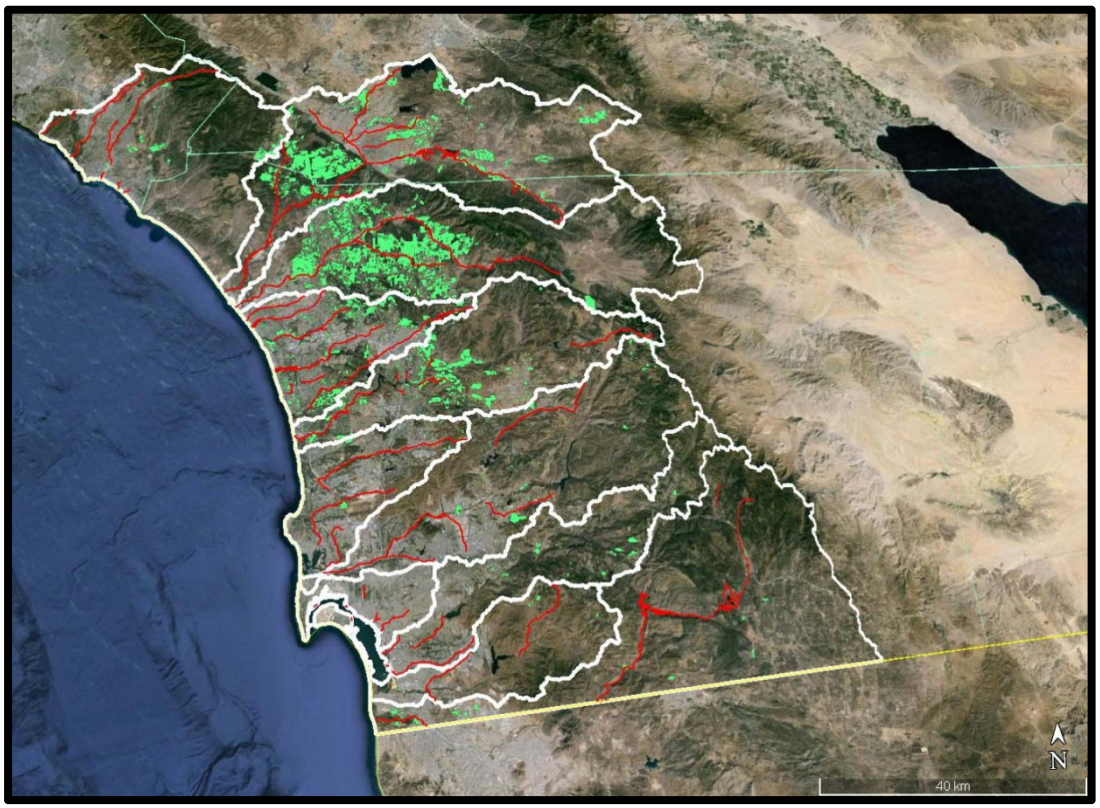


FIGURE D-2

LOCATION OF AGRICULTURAL OPERATIONS AND CLEAN WATER ACT SECTION 303(D) LIST OF WATER QUALITY LIMITED SEGMENTS WITHIN THE SAN DIEGO REGION



Green shading indicates areas of agricultural activity as indicated on landuse maps prepared by the Counties of San Diego, Riverside, and Orange.
Red lines indicate location of CWA Section 303(d) Water Quality Limited Segments.
White lines indicate 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 Board) and nine Regional Water Quality Control Boards (Regional 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 standards for waterbodies in the San Diego Region are primarily contained in the Water Quality Control Plan for the San Diego Basin (Basin Plan).

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 segments, which either do not meet, or not expected to meet, water quality standards. Impaired waterbodies, or segments on the 303(d) list, must be addressed through the development of TMDLs or by other means as described in the State's Water Quality Control Policy for Addressing Impaired Waters (Impaired Waters Policy).

The San Diego Water Board adopted the 2008 CWA Sections 305(b) and 303(d) Integrated Report on Evaluation of Surface Water Quality and Listing of Impaired Water Body Segments for the San Diego Region (2008 Integrated Report) on December 16, 2009. The final 2008 Integrated Report was incorporated into the statewide 2010 Integrated Report that was approved by the State Board on August 4, 2010. On November 12, 2010, USEPA approved the 2008-2010 CWA Section 303(d) List that includes listings for the San Diego Region. Table E-1 lists waterbodies on the 303(d) List where agriculture is listed as a pollutant source.

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

Watershed	Waterbody Name	Pollutant
San Juan	Arroyo Trabuco Creek	Diazinon
		Nitrogen
Santa Margarita	De Luz Creek	Nitrogen
	Redhawk Channel	Chlorpyrifos
	Santa Margarita Lagoon	Eutrophic
San Luis Rey	San Luis Rey River, Lower	Total Dissolved Solids
San Dieguito	Felicita Creek	Total Dissolved Solids
	Lake Hodges	Nitrogen
		Phosphorus
	Kit Carson Creek	Total Dissolved Solids
Penasquitos	Mission Bay North of Rose Creek	Eutrophic
San Diego	Forester Creek	Phosphorus
		Total Dissolved Solids
Tijuana	Morena Reservoir	Ammonia as Nitrogen
		Color
	Tijuana River	Pesticides

Table E-2 lists waterbodies on the 303(d) List where the pollutant is associated with agricultural activities; Agricultural Operations are known to be located in the vicinity of 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
	Arroyo Trabuco Creek	Phosphorus
	Prima Deshecha Creek	Phosphorus
	San Juan Creek	1,1-Dichloro-2,2-bis(p-chlorophenyl) ethylene (DDE)
		Phosphorus
		Nitrogen
Santa Margarita	Long Canyon Creek	Chlorpyrifos
	Murrieta Creek	Chlorpyrifos
		Nitrogen
		Phosphorus
	Redhawk Channel	Diazinon
		Nitrogen
		Phosphorus
	Santa Gertrudis Creek	Chlorprifos
		Phosphorus
	Santa Margarita River, Lower	Phosphorus
		Nitrogen
	Santa Margarita River, Upper	Phosphorus
	Temecula Creek	Chlorpyrifos
		Phosphorus
San Luis Rey	San Luis Rey River, Lower	Phosphorus
		Nitrogen
	San Luis Rey River, Upper	Nitrogen
Carlsbad	Agua Hedionda Creek	Phosphorus
		Nitrogen
	Buena Creek	Dichlorodiphenyltrichloroethane (DDT)
		Nitrate and Nitrite
		Phosphorus
	Buena Vista Lagoon	Nutrients
	Cottonwood Creek	DDT
		Phosphorus
	Encinitas Creek	Phosphorus
	Escondido Creek	DDT
		Phosphate
		Nitrogen
	San Marcos Creek	DDE
		Phosphorus
	San Marcos Lake	Ammonia as Nitrogen
		Nutrients
		Phosphates

II. TMDL OVERVIEW

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. Pollutant sources are characterized as either point sources that receive a wasteload allocation (WLA) or nonpoint sources that receive a load allocation (LA).

TMDLs must also account for seasonal variations in water quality, and include a margin of safety (MOS) to account for uncertainty in predicting how well pollutant reductions will result in meeting water quality standards.

There are five steps in developing a TMDL:

A. Involve Stakeholders

Stakeholders are involved at the beginning of the process in order to provide input to the Regional Boards on the development of TMDLs. Stakeholders can be the general public, business interests, government entities, environmental groups, or anyone concerned with a particular water body.

B. Assess Water Body

Pollution sources and amounts, or "loads," are identified for various times of the year, and the overall effect of these loads on the water body is determined.

C. Determine the Total Load and Develop Allocations

The total pollutant load and allocations of pollutant load for all sources are established to ensure water quality standards are met and beneficial uses are attained. TMDLs can address single pollutants or combinations of pollutants. The sum of the allocations must result in the water body attaining the applicable water quality standards.

D. Develop Implementation Plan

An Implementation Plan is developed which describes the approach and activities to be undertaken to ensure the allocations are met and identification of parties responsible for carrying out the actions. The Implementation Plan may include a Non-TMDL Alternative. A Non-TMDL Alternative includes actions, as required by other regulatory actions other than a TMDL that will result in the attainment of water quality objectives.

E. Amend the Basin Plan

As required by Federal law, TMDLs are incorporated into the Basin Plans. The Basin Plan is a legal document that describes how a Regional Board would manage water quality. The TMDLs must be formally incorporated into the Basin Plan to be part of the basis for Regional Board actions. Basin Plan amendments are adopted through a public process that requires approval of the TMDLs by a Regional Board, the State Board, the Office of Administrative Law, and USEPA Region 9.

III. TMDLS APPLICABLE TO DISCHARGES FROM AGRICULTURAL OPERATIONS IN THE SAN DIEGO REGION

A. Rainbow Creek TMDL

1. Administrative Record

   The Rainbow Creek TMDL was adopted by the San Diego Water Board on February 9, 2005, and approved by the State Water Board on November 16, 2005; the Office of Administrative Law (OAL) on February 1, 2006; and the USEPA on March 22, 2006. The Rainbow Creek TMDL became effective on February 1, 2006.

2. Attainment Date

   The attainment date contained in the Rainbow Creek TMDL is December 31, 2021.

3. Problem Statement

   Nitrate concentrations in Rainbow Creek exceed the water quality objective for municipal supply (MUN), and total nitrogen and total phosphorus concentrations exceed the water quality objectives for biostimulatory substances threatening to unreasonably impair the warm freshwater habitat (WARM), cold freshwater habitat (COLD), and wildlife habitat (WILD) beneficial uses of Rainbow Creek. Excessive nutrients in Rainbow Creek promote the growth of algae in localized areas, creating a nuisance condition that unreasonably interferes with aesthetics and water contact (REC-1) and non-water contact (REC-2) beneficial uses and threatens to impair WARM, COLD and WILD beneficial uses. Runoff from agriculture, nursery, and residential land uses contribute to increased pollutant nutrients in Rainbow Creek as a result of storm water runoff, irrigation return flows, and groundwater contributions to the creek.

4. Numeric Targets

   Numeric targets interpret and implement water quality standards (i.e., numeric and narrative water quality objectives and beneficial uses). Numeric targets are established at levels that will ensure attainment of water quality objectives and the protection of beneficial uses. The numeric targets for nutrients are intended to achieve the water quality objective for nitrates and the narrative water quality objective for stimulation of algal and emergent plant growth by nutrients. Water quality objectives are established for nitrates, total nitrogen, and total phosphorus to meet drinking water standards in the short-term, and to reduce existing periodic algal blooms and prevent future eutrophic conditions.

   Table E-3 presents the applicable numeric targets.

Table E-3. Numeric Targets for Rainbow creek watershed

Constituent	Numeric Target milligrams per liter (mg/L)
Nitrate (as N)	10
Total Nitrogen	1
Total Phosphorus	0.1

5. Source Assessment

   A source assessment was conducted to identify all known sources of nutrients that contribute to the loading of nutrients into Rainbow Creek. As shown on Table E-4, the primary source of nutrients into Rainbow Creek is from Agricultural Operations.

Table E-4. Calculated Annual Nutrient Surface Water Loads to Rainbow Creek

Land Use	Nitrogen		Phosphorus	
	Calculated Load (kg/yr)	% of Total Calculated Load	Calculated Load (kg/yr)	% of Total Calculated Load
Agriculture	1,974	74%	126	48%
Park	7	>1%	0.2	>1%
Residential	650	24%	125	48%
Urban	53	2%	11.2	4%
Total	**2,662**	**100%**	**262**	**100%**

6. Load Allocations (LAs) Assigned to Agriculture

The LAs for total nitrogen and total phosphorus for Rainbow Creek are shown in Table E-5.

Table E-5. Rainbow Creek TMDL LAs for Nutrients

Source	2009		2013		2017		2021	
	Load Allocation		Load Allocation		Load Allocation		Load Allocation	
	TN	TP	TN	TP	TN	TP	TN	TP
	kilograms per year (kg/yr)							
Commercial nurseries	390	20	299	16	196	10	116	3
Agricultural fields	504	28	386	21	253	14	151	4
Orchards	607	50	465	37	305	24	182	6

7. Implementation Plan

The Rainbow Creek TMDL includes an Implementation Plan for attainment of the required load allocations. Agricultural Operations within the Rainbow Creek Watershed must comply with the following requirements:

Agricultural Operations in the Rainbow Creek Watershed must report annually, through the ~~Annual Self-Assessment Report (~~Annual Report~~), regarding~~ the effectiveness of best management practice planning, implementation, and effectiveness in reducing nutrient loading to surface waters and groundwater.

Dischargers located within the Rainbow Creek watershed, a tributary of the Santa Margarita River in hydrologic subareas 902.22 and 902.23, must implement applicable elements of the Rainbow Creek Nutrient Reduction Management Plan (Rainbow Creek NRMP; ~~http://www.waterboards.ca.gov/sandiego/water_issues/programs/irrigated_lands/docs/Final_NRMP_2008.pdf~~http://www.waterboards.ca.gov/sandiego/water_issues/programs/irrigated_lands/docs/Rainbow_Creek_Nutrient_Reduction_and_Management_Plan_June_2016.pdf) developed by the County of San Diego and incorporated by this reference as if set forth in full herein.

B. Bacteria TMDL

1. Administrative Record

   The Bacteria TMDL was adopted by the San Diego Water Board on February 10, 2010, and approved by the State Water Board on December 14, 2010; OAL on April 4, 2011; and USEPA on June 22, 2011. The Bacteria TMDL became Effective on April 4, 2011.

2. Attainment Date

   a. Attain Dry Weather TMDL: April 4, 2021.

   b. Attain Wet Weather TMDL: April 4, 2031.

3. Problem Statement

   Bacteria in the waters of the beaches and creeks addressed by this TMDL have exceeded numeric water quality objective 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 REC-1 and 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 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.

4. Numeric Targets

   Different REC-1 water quality objectives were used as the basis for wet weather and dry weather allowable load (i.e., TMDL) calculations because the bacteria transport mechanisms to receiving waters are different under wet and dry weather conditions. Because wet weather conditions, or storm flow, are episodic and short in duration, and characterized by rapid wash-off and transport of high bacteria loads, with short residence times, from all land use types to receiving waters, the single sample maximum water quality objective were appropriate for use as wet weather numeric targets. For dry weather conditions, because dry weather runoff is not generated from storm flows, is not uniformly linked to every land use, and is more uniform than stormflow, with lower flows, lower loads, and slower transport, making die-off and/or amplification processes more important, the geometric mean water quality objective were appropriate for use as dry weather numeric targets. Wet weather TMDL calculations were based on the REC-1 single sample maximum water quality objective while dry weather TMDL calculations were based on REC-1 geometric mean water quality objective. Table E-6 contains the wet weather numeric targets, and Table E-7 contains the dry weather numeric targets.

Table E-6. Bacteria TMDL Wet Weather Numeric Targets

Indicator Bacteria	Numeric Target (MPN/100 mL)[1,2]	Allowable Exceedance Frequency[1]
Fecal coliform	400[2]	22%
Total coliform	10,000[3]	22%
Enterococci	104[4] / 61[5]	22%

Notes:

1. MPN = Most Probable Number of bacteria colonies
2. mL = Milligrams per liter
3. Total coliform single sample maximum water quality objective for REC-1 use at beaches and the point in creeks that discharges to beaches.
4. Enterococci single sample maximum water quality objective for REC-1 use in creeks established and designated as "moderately or lightly used" in the Basin Plan and at beaches downstream of those creeks, as well as all other beaches.
5. Enterococci single sample maximum water quality objective for REC-1 use in creeks not established and designated as "moderately or lightly used" in the Basin Plan and at beaches downstream of those creeks ("designated beach" frequency of use; applicable to San Juan Creek and downstream beach, Aliso Creek and downstream beach, Tecolote Creek, Forrester Creek, San Diego River and downstream beach, and Chollas Creek).

Table E-7. Bacteria TMDL Dry Weather Numeric Targets

Indicator Bacteria	Numeric Target (MPN/100 ml)[1,2]	Allowable Exceedance Frequency[1]
Fecal coliform	200[2]	0%
Total coliform	1000[3]	0%
Enterococci	35[4] / 33[5]	0%

Notes:

1. Percent of dry days (i.e., days with less than 0.2 inch of rainfall observed on each of the previous 3 days) allowed to exceed the dry weather numeric targets.
2. Fecal coliform 30-day geometric mean water quality objective for REC-1 use in creeks and at beaches.
3. Total coliform 30-day geometric mean water quality objective for REC-1 at beaches and the point in creeks that discharges to beaches.
4. Enterococci 30-day geometric mean water quality objective for REC-1 at beaches.
5. Enterococci 30-day geometric mean water quality objective for REC-1 use in impaired creeks and beaches downstream of those creeks (applicable to San Juan Creek and downstream beach, Aliso Creek and downstream beach, Tecolote Creek, Forrester Creek, San Diego River and downstream beach, and Chollas Creek).

5. Load Allocations (LAs) Assigned to Agricultural Operations

The LAs for identified watersheds are shown in Tables E-8 and E-9.

Table E.8. Bacteria TMDL LAs for Indicator Bacteria

Watershed	Indicator Bacteria	Wet Weather Bacteria Load (Billion MPN/year) [1]		Dry Weather Bacteria Load (Billion MPN/month) [1]	
		Existing	Load Allocation	Existing	Load Allocation
Lower San Juan HSA (901.27)	Fecal Coliform	3,275,477	2,855,570	0	0
	Total Coliform	18,499,884	14,946,372	0	0
	Enterococcus[2]	1,151,266	839,040	0	0
San Luis Rey HU (903.00)	Fecal Coliform	20,687,954	20,041,659	0	0
	Total Coliform	117,360,800	110,768,160	0	0
	Enterococcus	6,881,755	6,077,514	0	0
San Marcos HA (904.50)	Fecal Coliform	11,199	9,073	0	0
	Total Coliform	122,414	99,809	0	0
	Enterococcus	7,825	6,246	0	0
San Dieguito HU (905.00)	Fecal Coliform	11,872,240	11,698,811	0	0
	Total Coliform	69,551,416	66,570,499	0	0
	Enterococcus	4,423,566	4,082,010	0	0

Notes:

1. MPN = Most probable number of bacteria colonies
2. See Table E.9 for Alternative Wet Weather Enterococcus Load Allocation for Agriculture

Table E-9. Bacteria TMDL Alternative Wet Weather Enterococcus Bacteria Load Allocation

Watershed	Existing Load (Billion MPN/year)[1]	Load Allocation (Billion MPN/year)[1]
Lower San Juan HSA (901.27)	1,151,266	841,564

Notes:

1. MPN = Most probable number of bacteria colonies

6. Implementation Plan

The Implementation Plan for the Bacteria TMDL specifies that when Waste Discharge Requirements are adopted for nonpoint source discharges, such as discharges from Agricultural Operations, that they be consistent with the TMDLs and LAs. Agricultural Operations in the identified watersheds must report annually, through the Annual Report, regarding the effectiveness of management practice planning, implementation, and effectiveness in reducing bacteria loading to surface waters and groundwater.

ATTACHMENT F – PROHIBITIONS

Discharges from Agricultural Operations shall not cause receiving waters to exceed the following limitations:

I. Ocean Plan Discharge Prohibitions

A. The Discharge of any radiological chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.

B. Waste shall not be discharged to designated Areas of Special Biological Significance (ASBS) except as provided in Chapter III.E. of the Ocean Plan.

C. Pipeline discharge of sludge to the ocean is prohibited by federal law; the discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.

D. The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table 1 or Table 2 [of the Ocean Plan] is prohibited.

II. Basin Plan Discharge Prohibitions

A. The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code (CWC) section 13050, is prohibited.

B. The discharge of waste to land, except as authorized by waste discharge requirements (WDRs) of the terms described in CWC section 13264 is prohibited.

C. The discharge of pollutants or dredged or fill material to waters of the U.S. except as authorized by an National Pollutant Discharge Elimination System (NPDES) permit or a dredged or fill material permit (subject to the exemption described in CWC section 13376) is prohibited.

D. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues an NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Water Board's Division of Drinking Water and the operating agency of the impacted reservoir; and the Discharger has an approved fail-safe long-term disposal alternative.

E. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include stream flow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if stream flow provided 100:1 dilution capability.

F. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the Discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

G. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.

H. Any discharge to a storm water conveyance system that is not composed entirely of storm water is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR section 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR section 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to an NPDES permit and discharges resulting from firefighting activities.] [Section 122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].

I. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.

J. The discharge of industrial wastes to conventional septic tank/ subsurface disposal systems, except as authorized by the terms described in CWC section 13264, is prohibited.

K. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the State is prohibited.

L. The discharge of any radiological, chemical, or biological warfare agent into waters of the State is prohibited.

M. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.

N. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

O. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

P. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

Q. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at MLLW is prohibited.

R. The discharge of treated sewage from vessels, which do not have a properly functioning U.S. Coast Guard certified Type 1 or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water is prohibited.

ATTACHMENT G – 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
http://www.waterboards.ca.gov/sandiego/

Notice of Intent Application Package for Coverage Under
Order No. 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

This application package constitutes a Notice of Intent (NOI) pursuant to obtain coverage under General Order No. R9-2016-0005. You must provide complete factual information for each item requested below and include additional sheets as necessary to provide the information requested under section II.C of the General Order.

PART A: AGRICULTURAL OPERATION INFORMATION

Name:		
Address:	City:	Zip:
Phone No.:	E-mail:	
Assessor Parcel Number(s), use additional sheets if needed:		
Irrigated Acres:	Non-Irrigated Acres:	Irrigated and Non-Irrigated Acres:
Crop Types (check all that apply): ☐ Row Crops ☐ Orchard ☐ Vineyard ☐ Nursery ☐ Greenhouse ☐ Other (explain)		
Irrigation System Types (check all that apply): ☐ Microsprinkler ☐ Drip Emitter ☐ Drip Tape ☐ Sprinkler ☐ Furrow/Flood/Border ☐ Other (explain)		

PART A: AGRICULTURAL OPERATION INFORMATION (CONTINUED)

Pesticide Permit Information

Are pesticides used? ☐ Yes ☐ No

If yes, are they applied under a Department of Pesticide Regulation Permit? ☐ Yes ☐ No

Operator Identification Number: _____ Site ID _____

Name of Permit Holder: _____ Site ID _____

PART B: PROPERTY OWNER INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
Phone No.:	Email:	

PART C: AGRICULTURAL OPERATION OWNER INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
Phone No.:	Email:	

PART D: OPERATOR INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
Phone No.:	Email:	

PART E: DRINKING WATER SUPPLY WELLS

Are groundwater wells used for drinking water supply located at the Agricultural Operation?

☐ Yes ☐ No If yes, attach map showing location of drinking water supply wells.

PART F: WATER QUALITY PROTECTION PLAN

Is a complete Water Quality Protection Plan attached as required in section VI.C of the General Order?

☐ Yes ☐ No If no, provide explanation in the box below or in an attachment to this form.

PART G: SURFACE WATER AND GROUNDWATER MONITORING PROGRAM PLAN

Is an acceptable Surface Water and Groundwater Monitoring Program Plan attached as required in section VI.C of the General Order?

☐ Yes ☐ No If no, provide explanation in the box below or in an attachment to this form.

PART H: WATERBODY INFORMATION

Are there waterbodies located within 100 feet of the perimeter of the Agricultural Operation?

☐ Yes ☐ No If yes provide name of waterbody: _____

Does a waterbody pass through or exist on the Agricultural Operation?

☐ Yes ☐ No If yes provide name of waterbody: _____

Is irrigation return flow or storm water discharged directly to a waterbody? ☐ Yes ☐ No

If yes, show discharge location on Site Plan per NOI Section VII.

PART I: MAPS

Attach the following maps:

1. A scaled topographic Site Location Map extending one mile past beyond the property boundary of the Agricultural Operation and depicting the following:
   a. Property boundaries, roads, structures, and drainage structures.
   b. Irrigation wells, domestic water supply wells, springs, and other surface water bodies listed in public records or otherwise known to the Discharger to be in the map area.
2. A scaled Site Plan depicting the following:
   a. Property boundaries, roads, structures, and drainage structures.
   b. Irrigation wells, domestic water supply wells, springs, surface water bodies listed, storm water and non-storm water conveyance systems located within the property.
   c. Approximate location of growing areas.
   d. Compost and manure management areas including storage and disposal sites.
   e. Chemical storage areas.

f. Surface water flow directions and general topographic slope direction.

g. Locations where irrigation return flow and/or storm water is discharged directly to a waterbody.

h. The location and types of management practices employed.

i. Groundwater wells used for domestic supply.

PART J: 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: _____

~~AGRICULTURAL OPERATION INFORMATION~~

~~Name:~~		
~~Address:~~	~~City:~~	~~Zip:~~
~~Phone No.:~~	~~Email:~~	
~~Name of Third-Party Group:~~		
~~Assessor Parcel Number(s), use additional sheets if needed:~~	~~Total Size of Agricultural Operation: _____Acres~~	
~~Types of crops grown, use additional sheets if needed:~~		

~~LAND OWNER INFORMATION~~

~~Name:~~		
~~Mailing Address:~~		
~~City:~~	~~State:~~	~~Zip:~~
~~Phone No.:~~	~~Email:~~	

~~AGRICULTURAL OPERATION - OWNER INFORMATION~~

~~Name:~~

~~Mailing Address:~~		
~~City:~~	~~State:~~	~~Zip:~~
~~Phone No.:~~	~~Email:~~	

~~OPERATOR INFORMATION~~

~~Name:~~		
~~Mailing Address:~~		
~~City:~~	~~State:~~	~~Zip:~~
~~Phone No.:~~	~~Email:~~	

~~WATER QUALITY PROTECTION PLAN~~

~~Is a complete Water Quality Protection Plan attached as required in section III.C of the General Order? □Yes. □ No. If no, provide explanation in the box below or in an attachment to this form.~~

~~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 H – 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
http://www.waterboards.ca.gov/sandiego/

Notice of Termination Application Package for Coverage Under Order No. 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

This form constitutes a Notice of Termination (NOT) pursuant to section II.G of Order No. R9-2016-0005. You must provide complete factual information on each item requested below and additional sheets as necessary to provide the information requested. If you have any questions on the completion of any part of the NOT, please contact the San Diego Water Board at 2375 Northside Drive, Suite 100, San Diego, CA 92108, Phone (619) 516-1990, or Fax (619) 516-1994.

AGRICULTURAL OPERATION INFORMATION

Name of Operation:	Address:	
Owner/Operator Name:	City	Zip
Mailing Address:	Phone No.:	
City:	State:	Zip:
Assessor Parcel Number(s):		

REASON FOR TERMINATION (check all that apply)

☐ A new owner or operator has taken over responsibility for the Agricultural Operation, and transfer of coverage under this General Order is not requested.

☐ The ~~Member (~~Discharger~~)~~ no longer owns or operates an Agricultural Operation that meets the enrollment criteria specified in sections I.G of the General Order.

☐ The ~~Member (~~Discharger~~)~~ has applied for and obtained coverage under individual Waste Discharge Requirements (WDRs) or other applicable WDRs for the Agricultural Operation.

☐ Joined ~~New~~ Third-Party Group as of _____.

Name of ~~New~~ Third-Party Group: _____.

CONTINUED ON NEXT PAGE

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 – QUARTERLY SELF-INSPECTION REPORT

Order No. 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

AGRICULTURAL OPERATION INFORMATION

Name of Agricultural Operation:		
Address:	City:	Zip:
APN:		
Owner/Operator:	Phone No.:	
Address:	City:	Zip:

INSPECTION INFORMATION

Inspection Conducted by:		Phone No:
Inspection Date:	Inspection Time:	Was it Raining?:

OBSERVATIONS – Attach photographs to form

Irrigation System Inspection Items	Yes	No	NA	Comments
Was irrigation system inspected?				
Was system operating when inspected?				
Were photos taken? (if yes please attach the photos)				
Were leaks/overspray observed?				
Does irrigation runoff remain on the property?				
Were repairs to irrigation system made?				
Other observations?				

Structural Management Practices	Yes	No	NA	Comments
Were management practices used to control runoff and erosion on the property inspected?				
Photos taken (if yes attach)?				
Does irrigation, non-storm water, and storm water runoff remain on the property?				
Are the management practices used to protect compost piles from oversaturation and leachate production in good operating condition?				
Is a 100 foot buffer between compost piles and waterbodies maintained?				
Was erosion observed on roadways?				
Are management practices implemented for proper handling, storage, disposal and management of pesticides, fertilizer, and other chemicals?				
Are pesticides, herbicides and fertilizers shall be applied in accordance with the manufacturer's label?				
Were repairs made?				
Other observations?				

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 J – ANNUAL SELF-~~INSPECTION~~ ASSESSMENT REPORT

Order No. 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

FOR YEAR ENDING: _____

PART A - FACILITY INFORMATION

Name:		
Address:	City:	Zip:
Contact Person:	Total Irrigated + Non-Irrigated Acres:	
Telephone:	Email:	
Assessor Parcel Number(s):		
Type of crops grown on each parcel:		

PART B - PROPERTY OWNER

Name:		
Mailing Address:		
City:	State:	Zip:
Telephone:	Fax:	Email:

PART C - AGRICULTURAL OPERATION OWNER

Name:		
Mailing Address:		
City:	State:	Zip:
Telephone:	Fax:	Email:

PART D - AGRICULTURAL OPERATION - OPERATOR INFORMATION

Name:		
Mailing Address:		
City:	State:	Zip:
County	State:	Zip:
Telephone:	Fax:	Email:

PART E - EDUCATIONAL REQUIREMENT SPECIFICATIONS

Name of Organization providing Water Quality Training:_____

Name of Individual taking Water Quality Training:_____

□ Owner □ Operator □ Other: _____

Date annual water quality management training completed: _____

Include copy of certification of completion.

~~PART F - ASSOCIATION COMMUNICATION REQUIREMENT~~

~~Was regular contact with local Farm Bureau, UCCE, NRCS, and/or regional RCDs so you stay informed of the latest management practices and developments with water quality issues?~~
~~□ Yes □ No. If yes, attach proof of contact. If no, provide explanation whyin space provided below:~~

PART ~~G~~ F - QUARTERLY SELF-INSPECTIONS

Inspections were conducted on the following dates: Include copies of Inspection Reports_____

_____

PART ~~H~~ G – WATER QUALITY PROTECTION PLAN AMENDMENTS

Were amendments made to the Water Quality Protection Plan? □ Yes □ No. If yes, attach copy.

PART ~~H~~I - RECORDS MANAGEMENT

Identify whether the following records are being maintained for the Agricultural Operation and are capable of being reviewed during an inspection by the San Diego Water Board. For any record marked "No" or "n/a", provide, as an attachment, a brief explanation/justification.

Pesticide use report	□ Yes □ No □ N/A
City/County agricultural inspection reports	□ Yes □ No □ N/A
National Organic Program certification inspection reports (if applicable)	□ Yes □ No □ N/A
Self-Inspection Forms	□ Yes □ No □ N/A
Groundwater quality monitoring data (well data, if applicable)	□ Yes □ No □ N/A

PART ~~J~~ I - INCIDENTS OF NONCOMPLIANCE

Provide a listing of each incident of noncompliance during the annual monitoring period and, for each incident of noncompliance, provide the cause, the ~~period of noncompliance including~~ exact dates of non-compliance~~and times~~, and if the noncompliance has not been corrected, the ~~anticipated time it is expected to continue and the~~ steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. Incidents of noncompliance include, but are not limited to 1) failure to pay annual WDR fees (Order No. R9 2016-0005, section II.J), 2) failure to comply with waste discharge prohibitions (Order No. R9 2016-0005, section III), 3) failure to comply with waste discharge specifications (Order No. R9 2016-0005, section IV), 4) failure to obtain the required two-hours of yearly water quality education (Order No. R9 2016-0005, section VI.B), 5) failure to conduct Quarterly Self-Inspection (Order No. R9 2016-0005, section VI.E), 6) a single monitoring result that exceeds either the narrative or numeric water quality objective for a Water Quality Benchmark (Order No. R9 2016-0005, section V and MRP section VII), 7) the exceedance of a Water Quality Benchmark that triggers the development of a Water Quality Restoration Plan (WQRP), and 8) failure to submit and implement a WQRP (Order No. R9 2016-0005, section VI.D and MRP section VII).

PART ~~K~~ J - 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:_____

INSTRUCTIONS
Annual Self-Assessment Report

PART A – FACILITY INFORMATION

Complete all boxes in Part A. List all parcels enrolled in General Order No. R9-2016-0005. Include additional pages if needed

PART B – PROPERTY OWNER INFORMATION

Complete all boxes in Part B.

PART C – AGRICULTURAL OPERATION OWNER INFORMATION

Complete all boxes in Part C.

PART D – OPERATOR INFORMATION

Complete all boxes in Part D.

PART E – EDUCATIONAL REQUIREMENT

List name of Water Quality Education provider, date training complete, and attach copy of proof of completion of educational education. If the training was completed by the Owner or Operator listed in Parts C or D, check appropriate box. If training was not completed by the Owner or Operator listed in Parts C or D, include name of person taking training and relationship to the Agricultural Operation.

~~PART F – ASSOCIATION COMMUNICATION REQUIREMENT~~

~~Provide documentation of regular contact with local Farm Bureau, UCCE, NRCS, and/or regional RCDs so you stay informed of the latest management practices and developments with water quality issues. Documentation may include copies of newsletters, information handouts, screen shots of webpages, or meeting notes. If regular contact was not made, provide an explanation why it wasn't. Use additional pages if needed.~~

PART ~~G~~ F – QUARTERLY SELF-INSPECTIONS

List dates that the Quarterly Self-Inspections were conducted and attach copies of the Quarterly Self-Inspections forms.

PART ~~H~~ G – WATER QUALITY PROTECTION PLAN AMENDMENTS

Attach amendments made to the Water Quality Protection Plan.

PART ~~I~~H -RECORDS MANAGEMENT

Indicate what records have been received and are available for review by the San Diego Water Board.

PART ~~J~~I- INCIDENTS OF NONCOMPLIANCE

On a separate sheet include a list of all incidents of noncompliance the cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

PART ~~K~~ J -CERTIFICATION

The Owner or Operation of the Agricultural Operation must complete, sign, and date where indicated

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

TENTATIVE RESOLUTION NO. R9-2016-0136

ADOPTION OF A NEGATIVE DECLARATION AND INITIAL STUDY FOR THE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM COMMERCIAL AGRICULTURAL OPERATIONS IN THE SAN DIEGO REGION

WHEREAS, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) finds that:

1. The San Diego Water Board proposes to adopt 1) 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,* and 2) Order No. 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* (collectively referred to as General Orders).

2. The General Orders establish general waste discharge requirements (WDRs) for discharges from Agricultural Operations.[1] The General Orders require owners and operators of Agricultural Operations to implement management measures to prevent or minimize the discharge of wastes that are causing or contributing to exceedances of water quality standards in waters of the State and to conduct monitoring and reporting.

3. The San Diego Water Board is the lead agency for the General Orders under the California Environmental Quality Act (CEQA), (Public Resources Code (PRC) section 21000 *et seq.*). In that role, the San Diego Water Board conducted an Initial Study in accordance with the CEQA Guidelines (California Code of Regulations (CCR), title 14, section 15000 *et seq.*) to evaluate whether the adoption of the General Orders could have a significant effect on the environment.

4. On July 27, 2015 and December 22, 2015, the San Diego Water Board provided written notice of its intent to adopt the General Orders to California Native American Tribes that requested notice of consultation opportunities pursuant to PRC Section 21080.3.1. No Tribes requested consultation on the General Orders.

5. On April 15, 2016, the San Diego Water Board held a CEQA Scoping Meeting in San Diego, California, regarding the General Orders, and considered all testimony and evidence received at the workshop.

6. The San Diego Water Board's preliminary determination, based on an Initial Study, is that the adoption of the General Orders could not have a significant effect on the environment, and therefore, no alternatives or mitigation measures are proposed.

7. On June 6, 2016, the San Diego Water Board submitted the Initial Study and the proposed Negative Declaration to the State Clearinghouse and to the clerks of San Diego County, Orange County, and Riverside County.

8. On June 13, 2016, the San Diego Water Board notified interested agencies and persons of its intent to adopt a Negative Declaration for this project, and provided them with an opportunity to submit comments during a 45-day comment period that ended July 28,

[1] For the purposes of this General Orders, an Agricultural Operation is any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the intent to make a profit.

2016, regarding the proposed Negative Declaration and Initial Study prepared in support of the Negative Declaration. The San Diego Water Board, in a public hearing, considered all comments received during the public comment period and at the hearing regarding the proposed Negative Declaration.

9. On November 9, 2016, the San Diego Water Board, in a public hearing, considered all comments concerning the discharge to be regulated by the General Orders and the proposed Negative Declaration.
10. The San Diego Water Board finds, based on the Initial Study, the proposed Negative Declaration, and the entire administrative record, that there is no substantial evidence that the adoption of the General Orders will have a significant effect on the environment.

THEREFORE, BE IT RESOLVED THAT:

1. The San Diego Water Board approves the Initial Study and adopts the Negative Declaration for the proposed General Orders.
2. Directs that a copy of this Resolution be forwarded to the State Water Resources Control Board and all interested parties.
3. Directs the Executive Officer to file a Notice of Determination with the Office of Planning and Research, State Clearinghouse, pursuant to PRC section 21108 and CCR title 14, section 15075(a), which is to be accompanied by a check made payable to the California Department of Fish and Wildlife for its current CEQA filing fee of $2,210.25 for Negative Declarations.

I*, David W. Gibson, Executive Officer, do hereby certify that this a full, true, and correct copy of a Resolution adopted by the San Diego Water Board, on November 9, 2016.*

TENTATIVE

_____

David W. Gibson
Executive Officer

CALIFORNIA Water Boards

San Diego Regional Water Quality Control Board

DRAFT NEGATIVE DECLARATION
Pursuant to Public Resources Code section 21080(c)

The San Diego Water Board, acting as lead agency, has prepared this Negative Declaration/Initial Study in accordance with section 21080(c) of the Public Resources Code and sections 15070 and 15071 of Title 14 of the California Code of Regulations.

Project Title:

Adoption of General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations in the San Diego Region

Tentative Order Numbers: R9-2016-0004 and R9 2016-0005

Lead Agency:

California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive Suite 100 San Diego, California

Project Location:

The Project is located within the jurisdictional boundaries of the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). The San Diego Region is located in the southwest corner of California and occupies approximately 3,900 square miles. The western boundary of the San Diego Region is the 85 miles of the Pacific Ocean coastline from southern Orange County, California to 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.

Project Description:

The project consists of the adoption and implementation of general waste discharge requirements for commercial agricultural operations. For the purposes of the General Orders, a commercial agricultural operation is any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the intent to make a profit (Agricultural Operation).

The San Diego Water Board proposes adoption of this project through two general orders (collectively referred to as General Orders):

1. 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.* (General Third-Party ~~Group~~ General Order)
2. Order No. 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*. (~~General~~ Individual General Order)

If adopted, the General Orders will regulate discharges of waste from Agricultural Operations that could affect waters of the State within the San Diego Region. Wastes associated with agricultural activities, include but are not limited to: irrigation runoff, storm water runoff, sediment, pesticides, and fertilizers.

The General Orders contain prohibitions, specifications, and water quality standards to protect surface water and groundwater quality from discharges associated with agricultural activity. To comply, owner and operators of Agricultural Operations, or their representative Third-Party Group, will be required to:

- Enroll under the General Orders by submitting a Notice of Intent.
- Develop and implement a Water Quality Protection Plan (WQPP) to prevent or reduce the discharges of waste to the waters of the State through irrigation control, nutrient management, erosion control, and/or pesticide management.
- Conduct surface water monitoring or edge-of-field monitoring to determine if existing management practices are leading to compliance with water quality requirements.
- Conduct monitoring of any on-site drinking supply well to determine if agricultural activities are causing or contributing to nitrate contamination of drinking water.
- Conduct visual evaluations of management practices to ensure that selected management practices are appropriate and effective to achieve compliance with water quality standards.
- Develop and implement a Water Quality Restoration Plan (WQRP) if water quality data has shown that water quality standards are not being met.
- Complete annual agricultural water quality protection training.
- Prepare annual reports.
- Pay an annual fee.

The goal of the General Orders is to manage discharges from Agricultural Operations to ensure that these discharges do not cause or contribute to an exceedance of any regional, state, or federal water quality standard. The San Diego Water Board anticipates that implementation of the General Orders will result in a net-environmental gain. The General Orders may be reviewed at the San Diego Water Board's office (2375 Northside Drive, Suite 100, San Diego, CA 92108) or online at http://www.waterboards.ca.gov/sandiego/board_decisions/tentative_orders/.

Determination:

This Negative Declaration is comprised of this form and the attached Initial Study. The San Diego Water Board has reviewed and considered the information contained in this Negative Declaration, the General Orders, and the comments received during the public review period. On the basis of the whole record before the San Diego Water Board, the San Diego Water Board finds that there is not substantial evidence that the project will have a significant effect on the environment.

TENTATIVE

_____

David W. Gibson
Executive Officer

CALIFORNIA Water Boards

San Diego Regional Water Quality Control Board

Revised California Environmental Quality Act (CEQA) Initial Study and Environmental Checklist

Adoption of General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations in the San Diego Region

November 9, 2016

Table of Contents

I. INITIAL STUDY

A. PROJECT TITLE

Adoption of General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations in the San Diego Region

B. LEAD AGENCY

California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108

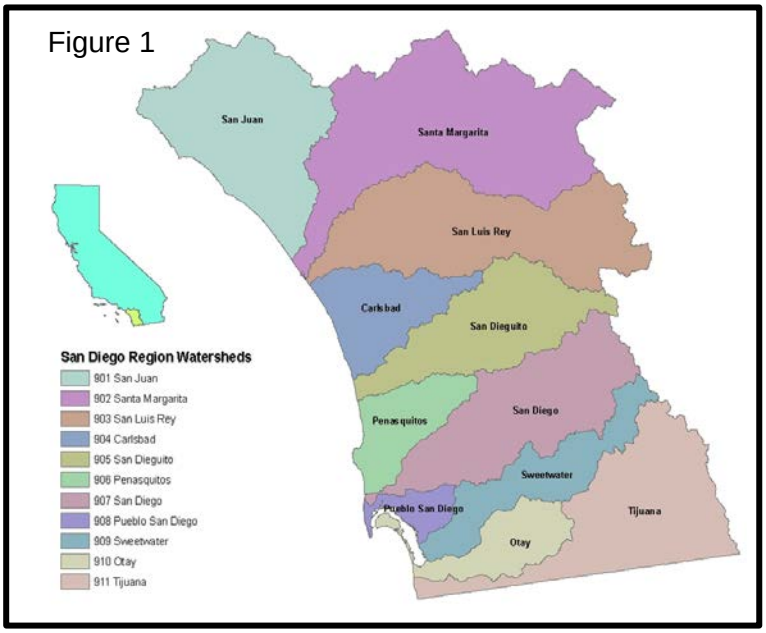
C. CONTACT PERSON

Mr. Barry Pulver, PG, CEG, CHG
Irrigated Lands Program Project Manager
2375 Northside Drive, Suite 100
San Diego, California 92108-2700
Barry.Pulver@waterboards.ca.gov

D. PROJECT LOCATION

The Project is located within the jurisdictional boundaries of the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). The San Diego Region is located in the southwest corner of California and occupies approximately 3,900 square miles (Figure 1). The western boundary of the San Diego Region is the 85 miles of the Pacific Ocean coastline from southern Orange County, California to 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.

Figure 1



E. REGULATORY BACKGROUND

Although discharges that constitute “agricultural return flows” are exempt from regulation through the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act (CWA), they are not exempt from the Porter-Cologne Water Quality Control Act, also known as the California Water Code (Water Code). Any

discharge from irrigated agricultural activities to surface water or to land, that impacts or threatens to impact water quality, is subject to regulation under the Water Code.

Waste discharges from Agricultural Operations to surface waters and groundwaters are subject to regulation by the Regional Water Quality Control Boards (Regional Water Boards). Regional Water Boards may regulate waste dischargers through the issuance of waste discharge requirements (WDRs) or a waiver of ~~waste discharge requirements~~WDRs, requiring the discharge to conform to the Water Code, the applicable Regional Water Board's Water Quality Control Plan (Basin Plan), and applicable policies of the State Water Resources Control Board (State Water Board) and the Regional Water Board. Regional Water Boards may prescribe general WDRs to a category of dischargers, such as Agricultural Operations, rather than issue individual WDRs to separate entities. General WDRs are adopted to efficiently regulate discharges that contain similar waste constituents and are treated or managed using similar methods.

The San Diego Water Board first began regulating discharges from commercial Agricultural Operations in 1983 with the adoption of a conditional waiver of WDRs, pursuant to Water Code section 13269 (1983 Waiver). The 1983 Waiver conditionally waived the requirement for submittal of a permit application (report of waste discharge or ROWD) for irrigation water runoff as long as the owner or operator of the Agricultural Operation implemented effective management practices, and the discharge did not cause exceedances of applicable water quality standards, nuisance conditions in the receiving waters, or toxicity to animal or plant life.

In 2007, the San Diego Water Board adopted Resolution No. R9-2007-0104, *Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge Within the San Diego Region* (2007 Waiver). The 2007 Waiver required dischargers to "implement management practices to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state." Prior to the expiration of the 2007 Waiver, the San Diego Water Board directed staff to develop general WDRs rather than extend the 2007 Waiver or issue a new waiver. The 2007 Waiver expired in 2014.

F. PROJECT DESCRIPTION

The San Diego Water Board is preparing two general WDRs (collectively referred to as General Orders):

1. Tentative Order No. R9-2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of Third-Party Groups in the San Diego Region* (~~General Third-Party Group Order~~Third-Party General Order).
2. Tentative Order No. 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* (~~General~~ Individual General Order).

The General Orders will regulate discharges to groundwater and to surface water from commercial agricultural operations, and will be applicable throughout the San Diego Water Board jurisdictional boundaries. For the purposes of the General Orders, a commercial agricultural operation is any agricultural business or trade activity, including

farms, nurseries, and orchards, that produces crops with the intent to make a profit (Agricultural Operation). Discharges from agricultural activities not engaged in for profit, such as hobby farming or gardening, are excluded from regulation under the General Orders.

Owners or operators of Agricultural Operations may obtain regulatory coverage through either the ~~General Third Party Group Order~~Third-Party General Order or the ~~General~~ Individual General Order. The requirements are similar. However, the ~~General Third Party Group Order~~Third-Party General Order includes provisions allowing dischargers to join a coalition of dischargers, known as a Third-Party Group, which will take on certain aspects of compliance such as fee collection, monitoring, and reporting. In summary, the General Orders require owners and operators of Agricultural Operations, or a Third-Party representative, to do the following:

- Enroll under the General Orders by submitting a Notice of Intent.
- Develop and implement a Water Quality Protection Plan (WQPP) to prevent or reduce the discharges of waste to the waters of the State through irrigation control, nutrient management, erosion control, and/or pesticide management.
- Conduct surface water monitoring or edge-of-field monitoring to determine if existing management practices are leading to compliance with water quality requirements.
- Conduct monitoring of any on-site drinking supply well to determine if agricultural activities are causing or contributing to nitrate contamination of drinking water.
- Conduct visual evaluations of management practices to ensure that selected management practices are appropriate and effective to achieve compliance with water quality standards.
- Develop and implement a Water Quality Restoration Plan (WQRP) if water quality data has shown that water quality standards are not being met.
- Complete annual agricultural water quality protection training.
- Prepare annual reports.
- Pay ~~an~~ annual WDR fees to the State Water Board.

Additional details of the proposed requirements are contained in the ~~draft~~ Revised Tentative General Orders available for review at the San Diego Water Board or online at http://www.waterboards.ca.gov/sandiego/board_decisions/tentative_orders/.

G. REASONABLY FORSEEABLE PHYSICAL CHANGES TO THE ENVIRONMENT

This Initial Study has been prepared to address California Environmental Quality Act (CEQA) requirements for the discretionary action of adopting the General Orders and the resulting potential reasonably foreseeable physical effects on the environment. These potential environmental effects are evaluated in greater detail the Environmental Checklist in section II. In summary:

1. Monitoring Activities

The monitoring activities proposed under the General Orders are not anticipated to require any physical changes to the environment. Monitoring provides information on how agricultural activities affect the physical environment and any changes in water quality resulting from implementation of the General Orders. The monitoring activities are not anticipated to significantly alter the physical environment because these

activities are typically transient, do not require heavy equipment, and do not disturb the soil or watercourse.

2. Management Practices

The installation and maintenance of some management practices may result in physical changes to the environment. The most reasonably foreseeable management practices that a discharger may utilize to comply with the requirements in the General Orders include both non-structural and structural management practices to control or eliminate discharges of waste. The San Diego Water Board is prohibited under Water Code section 13260 from specifying the design, location, type of construction, or particular manner of compliance with its orders, and dischargers can comply in any lawful manner. The actual environmental impacts of the management practices will depend upon the compliance strategy selected by the individuals enrolled in the General Order. Typical non-structural and structural controls are described below.

a. Non-structural Controls

Non-structural controls address the source of pollution and typically involve operational, maintenance, and educational activities designed to reduce or eliminate waste in runoff. Non-structural controls are expected to be the first methods to be utilized by the discharger and generally do not involve new construction. The following are examples of non-structural controls that may be applicable to Agricultural Operations:

i. Proper Irrigation, Fertilizer, and Pesticide Application
ii. Proper Material/Waste Management
iii. Agricultural Operation Inspection and Maintenance
iv. Design, Sizing and Location of Agricultural Operations

b. Structural Controls

Structural controls are management practices that involve the installation of engineering solutions (e.g. physical structures or barriers) that divert, store, and/or treat waste. The following are examples of ~~non-~~structural controls that may be applicable to Agricultural Operations:

i. Low flow irrigation methods such as micro-spray or drip irrigation
ii. Silt Fences
iii. Straw Wattles or Fiber Rolls
iv. Straw Bales
v. Mulch
vi. Riparian Buffers, Buffer Strips and Vegetated Swales
vii. Catch Basins and Detention Ponds

3. Compliance Costs

Compliance with the General Orders may result in increased regulatory costs for Agricultural Operations related to monitoring, preparation of plans, and installation of management practices. Under CEQA, economic costs are only considered to the

extent they result in physical changes to the environment. The San Diego Water Board is not required to evaluate costs in its CEQA analysis. However, the San Diego Water Board has considered whether there is chain of cause and effect from the costs of compliance with the General Orders to any physical changes.

Given that Agricultural Operations may defray the cost of compliance by joining Third-Party Groups and/or selecting cost-effective management practices, the regulatory costs associated with the General Orders are not anticipated to result in physical changes associated with Agricultural Operations temporarily or permanently ceasing agricultural activities. Moreover, many of the Agricultural Operations have already installed relevant management practices. During inspections of Agricultural Operations in 2013, the San Diego Water Board found that 82% of the Agricultural Operations enrolled in the 2007 Waiver, and 58% of Agricultural Operations not enrolled in the 2007 Waiver had implemented management practices. Almost 70% of the inspected Agricultural Operation used low flow irrigation methods such as micro-spray or drip irrigation. Low flow irrigation methods allows the growers to limit the amount of water applied to crops and minimize or prevent the discharge of irrigation return flows to surface water and groundwater. As such, costs of installing management practices should be minimal for a majority of Agricultural Operations. Even where an individual Agricultural Operation determines that it would rather cease operating than comply with environmental regulations, agricultural uses may be protected through City and/or County zoning. In these instances, agricultural uses would likely be preserved because of land use restrictions.

H. SURROUNDING LAND USES AND SETTING

The San Diego Region encompasses most of San Diego County, parts of southwestern Riverside County, and southwestern Orange County. The San Diego Region is divided into a coastal plain area, a central mountain-valley area, and an eastern mountain-valley area. It consists of eleven hydrologic units that ultimately drain to the Pacific Ocean.

The San Diego Region's climate is generally mild with annual temperatures averaging around 65°F near the coastal areas. Average annual rainfall ranges from 9 to 11 inches along the coast to more than 30 inches in the eastern mountains. There are two distinct seasons in the San Diego Region. Summer dry weather occurs from mid- April to mid-October. During this period almost no rain falls. The winter season (mid-October through mid-April) consists of generally dry weather interspersed by occasional rain storms. Eighty-five to 90 percent of the annual rainfall occurs during the winter season. Changes to the climate are expected as a result of global climate change.

The land use of the San Diego Region is highly variable. The western coastline areas are highly developed with industrial, commercial, and residential land uses, and the inland areas primarily consist of open space. The predominant land uses in the San Diego Region are open space or recreational land use, followed by low-density residential, and agriculture/livestock land uses. Other major land uses are commercial/institutional, high-density residential, industrial/transportation, military, transitional, and water.

There are an estimated 6,000 Agricultural Operations, on approximately 70,000 acres of land, in the San Diego Region. The highest density of Agricultural Operations is within the Santa Margarita River and San Luis Rey River Watersheds. There are a wide variety of crops produced within the region, including cut flowers, fruit, vegetables, wine grapes, and nuts.

Unlike other areas of the State, the majority of the Agricultural Operations within the jurisdictional boundaries of the San Diego Water Board are relatively small, with the median size being approximately 4 acres. Moreover, the types of crops grown, the methods used to grow them, the climate, and the hydrogeology are all unique to the San Diego Region.

The production of crops typically requires disturbance to the soil and the use of various agricultural chemicals which can generate discharges of waste such as sediment, pesticides, nutrients, and bacteria. Discharges from Agricultural Operations within the San Diego Region have adversely affected water quality, as documented by listings on the *CWA section 303(d) List of Water Quality Limited Segments* (303(d) List).

The 2008 303(d) List identifies 12 water quality limited segments comprised of approximately 80 linear miles and 1,132 acres of surface waters within the San Diego Region where water quality standards were not attained and where agriculture was identified as a source of the impairment.

Two total maximum daily loads (TMDLs) have been adopted by the San Diego Water Board relating to discharges from Agricultural Operations:

1. *A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed, San Diego County*, Resolution No. R9-2005-0036 (Rainbow Creek TMDL).
2. *A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate 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 (Bacteria TMDL).

Additionally, surface water monitoring conducted in accordance with the 2007 Waiver within the Santa Margarita River and San Luis Rey River Watersheds in areas influenced by Agricultural Operations also documented water quality impairments. Most of the samples collected exceeded water quality objectives ~~(WQOs)~~ for total dissolved solids, total nitrogen, and total phosphorus, constituents typically associated with agricultural activities. Likewise, regional bioassessment monitoring showed that 50% of the streams monitored were in poor or very poor condition, and 50% of the streams monitored were in good or very good condition.

I. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project. Please see the checklist in section II for additional information.

☐ Aesthetics	☐ Land Use and Planning
☒ Agriculture and Forest Resources	☐ Mineral Resources
☒ Air Quality	☒ Noise
☒ Biological Resources	☐ Population/Housing
☐ Cultural Resources	☐ Public Services
☒ Geology and Soils	☐ Recreation
☒ Greenhouse Gas Emissions	☐ Transportation/Traffic

☒ Hazards and Hazardous Materials ☒ Utilities and Service Systems

☒ Hydrology and Water Quality ☒ Mandatory Findings of Significance

J. DETERMINATION

On the basis of this initial evaluation:

☒	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐	I find that although the proposed project COULD have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Prepared By:

_____ Date: November 9, 2016

Mr. Barry S. Pulver, PG, CHG, CEG
Engineering Geologist
California Regional Water Quality Control Board, San Diego Region

II. CEQA ENVIRONMENTAL CHECKLIST

Section 1 – Aesthetics. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Aesthetics a), b), c), and d): No Impact

Discussion: The adoption of the General Orders would not directly impact aesthetics within the Project area. The General Orders do not propose or require any person to take agricultural lands out of production. Any construction or maintenance activity related to management practice implementation is reasonably expected to occur within presently active agricultural acreage. Additionally, reasonably foreseeable structural management practices are typically installed at or below grade and would not be of the size or scale that would:

1) Obstruct the view of a scenic vista.
2) Damage scenic resources.
3) Degrade the existing visual character or quality of a site or its surroundings.
4) Create a new source of substantial light or glare that would adversely affect day or nighttime views.

SECTION 2 - AGRICULTURAL AND FOREST RESOURCES. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping & Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural uses?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land [as defined in PRC section 12220(g)] or timberland (as defined by PRC section 4526)?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

The FMMP identifies and maps important farmland throughout California. Farmland categories relevant to this analysis include:

- **Prime Farmland** is land with the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed in accordance with accepted farming methods. In addition, the land must have been used for irrigated agricultural production in the last 4 years to qualify as Prime Farmland.
- **Farmland of Statewide Importance** is land other than Prime Farmland that has a good combination of physical and chemical characteristics for the production of crops.
- **Unique Farmland** is land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, and that has been used for the production of specific high-economic value crops at some time during the two update cycles prior to the mapping date. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.

Agricultural and Forest Resources b), c), d), and e): No Impact

Discussion: The General Orders do not propose or require any person to take agricultural lands out of production. The purpose of the General Orders is to increase and standardize the use of appropriate management practices on agricultural lands. Agricultural activity is still permitted under the General Orders. Because adoption of the General Orders will not change zoning or land use designations, will not cause rezoning of agricultural or forest land, and will not conflict with an existing Williamson Act contract, the appropriate finding is no impact.

Agricultural and Forest Resources a) Less than Significant Impact

Discussion: The requirements of the General Orders do not require the conversion of prime farmland, unique farmland, or farmland of statewide importance to non-agricultural uses. Direct impacts to farmland include the removal of farmland for production through the development of non-agricultural uses on that land.The General Orders do not authorize non-agricultural uses on any lands. Where Agricultural Operations choose to install certain structural management practices (e.g. vegetative buffers, catchment ponds, filter strips, etc.) on land that would otherwise be used for crops, some agricultural lands may be converted to a non-agricultural use. This reduction is not expected to be significant because of the size and scale of most management practices means that management practices can often be implemented in a way that does not result in reduction in acreage of any agricultural crop. Additionally, the installation of these types of management practices is an option not a mandate under the General Orders. Agricultural Operations may comply with alternative management practices that would not eliminate cropland such as eliminating activities that cause erosion or using crops as vegetative buffers.

An indirect impact of the project may include the cessation of agricultural activity due to the economic burden of compliance with the General Orders. However, under CEQA an economic impact is only considered significant to the extent it results in a physical change to the environment. As stated above, the purpose of the General Orders is not to stop agricultural activity. The General Orders will require Agricultural Operations to reduce or eliminate discharges of pollutants such as nutrients, pathogens, pesticides, herbicides, and sediments, into surface and groundwater using management practices.

The San Diego Water is prohibited from dictating the method of compliance. There are currently many practices available to growers which will have a beneficial impact on water quality by reducing erosion, optimizing irrigation efficiency to reduce the amount of water entering state waters from agricultural lands, and reducing the total amount of fertilizer and pesticides applied to crops. The Agricultural Operation may select which management practices are most appropriate based the size of the operation, crops grown, proximity to a receiving water, and other relevant considerations. Many of these practices may actually improve agricultural resources by reducing the loss of topsoil or improving soil quality and, in some cases, can result in improved productivity that can offset installation and maintenance cost. Moreover, Agricultural Operations may participate in a cooperative monitoring and reporting program by joining a Third-Party Group.

It is possible that the economic burden of complying with the General Orders may result in some Agricultural Operations electing to cease commercial agricultural activities rather than comply with environmental regulations. However, the impact is not expected to be significant as the majority farmland in the San Diego Region does not qualify as "prime," "unique," or "farmland of statewide importance". The FMMP uses a 10 acre minimum mapping unit to determine farmland resources, whereas the majority of farms in the San Diego Region are between 1-9 acres.

The San Diego Water Board recognizes that the FMMP data is not fully reflective of the unique agricultural resources in the San Diego Region. However, even considering potential impacts to any lands with an active agricultural use, the San Diego Water Board finds that it would be speculative to assume that adoption of the General Orders would cause agricultural activities to cease altogether. Farm soils in San Diego County are generally considered poor, with only 6% of soils meeting the definition of "prime agricultural land". Historically, the cost of water has been significantly higher than elsewhere in the State. Nevertheless, agriculture has continued to thrive in the San Diego Region by adopting high value crops that take advantage of the region's unique microclimates.

The San Diego Water Board is adopting a flexible permitting regime so that dischargers can tailor compliance to the needs and risks specific to their Agricultural Operation. The San Diego Water Board anticipates that most Agricultural Operations should be able to implement a wide range of cost-effective compliance options. Although the San Diego Water Board is not required to evaluate cost under CEQA, a detailed cost discussion is provided below to show the range of compliance costs associated with the General Orders:

1. Anticipated Costs

    a. WDR Fees

        Agricultural Operations enrolled in the General Orders will pay annual WDR fees to the State Water Board. Annual WDR fees are established by the State Water Board and can be found in the California Code of Regulations (CCR) title 23, section 2200.6. The fees are assessed based on the type of enrollment (Individual or as a Member of a Third-Party Group), and the acreage of the Agricultural Operation.[1] The 2015-16 annual fees for Individuals and for Members of a Third-Party Group are presented in Tables 1 and 2, respectively.

        Additionally, Agricultural Operations that were <u>not</u> members of a Third-Party Group on or before June 30, 2008 are required to pay a one-time enrollment fee. The fee is $200 for Agricultural Operations that receive a written request to submit an application for enrollment (NOI), and $50 for all other dischargers.

[1] Although the fees established in CCR title 23, section 2200.6 includes a fee schedule for Members of Third-Party Groups that do not manage fee collection and payment, the General Third-Party Order requires Third-Party Groups to manage fee collection and payment.

The San Diego Water Board does not have the authority to waive these fees except under limited circumstances stipulated in section 2206.6(b) which provides: "b. Upon approval by the Regional Board to join a group subject to waste discharge requirements or waivers of waste discharge requirements for discharges from agricultural lands, including irrigated lands, the discharger shall submit to the State Water Board an application fee, unless such fee is not required by the Regional Board. The application fee is a one-time fee of $200 for dischargers that have received a written request to submit an application or report of waste discharge, and $50 for all other dischargers. This application fee shall not apply to dischargers who were members of a group on or before June 30, 2008."

The San Diego Water Board will waive the one-time application fee for Members approved of Third-Party Groups who submit timely a NOI for enrollment under the Third-Party General Order by the deadlines specified in section III.B. This will provide an incentive for compliance and participation in the Third–Party Groups.

Table 1. FY 2015-16 Annual Fees for Dischargers Enrolled as Individuals

Acres	Fee Rate	Minimum Fee	Maximum Fee
0 – 10	$404 + $13.50/Acre	$404	$538
11 – 100	$1,084 + $6.70/Acre	$1,084	$1,756
101 – 500	$3,033 + $3.40/Acre	$3,033	$4,715
501 or more	$6,733 + $2.70/Acre	$6,733	No Maximum Fee

Table 2. FY 2015-16 Annual Fees for Members of a Third-Party Group

Tier	Description	Annual Fee/Acre
Tier I	Member of a Third-Party Group that manages fee collection and payment	$0.75

b. Third-Party Group Fees

Agricultural Operations that 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 Region Irrigated Lands Group (SDRILG) was established as a Third-Party Group under the 2007 Waiver. At that time, the SDRILG's fee schedule included a one-time enrollment fee and an annual fee to cover monitoring and reporting expenses. The enrollment fee was $250 per acre up to a maximum of $1,250.[2] Annual Third-Party fees are a function of the compliance costs borne by the Third-Party Group and the number of Members within the Third-Party Group. The yearly Third-Party Group fee, based on the cost estimates presented on Table 5, on a per

[2] San Diego Region Irrigated Lands Group application form available at https://www.sdfarmbureau.org/SDRILG/SDRILGApplication.pdf (as of October 20, 2016).

acre basis, including the cost of compliance and overhead is estimated to be $10 per acre.

c. Structural Management Practices

Structural management practices will likely be installed to implement irrigation management, storm water management, nutrient management, and erosion control. The most commonly used structural management practices are related to irrigation control to reduce or eliminate irrigation runoff. Many Agricultural Operations have already installed relevant management practices. During inspections of Agricultural Operations in 2013, the San Diego Water Board found that 82% of the Agricultural Operations enrolled in the 2007 Waiver, and 58% of Agricultural Operations not enrolled in the 2007 Waiver had implemented management practices. Additionally, due to the high cost of water Agricultural Operations generally use low-flow irrigation practices such as micro-spray or drip irrigation. Almost 70% of the Agricultural Operation in 2013 used low flow irrigation methods such as micro-spray or drip irrigation. Low flow irrigation methods allows the growers to limit the amount of water applied to crops and minimize or prevent the discharge of irrigation return flows to surface water and groundwater. ~~or micro-sprinklers.~~

Because many Agricultural Operations have already installed appropriate structural management practices, the San Diego Water anticipates many will have relatively minor construction costs associated with management practice implementation. Therefore, the cost of construction of new management practices will only be incurred by a portion of Agricultural Operations within the San Diego Region. Table 3 lists the anticipated structural management practices that may be installed and the cost range to design and install them, as well as an estimate of the yearly maintenance costs (assumed to be 30% of the installation 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 (FOTG).[3]

Table 3 – Anticipated Structural Management Practices Costs

Structural Management Practice[4]	NRCS FOTG No.	Design and Implementation Cost (per acre)	Maintenance Cost
Mini-Sprinkler Irrigation System	441-2	$0 to $2,600	$780
Mulching with Natural Materials	484-1	$0 to $290	$87
Silt Fence	570-2	$0 to $770	$231
Straw Bales	570-2	$0 to $1,892	$567

[3] USDA Practice Payment Scenarios available at https://efotg.sc.egov.usda.gov/references/public/CA/FY16_Practice_Payment_Scenarios_wBookmarks.pdf (as of October 20, 2016).
[4] The list presented in Table 3 is based on the type of agricultural activities in the San Diego Region and observations of implemented management practices made during Agricultural Operation inspections.

Structural Management Practice[4]	NRCS FOTG No.	Design and Implementation Cost (per acre)	Maintenance Cost
Straw Wattles or Fiber Rolls	570-2	$0 to $789	$264
Filter Strip – Native Species	393-3	$0 to $345	$103
Sedimentation Basin	350-3	$0 to $12,160[5]	$3,648

The selection of the most appropriate and cost effective structural management practices will be made by the Agricultural Operation and will be based on site-specific conditions such as existing structural management practices (for example, almost all of the avocado orchards in San Diego County currently use mini-sprinklers irrigation),[6] crop type, site location, slope, soil and geology, and distance to surface water bodies. Furthermore, it is likely that the site-specific conditions may not require the construction of structural management practices.

d. Monitoring and Reporting Fee

If adopted, the General Orders will require Agricultural Operations to comply with a Monitoring and Reporting Program (MRP). There are different MRP requirements for Agricultural Operations enrolled as Members of a Third-Party Group and for those enrolled as Individuals. Tables 4 and 5 summarize the estimated costs for compliance with the MRPs.

Table 4. Estimated Water Quality Monitoring and Reporting Costs for Agricultural Operations that are not Members of a Third-Party Group

Task	One-Time Cost	Annual Cost
Surface Water and Groundwater Monitoring Program Plan[7]	$2,000	na
Groundwater Monitoring, if needed	$100	na
Surface Water/Edge of Field Monitoring	na	$8,000
Prepare and Implement a Water Quality Restoration Plan (WQRP), if needed[8] [9]	$2,000	$10,000
Annual Reporting[10]	na	$1,000

[5] The cost provided in NRCS FOTG 350-3 is based on one, 1,500 cubic yard earthen embankment to construct a sedimentation basin. The cost presented in Table 3 is per embankment, and not per acre
[6] Per e-mail from Gary Bender, Ph.D., Farm Adviser Emeritus, University of California Agriculture and Natural Resources, dated May 16, 2016.
[7] Cost assumes a qualified consultant prepares the Surface Water and Groundwater Monitoring Plan.
[8] Cost assumes a qualified consultant prepares and implements the WQRP.
[9] Cost assumes the WQRP is prepared to address an exceedance of nutrients with additional monitoring to be conducted for nutrients.
[10] Cost assumes a qualified consultant prepare the Annual Report.

Table 5. Estimated Per Acre Water Quality Monitoring and Reporting Costs for Agricultural Operations that are Members of a Third-Party Group

Task	One-Time Cost	Annual Cost Based on Acres Enrolled[11]			
		30,000	40,000	50,000	60,000
Surface Water and Groundwater Monitoring Program Plan[12]	$0.60 / $0.45 / $0.36 / $0.30	--	--	--	--
Groundwater Monitoring (per Agricultural Operation)	$100	--	--	--	--
Surface Water Monitoring (per acre)	--	$8	$6	$5	$4
Prepare and Implement a WQRP, if needed (per acre)	$0.20	$1	$1	$1	$1
Annual Reporting (per acre)	--	$1	$1	$1	$1
Bioassessment (per acre)[13]	--	$4	$3	$2	$2
Total (rounded to nearest whole dollar)	$101	$14	$11	$9	$8

~~Task~~	~~One-Time Cost~~	~~Annual Cost~~
~~Surface Water and Groundwater Monitoring Program Plan[14]~~	~~$0.30~~	~~na~~
~~Groundwater Monitoring (per Agricultural Operation)~~	~~$100~~	~~na~~
~~Surface Water Monitoring (per acre)[15]~~	~~na~~	~~$4~~
~~Prepare a WQRP, if needed (per acre)~~	~~$0.20~~	~~$0.60~~
~~Annual Reporting (per acre)~~		~~$1~~
~~Bioassessment (per acre)[16]~~	~~$0.30~~	~~$2~~

2. Anticipated Costs in Relationship to Revenue

There are various factors that the owner of an Agricultural Operation, or any business, considers when deciding whether or not to continue in business. For example, the owner may decide to retire, to engage in another occupation, to redevelop or sell the property, or to maintain the Agricultural Operation. This analysis can only evaluate the impact that the estimated cost of compliance with the General Orders could have on the Agricultural Operation.

The analysis includes the economic burden of the enrollment and annual fees (whether paid directly to the State Water Board or to a Third-Party Group),

[11] Costs estimated to nearest whole dollar.
[12] Estimated per acre cost based on enrollment of 30,000 acres, 40,000 acres, 50,000 acres, and 60,000 acres.
[13] Bioassessment costs will only be incurred once every five years. Costs are a prorated yearly cost.
[14] ~~Per acre cost is based on enrollment of 60,000 acres (approximately 80% of the estimated eligible acreage in the San Diego Region). The actual per acre cost will be a function of the Third-Party Groups, and the number of acres enrolled in each Third- Party Group.~~
[15] ~~Per acre cost is based on enrollment of 60,000 acres (approximately 80% of the estimated eligible acreage in the San Diego Region). The actual per acre cost will be a function of the Third-Party Groups, and the number of acres enrolled in each Third- Party Group.~~
[16] ~~Bioassessment monitoring will be conducted every five years. The anticipated cost is the annualized cost per acre to conduct the bioassessment monitoring.~~

the installation and maintenance of new structural management practices,[17] and the costs associated with plan development, monitoring, and reporting.

As shown in Table 6, the estimated one-time cost for a median-sized (4 acre) Agricultural Operation to comply with the General Orders ranges between $1,~~190~~ 040 to $1,140 (when enrolled as a Member of a Third-Party Group) and $~~4,150~~$2,050 to $4,150 (when enrolled as an Individual), and the estimated annual cost for a median-sized (4 acre) Agricultural Operation to comply with the General Orders ranges between $~~5,048~~99 to $5,053 (when enrolled as a Member of a Third-Party Group) and $9,458 to $24,468 (when enrolled as an Individual).[18]

Table 6. Summary of Estimated Costs

Cost	Individual (4 Acres)		Member (4 Acres)	
	One-Time Cost	Annual Cost	One-Time Cost	Annual Cost
Enrollment Fee	$50	--	~~$50~~$0	--
Annual Fee	--	$458	--	$3
Third Party Fees[19]	--	--	$1,040	$~~24~~96
Mulching with Natural Materials	--	$0 - $348	--	$0 - $348
Silt Fence	--	$0 - $924	--	$0 - $924
Straw Bales	--	$0 - $2,268	--	$0 - $2,268
Straw Wattles or Fiber Rolls	--	$0 - $1,056	--	$0 - $1,056
Filter Strip	--	$0 - $414	--	$0 - $414
Surface Water and Groundwater Monitoring Program Plan	$2,000	--	--	--
Groundwater Monitoring, if needed	$0 - $100	--	$0 - $100	--
Surface Water/Edge of Field Monitoring	--	$8,000	--	--
Prepare WQRP, if needed	$0 - $2,000	--	--	--
Implement a WQRP, if needed	--	$0 - $10,000	--	--
Annual Reporting	--	$1,000	--	--
Bioassessment Workplan	--	--	--	--
Totals	$2,050 - $4,150	$9,458 - $24,468	~~$1,190~~1,040 - $1,140	$99-$5,053

The agricultural products most commonly grown in the San Diego Region can be broadly grouped into three categories: 1) nursery and cut flower products, 2) fruit and nuts, and 3) vegetables. Table 7 summarizes the acres planted

[17] The estimated annual maintenance costs for items that would likely be part of the normal operational activities and not specifically required by the General Orders, such as maintenance of a mini-sprinkler irrigation system is not included. Also, the maintenance for a sedimentation basin is not included as only a limited number of Agricultural Operations would likely require the construction of a sedimentation basin to comply with the General Orders.

[18] These cost may be less depending on the management practices currently in use.

[19] Based on an enrollment of 30,000 acres and a $10 per acre overhead rate.

and the revenue from these crops in San Diego County according to the 2014 County of San Diego Crop Report.[20] Table 7 also lists the average per acre revenue and the estimated average revenue for a median-sized (4 acre) Agricultural Operation.

Table 7. Summary of Estimated Revenue

Crop	Harvested Acres	Annual Revenue	Annual Revenue/Acre	Annual Revenue for a 4 Acre Agricultural Operation
Nursery & Cut Flowers	12,702	$1,182,613,913	$93,105	$372,418
Fruits & Nuts	34,811	$385,988,806	$11,088	$44,353
Vegetables	4,631	$6,644,917	$1,435	$5,740

As shown in Table 7, the greatest economic impact would be for Agricultural Operations growing vegetables.

3. Opportunities for Cost Reduction

   There are several ways to lessen the potential economic burden and to reduce the likelihood that complying with the General Orders will result in the loss of farmland.

   a. Selection of Cost-Effective Management Practices

      This analysis includes an array of possible management practices. The actual cost will be dependent on the selection made by the Agricultural Operation using site-specific considerations. Costs for management practices may be greatly reduced if not all management practices listed in Table 6 are used. Many groups/organizations, such as the University of California Cooperative Extension and the NRCS, can provide assistance with the selection of appropriate, cost-effective management practices.

   b. The Agricultural Operation could join a Third-Party Group

      Agricultural Operations have the option of joining a Third-Party Group. By doing so, the cost of compliance with the MRP will be distributed amongst all of the Members, thus vastly reducing the cost.

   c. Funding Opportunities

      The San Diego Water Board and 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 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 General Orders, and likely reduce the

[20] County of San Diego 2014 Crop Statistics & Annual Report, available at http://www.sandiegocounty.gov/content/dam/sdc/awm/docs/Crop%20Report-Final.pdf (as of October 20, 2016).

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.

i. Federal Farm Bill

Title II of the 2014 Farm Bill (the Agricultural Act of 2014), in effect through 2018, authorizes funding for conservation programs such as the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP). Both of these programs provide financial and technical assistance for activities that improve water quality on agricultural lands.

ii. State Water Resources Control 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 non-point source pollution 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 non-point source water quality control activities.

iii. 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. Proposals can include agricultural water quality improvement projects.

CONCLUSION

Ultimately, CEQA states that economic or social effects of a project shall not be treated as significant effects on the environment.[21] As stated previously, it is speculative to assume that the cost of regulation will result in a significant physical impact to the environment because Agricultural Operations may comply with the General Orders in any number of ways and there is no evidence that the General Orders will curtail agricultural activity in the San Diego Region. Therefore, this impact is found to be less than significant.

[21] PRC section 21083

SECTION 3 - AIR QUALITY. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Air Quality a), b), c), and d): No Impact

Discussion: Adoption of the General Orders will not impact air quality. Because the General Orders do not propose or require any person to take agricultural lands out of production, the General Orders are not expected to cause significant emissions due to increased vehicle traffic over baseline conditions. There could be some construction related impacts associated with management practice implementation. Construction emissions of criteria air pollutants such as reactive organic gases (ROG), oxides of nitrogen (NOx), carbon monoxide (CO), respirable particulate matter less than 10 microns in diameter (PM10), and respirable particulate matter less than 2.5 microns in diameter (PM2.5), are primarily the result of earth-moving activities and heavy-duty diesel powered equipment.

However, reasonably foreseeable management practices are not expected to be on a scale large enough to result in significant conflict with or obstruction of an applicable air quality plan, or to expose sensitive receptors to substantial pollutant concentrations. Emissions from construction-related equipment and vehicles are expected to be short-term and similar to vehicles used for existing crop production. Moreover, the implementation of some alternative pest management strategies could lead to a reduction in aerial drift, and cause an improvement in air quality.

Air Quality e): Less than Significant Impact

Discussion: Objectionable odors may result from the construction or maintenance of reasonably foreseeable structural controls. Sources odors include exhaust from construction equipment or odors from retention basins should stagnant water conditions occur. Nevertheless, any impacts are expected to be less than

significant because these odors are typically short-term and limited to the immediate area. Limited, short-term exposures are not expected to be on a scale large enough to result in the significant creation of objectionable odors affecting a substantial number of people.

SECTION 4 - BIOLOGICAL RESOURCES. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (DFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the DFW or USFWS?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the federal Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	☐	☐	☐	☒

Biological Resources c), e), and f): No Impact

Discussion: Adoption of the General Orders will not impact biological resources. Reasonably foreseeable management practices are not expected to be on a scale large enough that would result in direct removal or filling of riparian habitat, wetlands, or any sensitive natural communities or conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. In most instances, implementation of some management practices (e.g. hedgerows, vegetative swales, or riparian restoration), and any resultant

improvements to water quality, may also result in benefits to wetlands and riparian resources.

Biological Resources a), b), and d): Less than Significant Impact

Discussion: Reasonably foreseeable management practices will have less than significant impact on biological resources. The rationale for this conclusion is as follows.

Reasonably foreseeable structural controls are not expected to be on a scale large enough that would result in the significant impacts to biological resources. Structural controls, such as vegetated swales or buffer strips, could increase the diversity or number of species, which is beneficial by creating habitat for those species. Structural controls could divert, or reduce storm water runoff discharge. The elimination of storm water flows could result in a reduction of stream flows in historically non-perennial streams. However, the reduction of non-storm water flows during the dry season will return dry weather flows of perennialized streams to a more natural, pre-development condition. This would be benefit native, indigenous species.

Implementing structural controls would not foreseeably introduce new species. Construction of reasonably foreseeable structural controls likely would not restrict wildlife movement because the sizes of structural controls are generally too small to obstruct a corridor. Terrestrial animal corridors would be maintained regardless of stream flow as reduced flows would not cause physical barriers for these animals. In the event that any structural controls, such as animal exclusion controls, impede some wildlife migration, design features such as fence gaps large enough to allow migrating wildlife to pass through could be included in the design.

Similarly, most non-structural controls will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites because the controls would not introduce any physical effects that could impact these characteristics. The reduction or elimination of irrigation return flows could result in a barrier to the migration or movement of animals especially in the dry weather season by eliminating habitat dependent on those flows. However, if dry weather flows return to a more natural, pre-development condition, native plant and animal species that thrived in the creek and stream channels in the absence of nuisance flows are not expected to be adversely impacted by habitat changes.

The Project Area is covered by Western Riverside County Multi-Species Habitat Conservation Plan, 2004 (MSHCP), being implemented by the Western Riverside County Regional Conservation Agency (RCA) as well the San Diego County Multiple Species Conservation Program (MSCP). The purpose of the MSHCP is to protect 146 native plant and animal species and preserve their habitat. Similarly, the purpose of the MSCP is to ensure the long-term survival of sensitive plant and animal species and protect the native vegetation communities found throughout San Diego County. Implementation of the General Orders is not expected not preclude acquisition of conservation lands under the MSHCP nor the MSCP. Neither the MSHCP or the MSCP bar agricultural production or expansion. Many agricultural lands are already exempted and mitigated for under these two programs (See e.g., Implementing Agreement for the Western

Riverside County Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan section 11.3.2 Take Authorization for Existing Agricultural Operation, 11.3.5 Expansion of Existing Agricultural Operations; See also, San Diego County's Biological Mitigation Ordinance section 86.503). Development projects or operational expansions in natural areas that are important for sensitive plant and animal species and/or native vegetation may require additional approvals and mitigation under both the MSCHP and the MSCP. Where discretionary approvals are required additional environmental review and mitigation may be required thereby rendering any potential impacts to these resources less than significant.

Prior to implementing any management practice that will result in the permanent loss of wetlands, conduct a delineation of affected wetland areas to determine the acreage of loss in accordance with current U.S. Army Corps of Engineers (USACE) methods. For compliance with the federal Clean Water Act section 404 permit and WDRs protecting state waters from unauthorized fill, compensate for the permanent loss (fill) of wetlands and ensure no net loss of habitat functions and values. Compensation ratios will be determined through coordination with the San Diego Water Board and USACE as part of the permitting process. Such process will include additional compliance with CEQA, as necessary. Compensation may be a combination of mitigation bank credits and restoration/creation of habitat.

SECTION 5 - CULTURAL RESOURCES. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Calif. Code Regs. title 14 section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in Calif. Code Regs. title 14 section15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074?	☐	☐	☐	☒

Cultural Resources a), b), c), d), and e): No Impact

Discussion: Adoption of the General Orders will have less than significant impacts on cultural resources. At most sites, reasonably foreseeable management practices will be implemented in previously disturbed agricultural lands and are not expected to result in a substantial adverse change in the significance of a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, disturb any human remains, or cause a substantial adverse change in tribal cultural resources.

SECTION 6 - GEOLOGY and SOILS. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines & Geology Special Publication No. 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Geology and Soils a), i), ii), iii), iv), c), d), and e): No Impact

Discussion: Adoption of the General Orders would have no impact on geology and soils because reasonably foreseeable management practices are not expected to be on a scale large enough that would result in exposure of people or structures to geologic or seismic hazards.

Geology and Soils b): Less than Significant Impact

Discussion: Adoption of the General Orders would have less than significant impact on geology and soils. Reasonably foreseeable management practices are not expected to be on a large enough scale that would result in increase in wind or water erosion of soils, either on or off site. Management practices should be designed to reduce erosion and are expected to have a long-term positive impact

on the local soils. However, the installation of structural controls may result in minor soil disturbance. These impacts are expected to be less than significant because construction-related erosion impacts will be short-term and will end with the cessation of construction. Wind or water erosion of soils may also occur during construction but should also be a short-term. Additionally, established management practices can be employed to minimize offsite sediment runoff or deposition.

SECTION 7 - GREENHOUSE GAS EMISSIONS. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Greenhouse Gas Emissions a) and b): Less than Significant Impact

Discussion: Adoption of the General Orders would have less than significant impact on greenhouse gas (GHG) emissions. The California Air Resources Board (CARB) has estimated that the agricultural sector contributed approximately 8% of statewide GHG emissions in 2013, mainly from methane (CH_4) and nitrous oxide (N_2O) sources.[22] Typical emissions from agriculture include enteric fermentation and manure management from crop production (fertilizer use, soil preparation and disturbances, and crop residue burning), and fuel combustion associated with agricultural activities. The application of nutrients at agronomic rates is a likely management practice and will result in the reduction of the amount of applied nutrients. According to CARB, emissions from the growing and harvesting of crops have remained constant since 2000. Because the General Orders do not propose or require any person to take agricultural lands out of production, the General Orders are not expected to change baseline emission conditions for GHGs.

Installation and maintenance of structural controls may result in the short-term generation of GHGs due to exhaust from construction equipment and vehicles. These impacts, however, are not expected to be on a scale large enough to result in the significant generation of GHGs. Moreover, increased vegetation may result from implementation of reasonably foreseeable management practices including cover crops, vegetated swales, filter strips, bioretention, and infiltration basins. This increased vegetation would have a positive impact on GHG emissions as they remove GHGs from the atmosphere.

[22] California Air Resources Board, 2015 Edition California CHG Emission Inventory, available at http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_trends_00-13%20_10sep2015.pdf (as of October 20, 2016).

SECTION 8 - HAZARDS and HAZARDOUS MATERIALS. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	☐	☒	☐
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐

Hazards and Hazardous Materials a), b), c), d), e), and f): Less than Significant

Discussion: Adoption of the General Orders would have not directly result in potential impacts associated with hazards and hazardous materials because it is not foreseeable that implementation of the General Orders would result in management practices located at hazardous materials sites, an airport-related or private air-strip related safety hazard, or an impact on emergency response and evacuation plans.

There is the possibility that hazardous materials may be transported to an Agricultural Operation ~~site~~ and be present during installation or maintenance of structural management practices. These materials may include gasoline and diesel to fuel equipment, hydraulic fluid associated with equipment operations and machinery, asphalt and oils for road surfacing, surface stabilizers, acids,

solvents, degreasers, corrosives, and antifreeze, among others. Transportation and grading equipment could leak hydraulic fluids and oils; on-site fuel storage containers for vehicles could leak; cementitious materials used for restoration measures could discharge to land or surface waters if left unprotected from wind or precipitation; relocation of existing on-site hazardous materials storage containers could result in discharges if inappropriately managed; relocation or demolition of inappropriately sited structures could result in the release of hazardous materials including, but not limited to, treated wood waste, lead-based paints, and asbestos. However, the General Orders include conditions requiring proper storage, handling, use, and disposal of chemicals, which are intended to reduce the potential for release of hazardous materials into the environment. Any hazardous waste generated from the demolition of structures or impoundments would need to be disposed of in designated hazardous waste landfills.

Additionally, the Department of Pesticide Regulation examines hazards posed by pesticides to workers and the public during its regulatory process. Each product is evaluated for potential hazards and any conditions necessary for the safe use of the material are required on the label or in specific regulations. Some of these requirements include use of protective clothing and respirators, use of a closed system for mixing and loading, or special training requirements for workers applying the pesticide. Implementation of the General Orders should not result in any increased exposure to hazards or hazardous material and may reduce exposure as growers implement pest management techniques that reduce applications in order to minimize potential runoff.

SECTION 9 - HYDROLOGY and WATER QUALITY. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (*e.g.*, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place housing within a 100-year flood hazard area structures which would impede or redirect flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Hydrology and Water Quality a), b), and f): No Impact

Discussion: Adoption of the General Orders will not violate any water quality standards or WDRs, result in potential impacts, deplete groundwater supplies, or interfere substantially with groundwater recharge. The rationale for this conclusion is as follows:

1. The management practices required by the General Orders will eliminate or reduce the existing loading of pollutants to the waters of the State. This will improve water quality.
2. The management practices required by the General Orders may include actions that will result in the increased groundwater recharge.

Hydrology and Water Quality g), h), i), and j): No Impact

Discussion: Adoption of the General Orders does not entail construction of new housing or structures, or expose people or structures to a significant risk of loss, injury, or death from flooding or inundation by seiche, tsunami, or mudflow.

Hydrology and Water Quality c), d), and e): Less than Significant Impact

Discussion: Adoption of the General Orders will not have a direct impact on the alteration of existing drainage patterns or create or contribute runoff water exceeding a drainage systems capacity. The rationale for this conclusion is as follows:

1. Grading and excavation during installation or maintenance of structural controls could result in alterations in absorption rates, drainage patterns, and surface water runoff. Several types of structural controls collect and/or inhibit surface water runoff flow, which could alter drainage patterns and/or decrease the rate and amount of surface water runoff. For example, buffer strips (a form of structural control) would increase infiltration rates and reduce the amount of runoff to the adjacent water body. The amount of flow within the water body may change; however, the impact is expected to be less than significant because the drainage pattern would remain essentially unchanged. Moreover, reasonably foreseeable structural controls are typically expected to be small scale and/or short-term.
2. Reasonably foreseeable management practices would not be of the size or scale to create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Implementation of management practices required by the General Orders is expected to minimize the amount of polluted runoff.

SECTION 10 - LAND USE AND PLANNING. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Land Use and Planning a), b), and c): No Impact

Discussion: Adoption of the General Orders would not cause potential land use impacts by dividing a community, or conflicting with a land use plan, land use policy, habitat conservation plan, or natural community conservation plan because the proposed General Orders do not propose nor require a change in land use. See discussion of Agricultural Resources section for additional discussion of land use impacts specifically associated with the conversion of farmland to non-agricultural uses.

SECTION 11 - MINERAL RESOURCES. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Mineral Resources a) and b): No Impact

Discussion: Adoption of the General Orders will have no effect on mineral resources because impacts should be limited to lands used for agricultural production. It is not foreseeable that the management practices required by the General Orders will result in loss of availability of a known mineral resource that would be of future value to the region and the residents of the State, or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

SECTION 12 - NOISE. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing in or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing in or working in the project area to excessive noise levels?	☐	☐	☐	☒

Noise a), b), c), e), and f): No Impact

Discussion: The management practices required by the General Orders will not result in noise impacts greater than baseline conditions.

Noise d): Less than Significant Impact

Discussion: The construction and installation of structural controls could result in temporary increases in existing ambient noise levels. Because any impacts are expected to be short-term, localized impacts that would exist only in close proximity to the construction area, these noise impacts are not expected to be significant.

SECTION 13 - POPULATION AND HOUSING. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area either directly (*e.g.*, by proposing new homes and businesses) or indirectly (*e.g.*, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Population and Housing a), b), and c): No Impact

Discussion: Adoption of the General Orders will not directly or indirectly induce substantial population growth because implementation of management practices would not displace substantial numbers of people or housing necessitating the construction of replacement housing elsewhere.

SECTION 14 - PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Public Services a), b), c), d), and e): No Impact

Discussion: Adoption of the General Orders will not directly or impact public services because implementation of management practices will not result in a need for new or altered fire protection services, police protection services, schools, parks, or other public facilities..

SECTION 15 - RECREATION. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Recreation a) and b): No Impact

Discussion: Adoption of the General Orders will not cause any impacts to recreational facilities because implementation of management practices will not result in the construction or increased use of recreation facilities.

SECTION 16 - TRANSPORTATION/TRAFFIC. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Transportation/Traffic a), b), c), d), e), and f): No Impact

Discussion: Adoption of the General Orders will not cause any impacts to transportation or traffic. Because the General Order do not propose or require any person to take agricultural lands out of production, the existing traffic patterns are not expected to substantially increase or decrease. Installation and maintenance of reasonably foreseeable management practices would not cause any impact to areas beyond the limits of the Agricultural Operation. The transportation of equipment and material needed for the installation of structural controls will be minimal, and, as such, are not expected to cause any impacts to transportation or traffic. Water sampling required to comply with the monitoring requirements will also be minimal and will not cause any impacts to transportation or traffic.

SECTION 17 - UTILITIES AND SERVICE SYSTEMS. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, State, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Utilities and Service Systems a), b), and e): No Impact

Discussion: Adoption of the General Orders will not directly cause any impacts to utilities and service systems. Reasonably foreseeable management practices would not be of the size or scale that to exceed wastewater treatment capacity and/or requirements. Reasonably foreseeable structural management practices are typically designed to reduce, reuse, and otherwise retain water on site, thus potentially reducing the volume of water requiring treatment at wastewater treatment facilities.

Utilities and Service Systems d): No Impact

Discussion: Adoption of the General Orders will not directly cause any impacts on water supplies. Implementation of reasonably foreseeable management practices will only require minor amounts of water and will not have any impact on water supplies. The requirement to apply irrigation water at agronomic rates and the

elimination of irrigation runoff will likely improve water supplies because of a decrease in water use.

Utilities and Service Systems f): No Impact

Discussion: Adoption of the General Orders will not directly cause any impacts on solid waste services or landfill services. Implementation of reasonably foreseeable management practices may generate solid waste, but the amounts would be minor because of the size and scale of most reasonably foreseeably management practices.

Utilities and Service Systems c): Less than Significant Impact

Discussion: Adoption of the General Orders will not directly cause any impacts to the existing storm drain system. Structural controls may alter existing storm water flow patterns, but would not add to the volume of storm water entering the existing storm water system.

SECTION 18 - MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☒	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Mandatory Findings of Significance a): Less than Significant Impact

Discussion: As discussed in Section 4, Biological Resources, plant and animal species could potentially be affected due to the reduction or elimination of nuisance flows, especially in the dry weather season. However, this effect is expected to be less than significant because of the size and scale of management practices that will be used to comply with the General Orders. Additionally, proper implementation of management practices is expected to have a beneficial effect on native plant and animal species because of improved water quality and the promotion of natural hydrological conditions.

Mandatory Findings of Significance b): Less than Significant Impact

Discussion: Cumulative impacts, as defined in the CEQA Guidelines,[23] refer to two or more individual effects, that when considered together, are considerable or that increase other environmental impacts. Cumulative impacts associated with complying with the General Orders and other water quality control programs are

[23] CCR. title. 14, section 15355.

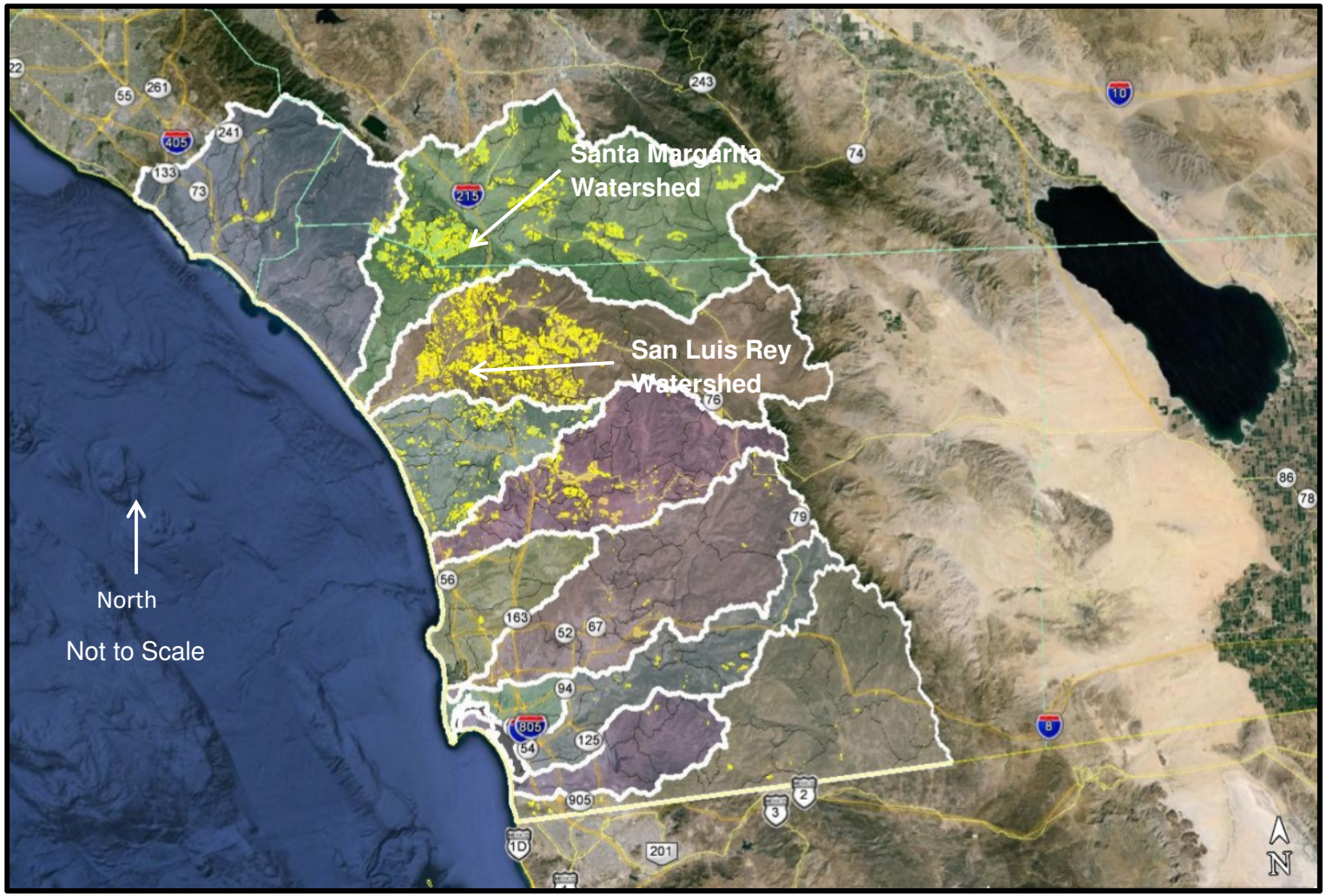
expected to be less than significant. Non-structural controls are expected to be the most likely initial strategy for complying with the General Orders, and because of their nature (i.e., plans, educations, inspections, etc.), are not expected to have negative effects on the environment.

Dischargers may use structural controls to minimize or eliminate the transport of pollutants to the waters of the State. Doing so may increase the likelihood of potential impacts to the environment. However, these impacts are expected to be less than significant because of the size and scale of the reasonably foreseeable management practices implementation of each structural control is expected to have minimal environmental impacts. These effects are not expected to cumulatively significant in the long-term because the effects will cease with the completion of construction and will have localized impacts.

Mandatory Findings of Significance c): Less than Significant Impact

Discussion: Implementation of management practices required by the General Orders is expected to improve environmental conditions. Reasonably foreseeable and properly implemented non-structural and/or structural controls would not be of a size or scale that would cause substantial adverse effects on human beings, either directly or indirectly. As discussed in section 2, Agricultural and Forestry Resources, CEQA states that economic or social effects of a project shall not be treated as significant effects on the environment.[24]

[24] PRC section 21083; CCR title 14, section 15131



Legend

- Yellow shading indicates areas of agricultural activity as indicated on landuse maps prepared by the Counties of San Diego, Riverside, and Orange.
- White lines indicate watershed boundaries.

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
June 22, 2016

ITEM: 12

SUBJECT: Public Workshop: The San Diego Water Board will hold a public workshop to receive and discuss information on 1) Tentative 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* (Tentative General Third-Party Group Order); 2) Tentative Order No. 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* (Tentative General Individual Order); and 3) Tentative Resolution No. R9-2016-0136, *Adoption of a Negative Declaration and Initial Study for the General Waste Discharge Requirements for Discharges from Agricultural Operations in the San Diego Region* (Tentative Negative Declaration/Initial Study). The San Diego Water Board will not take any action on these items at the workshop. (*Barry Pulver*)

PURPOSE: The San Diego Water Board has developed general waste discharge requirements (WDRs) to regulate discharges from commercial agriculture into surface waters and groundwaters of the State in the San Diego Region (collectively Tentative General Orders). The workshop is intended to provide information and address questions San Diego Water Board members or the public may have regarding the Tentative General Orders **(Supporting Document Nos. 1 and 2**) and the associated Tentative Negative Declaration/Initial Study **(Supporting Document No. 3)**.

RECOMMENDATION: None. The San Diego Water Board will not take any action on the Tentative General Orders or the Tentative Negative Declaration/Initial Study at the public workshop.

KEY ISSUES:

1. The San Diego Water Board began regulating discharges related to commercial agricultural activities in 1983.
2. If the Tentative General Orders are adopted, the owners and operators of commercial agricultural operations (also referred to as growers or Dischargers) will be required to enroll under the Tentative General Third-Party Group Order, the Tentative General Individual Order, or obtain individual WDRs.
3. If adopted, the Tentative General Orders will implement the State Water Resources Control Board (State Water Board) California *Nonpoint Source Program Implementation Plan* (NPS Program Plan) and *the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (Nonpoint Source Policy).[1]
4. If adopted, the Tentative General Orders will implement the *Total Maximum Daily Load for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed* (Rainbow Creek TMDL) and the *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 Tentative General Orders may also serve as a TMDL alternative for other identified water quality impairments related to agricultural activities in the San Diego Region.

PRACTICAL VISION:

Consistent with the mission of the *Strategizing for Healthy Waters* chapter of the Practical Vision, the Tentative General Orders integrate all applicable water quality standards, and require implementation of management practices as necessary in order to optimize protection of water quality and beneficial uses throughout the San Diego Region. Additionally, the Tentative General Orders implement the *Monitoring and Assessment* chapter of the

[1] The Nonpoint Source Policy is available at http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf (as of May 31, 2016)

Practical Vision by requiring surface water and groundwater monitoring to a) determine the status and trends of conditions in San Diego Region waters with respect to the water quality effects of agricultural operation waste discharges; b) evaluate the effectiveness of agricultural waste management practices; c) identify all drinking water wells on agricultural lands with nitrate concentrations that are detrimental to public health; d) determine if the agricultural operation regulatory program is succeeding in its ultimate purpose of achieving and maintaining water quality standards in surface waters and groundwater; and e) effectively communicate key findings to the public, dischargers, stakeholders, and decision-makers. The Tentative General Orders also further the goals of the *Recovery of Streams, Wetlands, and Riparian Areas* chapter of the Practical Vision by requiring the implementation of appropriate management practices at agricultural operations to prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards in waters of the State. This will help protect and restore surface water and groundwater located in areas of agricultural activity. Finally, the Tentative General Orders have provisions for participating in regional monitoring and assessment programs in keeping with San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of a Regional Monitoring Framework*.

DISCUSSION:

Background

It is estimated that within the San Diego Region there are approximately 6,000 commercial agricultural operations, on approximately 75,000 acres of land. The highest density of commercial agricultural operations is within the Santa Margarita River and San Luis Rey River Watersheds (See **Supporting Document No. 4.**). There are a wide variety of crops produced within the region, including cut flowers, fruit, vegetables, wine grapes, and nuts.

Agricultural discharges, including both irrigation water and storm water running off of agricultural fields into surface waters or percolating into groundwater, may carry constituents considered to be waste as defined under Water Code section 13050(d). These discharges can

affect water quality by transporting agricultural waste constituents such as pesticides and fertilizers, sediment, and salts from growing areas into surface waters and groundwater. In fact, an estimated 43 miles of streams/rivers and 1,244 acres of lakes/reservoirs have been identified as being impaired by pollutants associated with agricultural activities in the San Diego Region. Agricultural activities have also been identified as causing or contributing to nitrate impairment of groundwater in some areas of the San Diego Region.

The San Diego Water Board first began regulating discharges from commercial agricultural operations in 1983 with the adoption of a conditional waiver of WDRs, pursuant to Water Code section 13269 (1983 Waiver). The 1983 Waiver conditionally waived the requirement for submittal of a permit application (report of waste discharge or ROWD) for irrigation water runoff as long as the owner or operator of the agricultural operation implemented effective management practices, and the discharge did not cause exceedances of applicable water quality standards, nuisance conditions in the receiving waters, or toxicity to animal or plant life.

In 2007, the San Diego Water Board adopted Resolution No. R9-2007-0104, *Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Revised Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge Within the San Diego Region* (2007 Waiver). The 2007 Waiver allowed growers to form coalitions with third-party representatives that were responsible for outreach, education, and implementation of a number of 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. Development of general WDRs and the associated California Environmental Quality Act (CEQA) analysis commenced in 2014. Since 2014, the San Diego Water Board has held eight formal stakeholder meetings/workshops and has solicited public comments on several administrative drafts of the general

WDRs and the CEQA Initial Study and Environmental Checklist. The Tentative General Orders and Tentative Negative Declaration/Initial Study take into consideration comments received to date.

Additionally, the Tentative General Orders considered and incorporated, as appropriate, the following:

- The conclusions of the State Water Board Agricultural Expert Panel (Agricultural Expert Panel) that made recommendations on an appropriate regulatory framework for irrigated lands in fulfillment of Senate Bill X2-1. The Agricultural Expert Panel released their conclusions on September 9, 2014 in a report entitled *Conclusions of the Agricultural Expert Panel, Recommendations to the State Water Resources Control Board pertaining to the Irrigated Lands Regulatory Program*.[2]
- On February 8, 2016, the State Water Board issued *Draft Order WQ-2016-, 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, Issued by the California Regional Water Quality Control Board, Central Valley Region, SWRCB/OCC FILES A-2239(a)-(c)*. The proposed order was issued in response to several petitions made to the State Water Board to review General Order No. R5-2012-0116.[3]

Tentative General Orders Overview

The Tentative General Orders propose to regulate waste discharges from commercial agricultural operations in the San Diego Region. For the purposes of the Tentative General Orders, an agricultural operation is any agricultural business or trade activity, including farms, nurseries, and orchards, that produces crops with the

[2] Conclusions of the Agricultural Expert Panel, Recommendations to the State Water Resources Control Board pertaining to the Irrigated Lands Regulatory Program (September 9, 2014), available at http://www.swrcb.ca.gov/water_issues/programs/agriculture/docs/ILRP_expert_panel_final_report.pdf (as of May 31, 2016) (Agricultural Expert Panel Report).

[3] The proposed order can be accessed on the State Water Board website at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/a2239_sanjoaquin_ag.shtml

intent to make a profit. Discharges from agricultural activities not engaged in for profit, such as hobby farming or gardening are excluded from regulation under the Tentative General Orders.

The Tentative General Orders and the Tentative Negative Declaration/Initial Study will be considered by the San Diego Water Board for adoption at a public hearing to be held later this year. If adopted, the owners and operators of commercial agricultural operations (the growers) will be required to enroll under either the Tentative General Third-Party Group Order or the Tentative General Individual Order, or submit an ROWD to obtain coverage under individual WDRs.

The Tentative General Third-Party Group Order includes provisions allowing third-party groups to represent the growers. Under the Tentative Third-Party Group Order certain requirements are assigned to the individual growers and certain requirements are coordinated through their third-party representative. From a resource perspective, the third-party groups will allow the San Diego Water Board to leverage limited regulatory staff by acting as intermediaries between Board Staff and the growers, freeing Board Staff to focus on problem areas or actors. In addition, there are a number of cost benefits to the growers enrolled in a third-party group, including: lower annual WDR fees, potentially reduced costs in management practice implementation facilitated by access to third-party group management practice effectiveness information, significantly reduced monitoring costs due to allowance for regional water quality monitoring by the third party in lieu of individual monitoring, and reduced reporting costs.

The Tentative General Individual Order, as the name implies, applies to individual growers who have elected to not join a third-party group. Generally, the costs associated with this option are higher because the individual grower is responsible for developing its own monitoring and reporting program, including any supplemental studies that may be required in the event of a water quality standard exceedance.

Both Tentative General Orders regulate discharges from agricultural operations to surface waters as well as

groundwater. In brief summary, the Tentative General Orders require the growers, or their Third-Party Group, to do the following:

- Pay annual WDR fees.
- Develop and submit a Water Quality Protection Plan (WQPP), to implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards in waters of the State. The WQPP must also identify the monitoring locations that will be used to assess the effectiveness of the management practices and to characterize the impacts of agricultural activities on waters of the State. The WQPP must be implemented upon grower enrollment in the Tentative General Orders.
- Meet receiving water limitations which prohibit the grower from causing or contributing to exceedances of applicable water quality standards in surface water and groundwater.
- Conduct surface water monitoring to determine if existing management practices are leading to compliance with water quality requirements and implementation of improved water quality practices where they are not.
- Conduct monitoring of any on-site drinking supply well to determine if agricultural activities are causing or contributing to nitrate contamination of drinking water.
- Conduct visual evaluations of management practices to ensure that selected management practices are appropriate and effective to achieve compliance with water quality standards.
- Develop and implement a Water Quality Restoration Plan (WQRP) to respond to instances where water quality data has shown that water quality standards are not being met. A WQRP must have a specific schedule of tasks to implement new and improved management practices to achieve compliance with receiving water limitations and a monitoring system designed to measure whether the management practice changes are effective.

- Complete annual agricultural water quality protection training.
- Report annually on compliance with the Tentative General Orders.
- Implement applicable waste loads requirements and other implementation actions identified in the Rainbow Creek TMDL and the Bacteria TMDL.

Tentative Negative Declaration/Initial Study Overview

Pursuant to the California Environmental Quality Act (CEQA), (Pub. Resources Code section 21000 et seq.) and CEQA Guidelines (Cal. Code Regs., tit. 14, section 15000 et seq.), the San Diego Water Board is functioning as the lead agency for the adoption of the Tentative General Orders, has the principal responsibility for approving the project, and is responsible for preparation of environmental documents (Pub. Resources Code section 21067; Cal. Code Regs., tit. 14, section 15050).

In 2014, a CEQA Scoping Meeting was held and a draft CEQA Initial Study and Environmental Checklist was prepared. To be reflective of the current Tentative General Orders a second CEQA Scoping Meeting was convened in March 2016.

Based upon the initial study and consideration of comments from the scoping meetings, Staff is preparing a Negative Declaration.

Supporting Documents Availability for Public Review and Comment

Prior to today's workshop the San Diego Water Board will issue a notice announcing the availability of the above Tentative General Orders and Tentative Negative Declaration/Initial Study and the start of the public comment period on or about June 13, 2016. The draft CEQA documents will also be submitted to the California State Clearinghouse for distribution to state agencies for comment.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS: The Supporting Documents listed below will be provided in the Supplemental Agenda Package

1. Tentative General Third-Party Group Order
2. Tentative General Individual Order
3. Tentative Negative Declaration/Initial Study
   a. Tentative Resolution No. R9-2016-0136
   b. Draft CEQA Initial Study and Environmental Checklist
   c. Draft Negative Declaration
4. Location Map

PUBLIC NOTICE: Notice of today's workshop was provided to all known interested parties via e-mail on May 23, 2016, and posted on the San Diego Water Board website. Notice of today's workshop was also provided in the meeting notice and agenda for the June 22, 2016 Board meeting, which is posted on the San Diego Water Board's website.

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July 29, 2016

VIA E-MAIL [BARRY.PULVER@WATERBOARDS.CA.GOV; SANDIEGO@WATERBOARDS.CA.GOVS]

David Gibson, Executive Officer
San Diego Regional Water Quality Control Board
c/o Barry Pulver
2375 Northside Drive, Suite 100
San Diego, CA 92108

Re: Comment – Tentative General Orders Nos. R9-2016-0004/R9-2016-0005, and Tentative Resolution No. R9-2016-0136.

Dear Mr. Gibson:

On behalf of the Rancho Guejito Corporation, we would like to thank you for this opportunity to provide written comments on the San Diego Regional Water Quality Control Board's ("Regional Board") Draft General Waste Discharge Requirements for the Commercial Agricultural Operations Regulatory Program ("WDRs"). Rancho Guejito owns approximately 22,500 acres of land east of Escondido and north of the San Pasqual Valley that is dedicated to irrigated agriculture and ranching.

As stated in previous comments on this issue, Rancho Guejito's primary concern with the WDRs remains the need to provide coverage for the maintenance of existing farm roads and water supply facilities. Inclusion of these maintenance activities is consistent with the Clean Water Act and the California Environmental Quality Act ("CEQA"). It is also essential to the continued viable operations of farming activities across the San Diego region.

We read Sections I.A – H of the WDRs, Section I.B. of the Fact Sheet, and Attachment C to the WDRs as providing coverage for all discharges of waste associated with qualified Agricultural Operations, including discharges from maintenance to existing farm roads and water supply facilities. If this is not the case, please confirm that the WDRs do not cover discharges from such activities, and provide an explanation as to why.

Rancho Guejito is submitting the following comments to highlight additional issues with the WDRs. Please note that, as previously stated, these concerns are junior to Rancho Guejito's primary concern about permit coverage for routine maintenance activities.

Lastly, Rancho Guejito is aware that San Diego Regional Irrigated Lands Group Educational Corporation (SDRILG) is submitting written comments on the proposed WDRs. Rancho Guejito has been a member of the SDRILG since its formation in 2009, and will rely on SDRILG for compliance with the WDRs. Rancho Guejito fully supports SDRILG's comments and requests that the Regional Board give them special weight to reflect the entity's role as a regional coordinator that both the Regional Board and the farm community need to make the WDRs work. SDRILG's comments on the proposed monitoring plan are most concerning. SDRILG will be coordinating the monitoring plan for third party participants like Rancho Guejito and their concerns regarding the plan need to be addressed.

General Comments:

Continuing Education requirements are excessive

The WDRs will require agricultural operators to take a minimum of four hours of continuing education classes every year. This is too much of a burden for most farmers in the San Diego Region. They are busy taking care of their businesses and managing their operations and they have other continuing education requirements that they must also fit in. We request that the Regional Board consider revising this requirement to allow permittees who take continuing education for pesticide application to receive credit for this time. We further request that the Regional Board reduce the continuing education requirement to two hours every two years.

Reports should be submitted annually unless there are violations

The WDRs allow self-reporting for third party participants. This is a positive step forward and will go a long way toward making the WDRs successful for both the Regional Board and the agriculture community. However, the reporting requirements remain excessive. The WDRs require quarterly and annual reporting. We request that the Regional Board revise the WDRs to require an annual report with the information requested in the WDRs, and quarterly reporting if violations are found by the operator or the Regional Board.

The WDRs should include a Safe Harbor for self-reported violations

The California Department of Industrial Relations Division of Occupational Safety and Health (DOSH), has an inspection program that allows a farmer to request an inspection and if violations are found, the farmer will be required to correct them, but will not face enforcement. We request that the Regional Board consider a similar program for self-reported violations. This would encourage farmers to continually improve their management practices, and to work with Regional Board staff without fear of fines or other enforcement action.

RWL requirements are counter-productive and should be removed

The WDRs include Receiving Waters Limitations ("RWL") language that is borrowed from municipal stormwater permits issued under the Clean Water Act. This language has been interpreted by federal courts and the State Water Resources Control Board as creating numeric discharge limits for all water quality objectives that are expressed numerically in the Basin Plan, including TMDLs. The feasibility of complying with this prohibition is currently being challenged in Orange County Superior Court. (*See Cities of Duarte and Huntington Park v State Water Resources Control Board*, Orange County Superior Court Case No. 30-2016-00833614.)

It is inappropriate, and potentially unlawful for the Regional Board to include this requirement in the WDRs without explicit findings that the restrictions are necessary, and reasonably achievable. No existing state law or policy requires the Regional Board to include the proposed RWL language in the WDRs, and although both the WDRs and the Fact Sheet cite the State Board's Non-point Source Policy for authority to include the RWL requirement, nothing in the Policy explicitly requires the language as written.

The Non-point Source Policy requires a tie between the management practices included in the WDRs and the water quality objectives and beneficial uses in the San Diego Basin plan. It does not require a discharge prohibition. Specifically, the Policy states that the WDRs must "address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses." All that this requires is findings that the management practices in the WDRs will achieve and maintain the Basin Plan objectives. There is nothing in the Policy that could be reasonably interpreted as requiring an outright prohibition.

There are good reasons why the Regional Board should refrain from including the RWL language in the WDRs. For example, importing the numeric water quality objectives from the Basin Plan will interfere with development and use of recycled water for irrigation purposes. Recycled water has TDS at levels that often exceed the Basin Plan's freshwater standard. Incidental runoff would be a violation of the WDRs. Additionally, in certain groundwater basins, simple use of the recycled or even imported water for irrigation could be a violation because it would exceed TDS limits assigned to the underlying aquifer. Under the "cause or contribute" language in the RWL prohibition, any amount of TDS discharged to a groundwater basin or surface water could be viewed as a violation.

The RWL requirement is tantamount to outlawing irrigation and needs to be significantly revised or removed.

CEQA Comments:

The Initial Study and proposed Negative Declaration are inadequate CEQA because there is evidence in the record to support a fair argument that potentially significant environmental impacts may result from the WDRs and on that basis an environmental impact report must be prepared before the Regional Board can take action on the WDRs. (Pub. Resources Code, § 21080(d); 14 C.C.R., § 15064(a).)

First, under the heading, "Structural Management Practices," the Initial Study states: "During inspections of Agricultural Operations in 2013, the San Diego Water Board found that 82% of the Agricultural Operations enrolled in the 2007 Waiver, and 58% of the Agricultural Operations not enrolled in the 2007 Waiver, had implemented [structural] management practices." (Initial Study at 12.) Thus, the primary compliance methods with the WDRs' predecessor regulations have been structural management practices, meaning "management practices that involve the installation of engineering solutions (e.g., physical structures or barriers) that divert, store, and/or treat waste." (Initial Study at 4.) So past compliance has typically been accomplished via physical changes in the environment. This contradicts repeated inferences in the Initial Study that environmental impacts will be minimal because compliance with the WDRs can be attained via non-structural controls. (See e.g., Initial Study at 13 ["Furthermore, it is likely that the site-specific conditions may not require the construction of structural management practices."].)

In fact, based on past experience, the WDRs will *likely* require structural management practices that cause *physical changes in the environment* in the *majority of cases*. Based on historical compliance methods, it is not speculative to evaluate how compliance with the WDRs will occur. The Initial Study must analyze the reasonably foreseeable compliance methods and associated physical impacts on the environment that can be expected as a result of the WDRs.[1] Only then can the true scope of the WDRs' impacts be understood by the public. To do otherwise, is an improper attempt to piecemeal evaluation of the WDRs' true impacts. (14 C.C.R., § 15063(a)(1); see *City of Antioch v. City Council* (1986) 187 Cal.App.3d 1325 [piecemeal review of development found improper].)

Second, the Initial Study appropriately concludes that the economic burden of implementing reasonably foreseeable management practices and the monitoring and reporting program may result in the cessation of agricultural activities. (Initial Study at 7.) The costs of compliance will put some farmers out of business. However, the Initial Study concludes that

[1] Although lacking details, there is indication that the expected compliance methods *are* reasonably foreseeable. (See e.g., Initial Study at 15 n.15 ["only a limited number of Agricultural Operations would likely require the construction of a sedimentation basin to comply with the General Orders"].)

cessation of agricultural activities will not convert farmland into non-agricultural uses, reasoning:

> These Agricultural Operations are likely to be small growers, commonly called hobby farms. These agricultural properties are located on parcels zoned as agricultural or residential with minimum lot sizes that would prevent increased residential densities or the conversion to non-agricultural or non-residential land use. The cessation of commercial activities would not result in the land being converted to non-agricultural land use. (Initial Study at 7.)

Cessation of agricultural activities qualifies as a conversion of farmland to non-agricultural uses. Any farmland that is not used for irrigated agricultural production during a four-year period does not meet the definition of "prime farmland," "farmland of statewide importance," or "unique farmland." (Cal. Dept. of Conservation, 2015 California Farmland Conversion Report, 6; see also Initial Study at 9 ["Land must have been cropped at some time during the 4 years prior to the mapping date" to qualify as Unique Farmland.].) Mere cessation of agricultural activities thus converts entire categories of farmland into non-agricultural uses.

The Initial Study claims that: "Even where an individual Agricultural Operation determines that it would rather cease operating than comply with environmental regulations … agricultural uses would likely be preserved because of land use restrictions." (Initial Study at 5.) But the fact that applicable zoning may prevent a residential subdivision from being built on farmland does nothing to prevent the loss of farmland due to disuse or conversion to other uses, such as detention basins.

The Initial Study must consider and analyze the amount of farmland that will foreseeably be affected by the cessation of agricultural activities and the amount of farmland that will be converted to non-agricultural uses from the cessation. Currently, the Initial Study concludes that only a few small farms would cease their agricultural activities. (Initial Study at 11.) Yet, according to the Initial Study, "the majority of Agricultural Operations within the jurisdictional boundaries of the San Diego Water Board are relatively small, with the median size being approximately 4 acres." (Initial Study at 5.) The fact that most agricultural operators impacted by the WDRs are small is evidence that the WDRs' economic and subsequent indirect physical impacts on the environmental will be significant. It is reasonably foreseeable that the many small agricultural operations will cease under the burden of the WDRs' new costs. Thus, this full economic and indirect environmental impact of the WDRs must be fully analyzed.

Aesthetics

The Initial Study states that the WDRs will have no impact on aesthetics. (Initial Study at 8.) However, as discussed above, this ignores the likelihood that many agricultural operations are

likely to cease as a result of the compliance costs. It is reasonably foreseeable that fields once full of "cut flowers, fruit, vegetables, wine grapes, and nuts" (Initial Study at 5) will be replaced with weeds and detention basins. The Initial Study lacks any analysis of the aesthetic impacts associated with land fallowed (as a result of compliance costs) or converted to another use (as a result of compliance efforts) likely to be caused by the WDRs.

There is also no evidence to support the Initial Study's conclusion that the WDRs will not adversely affect scenic vistas, scenic resources and visual character of the areas impacted by the WDRs, particularly since the Initial Study fails to describe where scenic vista and scenic resources are located in proximity to agricultural operations that may be impacted by the WDRs. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 940, 946 [CEQA's purposes are subverted when a lead agency "omits material necessary to informed decisionmaking and informed public participation"].) Increased fallowing and decreased grazing can result in aesthetic impacts relating to the degradation of the visual character of the land if it is converted from verdant farmland to weed-choked, barren fields, belying the Initial Study's conclusion of "less than significant effect" in this area. (Initial Study at 8.) The Initial Study needs to provide more information and details on the reasonably foreseeable aesthetic impacts caused by the WDRs.

Agricultural and Forest Resources

As previously explained, the Initial Study states: "Land must have been cropped at some time during the 4 years prior to the mapping date" to qualify as Unique Farmland. (Initial Study at 9.) That is, the Initial Study concedes that if agricultural operations cease for more than four years as a result of the WDRs, that land is no longer Unique Farmland. Yet, the Initial Study discounts the significance of such loss, claiming that "the impact is not expected to be significant as the majority [of] farmland in the San Diego Region does not qualify as 'prime,' 'unique,' or 'farmland of statewide importance.'" (Initial Study at 11.) This discussion is inadequate.

First, there is no clear threshold in the Initial Study as to how much farmland loss *would* be significant—unless the Initial Study's position truly is that no impact to farmland is significant so long as less than 50% of the farmland in the region fails to qualify as prime, unique or farmland of statewide importance. But even assuming this is the position, the Initial Study lacks any basis for such a threshold.

Second, there is no discussion of how much farmland qualifying as prime, unique or farmland of statewide importance may be impacted by the WDRs. In fact, aside from a reference stating that "only 6% of soils" in San Diego County meet the definition of prime agricultural land (Initial Study at p. 11), there is no indication as to how much land meets the definition of prime, unique or farmland of statewide importance. Furthermore, the fact that prime farmland is not prevalent in San Diego County actually cuts *against* the Initial Study's conclusion that the

impact is less than significant. The Initial Study's justification that the impact will be less than significant (i.e., because the majority of farmland in the San Diego Region does not qualify as 'prime,' 'unique,' or 'farmland of statewide importance') does not support the conclusion. Considering its scarcity, the loss of *any* prime farmland is a potentially significant impact and must be analyzed.

The amount of farmland that will foreseeably be affected by the cessation of agricultural activities and the amount of farmland that will be converted to non-agricultural uses from the cessation are not disclosed, much less analyzed, in the Initial Study. More details are required for the public to understand how much valuable and scarce farmland will be lost as a result of WDRs compliance methods and costs. The Initial Study must be revised to address these points.

Air Quality

The Initial Study states that "reasonably foreseeable management practices are not expected to be on a scale large enough to result in significant conflict or obstruction of an applicable air quality plan, or to expose sensitive receptors to substantial pollutant concentrations." (Initial Study at 18.) This conclusion is unsupported by evidence. Further, the Initial Study fails to disclose applicable air quality plans or quantify the air emissions expected from the management practices that even the Initial Study admits are "reasonably foreseeable." (*Ibid.*) The fact that toxic emissions and odors are only "short-term" (see Initial Study at 18 and 19) is not evidence that the impacts will be less than significant. (See *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 732.)

Additionally, fallowed fields that cannot be otherwise developed (due to zoning restrictions) are likely to result in loose soil and worsened air quality conditions. Cessation of agricultural activities has been shown to result in indirect long-term air quality impacts and impacts to geology and soils due to loss of topsoil. (See, e.g., *Westlands Water Dist. v. U.S.* (E.D. Cal. 1994) 1994 U.S.Dist.LEXIS 6260, *7-8 [increased land fallowing has attendant increases in fugitive dust emissions]; *Westlands Water Dist. v. United States* (E.D. Cal. 1994) 1994 U.S.Dist.LEXIS 6276, *52 [finding lack of water for farmland could result in soil erosion and depletion of quality soil]; Sharratt et al., Loss of Soil and PM10 from Agricultural Fields Associated With High Winds on the Columbia Plateau (2006) 32 Earth Surf. Process, Landforms, 621-630 [fallowing leads to increased levels of soil erosion]; Soil Erosion: A Food and Environmental Threat (2006) 8 Environment, Development and Sustainability 119-137, 124 (2006) [leaving cropland unplanted exposes soil to erosion; soil erosion in the United States costs billions of dollars in loss of productivity].) The amount of fugitive dust emissions and loss of topsoil resulting from cessation of agricultural activities needs to be analyzed.

Biological Resources

As elsewhere in the Initial Study, the Biological Resources analysis consists of bare conclusions, unsupported by substantial evidence. For example, the discussion of issues (c), (e), and (f) explains: "Reasonably foreseeable management practices are not expected to be on a scale large enough that would result in direct removal of filling of riparian habitat, wetlands, or any sensitive natural communities or conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance." (Initial Study at 20.) This discussion fails to disclose any local policies or ordinances protecting biological resources or explain how no impact will occur. As discussed above, based on previous compliance practices, it is reasonably foreseeable that the WDRs will result in physical changes in the environment. Without adequate disclosure and analysis of the reasonably foreseeable compliance methods and impacts, the Initial Study lacks any basis to conclude that the WDRs will not impact wetlands, conflict with local policies or ordinances protecting biological resources, or conflict with a conservation plan.

The discussion of issues (a), (b), and (d) also lack adequate analysis and support for the less than significant impact conclusion. (See Initial Study at 21.) The discussion fails to disclose the presence of any species identified as candidate, sensitive, or special status species that exist and could be impacted by the WDRs. The Initial Study also fails to disclose the presence of any riparian habitat or other sensitive natural communities that exist and could be impacted by the WDRs. Although the Initial Study asserts that impacts will be less than significant, the conclusion is not supported. For example, the Initial Study admits that structural controls, "such as vegetated swales or buffer strips, could increase the diversity or number of species," but forecloses further analysis by baldly asserting that this is assuredly "beneficial." Without understanding which species currently exist and how the increased diversity or number of species will impact existing species (including potentially special status species), it is inadequate for the Initial Study to conclude that the WDRs' reasonably foreseeable physical changes in the environment are "beneficial." If special status species exist in areas where WDRs impacts will occur, an increase in the number or diversity of other species is reasonably likely to impact the special species, whether native or not.

The Initial Study's concession that the WDRs may result in reduced stream flows and that the "reduction or elimination of irrigation return flows could result in a barrier to the migration or movement of animals … by eliminating habitat dependent on those flows" (Initial Study at 21) is further evidence that species will be impacted. But without adequate analysis of which species exist and how they will be impacted, the public is left unaware of the WDRs' true effects on the environment, in violation of CEQA.

Additionally, because typical management practices include "catch basins and detention ponds" (Initial Study at 4), it is reasonably foreseeable that the WDRs will have significant effects in riparian areas or sensitive habitats. These impacts need to be disclosed and analyzed.

Cultural Resources

The Initial Study lacks adequate disclosure and analysis of the WDRs' impacts on cultural resources. The single-paragraph discussion states that no impacts will occur "[a]t most sites." (Initial Study at 22.) This raises the question as to which sites are not "most sites." Unfortunately, the Initial Study does not disclose the answer to this question and fails to provide any further analysis. Considering detention basins are a reasonably foreseeable result of the WDRs, it is reasonably foreseeable that excavation will be required and cultural resources may be impacted by the WDRs. Thus, further analysis and disclosure of the WDRs' impacts is necessary.

Greenhouse Gas Emissions

The analysis of greenhouse gas emissions concludes that the WDRs will not conflict with any applicable plan, policy or regulation of any agency adopted for the purpose of reducing the emissions of greenhouse gases. (Initial Study at 25.) But the Initial Study fails to disclose which plans, policies or regulations are applicable to the WDRs and its impacts. It is not possible to understand the WDRs' consistency with applicable plans without knowing which plans are applicable. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 940, 946 [CEQA's purposes are subverted when a lead agency "omits material necessary to informed decisionmaking and informed public participation"].)

And, as with the Air Quality discussion, the Initial Study's reliance on the short-term nature of greenhouse gas emission impacts is insufficient to justify the conclusion that the WDRs' impact is less than significant. (See *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 732.)

BEST BEST & KRIEGER LLP
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Rancho Guejito appreciates the opportunity to submit these comments on the WDRs and Initial Study. We look forward to working with the Regional Board on further development of the WDRs. If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

J. G. Andre Monette
of BEST BEST & KRIEGER LLP

THE CITY OF SAN DIEGO

July 29, 2016

VIA EMAIL

San Diego Water Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

RE: Comment – Tentative General Orders Nos. R9-2016-0004/R9-2016-0005

To Whom It May Concern:

The City of San Diego (City) appreciates the opportunity to comment on the adoption of the General Waste Discharge Requirements for Commercial Agriculture Operations (WDR). We understand that the San Diego Regional Water Quality Control Board (San Diego Water Board) is proposing Waste Discharge Requirements to provide additional clarification and control of discharges from agricultural operations to protect water quality in the San Diego region.

The City is pleased with the inclusion of the Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Bacteria TMDL) in the WDR and wants to ensure the monitoring and implementation of the requirements are effective. We have detailed our comments to strengthen the TMDL requirements in the attached comment table.

Thank you for your time and consideration of these comments. If you have questions, please contact Ruth Kolb at (858) 541-4328 or rkolb@sandiego.gov.

Sincerely,

Drew Kleis
Deputy Director

DK\rk

Enclosure: 1. Comment Table Regarding Tentative Order R9-2016-0004 General WDR for Commercial Agricultural Operations

Transportation & Storm Water Department
9370 Chesapeake Drive, Suite 100, MS 1900 • San Diego, CA 92123
Hotline (619) 235-1000 Fax (858) 541-4350

cc: Mike Hansen, Deputy Chief of Staff/Chief of Policy
Alejandra Gavaldon, Director of Federal Government Affairs & Water Policy
Paz Gomez, Deputy Chief Operating Officer, Infrastructure/Public Works
Kris McFadden, Director, Transportation & Storm Water Department
Halla Raza, Director, Public Utilities Department
Ben Carrier, Deputy City Attorney, City Attorney's Office
Ruth Kolb, Program Manager, Transportation & Storm Water Department

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
II.H	A-4	General Monitoring and Reporting Requirements	To provide documentation to support a statement that no discharge occurred during the monitoring period.	For any monitoring period in which no discharge occurred, the monitoring report shall include a statement certifying that no discharge occurred during the monitoring period and provide documentation showing lack of runoff as required in Permit Sections III.B.2.c and IV.B.2.d.
III. B.2.b	A-5	Core Monitoring Requirements	To clarify the frequency of sampling. This language is consistent with other WDRs.	A sample should be collected and analyzed at each site during one qualifying storm event. If there is no runoff at the monitoring site, then the observation shall be documented with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site.
III. B.2.c	A-5	Core Monitoring Requirements	To clarify the frequency of sampling. This language is consistent with other WDRs.	Dry season samples shall be collected once after the site has applied pesticides or fertilizers and during an irrigation event. If there is no runoff at the monitoring site, then the observation shall be documented with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site. A site shall be monitored on a regular basis in the dry season (at a minimum monthly) to determine if discharge is occurring.
Attachment E	E-8	Impaired Waterbodies and Applicable TMDLs, Implementation Plan	To require agricultural operators to reduce their bacteria loads according to the Load Allocations (LA) on page E-7.	Revise the language on page E-7 and E-8 to be consistent with the Bacteria TMDL Basin Plan Amendment (page A46), which states that, if individual or general WDRs are developed and issued to controllable nonpoint sources, the WDRs should incorporate "Effluent limitations that are consistent with the requirements and assumptions of the nonpoint source LAs. Effluent limitations should be expressed as numeric effluent limitations, if feasible and/or as a BMP program." Monitoring alone is insufficient to ensure that agricultural sources will reduce their bacteria loads: These sources should be subject to effluent limitations in the WDRs.

County of San Diego

RICHARD E. CROMPTON
DIRECTOR

DEPARTMENT OF PUBLIC WORKS
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July 29, 2016

Barry Pulver
Engineering Geologist
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700

Electronic submission: sandiego@waterboards.ca.gov

Dear Mr. Pulver:

COMMENTS ON TENTATIVE GENERAL ORDERS - NOS. R9-2016-0004/R9-2016-0005, AND TENTATIVE RESOLUTION NO. R9-2016-0136

The County of San Diego (County) appreciates the opportunity to provide comments on the General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations within the San Diego Region (Tentative Orders No. R9-2016-0004 and R9-2016-0005 [Orders]). The County strongly supports the proposed approach of regulating the commercial agricultural community through a general waste discharge permit instead of the now expired agricultural waiver. The Tentative Orders provide a solid framework for regulating the agricultural industry that will ultimately contribute to improved water quality in our region. In particular, the County is encouraged to see that agricultural operations will have the option to enroll either as a member of a third-party group or individually. We also support the use of these Orders to serve as a non-TMDL solution to addressing water quality impairments where agriculture has been identified as a contributing source.

The following are comments we feel will improve the Orders and support achievement of meaningful environmental outcomes.

Discharges Covered Under General Order (Tentative Order No. R9-2016-0004, I.G.3; Tentative Order No. R9-2016-0005, I.F.3)

Discharges Covered

The Tentative Orders regulate discharges from Agricultural Operations that have intent to make a profit. One of the criteria the Regional Board uses for this determination is whether the owner or operator of an Agricultural Operation holds a *current* Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting.

The County requests this criterion be clarified to state:

> "The owner or operator of an Agricultural Operation *required* to obtain an Operator Identification Number/Restricted Materials Permit Number for reporting pesticide use to the respective County Agricultural Commissioner."

The suggested language more accurately describes the Agricultural Operations that would be required to enroll. As currently written, the criterion is contingent upon compliance with applicable pesticide laws and regulations.

Additionally, to ensure all Agricultural Operations within the San Diego Region with intent to make a profit are covered under the Tentative Orders, the County recommends the inclusion of the following additional criteria be included:

- The owner or operator of the Agricultural Operation is registered with the California Department of Food and Agriculture Organic Program.
- The owner or operator of the Agricultural Operation holds a Certified Producer's Certificate from the respective County Agricultural Commissioner.
- The owner or operator of the Agricultural Operation holds a nursery license (Type 1, 2, or 4) with the California Department of Food and Agriculture.

Discharges Not Covered Under General Order (Tentative Order No. R9-2016-0004, I.H.11, III.E.1; Tentative Order No. R9-2016-0005, I.G.11, II.E.1)

Discharges Not Covered

The Tentative Orders do not provide coverage for discharges from Agricultural Operations where all growing operations are conducted within buildings or in completely enclosed areas with no potential to discharge waste to Waters of the State. The County supports this important exemption for Agricultural Operations meeting these criteria. As currently written, the Tentative Orders require Agricultural Operations to file a Notice of Intent (NOI) in order to receive a Notice of Exclusion (NOEX). The County requests the Tentative Orders provide a simplified parallel process for eligible Agricultural Operations to obtain a NOEX without submitting an NOI. Additionally, we request clarification about whether businesses such as greenhouses, which may have roof runoff, but all growing operations are conducted within enclosed areas, would qualify for this exemption.

Total Maximum Daily Loads

The linkage between the Total Maximum Daily Load (TMDL) requirements, Water Quality Protection Plan (WQPP) and Water Quality Restoration Program Plan (WQRP) are unclear. Further, it is not clear how compliance with TMDL requirements will be determined. For example, for the Rainbow Creek Nutrient TMDL, growers are required to implement the Rainbow Creek Nutrient Reduction Management Plan (NRMP), but it is not clearly stated that the control measures in the NRMP should be incorporated into the WQPP and/or WQRP.

As a result, agricultural dischargers in TMDL waterbodies may end up implementing multiple plans for the same constituents (e.g. if benchmark exceedances occur for constituents covered by a TMDL). It would be clearer if the WQPP and WQRP were required to incorporate any applicable TMDL requirements so that all control measures growers must implement are in a single place, and it is clear that implementing the WQPP and WQRP constitute compliance with the TMDL requirements.

In addition, the County requests that the Orders contain an explicit reopener provision to incorporate TMDL amendments, new TMDLs, or TMDL alternatives that are approved in the future. Since the Orders do not currently include an expiration date, it is important that they contain a mechanism to incorporate amendments to existing TMDLs as well as future TMDLs or TMDL alternatives. The incorporation of newly adopted TMDLs should also be required to be considered in the WQPP and WQRP modifications.

WQPP Clarifications

As currently written, the WQPP due upon Notice of Intent (NOI) submittal must include a schedule for operations and maintenance of control measures to meet all receiving water limitations regardless of whether or not exceedances of the limitations have occurred (Section VII.C.6.m). It may not be appropriate to ask agricultural dischargers to determine future practices and a schedule for their implementation until it is deemed that additional management is necessary to meet water quality standards. The County requests that specific control measures and a schedule for implementation only be required to be provided in the WQRP *after* a benchmark exceedance is triggered by monitoring results.

The scaled operation map submittal requirements outlined in Section VII.C.6.k are excessive as compared to other regions. The County requests that the operation map requirements be reduced to the minimum required to assess compliance with Order requirements. For example, only operations on site should be required to be mapped, not off-site areas where the operator/land owner likely does not have control of the activities.

The detailed visual monitoring program and schedule for evaluating management practices provided in Section VII.C.6.n appear duplicative when farmers are required to perform both quarterly self-inspections and annual self-assessments. Please remove the requirement for the visual monitoring program as part of the WQPP.

WQRP Clarifications

The schedule for development of the WQRP is too short (90 days). The County recommends it be made longer to allow growers sufficient time to complete the following steps: (1) obtain and evaluate the laboratory results; (2) determine if agriculture is the source of the exceedance; and (3) identify appropriate management measures, if needed.

WQRPs should also be allowed to group pollutants with similar management practices into one plan and/or add additional pollutants exceeding benchmarks into an existing WQRP if they have similar management practices. The County requests modifications to the language regarding the development of WQRPs to allow flexibility to incorporate new control measures into existing plans and develop one plan to cover all similar benchmark exceedances.

Quarterly Assessment

The County requests the following clarifications to the quarterly assessment requirements. In the Monitoring and Reporting section (Attachment A, Section III.B.2.c) of the Third Party Group Order there are specifications about when dry weather monitoring should occur that are problematic in operating a regional monitoring program. When those that have control over timing of irrigation are doing the assessment, it is more appropriate for the requirement that quarterly assessments be done during irrigation events.

Annual Self-Assessment
The requirement in Section VII.E.4 for the listing of non-compliance and specific information about each incident is not clearly stated and references to compliance are scattered throughout the Order and not explained in Attachment J: Annual Self-Assessment Report, or the instructions that accompany the report template. The County requests the Order be modified to clarify the compliance requirements and consolidate them into one place for clarity on what is required to be assessed and reported. This will make the requirements more understandable and easier to access for Agricultural Operations.

Overly Prescriptive Elements of the Order
A number of the specific requirements in the Tentative Order are excessive compared to other agricultural waivers and/or waste discharge requirements in California. Some of these may be challenging for agricultural dischargers to develop and implement and they are unlikely to provide measureable improvements in water quality.

Education
The Order requires four hours of education per year, which is more than some other regions. The education requirements should be reduced to two hours per year for consistency with other regions.

Annual Self-Assessment Part F – Association Communication Requirement
Tracking and managing multiple proofs of contact with various agencies (the same ones that are likely to provide education opportunities and will be documented under the training requirements) is an unnecessary burden for both Agricultural Operators and the third-party group. If a third-party group produces newsletters or other communications or passes along information from other agencies, a single copy of these communications included in the third-party group's annual report should be sufficient. On-farm meetings or consultations that are specific to a particular operation should be required to be documented, but any additional documentation is unnecessary.

Monitoring and Reporting Attachment A
Section III.B.2.b&c are overly prescriptive in regards to the timing of monitoring events. Part b lists specifications for wet weather monitoring and since samples shall be collected within the first 24 hours of a storm with a minimum of 0.5" of rainfall, the added requirement that a "no runoff" determination also include evidence that irrigation was occurring should be removed. The purpose of wet weather sampling is to evaluate the impacts of storm water runoff and farmers are not going to be irrigating within such close proximity to a significant rain event. Part c requirements for dry weather monitoring are only appropriate for on-farm/edge-of-field monitoring. When assessing contributions from a number of farms at numerous monitoring sites, timing of sample collection to ensure pesticide and fertilizer application and during irrigation is a logistical impossibility to coordinate for a group monitoring program. An alternative approach is recommended under the quarterly assessment comments of this letter; where the timing of the assessment is based on these specifications.

Monitoring Requirements
The United States Environmental Protection Agency has recommended a change to the preferred bacterial indicators for inland surface waters from enterococcus to both enterococcus and E. coli. Consider using both enterococcus and E. coli as the bacterial indicators for freshwater and enterococcus as the bacterial indicator for saline waters.

There is an extensive list of required analyses in Table A-3 as part of the bioassessment monitoring requirements. Please clarify how bioassessment monitoring data will be used by Agricultural Operations to improve their management decisions to protect water quality.

If a property exceeds the MCL for nitrate, the Order calls for notification and annual sampling. Annual sampling may be insufficient to capture seasonal variation in the impacted aquifer. Please consider requiring more frequent sampling if necessary, while allowing for sampling frequencies to be reduced based on results.

If agricultural operations are shown to be impacting drinking water wells, it is unclear whether or how an Agricultural Operation would be required to respond and/or change practices. Please clarify.

Provisions
To increase transparency with stakeholders, the County requests that the potential enforcement actions implied in section VII.F of the Orders be listed. Clarification of these potential enforcement actions will provide a level playing field for all potential dischargers and a higher level of assurance that appropriate follow up actions will be implemented in the event of non-compliance.

Thank you for the opportunity to comment on the draft Waste Discharge Requirements for Agricultural Operations. If you have any questions, please contact Todd Snyder, Watershed Protection Program Manager, at (858) 694-3672, or via e-mail at Todd.Snyder@sdcounty.ca.gov.

Sincerely,

RICHARD E. CROMPTON, Director
Department of Public Works

cc: Ha Dang, Director - Department of Agriculture, Weights and Measures
Todd Snyder – Department of Public Works

Pulver, Barry@Waterboards

From: R.Mina <rami.mina@gmail.com>
Sent: Monday, June 27, 2016 4:24 PM
To: Pulver, Barry@Waterboards
Subject: Proposed WDR's

Barry:

Thanks for taking the time and effort to rewrite the proposed waste discharge regulations. As mentioned in our last phone conversation, I have major concerns related to the viability of small avocado groves in the southern California area if we are bound by the proposed WDRs. This email documents the reasons.

In terms of the specifics of the latest proposed WDRs, small growers would have been glad to comply with the "individual" regulations if the fees were waived. Coalition member annual charges are lower than the annual fees for individuals, hence based on cost and extra responsibility, why would anyone choose the individual option?

It seems to me your goal is to improve the quality of our watersheds rather than collect fees. In fact, the federal government is assisting us financially by allowing generous write-offs and subsidising expenses such as crop insurance and others. Thus one government agency is attempting to reduce our financial burden while another in increasing it, without water quality improvement.

As you know from our grove data I previously shared with you, my situation is fairly typical of many small growers in the area. Highlights follow:

- *In the 10 years our 5 acre grove has been in operation, we had one year of profits and 9 years of losses. Even if tax write-offs are considered, we annually experience net losses of ~$3600.*
- *We must use good agricultural practices. i.e apply the optimum amount of fertilisers and water to reduce cost and minimise waste which also results in decreased contamination of surrounding watersheds*
- *water and labor costs are increasing, while avocado prices are decreasing due to south American imports.*

I and many of my fellow small avocado growers are seriously considering turning our water off and exiting the business. Many of our northern SD region have already done so because their water cost is significantly higher than ours. Grove managers and growers are worried that this may be the proverbial straw that broke the camels back.

If the proposed WDRs are approved as proposed, I personally cannot comply and my only alternative will be to exit the business. I'm sure many of my fellow growers will be doing the same if they have not already done so. It would be a shame if our beautiful green Southern California region is converted into brown brush.

Respectfully,

Rami Mina
951-699 1799

SAN DIEGO REGION
IRRIGATED LANDS GROUP

July 29, 2016

Barry Pulver
Engineering Geologist
California Regional Water Quality Control Board San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108

Comment – Tentative General Order No. R9-2016-0004 and Tentative Resolution No. R9-2016-0136

Dear Mr. Pulver,

Thank you for this opportunity to comment on the proposed 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 (Third-Party General Order).

The San Diego Regional Irrigated Lands Group Educational Corporation (SDRILG) is a California 501(c)(5) non-profit corporation. The stated purpose of SDRILG reads:

The purpose of this corporation is to provide for the protection of surface water by identifying, including through research, and promoting management practices to members of the Farm Bureau who are agricultural operators within the jurisdiction of the San Diego Regional Water Quality Control Board that, when implemented, may reduce the potential impact of irrigated agriculture on waters of the State of California. Within the context of the general purpose stated above, this Corporation is established for charitable, educational and public purposes to include, but not limited to, an educational and outreach program designed to inform agricultural operators on ways to manage their agricultural operations to benefit water quality in the watersheds within the jurisdiction of the San Diego Regional Water Quality Control Board.

SDRILG was formed in September, 2009, for the express purpose of giving producers a means to comply with Waiver No. 4 through a group effort. Upon adoption of the Third-Party General Order SDRILG will submit a letter of application for recognition as a Third-Party Group. We believe the letter will show that SDRILG has the ability to carry out the responsibilities of a Third-Party Group as required.

While we have a number of item-specific comments to offer, we do have two general comments and will begin with those.

Our first comment is that it was our observation under Waiver No. 4 well under one-half of the qualifying farm operations in the region were compelled to join a monitoring group. With that history we think it should be acknowledged that the Third-Party Groups may face challenges in

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meeting the expectations and requirements of the Third-Party General Order. The Third-Party Groups will have no capacity or reach beyond their combined member base.

The second comment is in regards to wholesale nurseries. In the San Diego Region wholesale nurseries are under two layers of regulation. Nurseries are subject to a schedule of fees and periodic inspections by the Co-permittees under the Waste Discharge Requirements for Discharges from the Municipal Separate Storm System (MS4). Additionally, wholesale nurseries will be included for compliance with the Third-Party General Order. We believe the Third-Party General Order will protect the waters of the region and wholesale nurseries should be relieved of their obligation of fees and inspections under the MS4 when they can show their respective co-permittee that they are members of a Third-Party Group and in compliance with the obligations in the Third-Party General Order.

Please accept the following as our section-by-section comments on the Third-Party General Order:

I. FINDINGS

D. It is stated here that a property owner could be held responsible for failure by a tenant to comply with the General Order. We are concerned that the prospect for transferring compliance responsibility to the property owner as a result of an operator's failure would have a dampening effect on the availability of leased land for farming.

G.3. The following addition (shown as underline) is suggested in order to include those operators who have failed to obtain an Operation Identification Number though required by law:

> 3. The owner or operator of the Agricultural Operation holds <u>or is required to hold</u> a current Operator Identification Number/Permit from a local County Agricultural Commissioner for pesticide use reporting.

O. While it is understood that this Third-Party Order does not address dischargers who are not participating in a third-party group, we think it would be appropriate to mention here that a second order exists. If a discharger only referenced this order they would be made aware that not being a member of an approved Third-Party Group requires individual compliance.

III. MEMBER APPLICATION FOR COVERAGE UNDER THIS GENERAL ORDER

B.1. It is stated here that dischargers have 180 days from the effective date of the General Order in order to submit a completed Notice of Intent (NOI), which will come through the Third-Party Group. The 180 day timeframe will be very difficult to meet. From the effective date of the General Order the Third-Party Group must first apply for and receive a Notice of Applicability from the San Diego Water Board before any work can begin. The Third-Party Group must then launch the enormous task of enrolling members and assisting members to complete their individual Water Quality Protection Plans (WQPP). Creating electronically transmittable WQPPs will require the development of custom software. In this same timeframe the Third-Party Group is required to submit its Monitoring Program Plan. At best, we believe it will take 270 days for the Third-Party Group to be in a position to submit the NOI's for its members.

C.1. We are concerned about the requirement that the members' WQPP must be sent to the Regional Board. Information within WQPPs will contain intellectual property, trade secrets, and proprietary information, much of which has no correlation or nexus to the Regional Board's authority to regulate water quality. Prior to any request for the entire WQPP, the Regional Board should make a finding showing the necessity of the data and information required to be submitted and how such data is related to water quality. Such information must remain confidential. The Porter-Cologne Act explicitly provides protection to members for intellectual property, trade secrets, and proprietary information that may be within a WQPP, monitoring report, or technical submittal:

> When requested by the person furnishing a report, **the portions of a report that might disclose trade secrets or secret processes may not be made available for inspection by the public but shall be made available to governmental agencies for use in making studies**. However, these portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report (Wat. Code, § 13267(b)(2).).

Thus, the Regional Board must acknowledge that farm specific information, including pesticide application, irrigation practices, mapping, crop rotations, best management practices, etc. are intellectual property, trade secrets, and proprietary information that must remain confidential.

Keeping information within WQPPs on farm rather than submitting them to the Regional Board does not hinder the Regional Board's ability to regulate water quality nor will it prevent the Regional Board from obtaining information it deems necessary. Water Code section 13267 specifically provides the Regional Board with the authority to "investigate the quality of any waters of the state within its region." (Wat. Code, § 13267(a).) In doing so, the statute further provides the Regional Board with the authority to require "any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge . . . [to] furnish, . . . technical or monitoring program reports which the regional board requires."

Our suggestion is to have the member submit the WQPP to the Third-Party Group for verification of completion and task the Third-Party Group with acknowledging in the NOI that the WQPP is complete and in possession of the member and available for inspection should an investigation be launched.

C.2. References XII.C. Should be VII.C.

C.3. We acknowledge that the State Water Board gives the San Diego Water Board authority to set a one-time application fee. Though it is a repeat of state statute, the mention here that fees don't apply to those who were members of a group before June 30, 2008, seems inappropriate to be placed in the Order in that the San Diego Water Board didn't even require membership in a group until well after that date. Making it appear relief from the fee was possible is misleading.

The imposition of an application fee by the San Diego Water Board would be a disincentive for participation. In essence, members are being asked to be funders of the oversite of the Third-Party General Order. It should be the responsibility of the San Diego Water Board to petition the State Water Board for sufficient funding to carry out the Third-Party General Order. We strongly believe this is an inappropriate transfer of responsibility. Members will face the costs of administering their Third-Party Group plus the ongoing cost of monitoring and WQPP enactment. It is imperative that the San Diego Water Board set aside the imposition of an application fee.

V. DISCHARGE SPECIFICATIONS

A. On this list of ten discharge specifications several are vague and leave room for interpretation. Even if complying with other aspects of the order, our concern would be that the Third-Party Group or members could be challenged. Specifically:

1. What would determine if a discharge is "contributing" to surface erosion in an arroyo (wash), which is basically an ephemeral stream channel that discharges after storms and is almost always eroding the streambed by definition?
3. As this is not drinking water, objectionable taste does not seem applicable as it is subjective.
9. Who is going to determine the amount of settleable material that degrades a benthic community?
10. Who determines how much natural light loss "significantly" degrades the communities?

B. This section prescribes 10 management measures that growers must follow. California Water Code Section 13360 prevents regional boards from prescribing management measures. Section V.B. should be stricken from the order. To memorialize this understanding the following could be added to the Third-Party Order:

> The board is prevented by Water Code section 13360 from prescribing specific management practices to be implemented. However, it may set forth performance standards and require dischargers to report on what practices they have or will implement to meet those standards.

While we believe Section V.B. should be stricken, should the San Diego Water Board see fit to ignore Code Section 13360, the following amendments (shown as strikeout and underline) should be made:

1. ~~Not apply~~ Avoid as best practicable the application of fertilizers, pesticides, herbicides, algaecide, or fumigants within three days prior to a predicted rain event.

There are several reasons for this suggestion. First, greenhouse applications pose no threat from rain events. Second, use of constant feed fertilizer programs would be interrupted. Constant feed uses very small doses of fertilizer in irrigation water that minimizes any runoff threat and in itself is a preferred management practice. Third, crops could be placed at risk from pests and diseases when serial storms are predicted.

2.a. Municipal solid waste except for biodegradable waste when processed.

It is our understanding that the definition of municipal solid waste can include green waste and food waste. Processed green waste is important to agricultural operations as mulch, soil additive, and as an input to composting. Though only emerging, the composting of food waste for use on farms is seen as an important future step in reducing waste sent to landfills.

VI. RECEIVING WATER LIMITATIONS

A through H. The list of plans, policies, and regulations imply by reference responsibilities for Third-Party Groups that exceed the charts in Attachment A. We suggest a note mentioning the limits of responsibilities as detailed in the Monitoring Requirements.

VII. REQUIREMENTS - MEMBERS

A.4. We suggest allowing for web access for members to the requirements of this section. It is possible that the amount of data required will exceed the capacity of some member's computer systems. Third-Party Groups could store all the data and give members direct access.

B.1. The doubling of water quality training from the two hours under Waiver No. 4 to four hours is excessive and will be seen as punitive. In addition to the required training the Third-Party Group will be in regular communication with its members discussing water quality protection issues. Also, the record-keeping, WQPP, quarterly self-inspection, and annual self-assessment will act as education opportunities for members. The two-hour standard is adequate.

C.2. See comment IIIC.1. above.

C.4. "Periodically evaluate" is vague. A requirement exists for quarterly self-inspections on a defined schedule. We suggest elimination of C.4.

C.6.i. The agricultural chemicals used on a farming operation is in constant flux depending on the season, crops grown, environmental conditions, and pest or disease challenges. Requiring that the WQPP contain a list of chemicals would mean constant amendment of the WQPP. The WQPP is to be kept on site and made available to the San Diego Water Board upon request. We suggest that the requirement for disclosure of chemicals used only be required when the San Diego Water Board makes a request to review the WQPP.

C.6.k.ii. This mapping requirement is onerous and impractical. For a member to survey all properties within one mile of his or her property boundary for all items mentioned in this section is beyond the capacity of any individual. Also, to expect a member to report to the San Diego Water Board what is taking place on what could amount to hundreds of parcels is a possibly serious violation of privacy. We suggest an amendment that makes these mapping requirements apply solely to the member's property.

C.6.k.ix. Proposed monitoring locations will be a discussion between the Third-Party Group and the San Diego Water Board. One of the advantages of joining a Third-Party Group is the group monitoring. Location of the monitoring stations is not relevant to members. Also, every member would be required to have in their WQPP the identical map retained by every other member. We suggest that the Third-Party Group be required to make the map available upon request to members and that this requirement be stricken.

C.6.m and n. We suggest deletion of both requirements. Item C.7. that follows is in essence a duplication.

VIII. REQUIREMENTS – THIRD-PARTY GROUPS

B. As an overall comment on this section the Third-Party Group will be challenged to fulfill any portion of the Water Quality Restoration Program Plan if a minority of farms in the region are members of a group. In essence, the Third-Party Group, and its members, will be burdened with monitoring and testing for non-members in order to meet the requirement for showing that exceedances are attributable to non-members. This will serve as a major disincentive to remain in a group when members learn they carry the burden and cost of discovering the pollutant contributions of non-members.

D.3. See comment III.B.1. above.

IX. PROVISIONS

A.1. This paragraph should be revised to clarify that the Third-Party Group is not the discharger under the Third-Party General Order. Thus, certain enforcement actions and violations of the Third-Party General Order do not apply to the Third-Party Group.

A.3. The title of this provision should be changed as "Duty to Mitigate" is not appropriate. A possible title would be "Reasonable Compliance"

A.6. We suggest that members be given a minimum of five business days' notice that consent will be requested for inspection. This will possibly avoid the initiation of the warrant process and avoid confrontational meetings.

D.2. The record retention requirement in this section seems appropriate for Third-Party Groups. However, asking members to retain all records and reports connected to the group monitoring process for five years, or even one year, is excessive and serves no purpose. Those records will be held by the Third-Party Group and readily available at any time to the members.

E.2, 3, and 4. Not allowing electronic signatures on document submittals will be a burden to Third-Party Groups and members. Five reports per year (four quarterly Self-Inspection Reports and one Annual Self-Assessment) must be completed by each member and submitted to the Third-Party Group. Each report carries a signature requirement. For a Third-Party Group with a reasonably to be expected 2500 members there would be a requirement to collect 10,000 physical signature pages annually which must then be scanned and submitted to the San Diego Water Board. Electronic signatures are in common use and should be allowed.

ATTACHMENT A – MONITORING AND REPORTING PROGRAM

III. CORE MONITORING REQUIREMENTS

B.2.a.-Table A-1. It should be Flow Velocity and Cross Sectional Area. Stream depth and width can be removed if cross sectional area is included. The calculation of cubic

feet per second flow comes from this information. We find cubic feet per day to be an odd requirement.

B.2.a.-Table A-1. We believe Chronic Toxicity should be removed as a monitoring requirement. We fear this testing could result in a very expensive endless loop of testing. Chronic Toxicity can be the result of a number of constituents that are not related to agriculture.

B.2.c. This section states dry season sample to be collected "after the site has applied pesticides or fertilizers and during an irrigation event." This appears to be an error because Third-Party Groups are doing hydrologic unit level monitoring, not individual farm site specific. It is suggested the first sentence be deleted.

B.2.e. We do not believe that crop type or crop rotation are sufficient reason for an increase in the frequency of surface water sampling. San Diego is a region of permanent crops and crop changes occur over lengthy periods of time. Those two criteria should be eliminated.

IV. REGIONAL MONITORING REQUIREMENTS

B.2.c. This section states that Third-Party Groups shall "confer" and "coordinate" with the Southern California Stormwater Monitoring Coalition (SMC) on Regional Bioassessment Monitoring. A clear explanation of the San Diego Water Board's scale and expectations of the Third-Party Group's role in working with SMC is needed.

B.2.d. This section states dry season sample "shall be collected after the member(s) have (has) applied pesticides or fertilizers and during an irrigation event." At the regional scale it would not be possible to time sample collection with applications because all farms are not on coordinated schedules. It is suggested the first sentence be deleted.

VI. SURFACE AND GROUNDWATER MONITORING PROGRAM PLAN

C. Agricultural Operation should be Agricultural Operations.

F. The monitoring team will undoubtedly change throughout the program. Keeping track of personnel not under their direct control would be a burden for Third-Party Groups. Stating the various qualified organizations in charge of monitoring should suffice instead of listing individuals.

VII. ANNUAL SURFACE WATER AND GROUNDWATER MONITORING REPORT

G.1. The term "applicable" puts the responsibility onto the Third-Party Group to determine what is applicable and what is not. It would seem VII.G.3 covers the benchmarks and VII.G.1 can be removed.

H.1. The Third-Party Group cannot say if the groundwater is safe to drink, it is only testing for one constituent. It can say that it does or does not contain nitrate as NO3.

I. The requirement that data be reported by the Third-Party Group to CEDEN in addition to transmittal to the San Diego Water Board is an undue burden. We suggest the reporting to the San Diego Water Board satisfy all reporting requirements.

J. Geotracker can potentially provide specific location data of the wells being sampled on

a public forum. We are concerned about protecting well-privacy and suggest this requirement be eliminated.

L. See comment VI.F.

N. – Table A-4. Nitrate + Nitrate (as Nitrogen) should be Nitrate + Nitrite (as Nitrogen). Total Nitrogen should be Nitrite as Nitrogen.

N. – Table A-4. We believe Chronic Toxicity should be removed as a monitoring requirement. We fear this testing could result in a very expensive endless loop of testing. Chronic Toxicity can be the result of a number of constituents that are not related to agriculture.

ATTACHMENT B – FACT SHEET

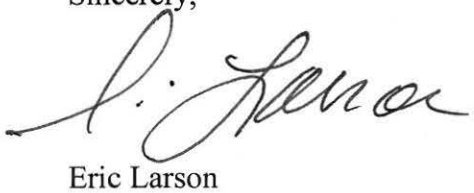
I. BACKGROUND

D.2.a.Figure B-2. There is no relevance to the San Diego Region of Figure B-2 or the accompanying text. If such a chart is needed, it should be representative of the San Diego Region. The chart and text should be removed.

G.7.d. When fees and costs of compliance are discussed this section makes the assumption that 60,000 irrigated acres in the region will enroll in the Third-Party General Order. Regardless of the number of acres enrolled, the monitoring obligations and costs for Third-Party Groups will remain the same. Therefore, if less than 60,000 acres are enrolled the per acre cost of compliance will rise proportionally. It is our belief that the 60,000 acre estimation is overly optimistic based on our experience with Waiver No. 4. The prepared charts should be revised and it is our suggestion it show the costs that members should expect at enrollments of 30,000 acres, 40,000 acres, 50,000 acres, and 60,000 acres.

Again, thank you for this opportunity to comment. Should our comments raise questions that require further discussion, please feel free to call on us at your convenience.

Sincerely,



Eric Larson
Administrator

CEQA

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

August 1, 2016

Barry Pulver
Regional Water Quality Control Board, Region 9
2375 Norhtside Drive, Suite 100
San Diego, CA 92108-2700

Subject: Adoption of General Waste Discharge Requirements for the Commercial Agricultural Operations Regulatory Project
SCH#: 2016061027

Dear Barry Pulver:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. The review period closed on July 29, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

2016 AUG -3 PM 2:27

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2016061027
Project Title Adoption of General Waste Discharge Requirements for the Commercial Agricultural Operations Regulatory Project
Lead Agency Regional Water Quality Control Board, Region 9 (San Diego), San Diego

Type Neg Negative Declaration
Description Note: Review Per Lead

The project consists of adoption of 1) Order No. R9-2016-0004, General Waste Discharge Requirements for Discharges from Commercial Ag Operations for Discharges that are Members of a Third Party Group in the San Diego Region, and 2) Order No. R9-2016-0005, General Waste Discharge Requirements for Discharges from Commercial Ag Operations for Dischargers Not Participating in a Third-Party Group in the San Diego Region (collectively referred to as Orders).

Lead Agency Contact

Name Barry Pulver
Agency Regional Water Quality Control Board, Region 9
Phone 619-521-3381 **Fax**
email
Address 2375 Norhtside Drive, Suite 100
City San Diego **State** CA **Zip** 92108-2700

Project Location

County San Diego, Riverside, Orange
City
Region
Lat / Long
Cross Streets
Parcel No. State Water Board Region 9
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways
Schools
Land Use

Project Issues Agricultural Land; Air Quality; Biological Resources; Drainage/Absorption; Economics/Jobs; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Cumulative Effects

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Wildlife, Region 5; Department of Fish and Wildlife, Region 6; Cal Fire; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Transportation Planning; Department of Food and Agriculture; State Water Resources Control Board, Division of Water Quality; Department of Toxic Substances Control; Native American Heritage Commission; Department of Pesticide Regulation

Date Received 06/10/2016 **Start of Review** 06/10/2016 **End of Review** 07/29/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

California Regional Water Quality Control Board
San Diego Region

Response to Comments Report

Tentative Order No. R9 2016-0004
Tentative Order No. R9 2016-0005
Tentative Resolution No. R9-2016-0136

Adoption of General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations in the San Diego Region

November 9, 2016

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
2375 Northside Drive, Suite 100, San Diego, California 92108
Phone • (619) 516-1990 • Fax (619) 516-1994
http://www.waterboards.ca.gov/sandiego

Documents are available at: http://www.waterboards.ca.gov/sandiego

California Regional Water Quality Control Board
San Diego Region

Henry Abarbanel, Ph.D. *Chair*
Gary Strawn, *Vice Chair*
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Vacant

David W. Gibson***,*** *Executive Officer*
James G. Smith***,*** *Assistant Executive Officer*

Catherine Hagan, *Senior Staff Counsel, Office of Chief Counsel*
Adriana Nunez*, Staff Counsel, Office of Chief Counsel*

This report was prepared under the direction of

David T. Barker, P.E., *Supervising Water Resource Control Engineer*
Brandi Outwin-Beals, P.E., *Senior Water Resources Control Engineer*

By

Barry S. Pulver, P.G., C.E.G., C.H.G.*, Engineering Geologist*

Introduction

This report contains the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) responses to written comments received on the following documents:

1. Tentative Order No. R9 2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of Third-Party Group* in the San Diego Region (Third-Party General Order).
2. Tentative Order No. 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* (Individual General Order).
3. Tentative Resolution No. R9-2016-0136, *Adoption of a Negative Declaration and Initial Study for the Adoption of General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations in the San Diego Region* (Tentative Resolution).

The Third-Party General Order, the Individual General Order (collectively referred to as Tentative General Orders), and the Tentative Resolution, including the Draft Negative Declaration (Draft Negative Declaration) and California Environmental Quality Act (CEQA) Initial Study and Checklist (Draft Initial Study), were made available for public review on June 13, 2016. An informational Public Workshop was conducted during the June 22, 2016 meeting of the San Diego Water Board. The Public Workshop provided the public and the San Diego Water Board an opportunity to receive information and discuss the requirements of the Tentative General Orders and Draft Initial Study. The public comment period ended on July 29, 2016. The Draft Negative Declaration and Draft Initial Study were distributed by the California State Clearinghouse and Planning Unit (State Clearinghouse) to selected State agencies for review. The review period commenced on June 10, 2016 and ended on July 29, 2016. The State Clearinghouse reported that no State agencies had submitted comments on the Draft Negative Declaration and Draft Initial Study by the close of the comment period on July 29, 2016.

Comments and Responses

The written comments and staff responses are in the table that follows. The comments are organized according to the person that submitted the comment. The table indicates the document to which it apples, or if it is a general comment, the San Diego Water Board's response to the comment, and any actions taken to revise the Tentative General Orders and draft CEQA documents in response to the comment.

No.	Comment	Response	Action Taken
Best Best & Krieger (BB&K) on behalf of Rancho Guejito Corporation, dated July 29, 2016			
1	Rancho Guejito's primary concern with the Tentative General Orders is the need to provide coverage for the maintenance of existing farm roads and water supply facilities. Inclusion of these maintenance activities is consistent with the Clean Water Act (CWA) and the California Environmental Quality Act (CEQA). It is also essential to the continued viable operations of farming activities across the San Diego Region. BB&K reads sections A-H of the Tentative General Orders, section I.B. of the Fact Sheet, and Attachment C to the Tentative General Orders as providing coverage for all discharges of waste associated with qualified Agricultural Operations, including discharges from maintenance to existing farm roads and water supply facilities. If this is not the case, please confirm that the Tentative General Orders do not cover discharges from such activities, and provide an explanation as to why.	As specified in section I.G of the Third-Party General Order and section I.F of the Individual General Order, each Tentative General Order regulates discharges from enrolled Agricultural Operations, including discharges from farm roads and water supply facilities that exist within the boundaries of enrolled Agricultural Operations that could affect waters of the State. The only exceptions are those discharges listed in section I.H of the Third-Party General Order and section I.G of the Individual General Order which are specifically excluded from regulation under the Tentative General Orders. Specifically with regards to the maintenance of existing farm roads and water supply facilities, the discharge of dredged or fill material from Agricultural Operations to waters of the State subject to regulation under CWA sections 401 and 404 are not covered under the Tentative General Orders. (See section I.H.9 of the Third-Party General Order and section I.G.9 of the Individual General Order.) A minor wording change has been made to section I.H.9 of the Third-Party General Order and section I.G.9 of the Individual General Order to specify that it is the discharge of dredged or fill material which is being excluded from coverage. *Third-Party General Order section I.H.9:* Discharges of dredged ~~and~~ or fill material from Agricultural Operations to waters of the State subject to regulation under CWA sections 401 and 404 and the California Water Code (Water Code). I*ndividual General Order section I.G.9:* Discharges of dredged ~~and~~ or fill material from Agricultural Operations to waters of the State subject to regulation under CWA sections 401 and 404 and the	Modified Third-Party General Order section I.H.9 Modified Individual General Order section I.G.9

No.	Comment	Response	Action Taken
		California Water Code (Water Code).	
2	Rancho Guejito is aware that San Diego Region Irrigated Lands Group (SDRILG) is submitting written comments on the Tentative General Orders. Rancho Guejito has been a member of the SDRILG since its formation in 2009, and will rely on SDRILG for compliance with the Tentative General Orders. Rancho Guejito fully supports SDRILG's comments and requests that the San Diego Water Board give them special weight to reflect the entity's role as a regional coordinator that both the San Diego Water Board and the farm community need to make the Tentative General Orders work. SDRILG's comments on the proposed monitoring plan are most concerning. SDRILG will be coordinating the monitoring plan for third party participants like Rancho Guejito and their concerns regarding the plan need to be addressed.	Comment noted. See San Diego Water Board responses to San Diego Irrigated Lands group (SDRILG) comments numbered 42 to 87.	None necessary
3	Rancho Guejito believes that the continuing education requirements are excessive. The Tentative General Orders will require Members/Dischargers to take a minimum of four hours of continuing education classes every year. This is too much of a burden for most Members/Dischargers in the San Diego Region. They are busy taking care of their businesses and managing their operations and they have other continuing education requirements that they must also fit in. We request that the San Diego Water Board consider revising this requirement to allow permittees who take continuing education for pesticide application to receive credit for this time. We further request that the San Diego Water Board reduce the continuing education requirement to two hours every two years.	Continuing education is an important means for providing current information regarding a variety of management practices (not only pesticide application), and water quality monitoring and reporting practices to assist Members/Dischargers with complying with the requirements in the Tentative General Orders. Members/Dischargers must understand why the management practices they are implementing are important, what the impacts will be to their specific Agricultural Operation, and how they can meet the requirements of the Tentative General Orders. The San Diego Water Board understands that the Members/Dischargers have many other demands on their time. The General Tentative Orders address this by allowing Members/Dischargers to use a variety of alternative formats for receiving this training, including classrooms, one-on-one training, and on-line training. A strong, comprehensive, and sustained educational program is crucial to the success of the Tentative General	Modified Third-Party General Order section VII.B.1 Modified Individual General Order section VI.B.1

No.	Comment	Response	Action Taken
		Orders. However, in further recognition of the burden placed on some Members/Dischargers created by applying education requirements uniformly, the Tentative General Orders have been modified to reduce the required number of education hours from four to two as follows (noting that the modifications also address comments numbered 31 and 57): *Third-Party General Order section VII.B.1:* By December 31 of each year, Members shall complete at least ~~four~~ two hours of appropriate water quality training to maintain compliance with this General Order. *Individual General Order section VI.B.1:* By December 31 of each year, Dischargers shall complete at least ~~four~~ two hours of appropriate water quality training to maintain compliance with this General Order.	
4	Rancho Guejito believes that reports should be submitted annually unless there are violations. The Tentative General Orders allow self-reporting for Third-Party Members. This is a positive step forward and will go a long way toward making the Tentative General Orders successful for both the San Diego Water Board and the agriculture community. However, the reporting requirements remain excessive. The Tentative General Orders require quarterly and annual reporting. We request that the San Diego Water Board revise the Tentative General Orders to require an annual report with the information requested in the Tentative General Orders, and quarterly reporting if violations are found by the operator or the San Diego Water Board.	While the Tentative General Orders require Members/Dischargers to complete a Quarterly Self-Inspection Report and an Annual Self-Assessment Report, these reports are required to be submitted annually as part of the Annual Report. (See sections VII.D.4 and VII.E.3 of the Third-Party General Order and sections VI.E.4 and VI.F.3 of the Individual General Order.) To provide clarity on the purpose and schedule for submission of the Quarterly-Self Inspection Reports and Annual Self-Assessment Reports the Tentative Orders have been modified as follows: *Third-Party General Order section VII.E.2* The purpose of the Annual Self-Assessment Report is to a) evaluate whether the ~~compliance with this General Order and the effectiveness of the~~ WQPP	Modified Third-Party General Order, sections VII.E.2. and E.6 Modified Individual General Order, sections VI.F.1., F.2. and F.5. and Attachment A MRP sections VII. N and O.

No.	Comment	Response	Action Taken
		described in section VII.C, and the management practices used to control the discharge of pollutants from the Agricultural Operation are adequate, properly implemented and effective in accordance with the terms of this General Order and b) determine whether additional control measures are necessary. *Third-Party General Order section VII.E.6:* By June 30 of each year Third-Party Groups shall submit to the San Diego Water Board copies of the Annual Self-Assessment and Quarterly Self-Inspection Reports submitted by Members. *Individual General Order, section VI. F.1:* By April 30 of each year, Dischargers shall submit a completed ~~conduct a self-assessment of the previous year. The Discharger shall document the self-assessment by completing the~~ Annual Self-Assessment Report (Attachment J) covering January 1 through December 31 of the prior year. *Individual General Order, section VI. F.2:* The purpose of the Annual Self-Assessment Report is to a) evaluate whether the ~~compliance with this General Order and the effectiveness of the~~ WQPP described in section VI.C, and the management practices used to control the discharge of pollutants from the Agricultural Operation are adequate, properly implemented and effective in accordance with the terms of this General Order and b) determine whether additional control measures are necessary. *Individual General Order, section VI. F.5:* Dischargers shall include the Annual Self-Assessment	

No.	Comment	Response	Action Taken
		Report (Attachment J) and the Quarterly Self-Inspection Reports (Attachment I) with the Annual Surface Water and Groundwater Monitoring Report described in section VII of the MRP (Attachment A) *Individual General Order Attachment A MRP section VII.N, Quarterly Self –Inspection Reports:* The Annual Monitoring Report shall include Quarterly Self-Inspection Reports as required by section VI. F.5 of this General Order. *Individual General Order Attachment A MRP section VII.O, Annual Self –Assessment Reports:* The Annual Monitoring Report shall include the Annual Self-Assessment Report as required by section VI.F.5. of this General Order	
5	Rancho Guejito believes that the Tentative General Orders should include a Safe Harbor for self-reported violations. The California Department of Industrial Relations Division of Occupational Safety and Health (DIOSH) has an inspection program that allows a farmer to request an inspection and if violations are found, the farmer will be required to correct them, but will not face enforcement. We request that the San Diego Water Board consider a similar program for self-reported violations. This would encourage farmers to continually improve their management practices, and to work with San Diego Water Board staff without fear of fines or other enforcement action.	The San Diego Water Board appreciates this recommendation but declines to amend the Tentative General Orders to include a "safe harbor". The Water Code and the statewide *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Plan* (NPS Policy)[1] require regional water boards to not only regulate nonpoint source discharges of waste, but also to ensure that water quality standards are met. The State Water Resources Control Board (State Water Board) *Water Quality Enforcement Policy*[2] (Enforcement Policy) defines a statewide enforcement process for regional water board actions that should take place in response to violations to assure compliance. The	None necessary

[1] The *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Plan* (NPS Policy) is available on the State Water Resources Control Board website at http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf (as of September 25, 2016).

[2] The State Water Board *Water Quality Enforcement Policy* is available on the State Water Board website at http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf (as of September 25, 2016).

No.	Comment	Response	Action Taken
		Enforcement Policy is based in part on the principle that appropriate penalties and other consequences for violations offer some assurance of equity between those who choose to comply with requirements and those who violate them. The Enforcement Policy outlines the enforcement actions available to the San Diego Water Board. Enforcement actions can include informal enforcement (e.g. notices of violation) as well as formal enforcement (e.g. Cleanup and Abatement Orders, Cease and Desist Orders, Administrative Civil Liability). The appropriate enforcement action is fact dependent, but both the Enforcement Policy and the San Diego Water Board *Water Quality Control Plan for the San Diego Basin* (Basin Plan) recognize the importance of progressive enforcement to achieve compliance. Progressive enforcement is an escalating series of actions that allows for the efficient and effective use of enforcement resources. The San Diego Water Board as a matter of practice considers the nature and circumstances of the violation, including the extent to which a Discharger fully reported the violation and voluntarily cooperated in returning to compliance and correcting environmental damage, in determining the appropriate enforcement response. Typically, progressive enforcement begins with simple verbal contact to apprise the Discharger of a violation. If a Discharger is cooperative, staff may opt to take no action, follow up with site visit(s) to confirm compliance and/or provide technical assistance. If violations continue, staff may escalate enforcement as necessary to achieve compliance. Appropriate and timely responses to violations of the Tentative General Orders are critical to protect waters of the State from discharges of waste associated with agricultural activity in the San Diego	

No.	Comment	Response	Action Taken
		Region. While the San Diego Water Board declines to adopt "safe harbor" provisions, it should also be noted that the Tentative General Orders incorporate an iterative process for compliance with applicable receiving water limitations. In the event of an exceedance, Dischargers, or a Third-Party Group on their behalf, must develop a Water Quality Restoration Plan (WQRP). WQRPs provide an adaptive management framework for Dischargers to evaluate the sources of the impairment, propose solutions to correct the impairment, and to develop a schedule of implementation. Implementation of an approved WQRP would constitute compliance with the Tentative General Orders.	
6	Rancho Guejito believes the receiving water limitations requirements are counter-productive and should be removed. The Tentative General Orders include receiving water limitations language that is borrowed from municipal storm water permits issued under the CWA. This language has been interpreted by federal courts and the State Water Board as creating numeric discharge limits for all water quality objectives that are expressed numerically in water quality control plans, including Total Maximum Daily Loads (TMDLs). The feasibility of complying with this prohibition is currently being challenged in Orange County Superior Court. (See *Cities of Duarte and Huntington Park v State Water Resources Control Board,* Orange County Superior Court Case No. 30-2016-00833614.). It is inappropriate, and potentially unlawful for the San Diego Water Board to include this requirement in the Tentative General Orders without explicit findings that the restrictions are necessary, and reasonably achievable. No existing state law or policy requires the San Diego Water Board to include the proposed receiving water limitations language in the Tentative General Orders, and although both the Tentative	The San Diego Water Board disagrees. While the NPS Policy does not specifically mandate incorporation of receiving water limitations, it explicitly states that nonpoint source discharges "must be regulated" under waste discharge requirements (WDRs), waivers of WDRs, a basin plan prohibition, or some combination of the three regulatory tools. (NPS Policy, p. 3). The San Diego Water Board is electing to regulate discharges associated with commercial agricultural through WDRs. 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 Tentative General Orders implement all applicable water quality control plans including the Basin Plan and protect beneficial uses through requirements to comply with receiving water limitations and discharge prohibitions as well as requirements to implement management practices. While management practices are integral to the Tentative General Orders, management practices are not	None necessary

No.	Comment	Response	Action Taken
	General Orders and the Fact Sheet cite the State Water Board's NPS Policy for authority to include the receiving water limitations requirement, nothing in the NPS Policy explicitly requires the language as written. The NPS Policy requires a tie between the management practices included in the Tentative General Orders and the water quality objectives and beneficial uses in the Basin Plan. It does not require a discharge prohibition. Specifically, the NPS Policy states that the Tentative General Orders must "address non-point source pollution in a manner that achieves and maintains water quality objectives and beneficial uses." All that this requires is findings that the management practices in the Tentative General Orders will achieve and maintain the Basin Plan objectives. There is nothing in the NPS Policy that could be reasonably interpreted as requiring an outright prohibition. There are good reasons why the San Diego Water Board should refrain from including the receiving water limitations language in the Tentative General Orders. For example, importing the numeric water quality objectives from the Basin Plan will interfere with development and use of recycled water for irrigation purposes. Recycled water has total dissolved solids (TDS) at levels that often exceed the Basin Plan's freshwater standards. Incidental runoff would be a violation of the Tentative General Orders. Additionally, in certain groundwater basins, the simple use of the recycled or even imported water for irrigation could be a violation because it would exceed TDS limits assigned to the underlying aquifer. Under the "cause or contribute" language in the receiving water limitations prohibition, any amount of TDS discharged to a groundwater basin or surface water could be viewed as a violation. The receiving water limitations requirement is tantamount to outlawing irrigation and needs to be significantly revised or removed.	water quality standards. Therefore, as noted in the NPS Policy, “management practice implementation [ ] may not be substituted for actual compliance with water quality requirements.” Without receiving water limitations, the San Diego Water Board could not evaluate whether selected management practices prevent or control discharges from agricultural activity sufficiently to meet water quality standards. The San Diego Water Board expects timely development and implementation of the Water Quality Protection Plan (WQPP) and, if needed, a WQRP to provide the framework for Dischargers to evaluate and improve management practices as necessary to comply with receiving water limitations. *Cities of Duarte and Huntington Park v State Water Resources Control Board, Orange County Superior Court Case No. 30-2016-00833614* is wholly inapplicable to the Tentative General Orders as it challenges the appropriateness of receiving water limitations in a storm water permit issued pursuant to the CWA. Finally, the San Diego Water Board is not persuaded that the incorporation of receiving water limitations will interfere with the development and use of recycled water for irrigation. There are many sources of salts and nutrients in surface water and groundwater, including, but not limited to: imported water, animal waste, fertilizer, municipal water softeners, industrial wastewater, and salt water intrusion. While added salt in irrigation water may increase salt in waters of the State, the State Board has found that it is unlikely to be a significant source of salt relative to other potential sources. (WQ 2014-0090-DWQ-Corrected, finding 12). Additionally, users of recycled water are regulated under the State Water Board’s *General WDRs for Recycled Water*, Order WQ 2014-0090-DWQ-Corrected or under the San Diego Water Board Order No. R9-2014-0041, Waiver No. 2,	

No.	Comment	Response	Action Taken
		Dischargers to Land of Recycled Water. These orders both limit application of recycled water to land and require enrollees to prevent significant runoff from application areas. (Id. Finding 24.a; Order No. R9-2014-0041, Waiver No. 2 § B). As such, the San Diego Water Board has concluded that the imposition of receiving water limitations in the Tentative General Orders is unlikely to impede recycled water usage because any salinity increases associated with recycled water are unlikely to impair achievement of applicable water quality standards.	
7	The Draft Initial Study and proposed Draft Negative Declaration are inadequate CEQA because there is evidence in the record to support a fair argument that potentially significant environmental impacts may result from the Tentative General Orders and on that basis an environmental impact report must be prepared before the Regional Board can take action on the Tentative General Orders. (Pub. Resources Code, § 21080(d); 14 C.C.R., § 15064(a).) First, under the heading, "Structural Management Practices," the Draft Initial Study (Draft Initial Study section G.3) states: "During inspections of Agricultural Operations in 2013, the San Diego Water Board found that 82% of the Agricultural Operations enrolled in the 2007 Waiver, and 58% of the Agricultural Operations not enrolled in the 2007 Waiver, had implemented [structural] management practices". Thus, the primary compliance methods with the Tentative General Orders' predecessor regulations have been structural management practices, meaning "management practices that involve the installation of engineering solutions (e.g., physical structures or barriers) that divert, store, and/or treat waste." (Draft Initial Study at 4.) So past compliance has typically been accomplished via physical changes in the environment. This contradicts repeated inferences in the Draft Initial Study that environmental impacts will be minimal because compliance with the Tentative General Orders can be attained via non-structural controls. (See e.g., Draft Initial	The San Diego Water Board disagrees. The commenter has provided no evidence to support a fair argument that the Tentative General Orders may result in a potentially significant impact. First, the Tentative General Orders are designed to allow maximum flexibility for Dischargers in choosing the most appropriate and cost-effective combination of management practices. The commenter relies on information from the 2013 inspections conducted by the San Diego Water Board to argue that compliance with the Tentative General Orders will require installation of structural management practices that are likely to have physical impacts on the environment. However, during the 2013 site inspections approximately 70% of the inspected agricultural operations were observed to use low flow irrigation methods such as drip and micro-spray irrigation. Installation of these types of management practices are already standard practice at Agricultural Operations in the San Diego Region due to the high price of water locally as well as the limited availability of groundwater. Further, because effective management practices need to control nonpoint discharges at its source, new systems would likely be located in areas of existing crop production where soil has previously been disturbed. To the extent other structural management practices may	Modified Draft Initial Study, Initial Study section I.G.2.b, and CEQA Environmental Checklist Section 2 – Agricultural and Forest Resources, Structural Management Practices

No.	Comment	Response	Action Taken
	Study at 13 ["Furthermore, it is likely that the site-specific conditions may not require the construction of structural management practices."].) In fact, based on past experience, the Tentative General Orders will likely require structural management practices that cause physical changes in the environment in the majority of cases. Based on historical compliance methods, it is not speculative to evaluate how compliance with the Tentative General Orders will occur. The Draft Initial Study must analyze the reasonably foreseeable compliance methods and associated physical impacts on the environment that can be expected as a result of the Tentative General Orders. [Although lacking details, there is indication that the expected compliance methods are reasonably foreseeable. (See e.g., Draft Initial Study at 15 n.15 ["only a limited number of Agricultural Operations would likely require the construction of a sedimentation basin to comply with the General Orders"]. Only then can the true scope of the Tentative General Orders' impacts be understood by the public. To do otherwise, is an improper attempt to piecemeal evaluation of the Tentative General Orders' true impacts. (14 C.C.R., § 15063(a)(1); see *City of Antioch v. City Council* (1986) 187 Cal.App.3d 1325 [piecemeal review of development found improper].) Second, the Draft Initial Study appropriately concludes that the economic burden of implementing reasonably foreseeable management practices and the monitoring and reporting program may result in the cessation of agricultural activities. (Drat Initial Study at 7.) The costs of compliance will put some farmers out of business. However, the Draft Initial Study concludes that reasoning: *These Agricultural Operations are likely to be small growers, commonly called hobby farms. These agricultural properties are located on parcels zoned as agricultural or residential with minimum lot sizes that*	be installed (buffer strips, sedimentation basins, etc.), the San Diego Water Board considered the potential direct and indirect impacts of these practices because the Board cannot dictate the manner of compliance. The San Diego Water Board did not intend to imply that these compliance methods were expected, required, or even likely under the Tentative General Orders. In reviewing historical compliance methods, aerial photography of agricultural areas, and crop reports for the San Diego Region, the San Diego Water Board does not expect that land intensive structural management practices are likely to be installed when land is at a premium and there are cost effective compliance alternatives that can achieve similar results. Next, the commenter argues that the Draft Initial Study failed to consider and analyze the amount of farmland that will foreseeably be affected by the cessation of agricultural activities. To make this argument the commenter alludes to the economic impacts to “hobby farms”. However, the text quoted by the commenter comes from a prior draft of the Initial Study released as a discussion aid at a CEQA scoping meeting. Based on feedback at the scoping meeting, the San Diego Water Board revised the Project to ensure that “hobby farms” were excluded from regulation under the Tentative General Orders. Furthermore, the San Diego Water Board is not persuaded that the cessation of agricultural activities is an impact appropriately studied under CEQA. As discussed in the proposed Draft Negative Declaration and the Draft Initial Study, impacts analyzed under CEQA must be related to a physical change in the environment. (CEQA Guidelines §§15358(b) and 15382). The commenter has speculated that the adoption of the Tentative General Orders will indirectly lead to the physical conversion of farmland to nonagricultural uses. However, the	

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	would prevent increased residential densities or the conversion to non-agricultural or non-residential land use. The cessation of commercial activities would not result in the land being converted to non-agricultural land use. (Draft Initial Study at 7.) Cessation of agricultural activities qualifies as a conversion of farmland to nonagricultural uses. Any farmland that is not used for irrigated agricultural production during a four-year period does not meet the definition of "prime farmland," "farmland of statewide importance," or "unique farmland." (Cal. Dept. of Conservation, *2015 California Farmland Conversion Report*, 6; see also Draft Initial Study at 9 ["Land must have been cropped at some time during the 4 years prior to the mapping date" to qualify as Unique Farmland.].) Mere cessation of agricultural activities thus converts entire categories of farmland into non-agricultural uses. The Draft Initial Study claims that: "Even where an individual Agricultural Operation determines that it would rather cease operating than comply with environmental regulations ... agricultural uses would likely be preserved because of land use restrictions." (Draft Initial Study at 5.) But the fact that applicable zoning may prevent a residential subdivision from being built on farmland does nothing to prevent the loss of farmland due to disuse or conversion to other uses, such as detention basins. The Draft Initial Study must consider and analyze the amount of farmland that will foreseeably be affected by the cessation of agricultural activities and the amount of farmland that will be converted to non-agricultural uses from the cessation. Currently, the Draft Initial Study concludes that only a few small farms would cease their agricultural activities. (Draft Initial Study at 11.) Yet, according to the Draft Initial Study, "the majority of Agricultural Operations within the jurisdictional boundaries of the San Diego Water Board are	commenter has provided no evidence to substantiate this claim. For the purposes of CEQA, substantial evidence consists of "facts, a reasonable assumption predicated upon facts, or expert opinion supported by fact". (CEQA Guidelines § 15384(b). Conclusory statements that businesses might close are not substantial evidence. (See *Citizen Action to Serve All Students v Thornley* (1990) 222 CA3d 748, 758). "Complaints, fears, and suspicions about a project's potential environmental impact [] do not constitute substantial evidence." *Joshua Tree Downtown Bus. All. v. City of San Bernardino*, 204 Cal. Rptr. 3d 464, 477 (2016) (quoting Kostka & Zischke, Practice under the Cal. Environmental Quality Act (2d ed. 2015) § 6.42, pp. 6–47–6–48). Nevertheless, the commenter's argument hinges on the assumption that the cost of compliance will put farmers out of business. As evidence, the commenter points to the classification scheme in the *2015 California Farmland Conversion Report*. However, even where long-term land idling results in the reclassification "prime", "of statewide importance" or "unique" agricultural land, the resultant reclassification may not signal a loss of agricultural activity as these classes exclude many dry farming and grazing activities. The commenter also assumes, without factual support, that because the median farm size in San Diego is small, that any added operational costs will push "many" farms out of business. However, in a region that specializes in high value crops on small parcels, acreage is not equivalent to economic viability. (See *2014 San Diego County Farm Report*, page 4, noting that 68% of farms in San Diego are between 1-9 acres and that San Diego has the 20th largest agricultural economy in the United States). A host of factors from climate change to labor costs ultimately influence the viability of Agricultural Operations in the San Diego Region. Moreover, all Agricultural Operations are already	

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	relatively small, with the median size being approximately 4 acres." (Draft Initial Study at 5.) The fact that most agricultural operators impacted by the Tentative General Orders are small is evidence that the Tentative General Orders' economic and subsequent indirect physical impacts on the environmental will be significant. It is reasonably foreseeable that the many small agricultural operations will cease under the burden of the Tentative General Orders' new costs. Thus, this full economic and indirect environmental impact of the Tentative General Orders must be fully analyzed.	subject to water quality protection law as discharges that violate water quality objectives are illegal under existing law. Thus, while the San Diego Water Board is sensitive to the commenter's cost concerns, no specific evidence has been presented to establish that a significant number of Agricultural Operations will be forced out of business by the adoption of the Tentative General Orders. To provide clarity the Draft Initial Study has been modified as follows: *Initial Study section I.G.2.b:* i. Low flow irrigation methods such as micro-spray or drip irrigation *CEQA Environmental Checklist Section 2 - Agricultural and Forest Resources, Structural Management Practices:* Structural management practices will likely be installed to implement irrigation management, storm water management, nutrient management, and erosion control. <u>The most commonly used structural management practices are related to irrigation control to reduce or eliminate irrigation runoff.</u> Many Agricultural Operations have already installed relevant management practices. During inspections of Agricultural Operations in 2013, the San Diego Water Board found that 82% of the Agricultural Operations enrolled in the 2007 Waiver, and 58% of Agricultural Operations not enrolled in the 2007 Waiver had implemented management practices. Additionally, due to the high cost of water Agricultural Operations generally use low-flow <u>irrigation practices such as micro-spray</u> or <u>drip irrigation</u>. <u>Almost 70% of the Agricultural Operation in 2013 used low flow irrigation methods such as micro-spray or drip irrigation. Low flow irrigation</u>	

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		methods allows the growers to limit the amount of water applied to crops and minimize or prevent the discharge of irrigation return flows to surface water and groundwater ~~or micro-sprinklers~~.	
8	The Draft Initial Study states that the Tentative General Orders will have no impact on aesthetics. (Draft Initial Study at 8.) However, as discussed above, this ignores the likelihood that many agricultural operations are likely to cease as a result of the compliance costs. It is reasonably foreseeable that fields once full of "cut flowers, fruit, vegetables, wine grapes, and nuts" (Draft Initial Study at 5) will be replaced with weeds and detention basins. The Draft Initial Study lacks any analysis of the aesthetic impacts associated with land fallowed (as a result of compliance costs) or converted to another use (as a result of compliance efforts) likely to be caused by the Tentative General Orders. There is also no evidence to support the Draft Initial Study's conclusion that the Tentative General Orders will not adversely affect scenic vistas, scenic resources and visual character of the areas impacted by the Tentative General Orders, particularly since the Draft Initial Study fails to describe where scenic vista and scenic resources are located in proximity to agricultural operations that may be impacted by the Tentative General Orders. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 940, 946 [CEQA's purposes are subverted when a lead agency "omits material necessary to informed decision-making and informed public participation"].) Increased fallowing and decreased grazing can result in aesthetic impacts relating to the degradation of the visual character of the land if it is converted from verdant farmland to weed-choked, barren fields, belying the Draft Initial Study's conclusion of "less than significant effect" in this area. (Draft Initial Study at 8.) The Draft Initial Study needs to provide more information and details on the reasonably foreseeable	The San Diego Water Board disagrees. The Draft Negative Declaration and Draft Initial Study appropriately limited its analysis to reasonably foreseeable aesthetic impacts from installation of structural management practices. Under CEQA, if the economic effects of a project cause a physical effect, then that physical change may be significant in the same manner as any other physical change resulting from the project. (CEQA Guidelines § 15064(e)). However, the speculative possibility that agricultural lands “will be replaced with weeds and detention basins” is not substantial evidence of an aesthetic impact. As discussed in Comment No. 7, there is no evidence that the cost of compliance will put Agricultural Operations out of business. Therefore, an aesthetic impact from the cessation of agricultural activity is not a reasonably foreseeable effect from the adoption of the Tentative General Orders.	None necessary

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	aesthetic impacts caused by the Tentative General Orders.		
9	As previously explained, the Initial Study states: "Land must have been cropped at some time during the 4 years prior to the mapping date" to qualify as Unique Farmland. (Draft Initial Study at 9.) That is, the Draft Initial Study concedes that if agricultural operations cease for more than four years as a result of the Tentative General Orders, that land is no longer Unique Farmland. Yet, the Draft Initial Study discounts the significance of such loss, claiming that "the impact is not expected to be significant as the majority [of] farmland in the San Diego Region does not qualify as 'prime,' 'unique,' or 'farmland of statewide importance.'" (Draft Initial Study at 11.) This discussion is inadequate. First, there is no clear threshold in the Draft Initial Study as to how much farmland loss would be significant- unless the Draft Initial Study's position truly is that no impact to farmland is significant so long as less than 50% of the farmland in the region fails to qualify as prime, unique or farmland of statewide importance. But even assuming this is the position, the Draft Initial Study lacks any basis for such a threshold. Second, there is no discussion of how much farmland qualifying as prime, unique or farmland of statewide importance may be impacted by the Tentative General Orders. In fact, aside from a reference stating that "only 6% of soils" in San Diego County meet the definition of prime agricultural land (Draft Initial Study at p. 11), there is no indication as to how much land meets the definition of prime, unique or farmland of statewide importance. Furthermore, the fact that prime farmland is not prevalent in San Diego County actually cuts against the Draft Initial Study's conclusion that the impact is less than significant. The Draft Initial Study's justification that the impact will be less than significant (i.e., because the majority of farmland in the San Diego Region does not qualify as 'prime,' 'unique,' or 'farmland of statewide importance') does not support the	To determine significance, the San Diego Water Board evaluated whether the Tentative General Orders would convert Prime Farmland, Unique Farmland, and Farmland of Statewide importance to nonagricultural uses. This significance threshold is set forth in Appendix G to the CEQA Guidelines (Appendix G). Because the thresholds in Appendix G may not cover all the potential impacts from a project, agencies may adapt the questions as necessary. In applying the Appendix G criteria to the Tentative General Orders, the San Diego Water Board recognized that the narrow definition of “prime farmland”, “unique farmland”, and “farmland of statewide significance” may not be the most appropriate in the San Diego Region given the limited number of agricultural lands that meet these criteria. (In 2012, 152,510 acres in San Diego County met the definition for lands of local importance, whereas only 6,999 acres met the definition of Prime Farmland; *2015 Farmland Conversion Report*, p. 57.) As such, the San Diego Water Board also considered more broadly whether adoption of the Tentative General Orders would result in the conversion of any lands supporting agricultural activity to a nonagricultural use. Furthermore, the lack of specific information in the Draft Initial Study on how much land qualifies as prime, unique or farmland of statewide importance, does not give rise to a fair argument that the Project will in fact have a significant effects See e.g. *Gentry v. City of Murrieta*, 36 Cal. App. 4th 1359, 1382, (1995), as modified on denial of reh'g (Aug. 17, 1995) (negative declaration was not invalidated for lack of study on cumulative effects). Staff conducted a careful analysis of agricultural activity in the San Diego Region (see the Third-Party General Order Attachment B, section I.C) and reviewed historic compliance methods and probable compliance methods. In doing this analysis, the San Diego Water Board	None Necessary

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	conclusion. Considering its scarcity, the loss of any prime farmland is a potentially significant impact and must be analyzed. The amount of farmland that will foreseeably be affected by the cessation of agricultural activities and the amount of farmland that will be converted to non-agricultural uses from the cessation are not disclosed, much less analyzed, in the Draft Initial Study. More details are required for the public to understand how much valuable and scarce farmland will be lost as a result of Tentative General Orders compliance methods and costs. The Draft Initial Study must be revised to address these points.	concluded that implementation of management practices does not constitute a non-agricultural use irrespective of farmland classification. The commenter also raises questions about how many farms the Tentative General Orders will put out of business. However, as discussed in the response to Comment No. 7, this impact is speculative.	
10	The Draft Initial Study states that "reasonably foreseeable management practices are not expected to be on a scale large enough to result in significant conflict or obstruction of an applicable air quality plan, or to expose sensitive receptors to substantial pollutant concentrations." (Draft Initial Study at 18.) This conclusion is unsupported by evidence. Further, the Draft Initial Study fails to disclose applicable air quality plans or quantify the air emissions expected from the management practices that even the Draft Initial Study admits are "reasonably foreseeable." (Ibid.) The fact that toxic emissions and odors are only "short-term" (see Draft Initial Study at 18 and 19) is not evidence that the impacts will be less than significant. (See *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 732.) Additionally, fallowed fields that cannot be otherwise developed (due to zoning restrictions) are likely to result in loose soil and worsened air quality conditions. Cessation of agricultural activities has been shown to result in indirect long-term air quality impacts and impacts to geology and soils due to loss of topsoil. (See, e.g., *Westlands Water Dist. v. U.S.* (E.D. Cal. 1994) 1994 U.S.Dist.LEXIS 6260, *7-8 [increased land fallowing has attendant increases in fugitive	An initial study is neither intended nor required to include the level of detail included in an Environmental Impact Report (EIR) (CEQA Guidelines § 15063(a)(3)). With respect to air quality, the San Diego Water Board approached the questions set forth in Appendix G by first evaluating the types of management practices that would likely be installed to comply with the Tentative General Orders, and then what construction, if any, would be necessary to install these management practices. The Draft Initial Study identifies the structural management practices commonly used to reduce irrigation and storm water runoff. While the San Diego Water Board agrees with the commenter that the effect from installation of management practices need not be long-term nor permanent to be significant, duration of the effect is still relevant when evaluating whether an environmental impact is significant. (See *Running Fence Corp. v Superior Court* (1975) 51 CA3d 400, 416.) Management practices are expected to be installed in previously disturbed areas using equipment and heavy machinery standard in crop production. For example, installation of storm water runoff controls (e.g. straw wattles, silt fencing, straw bales) requires a pickup truck	None necessary

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	dust emissions]; *Westlands Water Dist. v. United States* (E.D. Cal. 1994) 1994 U.S.Dist.LEXIS 6276, *52 [finding lack of water for farmland could result in soil erosion and depletion of quality soil]; Sharratt et al., *Loss of Soil and PM10 from Agricultural Fields Associated With High Winds on the Columbia Plateau* (2006) 32 Earth Surf. Process, Landforms, 621-630 [fallowing leads to increased levels of soil erosion]; *Soil Erosion: A Food and Environmental Threat* (2006) 8 Environment, Development and Sustainability 119-137, 124 (2006) [leaving cropland unplanted exposes soil to erosion; soil erosion in the United States costs billions of dollars in loss of productivity].) The amount of fugitive dust emissions and loss of topsoil resulting from cessation of agricultural activities needs to be analyzed.	and basic tools such as power tools and shovels. Similarly, installation of mulch on exposed slopes can be done with basic power tools, and in some cases may require the use of hydroseeder, also standard equipment in commercial agriculture. (*Natural Resource Conservation Service, California*, pages 684, 561, 562). Given that the installation of management practices is consistent with existing agricultural activities, the San Diego Water Board determined that compliance with the Tentative General Orders would not result in a change to baseline environmental conditions with respect to air quality. The commenter has also submitted evidence pertaining to the relationship between fallowed fields and air quality impacts. However, as discussed in the response to Comment No. 7, there is no evidence that the economic impact of the adoption of the Tentative General Orders will directly or indirectly lead to an increase in fallowed fields.	
11	As elsewhere in the Draft Initial Study, the Biological Resources analysis consists of bare conclusions, unsupported by substantial evidence. For example, the discussion of issues (c), (e), and (f) explains: "Reasonably foreseeable management practices are not expected to be on a scale large enough that would result in direct removal of filling of riparian habitat, wetlands, or any sensitive natural communities or conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance." (Draft Initial Study at 20.) This discussion fails to disclose any local policies or ordinances protecting biological resources or explain how no impact will occur. As discussed above, based on previous compliance practices, it is reasonably foreseeable that the Tentative General Orders will result in physical changes in the environment. Without adequate disclosure and analysis of the reasonably foreseeable compliance methods and	The San Diego Water Board disagrees. The San Diego Water Board concluded that reasonably foreseeable management practices would not result in the filling of riparian habitat, wetland, or sensitive natural communities or conflict with local policies or ordinances, because the installation of management practices is expected to occur on established (i.e. disturbed) agricultural lands as discussed in Comment No. 7. To the extent management practices could be installed on land that is not currently used for the production of crops, the Tentative General Orders do not relieve enrolled Dischargers from obtaining and complying with applicable local, state, and federal law, including but not limited to: the CWA, the California Water Code, the California Fish and Game Code, the California Endangered Species Act, the federal Endangered Species Act, and the local Species Conservation Plans. The San Diego Water Board has	Modified Draft Initial Study, CEQA Environmental Checklist Section 4 – Biological Added Third-Party General Order section I.GG Added Individual General Order section I.FF

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	impacts, the Draft Initial Study lacks any basis to conclude that the Tentative General Orders will not impact wetlands, conflict with local policies or ordinances protecting biological resources, or conflict with a conservation plan. The discussion of issues (a), (b), and (d) also lack adequate analysis and support for the less than significant impact conclusion. (See Draft Initial Study at 21.) The discussion fails to disclose the presence of any species identified as candidate, sensitive, or special status species that exist and could be impacted by the Tentative General Orders. The Draft Initial Study also fails to disclose the presence of any riparian habitat or other sensitive natural communities that exist and could be impacted by the Tentative General Orders. Although the Draft Initial Study asserts that impacts will be less than significant, the conclusion is not supported. For example, the Draft Initial Study admits that structural controls, "such as vegetated swales or buffer strips, could increase the diversity or number of species," but forecloses further analysis by baldly asserting that this is assuredly "beneficial." Without understanding which species currently exist and how the increased diversity or number of species will impact existing species (including potentially special status species), it is inadequate for the Draft Initial Study to conclude that the Tentative General Orders' reasonably foreseeable physical changes in the environment are "beneficial." If special status species exist in areas where Tentative General Orders impacts will occur, an increase in the number or diversity of other species is reasonably likely to impact the special species, whether native or not. The Draft Initial Study's concession that the Tentative General Orders may result in reduced stream flows and that the "reduction or elimination of irrigation return flows could result in a barrier to the migration or movement of animals ... by eliminating habitat dependent on those flows" (Draft Initial Study at 21) is further evidence that species will be impacted. But without adequate analysis of which species exist and	determined that no substantial adverse impacts to wetlands are likely to occur provided that the Members/Dischargers comply with conditions imposed through the federal CWA section 404/401 permitting and water quality certification process, under WDRs issued pursuant to the California Water Code, requirements imposed by California Department of Fish and Wildlife (CDFW) pursuant to the Fish and Game Code, and any requirements imposed by local grading ordinances. It also worth noting, that compliance with the 404/401 permitting scheme will require additional CEQA analysis when a specific dredged or fill project is proposed. Additionally, both San Diego and Riverside Counties have regional habitat conservation programs (the *Multiple Species Conservation Program* and the *Multiple Species Habitat Conservation Plan* respectively) are designed to ensure the long-term survival of sensitive plant and animal species as well as native vegetation. Under these programs, the role of agriculture in affecting habitat and rare, endangered, and threatened species was thoroughly considered. Under these programs, development projects or operational expansions in natural areas that are important for sensitive plant and animal species and/or native vegetation may require additional approvals and mitigation. The Draft Negative Declaration has been revised to clarify that additional CEQA may be required if an Agricultural Operation must obtain a 404 permit/401 certification for dredged and fill activities under the General WDRs thereby rendering any potential impacts to these resources to less than significant. The Draft Initial Study has been revised to clarify 404 permit/401 certification for dredged and fill activities: *Draft Initial Study, CEQA Environmental Checklist,*	

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	how they will be impacted, the public is left unaware of the Tentative General Orders' true effects on the environment, in violation of CEQA. Additionally, because typical management practices include "catch basins and detention ponds" (Draft Initial Study at 4), it is reasonably foreseeable that the Tentative General Orders will have significant effects in riparian areas or sensitive habitats. These impacts need to be disclosed and analyzed.	*Section 4 – Biological Resources:* Prior to implementing any management practice that will result in the permanent loss of wetlands, conduct a delineation of affected wetland areas to determine the acreage of loss in accordance with current U.S. Army Corps of Engineers (USACE) methods. For compliance with the federal Clean Water Act section 404 permit and WDRs protecting state waters from unauthorized fill, compensate for the permanent loss (fill) of wetlands and ensure no net loss of habitat functions and values. Compensation ratios will be determined through coordination with the San Diego Water Board and USACE as part of the permitting process. Such process will include additional compliance with CEQA, as necessary. Compensation may be a combination of mitigation bank credits and restoration/creation of habitat. The Draft Initial Study and the Tentative General Orders have been revised as follows to clarify that compliance with the Tentative General Orders does not authorize a "take" under the California or Federal Endangered Species Acts: Draft Initial Study, CEQA Environmental Checklist, Section 4 – Biological Resources: The Project Area is covered by Western Riverside County Multi-Species Habitat Conservation Plan, 2004 (MSHCP), being implemented by the Western Riverside County Regional Conservation Agency (RCA) as well the San Diego County Multiple Species Conservation Program (MSCP). The purpose of the MSHCP is to protect 146 native plant and animal species and preserve their habitat. Similarly, the purpose of the MSCP is to ensure the long-term survival of sensitive plant and animal species and protect the native vegetation communities found	

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		throughout San Diego County. Implementation of the General Orders is not expected not preclude acquisition of conservation lands under the MSHCP nor the MSCP. Neither the MSHCP or the MSCP bar agricultural production or expansion. Many agricultural lands are already exempted and mitigated for under these two programs (See e.g., Implementing Agreement for the Western Riverside County Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan section 11.3.2 Take Authorization for Existing Agricultural Operation, 11.3.5 Expansion of Existing Agricultural Operations; See also, San Diego County's Biological Mitigation Ordinance section 86.503). Development projects or operational expansions in natural areas that are important for sensitive plant and animal species and/or native vegetation may require additional approvals and mitigation under both the MSCHP and the MSCP. Where discretionary approvals are required additional environmental review and mitigation may be required thereby rendering any potential impacts to these resources less than significant. *Third-Party General Order section I.GG:* This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any action authorized under this Order, the Member shall obtain authorization for an incidental take prior to construction or operation of the project. The Member shall be responsible for meeting all requirements of the applicable Endangered Species	

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		Act. *Individual General Order section I.FF:* This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any action authorized under this Order, the Discharger shall obtain authorization for an incidental take prior to construction or operation of the project. The Discharger shall be responsible for meeting all requirements of the applicable Endangered Species Act.	
12	The Draft Initial Study lacks adequate disclosure and analysis of the Tentative General Orders' impacts on cultural resources. The single-paragraph discussion states that no impacts will occur "[a]t most sites." (Draft Initial Study at 22.) This raises the question as to which sites are not "most sites." Unfortunately, the Draft Initial Study does not disclose the answer to this question and fails to provide any further analysis. Considering detention basins are a reasonably foreseeable result of the Tentative General Orders, it is reasonably foreseeable that excavation will be required and cultural resources may be impacted by the Tentative General Orders. Thus, further analysis and disclosure of the Tentative General Orders' impacts is necessary.	The San Diego Water Board disagrees. Installation of reasonably foreseeable management practices is likely to occur on established agricultural lands because the control of nonpoint source discharges are most effective when management practices address the source of the discharge, i.e. those areas used to grow the crops, which have already been disturbed. Although installation of some management practices may require limited trenching or digging, resultant impacts would be consistent with baseline conditions because they are similar to impacts associated with grading, sowing, and tilling for crop cultivation. Further, the installation of detention basins, while permissible under the Tentative General Orders, is not considered to be a reasonably foreseeable management practice because detention basins are only typically used, if needed, for nurseries and greenhouses which occupy a relatively small amount of agricultural lands in the San Diego Region.	None Necessary
13	The analysis of greenhouse gas (GHG) emissions concludes that the Tentative General Orders will not conflict with any	The San Diego Water Board disagrees. While soil cultivation can contribute to GHG such as methane,	None necessary

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	applicable plan, policy or regulation of any agency adopted for the purpose of reducing the emissions of GHG. (Draft Initial Study at 25.) But the Draft Initial Study fails to disclose which plans, policies or regulations are applicable to the Tentative General Orders and its impacts. It is not possible to understand the Tentative General Orders' consistency with applicable plans without knowing which plans are applicable. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 940, 946 [CEQA's purposes are subverted when a lead agency "omits material necessary to informed decision-making and informed public participation"].) And, as with the Air Quality discussion, the Draft Initial Study's reliance on the short-term nature of GHG emission impacts is insufficient to justify the conclusion that the Tentative General Order's impact is less than significant. (See *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 732.)	nitrogen dioxide, and carbon dioxide, the Tentative General Orders are expected to improve baseline GHG emissions associated with agricultural activity through improved fertilizer and irrigation management practices. The main source of GHG from agriculture is the emission of nitrous oxide (N_2O) from soils treated with nitrogen-based fertilizers to aid in growing crops and grazing livestock. Tailoring fertilizer and manure applications to satisfy crop nitrogen demands, so that less nitrogen is left behind in the soil, can reduce N_2O emissions while building soil carbon stocks. Nitrous oxide emitted from soils is particularly significant, because it has a heat-trapping greenhouse effect that is approximately 310 times greater than that of carbon dioxide (CO_2). Efficient use of irrigation water will similarly reduce nitrogen losses and lead to less GHG by making the soil profile less conducive to producing N_2O and minimizing CO_2 emissions from energy used for pumping while maintaining high yields and crop-residue production. (Parton, William J., Stephen J. Del Grosso, Ernie Marx, and Amy L. Swan. "Agriculture's Role in Cutting Greenhouse Gas Emissions." Issues in Science and Technology 27, no. 4 (Summer 2011); see also California Ag Water Stewardship Initiative's On Farm Practices, Irrigation Management and Soil Management, available at http://agwaterstewards.org/practices/irrigation_management/) Further, the requirements in the Tentative General Orders are not expected to conflict with greenhouse reduction plans, policies, and regulations. Assembly Bill 32 requires California to reduce its GHG emissions to 1990 levels by 2020, and the recently adopted SB 32 requires 40% reduction below 1990 levels by 2030. To implement Assembly Bill 32 the California Air Resources Board developed a Scoping Plan to achieve emissions goals.	

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		Under this Scoping Plan, agricultural reductions remain voluntary. Similarly, the Tentative General Orders are not expected to affect local GHG reduction plans. The Riverside County's Climate Action Plan (Riverside CAP) was adopted on December 9, 2015. The Riverside CAP contains no GHG reduction measures for agriculture. The County of San Diego's Climate Action Plan is expected to be adopted in 2017 but agriculture and forestry together only represent an estimated one percent of GHG emissions in San Diego County. (*2013 San Diego County Updated Greenhouse Gas Inventory Executive Summary*, p. 3). Finally, the Tentative General Orders do not relieve Dischargers from obtaining applicable permits (e.g. Title V permits under the Clean Air Act and agricultural equipment permits). As such, the adoption and implementation of the Tentative General Orders is not expected to conflict with achievement of any present or future GHG targets.	
City of San Diego, dated July 29, 2016			
14	The City of San Diego (City) is pleased with the inclusion of the Bacteria TMDL in the Tentative General Orders and wants to ensure the monitoring and implementation of the requirements are effective. We have detailed our comments to strengthen the TMDL requirements.	The San Diego Water Board has noted the comment.	None necessary
15	To provide documentation to support a statement that no discharge occurred during the monitoring period, the City requests the following modification to Attachment A section II.H of the Tentative General Orders: For any monitoring period in which no discharge occurred, the monitoring report shall include a statement certifying that no discharge occurred during the monitoring period and provide documentation <u>showing</u>	The San Diego Water Board agrees that the Tentative General Orders should be modified to require documentation to support any statement that monitoring of receiving waters was not performed due to a lack of sufficient water. The San Diego Water Board has modified the Tentative General Orders as follows (noting that the modifications also address Comments numbered 29, 33, 73, and 76):	Modified Third-Party General Order Attachment A MRP sections II.H, III.B.2.c, and IV.B.2.d Modified Individual General

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	lack of runoff as required in [Attachment A] sections III.B.2.c and IV.B.2.d.	*Third-Party General Order Attachment A MRP section II.H:* For any monitoring period in which ~~no discharge occurred~~ there is insufficient water to collect water samples at a given monitoring location, the monitoring report shall include a statement certifying that ~~no discharge occurred during the monitoring period~~ observation and adequate documentation to support the statement. *Third-Party General Order Attachment A MRP section III.B.2.c:* ~~Dry season samples shall be after the site has applied pesticides or fertilizers and are conducted during an irrigation event.~~ If there is insufficient water to collect samples ~~no runoff~~ at the monitoring site, the observation shall be documented ~~with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site~~. *Third-Party General Order Attachment A MRP section IV.B.2.d:* ~~Dry season samples shall be after the site has applied pesticides or fertilizers and are conducted during an irrigation event.~~ If there is insufficient water to collect samples ~~no runoff~~ at the monitoring site, then the observation shall be documented ~~with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site~~. *Individual General Order Attachment A MRP section II.H:* For any monitoring period in which ~~no discharge occurred~~ there is insufficient water to collect water samples at a given monitoring location, the monitoring report shall include a statement certifying that ~~no~~	Order Attachment A MRP sections II.H and III.B.2.c

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		~~discharge occurred~~ ~~during the monitoring period~~ observation and adequate documentation to support the statement. *Individual General Order Attachment A MRP section III.B.2.c:* ~~Dry season samples shall be after the site has applied pesticides or fertilizers and are conducted during an irrigation event.~~ If there is insufficient water to collect samples ~~no runoff~~ at the monitoring site, the observation shall be documented ~~with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site~~.	
16	To clarify regarding the frequency of sampling and consistent with other WDRs, the City requests with the following modification to Attachment A section III.B.2.c of Tentative General Orders: A sample should be collected and analyzed at each site during one qualifying storm event. If there is no runoff at the monitoring site, then the observation shall be documented with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site.	The San Diego Water Board disagrees. Attachment A MRP Section III.B.2.b of the Tentative General Orders already contains language similar to the language requested by the City clarifying the timing of wet season sampling events.	None necessary
17	To clarify the frequency of sampling and consistent with other WDRs, the City requests the following modification to Attachment A section III.B.2.c of Tentative General Orders: Dry season samples shall be collected once after the site has applied pesticides or fertilizers and during an irrigation event. If there is no runoff at the monitoring site, then the observation shall be documented with photos showing the occurrence of irrigation and the lack of runoff at the monitoring site. A site shall be monitored on a regular basis in the dry season (at a minimum monthly) to determine if discharge is occurring.	The San Diego Water Board does not agree that the proposed modification would improve the Tentative General Orders. As written, the Tentative General Orders give Members/Dischargers sufficient direction regarding the frequency and timing of dry weather sampling without being overly prescriptive. Comment No. 15 also addresses this section of the Tentative General Orders.	None necessary
18	To require agricultural operators to reduce their bacteria	The Tentative General Orders are consistent with the	None necessary

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	loads according to the Load Allocations (LAs) on page E-7, the City requests that the language on page E-7 and E-8 of the Tentative General Orders be revised to be consistent with the Bacteria TMDL Basin Plan Amendment (page A46), which states that, if individual or general WDRs are developed and issued to controllable nonpoint sources, the WDRs should incorporate "Effluent limitations that are consistent with the requirements and assumptions of the nonpoint source LAs. Effluent limitations should be expressed as numeric effluent limitations, if feasible and/or as a [Best Management Program (BMP)] program." Monitoring alone is insufficient to ensure that agricultural sources will reduce their bacteria loads. These sources should be subject to effluent limitations in the Tentative General Orders.	assumptions and requirements of the Bacteria TMDL. The Bacteria TMDL encourages but does not mandate numeric effluent limitations where doing so would be infeasible. The San Diego Water Board has found that it is infeasible to set effluent limitations for nonpoint sources of pollution such as for those discharges typical of Agricultural Operations. In a permit for a traditional point-source facility, the San Diego Water Board would set a water quality-based effluent limitation (consistent with the assumptions and requirements of the TMDL) to be met at the discharge point and require monitoring of the discharge to verify that the effluent limitation is being met. In a landscape-based nonpoint source program such as the Tentative General Orders, monitoring the numerous and sometimes indeterminate set of agricultural operation discharge points for compliance with an effluent limitation is an impractical, prohibitively costly, and often ineffective method for compliance determination and the Nonpoint Source Policy accordingly does not mandate such monitoring. Instead, the Tentative General Orders require that Members/Dischargers control the diffuse sources of pollution from Agricultural Operations through management practices implementation, assessment, and adaptive management rather than by setting effluent limitations for discharges at multiple and often indeterminate discharge points. The San Diego Water Board expects that development and enforcement of the Tentative General Orders will be sufficiently protective of water quality to implement the agricultural load allocations in the Bacteria TMDL. In order to comply with the receiving water limitations, the terms of the Tentative General Orders (Third-Party General Order section V.B.8, and Individual General Order section IV.A.B.8) require Members/Dischargers to 1) implement management practices that prevent or reduce discharges of waste that are causing or	

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		contributing to exceedances of water quality standards; and 2) when effectiveness evaluation or 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, the Member/Discharger must implement improved management practices as soon as practicable. Moreover, the Bacteria TMDL assumes the receiving water limitations (based on the numeric targets) are met in the receiving waters if controllable nonpoint sources, like agriculture, have met their load allocations. (Bacteria TMDL, A45) The requirement to implement effective management practices, the monitoring program which will evaluate the effectiveness of the implemented management practices, and the implementation of the WQRP, if needed, implements the requirements of the Bacteria TMDL and will reduce bacteria in agricultural operation discharges to meet applicable water quality standards. Where applicable water quality standards are not met, Members/Dischargers out of compliance with the Tentative General Orders would be required to come into compliance or cease discharges.	
County of San Diego (County), July 29, 2016			
19	The County of San County (County) strongly supports the proposed approach of regulating the commercial agricultural community through a general waste discharge permit instead of the now expired agricultural waiver. The Tentative General Orders provide a solid framework for regulating the agricultural industry that will ultimately contribute to improved water quality in our region. In particular, the County is encouraged to see that agricultural operations will have the option to enroll either as a member of a Third-Party Group or individually. We also support the use of these Tentative	The San Diego Water Board has noted the comment.	None necessary

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	General Orders to serve as a non-TMDL solution to addressing water quality impairments where agriculture has been identified as a contributing source.		
20	The Tentative General Orders regulate discharges from Agricultural Operations that have intent to make a profit. One of the criteria the San Diego Water Board uses for this determination is whether the owner or operator of an Agricultural Operation holds a *current* Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting. The County of San Diego requests this criterion be clarified to state: "The owner or operator of an Agricultural Operation is *required* to obtain an Operator Identification Number/Restricted Materials Permit Number for reporting pesticide use to the respective County Agricultural Commissioner." The suggested language more accurately describes the Agricultural Operations that would be required to enroll. As currently written, the criterion is contingent upon compliance with applicable pesticide laws and regulations. Additionally, to ensure all Agricultural Operations within the San Diego Region with intent to make a profit are covered under the Tentative General Orders, the County recommends the inclusion of the following additional criteria be included: • The owner or operator of the Agricultural Operation is registered with the California Department of Food and Agriculture Organic Program. • The owner or operator of the Agricultural Operation holds a Certified Producer's Certificate from the respective County Agricultural Commissioner. • The owner or operator of the Agricultural Operation	For the reasons stated by the County, the San Diego Water Board has modified section I.G.3 of the Third-Party General Order and section I.F.3 of the Individual General Order as follows (noting that the modifications also address Comment No. 45): *Third-Party General Order section I.G.3:* The owner or operator ~~holds a current~~ is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting. *Individual General Order section I.F.3:* The owner or operator ~~holds a current~~ is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting. *Third-Party General Order Attachment B (Fact Sheet) section I.A.3.c:* The owner or operator ~~holds a current~~ is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting. *Individual General Order Attachment B (Fact Sheet) section I.A.2.c:* The owner or operator ~~holds a current~~ is required to obtain an Operator Identification Number/Permit Number from a local County Agricultural Commissioner for pesticide use reporting. The San Diego Water Board disagrees that it is necessary to add the suggested additional criteria at this time. As	Modified Third-Party General Order section I.G.3 Modified Individual General Order section I.F.3 Modified Third-Party General Order Attachment B (Fact Sheet), section I.A.3.c Modified Individual General Order Attachment B (Fact Sheet), section I.A.2.c Modified Third Party General Order and Individual Order Attachment C (Abbreviations and Definitions).

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	holds a nursery license (Type 1, 2, or 4) with the California Department of Food and Agriculture.	currently written, the Tentative General Orders require enrollment of those Agricultural Operations that operate with the intent to make a profit.	
21	The Tentative General Orders do not provide coverage for discharges from Agricultural Operations where all growing operations are conducted within buildings or in completely enclosed areas with no potential to discharge waste to waters of the State. The County of San Diego supports this important exemption for Agricultural Operations meeting these criteria. As currently written, the Tentative General Orders require Agricultural Operations to file a Notice of Intent (NOI) in order to receive a Notice of Exclusion (NOEX). The County of San Diego requests the Tentative General Orders provide a simplified parallel process for eligible Agricultural Operations to obtain a NOEX without submitting an NOI. Additionally, we request clarification about whether businesses such as greenhouses, which may have roof runoff, but all growing operations are conducted within enclosed areas, would qualify for this exemption.	As currently written, the Tentative General Orders do not require a Notice of Intent (NOI) for Agricultural Operations where all growing operations are conducted within buildings or in completely enclosed areas with no potential to discharge waste to waters of the State. For clarification, this exemption applies to businesses such as greenhouses, which may have roof runoff, but where all growing operations are conducted within enclosed areas, provided that the roof runoff consists only of storm water.	None necessary
22	The linkage between the TMDL requirements, the WQPP, and the WQRP are unclear. Further, it is not clear how compliance with TMDL requirements will be determined. For example, for the Rainbow Creek Nutrient TMDL, growers are required to implement the *Rainbow Creek Nutrient Reduction Management Plan* (NRMP), but it is not clearly stated that the control measures in the NRMP should be incorporated into the WQPP and/or WQRP. As a result, agricultural dischargers in TMDL waterbodies may end up implementing multiple plans for the same constituents (e.g. if benchmark exceedances occur for constituents covered by a TMDL). It would be clearer if the WQPP and WQRP were required to incorporate any applicable TMDL requirements so that all control measures growers must implement are in a single place, and it is clear that implementing the WQPP and WQRP constitute	The San Diego Water Board has modified the Tentative General Order as follows to provide clarification that TMDL requirements are to be included in WQPPs: *Third-Party General Order section VII.C.6.m (previously section VII.C.6.l):* A detailed description of each current and proposed management practice, including its purpose, operational status, and a time schedule for construction and implementation, if the management practice is not currently in use. This includes but is not limited to management practices related to irrigation efficiency and management, pesticide management, nutrient management, salinity management, and sediment and erosion control to achieve compliance with this General Order. <u>This also includes management practices required to</u>	Modified Third-Party General Order section VII.C.6.m (previously section VII.C.6.l) Modified Individual General Order section VI.C.6.l (previously section VI.C.6.k)

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	compliance with the TMDL requirements.	address applicable TMDLs, including by not limited to management practices identified in the Rainbow Creek Nutrient Management Plan. The time schedule shall reflect the shortest practicable time required to perform each task and shall include a final date for construction and implementation. The schedule may not be longer than that which is reasonably necessary to achieve compliance with the receiving water limitations contained in section VI of this General Order. *Individual General Order section VI.C.6.l (previously section VI.C.6.k):* A detailed description of each current and proposed management practice, including its purpose, operational status, and a time schedule for construction and implementation, if the management practice is not currently in use. This includes but is not limited to management practices related to irrigation efficiency and management, pesticide management, nutrient management, salinity management, and sediment and erosion control to achieve compliance with this General Order. This also includes management practices required to address applicable TMDLs, including by not limited to management practices identified in the Rainbow Creek Nutrient Management Plan. The time schedule shall reflect the shortest practicable time required to perform each task and shall include a final date for construction and implementation. The schedule may not be longer than that which is reasonably necessary to achieve compliance with the receiving water limitations contained in section V of this General Order.	
23	The County requests that the Tentative General Orders contain an explicit reopener provision to incorporate TMDL	The San Diego Water Board has modified the Tentative General Orders to explicitly state that the Tentative	Modified Third-Party General

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	amendments, new TMDLs, or TMDL alternatives that are approved in the future. Since the Tentative General Orders do not currently include an expiration date, it is important that they contain a mechanism to incorporate amendments to existing TMDLs as well as future TMDLs or TMDL alternatives. The incorporation of newly adopted TMDLs should also be required to be considered in the WQPP and WQRP modifications.	General Orders may be reopened to incorporate future TMDL amendments, new TMDLs, or TMDL alternatives: *Third-Party General Order section IX.B*: ~~Reopener Provisions~~ This General Order may be modified, revoked and reissued, or terminated for cause including, but not limited to the following: 1. Violation of any terms or conditions of this General Order. 2. Obtaining this General Order by misrepresentation or failure to disclose fully all relevant facts. 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. 4. <u>Adoption of TMDL amendment, new TMDL, or TMDL alternative.</u> *Individual General Order section VII.B:* ~~Reopener Provisions~~ This General Order may be modified, revoked and reissued, or terminated for cause including, but not limited to the following: 1. Violation of any terms or conditions of this General Order. 2. Obtaining this General Order by misrepresentation or failure to disclose fully all relevant facts. 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. 4. <u>Adoption of TMDL amendment, new TMDL, or</u>	Order section IX.B Modified Individual General Order section VII.B

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		TMDL alternative.	
24	As currently written, the WQPP due upon NOI submittal must include a schedule for operations and maintenance of control measures to meet all receiving water limitations regardless of whether or not exceedances of the limitations have occurred (section VII.C.6.m of the Third-Party General Order and section VI.C.6.l of the Individual General Order). It may not be appropriate to ask agricultural dischargers to determine future practices and a schedule for their implementation until it is deemed that additional management is necessary to meet water quality standards. The County of San Diego requests that specific control measures and a schedule for implementation only be required to be provided in the WQRP after a benchmark exceedance is triggered by monitoring results.	The schedule for the implementation of additional management practices in the WQPP is specific to those identified at the time the WQPP is prepared. The purpose of including the schedule is to document the Member's/ Discharger's acknowledgement that additional management practices are needed and commitment to implement the additional practices. The WQRP must include the identification of additional management practices to address the specific exceedances of a water quality benchmark and the schedule for implementation.	None necessary
25	The scaled operation map submittal requirements outlined in Third-Party General Order section VII.C.6.k are excessive as compared to other regions. The County requests that the operation map requirements be reduced to the minimum required to assess compliance with Order requirements. For example, only operations on-site should be required to be mapped, not off-site areas where the operator/land owner likely does not have control of the activities.	The purpose of the scaled operation map is to identify the location of on-site operations, to support the selection and location of management practices to prevent or minimize the potential of pollution as a result of those operations, and to support the selection of monitoring locations. While the Member/Discharger may not have control of off-site activities, certain off-site characteristics (e.g., the location of nearby waterbodies, the location of nearby drinking water wells, the location of adjacent agricultural activities) should be considered when selecting monitoring locations. In order to clarify the scale of the map and the level of detail for off-site characteristics, the San Diego Water Board has modified the Tentative General Orders as follows (noting that the modifications also address Comment No. 61): *Third-Party General Order sectionVII.C.6.k:* A scaled topographic Site Location Map extending one mile past beyond the property boundary of the	Modified Third-Party General Order section VII.C.6.k Added Third-Party General Order section VII.C.6.l Modified Individual General Order section VI.C.6.j Added Individual General Order section VI.C.6.k

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		Agricultural Operation and depicting the following: i. Property boundaries, roads, structures, and drainage structures. ii. Irrigation wells, domestic water supply wells, springs, and other surface water bodies listed in public records or otherwise known to the Member to be in the map area. iii. ~~Growing areas.~~ iv. ~~Compost and manure management areas including storage and disposal sites.~~ v. ~~Chemical storage areas.~~ vi. ~~Topographic lines.~~ vii. ~~Major pipes or other structures through which through which irrigation runoff, storm water runoff and non-storm water runoff from the Agricultural Operation is discharged to surface waters, if applicable.~~ viii. ~~The location and types of management practices employed at the Agricultural Operation.~~ ix. ~~The location of proposed surface water and groundwater monitoring stations.~~ *Third-Party General Order section VII.C.6.l (added section):* A scaled Site Plan depicting the following: i. Property boundaries, roads, structures, and drainage structures. ii. Irrigation wells, domestic water supply wells, springs, surface water bodies, and storm water and non-storm water conveyance	

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		systems located within the property boundary. iii. Approximate location of growing areas. iv. Compost and manure management areas including storage and disposal sites. v. Chemical storage areas. vi. Surface water flow directions and general topographic slope direction. vii. The location and types of management practices employed. viii. Groundwater wells used for domestic supply. *Individual General Order section VI.C.6.j:* A scaled topographic Site Location Map extending one mile past beyond the property boundary of the Agricultural Operation and depicting the following: i. Property boundaries, roads, structures, and drainage structures. ~~ii.~~ Irrigation wells, domestic water supply wells, springs, and other surface water bodies listed in public records or otherwise known to the Discharger to be in the map area. ~~iii. Growing areas.~~ ~~iv. Compost and manure management areas including storage and disposal sites.~~ ~~v. Chemical storage areas.~~ ~~vi. Topographic lines.~~ ~~vii. Major pipes or other structures through which through which irrigation runoff, storm water runoff and non-storm water runoff from the~~	

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		~~Agricultural Operation is discharged to surface waters, if applicable.~~ ~~viii. The location and types of management practices employed at the Agricultural Operation.~~ ~~ix. The location of proposed surface water and groundwater monitoring stations.~~ *Individual General Order sectionVI.C.6.k:* A scaled Site Plan depicting the following: i. Property boundaries, roads, structures, and drainage structures. ii. Irrigation wells, domestic water supply wells, springs, surface water bodies, and storm water and non-storm water conveyance systems located within the property boundary. iii. Approximate location of growing areas. iv. Compost and manure management areas including storage and disposal sites. v. Chemical storage areas. vi. Surface water flow directions and general topographic slope direction. vii. The location and types of management practices employed. viii. The location of groundwater wells used for domestic supply.	
26	The detailed visual monitoring program and schedule for evaluating management practices provided in Third-Party General Order section VII.C.6.n appear duplicative when farmers are required to perform both quarterly self-inspections and annual self-assessments. Please remove the	The requirement to include a detailed description of the visual observation monitoring program in the WQPP is intended to ensure that a reliable and consistent approach is used to conduct the visual inspections and that the frequency of performing visual inspections is appropriate	Modified Third-Party General Order section VII.C.6.o Modified

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	requirement for the visual monitoring program as part of the WQPP.	given site-specific considerations. While a Member/Discharger may determine that visual inspections should be performed more frequently, they must be performed at least quarterly as part of the Quarterly Self-Inspection Report. While visual observation monitoring is a component of the Quarterly Self-Inspection Report, it is not a requirement of the Annual Self-Assessment Report (except to the extent that the Quarterly Self-Inspection Reports are attached to the Annual Self-Assessment Report as required by section VII.D.4. of the Third-Party General Order and section VI.E.4 of the Individual General Order. To clarify this, the San Diego Water Board has modified the Tentative General Orders as follows: *Third-Party General Order section VII.C.6.o:* A detailed visual <u>observation</u> monitoring program ~~and schedule~~ <u>as required by section VII.D of this General Order</u> ~~and schedule~~ for evaluating <u>whether management practices are adequate, properly implemented</u> and ~~the~~ effective<u></u>~~ness of each current or proposed management practice~~. *Individual General Order section VI.C.6.n:* A detailed visual <u>observation</u> monitoring program ~~and schedule~~ <u>as required by section VI.E of this General Order</u> ~~and schedule~~ for evaluating <u>whether management practices are adequate, properly implemented</u> and ~~the~~ effective<u></u>~~ness of each current or proposed management practice~~.	Individual General Order section VI.C.6.n
27	The schedule for development of the WQRP is too short (90 days). The County recommends it be made longer to allow growers sufficient time to complete the following steps: 1) obtain and evaluate the laboratory results; 2) determine if agriculture is the source of the exceedance; and 3) identify	While the San Diego Water Board agrees that implementation of the WQRP may take more than 90 days, the San Diego Water Board believes that 90 days should be sufficient to develop a WQRP for most situations. The San Diego Water Board may permit	None necessary

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	appropriate management measures, if needed.	additional time as warranted (section VIII.B.2 of the Third-Party General Order and section VI.D.2 of the Individual General Order). As drafted, the Tentative General Orders already address the County's comment: 1) a WQRP is required to be developed after an exceedance of a water quality benchmark has been identified based on laboratory results or a determination of threatened degradation has been made (section VIII.B.2 of the Third-Party General Order and section VI.D.2 of the Individual General Order); 2) the location of monitoring stations should be selected to eliminate sources of pollution from other agricultural activities (Attachment A, MRP section III.B.1 of the Third-Party General Order and Attachment A, MRP section III.B.1. of the Individual General Order); and 3) a WQRP is a detailed plan to identify the source(s) of exceedance(s) and to reduce or eliminate the pollution from the source(s) once identified (section VIII.B of the Third-Party General Order and section VI.D of the Individual General Order).	
28	WQRPs should also be allowed to group pollutants with similar management practices into one plan and/or add additional pollutants exceeding benchmarks into an existing WQRP if they have similar management practices. The County requests modifications to the language regarding the development of WQRPs to allow flexibility to incorporate new control measures into existing plans and develop one plan to cover all similar benchmark exceedances.	The Tentative General Orders do not prohibit Third-Party Groups or Dischargers from developing a new WQRP or revising an existing WQRP to address more than one water quality impairment.	None necessary

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29	The County requests the following clarifications to the quarterly assessment requirements. In the Monitoring and Reporting Program (MRP; Attachment A) section III.B.2.c there are specifications about when dry weather monitoring should occur that are problematic in operating a regional monitoring program. When those that have control over timing of irrigation are doing the assessment, it is more appropriate for the requirement that quarterly assessments be done during irrigation events.	See response to Comment No. 15.	See response to Comment No. 15
30	The requirement in the Third-Party General Order section VII.E.4 for the listing of non-compliance and specific information about each incident is not clearly stated and references to compliance are scattered throughout the Third-Party General Order and not explained in Attachment J: *Annual Self-Assessment Report*, or the instructions that accompany the report template. The County requests the Third-Party General Order be modified to clarify the compliance requirements and consolidate them into one place for clarity on what is required to be assessed and reported. This will make the requirements more understandable and easier to access for Agricultural Operations.	Attachment J of the Tentative General Orders has been modified to more clearly identify what information regarding non-compliance should be reported as part of the Annual Self-Assessment Report. Part J of Attachment J – Annual Self-Inspection Report to the General Orders have been modified as follows *Third-Party General Order Attachment J, Part I (formerly part J):* Provide a listing of each incident of noncompliance during the annual monitoring period and, for each incident of noncompliance, provide the cause, the ~~period of non-compliance including~~ the exact dates of non-compliance ~~and times~~, and if the noncompliance has not been corrected, the ~~anticipated time it is expected to continue and the~~ steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. Incidents of noncompliance include but are not limited to1) failure to pay annual WDR fees (Order No. R9 2016-0004, section III.J), 2) failure to comply with waste discharge prohibitions (Order No. R9 2016-0004, section IV), 3) failure to comply with waste discharge specifications (Order No. R9 2016-0004, section V), 4), failure to obtain the required two-hours of yearly water quality education (Order No. R9 2016-0004, section VII.B), 5) failure to conduct Quarterly Self-Inspection (Order No. R9 2016-0004,	Modified Third-Party General Order Attachment J Modified Individual General Order Attachment J

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		section VII.D), 6) a single monitoring result that exceeds either the narrative or numeric water quality objective for a Water Quality Benchmark (Order No. R9 2016-0004, section VI and MRP section VII), and 7) the exceedance of a Water Quality Benchmark that triggers the development of a Water Quality Restoration Plan (WQRP), and failure to submit and implement a WQRP (Order No. R9 2016-0004, section VIII.B and Order No. R9 2016-0004 MRP section VII and Table A-4). *Individual General Order Attachment J, Part I (formerly part J):* Provide a listing of each incident of noncompliance during the annual monitoring period and, for each incident of noncompliance, provide the cause, the ~~period of non-compliance including~~ the exact dates of non-compliance ~~and times~~, and if the noncompliance has not been corrected, the ~~anticipated time it is expected to continue and the~~ steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. Incidents of noncompliance include but are not limited to1) failure to pay annual WDR fees (Order No. R9 2016-0005, section II.J), 2) failure to comply with waste discharge prohibitions (Order No. R9 2016-0005, section III), 3) failure to comply with waste discharge specifications (Order No. R9 2016-0005, section IV), 4) failure to obtain the required two-hours of yearly water quality education (Order No. R9 2016-0005, section VI.B), 5) failure to conduct Quarterly Self-Inspection (Order No. R9 2016-0005, section VI.E), 6) a single monitoring result that exceeds either the narrative or numeric water quality objective for a Water Quality Benchmark (Order No. R9 2016-0005, section V and MRP section VII), and 7) the exceedance of a Water Quality Benchmark that triggers the development of a Water Quality	

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		Restoration Plan (WQRP), and failure to submit and implement a WQRP (Order No. R9 2016-0005, section VI.D and MRP section VII and Table A-2).	
31	The Order requires four hours of education per year, which is more than some other regions. The education requirements should be reduced to two hours per year for consistency with other regions.	See response to Comment No. 3.	See response to Comment No. 3
32	Tracking and managing multiple proofs of contact with various agencies (the same ones that are likely to provide education opportunities and will be documented under the training requirements) is an unnecessary burden for both Agricultural Operators and the Third-Party Group. If a Third-Party Group produces newsletters or other communications or passes along information from other agencies, a single copy of these communications included in the Third-Party Group's annual report should be sufficient. On-farm meetings or consultations that are specific to a particular operation should be required to be documented, but any additional documentation is unnecessary.	The San Diego Water Board agrees that tracking and managing proofs of contact with organizations such as local Farm Bureaus, the University of California Cooperative Extension (UCEE), the National Resource Conservation Service (NRCS), the Resource Conservation Districts (NCD), or other comparable organizations (section VII.B.2 of the Third-Party General Order and section VI.B.2 of the Individual General Order), could be burdensome. For this reason, the San Diego Water Board has modified the Tentative General Orders to remove the requirements for regular contact and proof of regular contact documentation. A statement to the Attachment A Fact Sheet of the Tentative General Orders has been added pointing out that Members/Dischargers can keep current on agricultural water quality issues and recommended management practices by maintaining regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs. The Tentative General Orders are modified as follows: *Third-Party General Order, section VII.B.2 is deleted:* ~~Members shall maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems.~~ *Third-Party General Order, Attachment J is modified*	Deleted Third-Party General Order section VII.B.2. Modified Third-Party General Order Attachment J, Part F. Modified Third-Party General Order Attachment A, Fact Sheet section VII.B. Deleted Individual General Order section VI.B.2 Modified Individual General Order Attachment J, Part F. Modified Individual General Order Attachment A, Fact Sheet

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		Annual Self- Assessment Form, section F. Association Communication Requirement is deleted. *Third-Party General Order, Attachment A, Fact Sheet section VII. B is modified to include the following.* Members can also maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems. *Individual General Order, section VI.B.2 is deleted:* ~~Dischargers shall maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems.~~ *Individual General Order, Attachment J is modified* Annual Self- Assessment Form, section F. Association Communication Requirement is deleted. *Individual General Order, Attachment A, Fact Sheet section VI. B is modified to include the following:* Dischargers can also maintain regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs to be informed on any known water quality problems and the management practices that are available to address those problems.	section VI.B.
33	Sections III.B.2.b and c of the Third-Party General Order are overly prescriptive in regards to the timing of monitoring events. Part b lists specifications for wet weather monitoring and since samples shall be collected within the first 24 hours	See response to Comment No. 15.	See response to Comment No. 15

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	of a storm with a minimum of 0.5" of rainfall, the added requirement that a "no runoff' determination also include evidence that irrigation was occurring should be removed. The purpose of wet weather sampling is to evaluate the impacts of storm water runoff and farmers are not going to be irrigating within such close proximity to a significant rain event. Part c requirements for dry weather monitoring are only appropriate for on-farm/edge-of-field monitoring. When assessing contributions from a number of farms at numerous monitoring sites, timing of sample collection to ensure pesticide and fertilizer application and during irrigation is a logistical impossibility to coordinate for a group monitoring program. An alternative approach is recommended under the quarterly assessment comments of this letter; where the timing of the assessment is based on these specifications.		
34	The U.S. Environmental Protection Agency (USEPA) has recommended a change to the preferred bacterial indicators for inland surface waters from enterococcus to both enterococcus and *E. coli*. Consider using both enterococcus and *E. coli* as the bacterial indicators for freshwater and enterococcus as the bacterial indicator for saline waters.	The San Diego Water Board is familiar with USEPA's recommendation and it should be noted that the Basin Plan has not yet amended the Basin Plan to incorporate the new USEPA criteria. Therefore, monitoring is still required for total coliform and fecal coliform bacteria levels that are specified in existing water quality standards in the Basin Pan and Ocean Plan.	None necessary
35	There is an extensive list of required analyses in Table A-3 as part of the bioassessment monitoring requirements. Please clarify how bioassessment monitoring data will be used by Agricultural Operations to improve their management decisions to protect water quality.	Bioassessment monitoring 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 (e.g., 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. As described in section I.D.2.b.iii of Attachment B to the Tentative General Orders, the California Stream Condition	Modified Third-Party General Order Attachment B (Fact Sheet), section IX.B Modified Individual General Order Attachment B (Fact Sheet), section VII.B

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		Index (CSCI) tool is used to assign an Indicator of Biological Integrity (IBI) score to the area assessed, with possible scores being Very Good, Good, Fair, Poor, and Very Poor. For streams or stream reaches that are determined to be in Very Good or Good biological condition, the bioassessment information can be can be used by Third-Party Group and Members to determine the level of protection that is expected to maintain and improve the existing biological condition. For streams or stream reaches that are determined to be in Fair, Poor, or Very Poor biological condition, the bioassessment information can be used to determine the level of protection that is needed to restore the biological condition. The Causal Analysis/Diagnosis Decision Information System (CADDIS), an on-line decision support system supported by the USEPA, can also be used by technically qualified biologists to help identify the specific causes (stressors) responsible for degraded biological conditions in streams and rivers that have been classified as impacted by the IBI score. CADDIS is available on-line on the USEPA website at http://www.epa.gov/caddis. The framework is largely based on five steps of stressor identification using a weight of evidence approach to either diagnose or refute a stressor. Additional information regarding the use of CADDIS is available in a Southern California Coastal Water Research Project (SCCWRP) report entitled *Casual Assessment Evaluation and Guidance for California, Technical Report 750-April 2015*. The report is available on the SCCWRP website at http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/750_CausalAssessmentGuidance041515wCov.pdf Section IX.B of Attachment B (Fact Sheet) of the Third-Party General Order and section VII.B of Attachment B	

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		(Fact Sheet) of Individual General Order have been modified to include the above response.	
36	If a property exceeds the MCL for nitrate, the Tentative General Orders call for notification and annual sampling. Annual sampling may be insufficient to capture seasonal variation in the impacted aquifer. Please consider requiring more frequent sampling if necessary, while allowing for sampling frequencies to be reduced based on results.	Annual monitoring of groundwater for nitrate is consistent with other similar agricultural waste discharge requirements in California.[3] Should annual monitoring prove to be insufficient, the San Diego Water Board may increase the frequency of groundwater monitoring (Attachment A, section III.C.4 of the Third-Party General Order and Attachment A, section III.C.4 of the Individual General Order).	None necessary
37	If Agricultural Operations are shown to be impacting drinking water wells, it is unclear whether or how an Agricultural Operation would be required to respond and/or change practices. Please clarify.	Attachment A section III.C.b.ii.(a) of the Third-Party General Order and Attachment A section III.C.b.ii.(a) of the Individual General Order require that within 24 hours of receipt of a laboratory test result indicating a nitrate concentration in excess of the MCL, the Member/Discharger must notify the San Diego Water Board and the applicable County Health Department to determine if additional actions are needed. These actions may include taking the well out of service and providing an alternate source of drinking water, or installing filters to treat the water prior to use for domestic purposes based on the County Health Department's direction. Attachment A section III.C.b.ii.(b) of the Third-Party General Order and Attachment A section III.C.b.ii.(b) of the Individual General Order also require that the Discharger /Member, or Third-Party Group on the Member's behalf, shall immediately notify all individuals using the water supply well for a drinking source of the nitrate test results and actions to be taken. Where the	Modified Third-Party General Order Attachment A section III.C.1.b.ii.(b) Modified Third-Party General Order sections VIII.B and Attachment A MRP section VII.H.3. Modified Individual General Order Attachment A section III.C.1.b.ii.(b)

[3] See Waste Discharge Requirements General Order No. R5-2012-0116 issued by the Central Valley Regional Water Quality Control Board for Growers within the Eastern San Joaquin River Watershed that are Members of a Third-Party Group and the Conditional Waiver of Waste Discharge Requirements Order No. R3-2012-0011 and the accompanying Monitoring and Reporting Program Orders Nos. R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03,1 and the accompanying Resolution No. R3-2012-0012 issued by the Central Coast Regional Water Quality Control Board for discharges from irrigated agricultural lands in the Central Coast region.

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		Discharger/Member is not the property owner, the San Diego Water Board will notify the users promptly. A footnote has been added to Attachment A section III.C.1.ii.(b) of the Third-Party General Order and Attachment A section III.C.1.ii.(b) of the Individual General Order as follows: *Third-Party General Order Attachment A section III.C.1.ii.(b) (added footnote 6):* The notification should include the information provided in the State Water Board's Nitrate MCL Exceedance template, which can be found at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Notices.shtml. *Individual General Order Attachment A section III.C.1.ii.(b) (added footnote 5):* The notification should include the information provided in the State Water Board's Nitrate MCL Exceedance template, which can be found at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Notices.shtml. Attachment A, MRP section VII.G.3 of the Third-Party General Order and Attachment A, MRP section VII.H.3 of the Individual Order require Third-Party Groups/Dischargers to prepare a WQRP if groundwater quality data indicate an exceedance of the applicable nitrate benchmark of 36 mg/L as nitrite. The WQRP must identify management practices currently being implemented and additional or improved management practices that will be implemented by Members/Dischargers to prevent or minimize the discharge of any waste that is causing or contributing to the exceedance of the nitrate water quality benchmark or a trend of water quality degradation. Improved practices may include but not be limited to development and	Modified Individual General Order sections VI.D and Attachment A MRP section VII.H.3.

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		implementation of a nutrient management plan to reduce nitrogen loading to groundwater if appropriate. To provide clarity on when an exceedance of the nitrate benchmark of 36 mg/L as nitrite triggers the requirement for a WQRP the Tentative General Orders have been modified as follows: *Third-Party General Order section VIII. B.* If a ~~Surface~~ Water Quality Benchmark described in section VII, Table A.4 of the MRP (Attachment A) is exceeded, Third-Party-Groups must promptly notify the San Diego Water Board and ~~thereafter~~ prepare a WQRP in consultation with its Members suspected of causing or contributing to the exceedance. The WQRP must contain the information described in section VIII.B.3 below. For the purposes of this General Order, an exceedance occurs when a) a sampling result for a constituent at a single surface water monitoring location exceeds the monitoring benchmark more than three out of four times for the same constituent or b) a groundwater sampling result exceeds the nitrate benchmark in accordance with section III.C.b of the MRP (Attachment A) of this General Order. The San Diego Water Board may also require Third-Party Groups to prepare a WQRP if a trend of degradation of water quality is identified that threatens a beneficial use in receiving waters affected by its Member's Agricultural Operation(s). *Third-Party General Order MRP section VII. H.3* Identification of all exceedances of the applicable nitrate benchmark of 36 mg/L as NO3 at any water supply well monitoring location. If groundwater	

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		quality monitoring data indicate an exceedance~~s~~ of the nitrate benchmark in accordance with section III.C.b of this MRP, Third-Party Groups shall prepare and submit a ~~Water Quality Restoration Plan~~ (WQRP) pursuant to section VIII.B of this General Order. *Individual General Order section VI. D.* If a ~~monitoring~~ Water Quality ~~b~~Benchmark described in section VII, Table A.2 of the MRP (Attachment A) is exceeded, Dischargers must promptly notify the San Diego Water Board and ~~thereafter~~ prepare a WQRP containing the information described in section VI.D.3 below. For the purposes of this General Order, an exceedance occurs when a) a sampling result for a constituent at a single surface water monitoring location exceeds the ~~applicable Surface Water Quality Benchmarks~~ monitoring benchmark more than three out of four times for the same constituent or b) a groundwater sampling result exceeds the nitrate benchmark in accordance with section III.C.b of the MRP (Attachment A) of this General Order. The San Diego Water Board may also require Dischargers to prepare a WQRP if a trend of degradation of water quality is identified that threatens a beneficial use in receiving waters affected by the Discharger's Agricultural Operation. *Individual General Order MRP section VII. H.3* Identification of all exceedances of the applicable nitrate benchmark of 36 mg/L as NO3 at any water supply well monitoring location. If groundwater quality monitoring data indicate an exceedance~~s~~ of the nitrate benchmark in accordance with section III.C.b of this MRP, Third-Party Groups shall prepare	

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		and submit a ~~Water Quality Restoration Plan~~ (WQRP) pursuant to section VIII.B of this General Order.	
38	To increase transparency with stakeholders, the County requests that the potential enforcement actions implied in section VII.F of the Tentative General Orders be listed. Clarification of these potential enforcement actions will provide a level playing field for all potential dischargers and a higher level of assurance that appropriate follow up actions will be implemented in the event of non-compliance.	See response to Comment No. 5.	See response to Comment No. 5
Mr. Rami Mina, dated June 27, 2016			
39	In terms of the specifics of the latest Tentative General Orders, small growers would have been glad to comply with the Individual General Order if the annual Tentative General Order fees were waived. Third-Party Group Member annual Tentative General Order fees are lower than the annual Tentative General Order fees for individuals, hence based on cost and extra responsibility, why would anyone choose the individual option?	Water Code section 13260 requires each person who discharges waste or proposes to discharge waste that could affect the quality of the waters of the State to file a report of waste discharge with the appropriate regional water board and to pay an annual fee set by the State Water Board. The collected fees are deposited in the Waste Discharge Permit Fund (WDPF). Water Code section 13260 requires the State Water Board to adopt, by emergency regulations, an annual schedule of fees for persons discharging waste to the waters of the State. Water Code Section 13260 further requires the State Water Board to adjust the annual fees each fiscal year to conform to the revenue levels set forth in the Budget Act. The State Water Board's Division of Administrative Services – Fee Branch has the responsibility for setting annual fees for the Water Quality Program, which includes all agricultural regulatory programs. The annual fee schedule for WDRs and waivers of WDRs for discharges from agricultural lands (including irrigated and non-irrigated lands) is set forth in CCR title 23, division 3, chapter 9, section 2200.6. The San Diego Water Board does not have the authority to waive these fees except	None necessary

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		under limited circumstances stipulated in the fee schedule. The Individual General Order was developed to serve as general WDRs for waste discharges from Agricultural Operations that are not covered by the Third-Party General Order. Thus, owners and operators of an Agricultural Operation may opt for coverage under either Tentative General Order, given their preference. Owners and operators who enroll under Individual General Order are subject to its terms and conditions in their individual capacity.	
40	It seems to me your goal is to improve the quality of our watersheds rather than collect fees. In fact, the federal government is assisting us financially by allowing generous write-offs and subsidizing expenses such as crop insurance and others. Thus one government agency is attempting to reduce our financial burden while another in increasing it, without water quality improvement.	As discussed in Attachment B (Fact Sheet) sections I.C and I.D to the Tentative General Orders, water quality data has shown that agricultural activities have negatively impacted water quality in the San Diego Region. It is the purpose of the Tentative General Orders to prevent further degradation and to restore the affected water bodies. While there are costs associated with enrolling under and implementing the Tentative General Orders, the San Diego Water Board has consistently considered and looked for opportunities to reduce those costs during the development of the Tentative General Orders. Additional information regarding the anticipated costs of compliance may be found in Fact Sheet section I.G of Attachment B to the Tentative General Orders.	None necessary
41	As you know from our grove data I previously shared with you, my situation is fairly typical of many small growers in the area. Highlights follow: • In the 10 years our 5 acre grove has been in operation, we had one year of profits and 9 years of losses. Even if tax write-offs are considered, we annually experience net losses of ~$3600. • We must use good agricultural practices. i.e. apply	As stated in the response to Comment No. 40, the San Diego Water Board has consistently considered and looked for opportunities to reduce the costs associated with complying with the Tentative General Orders. As discussed in Attachment B (Fact Sheet) section I.G.7 of the Third-Party General Order and Attachment B (Fact Sheet) section I.G.7 of the Individual General Order, the San Diego Water Board believes that the annual cost of compliance for a 4 acre parcel (the median sized	None necessary

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	the optimum amount of fertilizers and water to reduce cost and minimize waste which also results in decreased contamination of surrounding watersheds. • Water and labor costs are increasing, while avocado prices are decreasing due to south American imports. I and many of my fellow small avocado growers are seriously considering turning our water off and exiting the business. Many of small avocado growers in the northern portion of the San Diego Water Board's jurisdictional boundaries have already done so because their water cost is significantly higher than ours. Grove managers and growers are worried that this may be the proverbial straw that broke the camel's back. If the proposed Tentative General Orders are approved as proposed, I personally cannot comply and my only alternative will be to exit the business. I'm sure many of my fellow growers will be doing the same if they have not already done so. It would be a shame if our beautiful green Southern California region is converted into brown brush.	Agricultural Operation in San Diego County) may be as low as $18 for those growers who opt to enroll as a Member of a Third-Party Group. The costs may be even lower for those growers who have already taken measures to prevent or minimize the discharge of waste from their Agricultural Operations to surface water and/or groundwater. Additional information regarding the anticipated cost of compliance and the assumptions used to develop those costs may be found in Attachment B (Fact Sheet) section I.G.7 of the Tentative General Orders.	
San Diego Region Irrigated Lands Group (SDRILG), dated July 29, 2016			
42	Our first comment is that it was our observation under the *2007 Conditional Waiver of Waste Discharge Requirements for Discharges from Agricultural and Nursery Operations* (Agricultural Waiver) well under one-half of the qualifying farm operations in the region were compelled to join a monitoring group. With that history we think it should be acknowledged that the Third-Party Groups may face challenges in meeting the expectations and requirements of the Third-Party General Order. The Third-Party Groups will have no capacity or reach beyond their combined Member base.	The San Diego Water Board supports the Third-Party approach to regulating agricultural discharges, as permitted by the NPS Policy and the Third-Party General Order. It is in the interest of the San Diego Water Board to maximize enrollment of Agricultural Operations in the Third-Party General Order through approved Third- Party Groups. From a resource perspective, Third-Party Groups allow the San Diego Water Board to leverage limited regulatory staff by acting as intermediaries between the San Diego Water Board and the Agricultural Operations, freeing San Diego Water Board resources to focus on problem areas or actors. Third-Party Groups frequently have the expertise to provide technical assistance and training to growers at a scale that cannot be matched by	None necessary

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		the San Diego Water Board resources, and in many cases Third-Party Groups already have existing relationships with Agricultural Operations. Following adoption of the Tentative General Orders, the San Diego Water Board intends to implement outreach efforts to educate growers on the enrollment requirements of the Tentative General Orders and to closely coordinate such efforts with qualifying Third- Party Group representatives. The San Diego Water Board recognizes that an effective enforcement program is needed to achieve full enrollment and compliance with the adopted General Orders and to eliminate any economic advantage to those who elect not to comply with the enrollment requirements of the adopted General Orders. The San Diego Water Board follows the State Enforcement Policy and uses progressive levels of enforcement, as necessary, to assure compliance in all water quality programs. See Response to Comment No. 5.	
43	The second comment is in regards to wholesale nurseries. In the San Diego Region wholesale nurseries are under two layers of regulation. Nurseries are subject to a schedule of fees and periodic inspections by the Co-permittees under Municipal Separate Storm System (MS4) Permit. Additionally, wholesale nurseries will be included for compliance with the Third-Party General Order. We believe the Third-Party General Order will protect the waters of the region and wholesale nurseries should be relieved of their obligation of fees and inspections under the MS4 Permit when they can show their respective co-permittee that they are Members of a Third-Party Group and in compliance with the obligations in the Third-Party General Order.	The San Diego Water Board has no authority to relieve nurseries of their obligation to pay fees to the owners and operators of MS4 systems (referred to as Copermittees) receiving discharges from nurseries. While section II.E.5.c of the Regional MS4 Permit requires Copermittees to conduct inspections to ensure compliance with applicable local laws and the requirements of the MS4 Permit, the MS4 Permit does not require Copermittees to collect fees from wholesale nurseries to conduct these inspections. The San Diego Water Board does not agree that the Co-permittees must be relieved of the requirement to inspect wholesale nurseries that are enrolled in the Tentative General Orders and discharge to an MS4. The Regional MS4 Permit includes specific inspection requirements that are not required by the Tentative General Orders, and the	None necessary

No.	Comment	Response	Action Taken
		information obtained during the inspections is needed to assist the Copermittees with ensuring their compliance with the MS4 Permit.	
44	*Third-Party General Order section I.D* - It is stated here that a property owner could be held responsible for failure by a tenant to comply with the Tentative General Order. We are concerned that the prospect for transferring compliance responsibility to the property owner as a result of an operator's failure would have a dampening effect on the availability of leased land for farming.	The property owner has the ultimate responsibility for the condition of the land and wastes discharged at the property. The State Water Board addressed the issue of landowner liability in a series of orders during the 1980s dealing with review of regional water board decisions on who is responsible for cleanups (for example see Order No. WQ 86-11, *In the Matter of the Petition of Southern California Edison Company for Review of Order No. 6-86-5 of the California Regional Water Quality Control Board, Lahontan Regional Board*). If the lessee (tenant) fails to control the discharge or comply with the Tentative General Orders, the San Diego Water Board has the discretion to place responsibility on the landowner. While most property owners may not enroll under the Tentative General Orders, naming the property owner in the WDRs serves to put landlords on notice that an agricultural tenant's activities may be a potential source of liability.	None necessary
45	*Third-Party General Order section I.G.3* - The following addition (shown as underline) is suggested by the SDRILG to include those operators who have failed to obtain an Operation Identification Number though required by law: The owner or operator of the Agricultural Operation holds <u>or is required to hold</u> a current Operator Identification Number/Permit from a local County Agricultural Commissioner for pesticide use reporting.	See response to Comment No. 20.	See response to Comment No. 20
46	*Third-Party General Order section I.O* - While it is understood that this Third-Party General Order does not address dischargers who are not participating in a Third-Party Group, we think it would be appropriate to mention here that a second order exists. If a discharger only referenced this order they would be made aware that not being a Member of an approved Third-Party Group requires individual	Section I.A of the Third-Party General Order states the following: *This General Order serves as Tentative General Orders for waste discharges from Agricultural Operations unless the discharges are covered by other applicable Tentative General Orders for*	None necessary

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	compliance.	*Individual Agricultural Operations.*[1] Footnote 1 provides the reference for the Individual General Order.	
47	*Third-Party General Order section III.B.1* - It is stated here that Members have 180 days from the effective date of the Third-Party General Order in order to submit a completed NOI, which will come through the Third-Party Group. The 180 day timeframe will be very difficult to meet. From the effective date of the Third-Party General Order, the Third-Party Group must first apply for and receive a Notice of Applicability (NOA) from the San Diego Water Board before any work can begin. The Third-Party Group must then launch the enormous task of enrolling Members and assisting Members to complete their individual WQPPs. Creating electronically transmittable WQPPs will require the development of custom software. In this same timeframe the Third-Party Group is required to submit its Monitoring Program Plan. At best, we believe it will take 270 days for the Third-Party Group to be in a position to submit the NOI's for its Members.	The San Diego Water Board agrees that 180 days may not provide sufficient time for Third-Party Groups to seek San Diego Water Board approval prior to developing their membership and assisting their Members with developing WQPPs. The San Diego Water Board has made the following modifications to the Third-Party General Order (noting that the modifications also address Comment No. 65): *Third-Party General Order section III.B.1:* Existing Dischargers without active coverage in other applicable general or individual Tentative General Orders shall submit a completed NOI (Attachment G) to enroll under this General Order no later than the ~~180~~ 270 days following the effective date of this General Order. *Third-Party General Order section VIII.C.1:* Within ~~180~~ 270 days of receipt of the NOA, Third-Party Groups shall submit a Surface Water and Groundwater Monitoring Program Plan (Monitoring Program Plan), as described in section VI of the MRP (Attachment A), to the San Diego Water Board for review and approval. Third-Party Groups must implement the Monitoring Program Plan within 90 days of approval. *Third-Party General Order Attachment A, MRP section VI:* Third-Party Groups shall prepare and submit a detailed Surface Water and Groundwater Monitoring Program Plan (Monitoring Program Plan) to implement the surface water and groundwater (if applicable) monitoring requirements specified in this MRP. The	Modified Third-Party General Order sections III.B.1 and VIII.C.1 and Attachment A MRP section VI Modified Individual General Order section II.B.1

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		Monitoring Program Plan is required under section VIII.C.1 of this General Order and shall be submitted ~~180~~ 270 days after receipt of the NOA. The deadline for existing Agricultural Operations to enroll in the Individual General Order (section II.B.2) has also been increased to 270 days following adoption of the Individual General Order. No additional time is needed to develop a Monitoring Program Plan for those enrolling in the Individual General Order because Individual enrollees need only develop a Monitoring Program Plan specific to their Agricultural Operation. The Individual General Order has been modified as follows: *Individual General Order section II.B.1:* Existing Dischargers without active coverage in other applicable general or individual WDRs shall submit a completed NOI (Attachment G) to enroll under this General Order no later than ~~180~~ 270 days following the effective date of this General Order.	
48	*Third-Party General Order section III.C.1* - We are concerned about the requirement that the Members' WQPP must be sent to the San Diego Water Board. Information within WQPPs will contain intellectual property, trade secrets, and proprietary information, much of which has no correlation or nexus to the San Diego Water Board's authority to regulate water quality. Prior to any request for the entire WQPP, the San Diego Water Board should make a finding showing the necessity of the data and information required to be submitted and how such data is related to water quality. Such information must remain confidential. The Porter-Cologne Act explicitly provides protection to Members for intellectual property, trade secrets, and proprietary information that may be within a WQPP, monitoring report, or technical submittal: "*When requested by the person furnishing a report, **the***	Although the San Diego Water Board recognizes that Members/Dischargers have concerns regarding the privacy of information provided in WQPPs, the WQPPs are required to contain only generalized information and do not run counter to competitive advantage or trade secret concerns. Moreover, the existing exemptions to the Water Code (see Water Code section 13267, subd. (b)(2)) and to the Public Records Act (see Government Code section 6254, subd. (k); and Evidence Code section 1060), which allow withholding of information deemed trade secrets and secret processes, are sufficient to protect the most sensitive information submitted. In order to establish a process by which a Member/Discharger may assert that all or a portion of the WQPP or other report is exempt from public disclosure, the San Diego Water Board has modified the Tentative	Added Third-Party General Order section IX.D.5 Added Individual General Order section VII.D.5

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	portions of a report that might disclose trade secrets or secret processes may not be made available for inspection by the public but shall be made available to governmental agencies for use in making studies. *However, these portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report (Water Code section 13267(b)(2)).*" Thus, the San Diego Water Board must acknowledge that farm specific information, including pesticide application, irrigation practices, mapping, crop rotations, best management practices, etc. are intellectual property, trade secrets, and proprietary information that must remain confidential. Keeping information within WQPPs on farms rather than submitting them to the San Diego Water Board does not hinder the San Diego Water Board's ability to regulate water quality nor will it prevent the San Diego Water Board from obtaining information it deems necessary. Water Code section 13267 specifically provides the San Diego Water Board with the authority to "*investigate the quality of any waters of the state within its region." (Water Code section 13267(a)).* In doing so, the statute further provides the San Diego Water Board with the authority to require *"any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge …(to] furnish, ... technical or monitoring program reports which the regional board requires*." Our suggestion is to have the Member submit the WQPP to the Third-Party Group for verification of completion and task the Third-Party Group with acknowledging in the NOI that the WQPP is complete and in possession of the Member and available for inspection should an investigation be launched.	General Orders as follows (noting that the modifications also address Comment No. 58): *Third-Party General Order section IX.D.5:* All reports prepared and submitted to the San Diego Water Board in accordance with the terms of this General Order will be made available for public inspection at the offices of the San Diego Water Board, except for reports, or portions of such reports, subject to an exemption from public disclosure in accordance with California law and regulations, including the Public Records Act, Water Code section 13267(b)(2), and the California Food and Agriculture Code. If the Third-Party Group or a Member of the Third-Party Group asserts that all or a portion of a report is subject to an exemption from public disclosure, it must clearly indicate on the cover of the report that it asserts that all or a portion of the report is exempt from public disclosure. The complete report must be submitted with those portions that are asserted to be exempt in redacted form, along with separately-bound unredacted pages (to be maintained separately by San Diego Water Board). The Member/Third-Party Group shall identify the basis for the exemption. If the San Diego Water Board cannot identify a reasonable basis for treating the information as exempt from disclosure, the Executive Officer will notify the Member/Third-Party Group that the information will be placed in the public file unless the San Diego Water Board receives, within 10 calendar days, a satisfactory explanation supporting the claimed exemption. Data on waste discharges, water quality, meteorology, geology, and hydrogeology shall not be considered confidential. NOIs, WQPPs, and WQRPs shall generally not be considered exempt from disclosure.	

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		Individual General Order section VII.D.5: All reports prepared and submitted to the San Diego Water Board in accordance with the terms of this General Order will be made available for public inspection at the offices of the San Diego Water Board, except for reports, or portions of such reports, subject to an exemption from public disclosure in accordance with California law and regulations, including the Public Records Act, Water Code section 13267(b)(2), and the California Food and Agriculture Code. If the Discharger asserts that all or a portion of a report is subject to an exemption from public disclosure, it must clearly indicate on the cover of the report that it asserts that all or a portion of the report is exempt from public disclosure. The complete report must be submitted with those portions that are asserted to be exempt in redacted form, along with separately-bound unredacted pages (to be maintained separately by San Diego Water Board). The Discharger shall identify the basis for the exemption. If the San Diego Water Board cannot identify a reasonable basis for treating the information as exempt from disclosure, the Executive Officer will notify the Discharger that the information will be placed in the public file unless the San Diego Water Board receives, within 10 calendar days, a satisfactory explanation supporting the claimed exemption. Data on waste discharges, water quality, meteorology, geology, and hydrogeology shall not be considered confidential. NOIs, WQPPs, and WQRPs shall generally not be considered exempt from disclosure.	
49	*Third-Party General Order section III.C.2* – References XII.C. Should be VII.C.	The San Diego Water Board has revised the Third-Party General Order as requested.	Modified Third-Party General

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			Order section III.C.2
50	*Third-Party General Order section III.C.3* - We acknowledge that the State Water Board gives the San Diego Water Board authority to set a one-time application fee. Though it is a repeat of State statute, the mention here that fees don't apply to those who were Members of a group before June 30, 2008, seems inappropriate to be placed in the Order in that the San Diego Water Board didn't even require Membership in a group until well after that date. Making it appear relief from the fee was possible is misleading. The imposition of an application fee by the San Diego Water Board would be a disincentive for participation. In essence, Members are being asked to be funders of the oversite of the Third-Party General Order. It should be the responsibility of the San Diego Water Board to petition the State Water Board for sufficient funding to carry out the Third-Party General Order. We strongly believe this is an inappropriate transfer of responsibility. Members will face the costs of administering their Third-Party Group plus the ongoing cost of monitoring and WQPP enactment. It is imperative that the San Diego Water Board set aside the imposition of an application fee.	Each person subject to WDRs must submit an annual fee to the State Board. The State Water Board's Division of Administrative Services – Fee Branch has the responsibility for setting annual fees for the Water Quality Program, which includes all agricultural regulatory programs. (See response to Comment No. 39 for additional background information.) The fee schedule for WDRs and waivers of WDRs for discharges from agricultural lands is set forth in CCR title 23, division 3, chapter 9, section 2200.6. The San Diego Water Board does not have the authority to waive these fees except under limited circumstances stipulated in section 2206.6(b) which provides: "b. Upon approval by the Regional Board to join a group subject to waste discharge requirements or waivers of waste discharge requirements for discharges from agricultural lands, including irrigated lands, the discharger shall submit to the State Water Board an application fee, unless such fee is not required by the Regional Board. The application fee is a one-time fee of $200 for dischargers that have received a written request to submit an application or report of waste discharge, and $50 for all other dischargers. This application fee shall not apply to dischargers who were members of a group on or before June 30, 2008." The San Diego Water Board agrees that waiving the one-time application fee for approved Members of Third-Party Groups who submit a timely NOI for enrollment under the Third-Party General Order by the deadlines specified in section III.B will provide an incentive for compliance and participation in the Third–Party Groups. However, the one-time application fee should be retained for Members of Third-Party Groups who do not submit timely NOI applications by the deadlines specified in the Third-Party	Modified Third-Party General Order section III.C.3 Modified Draft Initial Study, CEQA Environmental Checklist, Section 2 – Agricultural and Forest Resources, Anticipated Costs, WDR Fees

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		General Order. Based on these considerations the San Diego Water Board has modified the Third-Party General Order as follows: *Third-Party General Order section III.C.3:* One-time application fee made payable to "SWRCB" in accordance with CCR title 23, division 3, chapter 9, section 2200.6(b). The one-time application fee is waived for approved Members of Third-Party Groups who submit a timely NOI for enrollment by the deadlines specified in section III.B of this General Order. ~~This application fee does not apply to dischargers who were Members of a group on or before June 30, 2008.~~ The fee regulations can be accessed online at http://www.waterboards.ca.gov/resources/fees/water_quality/ *Draft Initial Study, CEQA Environmental Checklist, Section 2 – Agricultural and Forest Resources, Anticipated Costs, WDR Fees:* Agricultural Operations enrolled in the General Orders will pay annual WDR fees to the State Water Board. Annual WDR fees are established by the State Water Board and can be found in the California Code of Regulations (CCR) title 23, section 2200.6. The fees are assessed based on the type of enrollment (Individual or as a Member of a Third-Party Group), and the acreage of the Agricultural Operation. The 2015-16 annual fees for Individuals and for Members of a Third-Party Group are presented in Tables 1 and 2, respectively. Additionally, Agricultural Operations that were not members of a Third-Party Group on or before June 30, 2008 are required to pay a one-time enrollment	

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		fee. The fee is $200 for Agricultural Operations that receive a written request to submit an application for enrollment (NOI), and $50 for all other dischargers. The San Diego Water Board does not have the authority to waive these fees except under limited circumstances stipulated in section 2206.6(b) which provides: "b. Upon approval by the Regional Board to join a group subject to waste discharge requirements or waivers of waste discharge requirements for discharges from agricultural lands, including irrigated lands, the discharger shall submit to the State Water Board an application fee, unless such fee is not required by the Regional Board. The application fee is a one-time fee of $200 for dischargers that have received a written request to submit an application or report of waste discharge, and $50 for all other dischargers. This application fee shall not apply to dischargers who were members of a group on or before June 30, 2008." The San Diego Water Board will waive the one-time application fee for approved Members of Third-Party Groups who submit a timely NOI for enrollment under the Third-Party General Order by the deadlines specified in section III.B. This will provide an incentive for compliance and participation in the Third–Party Groups. For more information regarding fees, please refer to the response to Comment No. 39.	
51	*Third-Party General Order section V.A* - On this list of ten discharge specifications several are vague and leave room for interpretation. Even if complying with other aspects of the order, our concern would be that the Third-Party Group or Members could be challenged. Specifically: 1. What would determine if a discharge is "contributing"	The Tentative General Orders will be adopted by the San Diego Water Board under the authority of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), specifically Water Code sections 13263 and 13267. Among other mandates section 13263 subd. (a) requires the San Diego Water Board to set WDRs that implement applicable water quality control plans, including water	None necessary

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	to surface erosion in an arroyo (wash), which is basically an ephemeral stream channel that discharges after storms and is almost always eroding the streambed by definition? 3. As this is not drinking water, objectionable taste does not seem applicable as it is subjective. 9. Who is going to determine the amount of settleable material that degrades a benthic community? 10. Who determines how much natural light loss "significantly" degrades the communities?	quality objectives. Consistent with this requirement discharge specifications in section V.A of the Third-Party General Order and section IV.A of the Individual General Order were derived from applicable Basin Plan narrative water quality objectives. For instance, discharge specification 3 states, "*The waste shall not contain materials or substances in amounts that cause or contribute to the occurrence of objectionable tastes or odors in surface waters or groundwater*." Undesirable tastes and odors in waters of the State may be a nuisance and may indicate the presence of pollutants. This discharge specification provides a basis for ensuring that the discharge does not cause or contribute to violations of the narrative *Water Quality Objectives for Taste and Odor* on page 3-32 of the Basin Plan which provides in relevant part that that "*Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses."* Moreover, many surface water bodies located in areas of Agricultural Operations, such as the San Luis Rey River, the Santa Margarita River, and Rainbow Creek, are designated in the Basin Plan as having Municipal and Domestic Supply (MUN), which includes uses of water for community, military, or individual water supply systems, including but not limited to drinking water supply) existing beneficial uses (See Table 2-2 of the Basin Plan). Additionally, groundwater in areas of Agricultural Operations are also designated in the Basin Plan as having existing MUN beneficial uses (see Table 2-5 of the Basin Plan). Because both surface water and groundwater in areas of Agricultural Operations are designated as having existing beneficial use for Municipal and Domestic Supply, discharge specification 3 is appropriate to include in the General Tentative Orders.	

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		The San Diego Water Board will ultimately determine compliance with the discharge specifications on the basis of monitoring data and other available information.	
52	*Third-Party General Order section V.B* - This section prescribes 10 management measures that growers must follow. Water Code section 13360 prevents Regional Water Boards from prescribing management measures. Section V.B. should be stricken from the Third-Party General Order. To memorialize this understanding the following could be added to the Third-Party General Order: The Board is prevented by Water Code section 13360 from prescribing specific management practices to be implemented. However, it may set forth performance standards and require dischargers to report on what practices they have or will implement to meet those standards.	Section V.B of the Third-Party General Order and section IV.B of the Individual General Order comply with Water Code section 13360. The listed management practices are performance standards, and the Tentative General Orders do not prescribe how Members/Dischargers are required to meet the performance standards. For example, the Tentative General Orders require Members/Dischargers to maintain a 100 feet buffer zone between compost piles and surface waterbodies. The San Diego Water Board is authorized by Water Code Section 13243 to specify areas where discharges of waste are not permitted. Additionally, this performance standard does not specify how this is to be accomplished. (See section V.B.3 of the Third-Party General Order and section IV.B.3 of the Individual General Order.) For more information regarding performance standards, please refer to the response to Comment Nos. 53 and 54.	None necessary
53	*Third-Party General Order section V.B* - While we believe section V.B. should be stricken, should the San Diego Water Board see fit to ignore Water Code section 13360, the following amendments should be made: 1. ~~Not apply~~ Avoid as best practicable the application of fertilizers, pesticides, herbicides, algaecide, or fumigants within three days prior to a predicted rain event. There are several reasons for this suggestion. First, greenhouse applications pose no threat from rain events. Second, use of constant feed fertilizer programs would be interrupted. Constant feed uses very small doses of fertilizer in irrigation water that minimizes any runoff threat and in itself is a preferred management practice. Third, crops could be placed at risk from pests and diseases when serial storms	For the reasons stated in the comment, the San Diego Water Board has modified the Tentative General Orders as follows: *Third-Party General Order section V.B.1:* ~~Not apply~~ To the extent practical, avoid the application of fertilizers, pesticides, herbicides, algaecide, or fumigants within three days prior to a predicted rain event. *Individual General Order section IV.B.1:* ~~Not apply~~ To the extent practical, avoid the application of fertilizers, pesticides, herbicides, algaecide, or fumigants within three days prior to a	Modified Third-Party General Order section V.B.1 Modified Individual General Order section IV.B.1

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	are predicted.	predicted rain event.	
54	*(Second part of Comment No. 53)* 2.a. Municipal solid waste <u>except for biodegradable waste when processed</u>. It is our understanding that the definition of municipal solid waste can include green waste and food waste. Processed green waste is important to agricultural operations as mulch, soil additive, and as an input to composting. Though only emerging, the composting of food waste for use on farms is seen as an important future step in reducing waste sent to landfills.	To provide clarification regarding the use of processed biodegradable waste as a soil amendment, the San Diego Water Board has modified the Tentative General Orders as follows: *Third-Party General Order section V.B.2.a:* Municipal solid waste <u>except for biodegradable waste meeting the definition of "compost" as defined in Public Resources Code section 40116.</u> *Individual General Order section IV.B.2.a:* Municipal solid waste <u>except for biodegradable waste meeting the definition of "compost" as defined in Public Resources Code section 40116.</u>	Modified Third-Party General Order section V.B.2.a Modified Individual General Order section IV.B.2.a
55	*Third-Party General Order section VI.A-H* - The list of plans, policies, and regulations imply by reference responsibilities for Third-Party Groups that exceed the charts in Attachment A. We suggest a note mentioning the limits of responsibilities as detailed in the Monitoring Requirements	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 Tentative General Orders protect the beneficial uses of receiving waters in part through the Receiving Water Limitation (section VI of the Third-Party General Order and section V of the Individual General Order) requirements to comply with applicable water quality standards contained in the water quality control plans and policies and federal regulations listed in Items A though H. The water quality standards contained in these documents are incorporated by reference in the Tentative General Orders as if set forth in full therein. To facilitate compliance, the San Diego Water Board has modified section VI of the Third-Party General Order and section V of the Individual General Order to remove the specific list of plans and policies and has identified water quality benchmarks for specific waste constituents	Modified Third-Party General Order section VI and Attachment B, Fact Sheet section VI Modified Individual General Order section V and Attachment B, Fact Sheet section V

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		required to be monitored and the applicable water quality standards. The water quality benchmarks for the receiving water standards are set forth in the Monitoring and Reporting Program (MRP) for the Tentative General Orders. Section VI of Attachment B (Fact Sheet) to the Third-Party General Order, and section V of Attachment B (Fact Sheet) to the Individual General Order have also been revised to include tables to add additional clarity on the applicable water quality standard and beneficial use(s) being protected.	
56	*Third-Party General Order section VII.A.4* - We suggest allowing for web access for Members to the requirements of this section. It is possible that the amount of data required will exceed the capacity of some Member's computer systems. Third-Party Groups could store all the data and give Members direct access.	The Third-Party General Order does not prohibit Third-Party Groups from electronically storing documents and data on behalf of its Members. Copies of site-specific planning documents for an Agricultural Operation that are intended to be periodically referenced by the Member and his/her employees, such as the NOA and the WQPP, should be available on-site or easily accessed electronically.	None necessary
57	*Third-Party General Order section VII.B.1* - The doubling of water quality training from the two hours under the Agricultural Waiver to four hours is excessive and will be seen as punitive. In addition to the required training, the Third-Party Group will be in regular communication with its Members discussing water quality protection issues. Also, the record-keeping, WQPP, quarterly self-inspection, and annual self-assessment will act as education opportunities for Members. The two-hour standard is adequate.	See response to Comment No. 3.	See response to Comment No. 3
58	*Third-Party General Order section VII.C.2* - We are concerned about the requirement that the members' WQPP must be sent to the San Diego Water Board. Information within WQPPs will contain intellectual property, trade secrets, and proprietary information, much of which has no correlation or nexus to the San Diego Water Board's authority to regulate water quality. Prior to any request for the entire	See response to Comment No. 48.	See response to Comment No. 48

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	WQPP, the San Diego Water Board should make a finding showing the necessity of the data and information required to be submitted and how such data is related to water quality. Such information must remain confidential. The Porter-Cologne Act explicitly provides protection to members for intellectual property, trade secrets, and proprietary information that may be within a WQPP, monitoring report, or technical submittal: “When requested by the person furnishing a report, the portions of a report that might disclose trade secrets or secret processes may not be made available for inspection by the public but shall be made available to governmental agencies for use in making studies. However, these portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report (Water Code section 13267(b)(2)).” Thus, the San Diego Water Board must acknowledge that farm specific information, including pesticide application, irrigation practices, mapping, crop rotations, best management practices, etc. are intellectual property, trade secrets, and proprietary information that must remain confidential. Keeping information within WQPPs on farm rather than submitting them to the San Diego Water Board does not hinder the San Diego Water Board's ability to regulate water quality nor will it prevent the San Diego Water Board from obtaining information it deems necessary. Water Code section 13267 specifically provides the San Diego Water Board with the authority to "investigate the quality of any waters of the state within its region." (Water Code section 13267(a).) In doing so, the statute further provides the San Diego Water Board with the authority to require "any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge ...		

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	(to] furnish, ... technical or monitoring program reports which the regional board requires." Our suggestion is to have the member submit the WQPP to the Third-Party Group for verification of completion and task the Third-Party Group with acknowledging in the NOI that the WQPP is complete and in possession of the member and available for inspection should an investigation be launched.		
59	*Third-Party General Order section VII.C.4* - "Periodically evaluate" is vague. A requirement exists for quarterly self-inspections on a defined schedule. We suggest elimination of C.4.	The Tentative General Orders require Dischargers to design, implement, and maintain effective management practices to reduce or eliminate sources of NPS pollution. An effective inspection program is needed to ensure that the deployed management practices are working effectively to address site-specific pollutants. To clarify the minimum frequency for evaluating the effectiveness of deployed management practices, the San Diego Water Board has modified the Tentative General Orders as follows: *Third-Party General Order section VII.C.4:* At least quarterly, Members shall ~~periodically~~ evaluate the effectiveness of the management practices in the WQPP and make modifications to the WQPP as necessary. *Third-Party General Order section VII.D.1:* At least quarterly ~~Quarterly~~ during the months of March, June, September, and December, Members shall inspect the Agricultural Operation to assess the operation and maintenance of installed management practices and to correct any deficiencies. *Individual General Order section VI.C.4:* At least quarterly, Dischargers shall ~~periodically~~ evaluate the effectiveness of the management practices in the WQPP and make modifications to the	Modified Third-Party General Order sections VII.C.4 and VII.D.1 Modified Individual General Order sections VI.C.4 and VI.E.1

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		WQPP as necessary. *Individual General Order section VI.E.1:* At least quarterly ~~Quarterly~~ during the months of March, June, September, and December, Dischargers shall inspect the Agricultural Operation to assess the operation and maintenance of installed management practices and to correct any deficiencies.	
60	*Third-Party General Order section VII.6.i* - The agricultural chemicals used on a farming operation is in constant flux depending on the season, crops grown, environmental conditions, and pest or disease challenges. Requiring that the WQPP contain a list of chemicals would mean constant amendment of the WQPP. The WQPP is to be kept on-site and made available to the San Diego Water Board upon request. We suggest that the requirement for disclosure of chemicals used only be required when the San Diego Water Board makes a request to review the WQPP.	The San Diego Water Board recognizes that the Discharger may not be able to forecast all of the agricultural chemicals that will be used in a given year at an Agricultural Operation. However, it is important for the Discharger to select management practices that are appropriate for the agricultural chemicals that are used. In order for the San Diego Water Board to assess the sufficiency of the WQPP for any given Agricultural Operation, it is appropriate to include a list of the types of agricultural chemicals typically used at the Agricultural Operation. To clarify this expectation, the San Diego Water Board has modified the Tentative General Orders as follows: *Third-Party General Order section VII.C.6.i:* List of agricultural chemicals typically applied to crops at the Agricultural Operation, including but not limited to fertilizers and organic amendments, pesticides, and fumigants. *Individual General Order section VI.C.6.h:* List of agricultural chemicals typically applied to crops at the Agricultural Operation, including but not limited to fertilizers and organic amendments, pesticides, and fumigants.	Modified Third-Party General Order section VII.C.6.i Modified Individual General Order section VI.C.6.h
61	*Third-Party General Order section VII.C.6.k.ii* - This mapping requirement is onerous and impractical. For a Member to	See response to Comment No. 25.	See response to

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	survey all properties within one mile of his or her property boundary for all items mentioned in this section is beyond the capacity of any individual. Also, to expect a Member to report to the San Diego Water Board what is taking place on what could amount to hundreds of parcels is a possibly serious violation of privacy. We suggest an amendment that makes these mapping requirements apply solely to the Member's property.		Comment No. 25
62	*Third-Party General Order section VII.C.6.k.ix* - Proposed monitoring locations will be a discussion between the Third-Party Group and the San Diego Water Board. One of the advantages of joining a Third-Party Group is the group monitoring. Location of the monitoring stations is not relevant to Members. Also, every Member would be required to have in their WQPP the identical map retained by every other Member. We suggest that the Third-Party Group be required to make the map available upon request to Members and that this requirement be stricken.	For the reasons stated by the commenter, the San Diego Water Board agrees and has modified the Third-Party General Order to remove this requirement.	Modified Third-Party General Order section VII.C.6.k
63	*Third-Party General Order section VII.C.6.m and n* - We suggest deletion of both requirements. Item C.7 that follows is in essence a duplication.	Sections VII.C.6.m, VII.C.6.n, and VII.C.7 of the Third-Party General Order and sections VI.C.6.l, VI.C.6.m, and VI.C.7 of the Individual General Order are actually three separate requirements addressing the construction, operation, maintenance, and evaluation of management practices: Sections VII.C.6.m and VII.C.6.n of the Third-Party General Order and sections VI.C.6.l and VI.C.6.m of the Individual General Order can be consolidated into a single requirement in each General Order. Section VII.C.7 of the Third-Party General Order and section VI.C.7 of the Individual General Order require Members/Dischargers to periodically evaluate whether or not the management practice selected is actually the appropriate management practice for the site. If not, the Member/Discharger should consider choosing another	Modified Third-Party General Order Sections VII.C.6.m and n. Modified Individual General Order section VI.C.6.l and m.

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		more appropriate management practice. Based on these considerations the Tentative General Orders are revised as follows: *Third-Party General Order Section VII.C.6.m and Individual General Order section VI.C.6.l are changed to:* A detailed description of each current and proposed management practice, including its purpose, operational status, ~~and~~ a time schedule for the operation and maintenance of current management practices, and a time schedule for ~~if~~ the construction, ~~and~~ implementation, operation and maintenance, ~~if the~~ of proposed management practices ~~is~~ not currently in use. This includes but is not limited to management practices related to irrigation efficiency and management, pesticide management, nutrient management, salinity management, and sediment and erosion control to achieve compliance with this General Order. This also includes management practices required to address applicable TMDLs, including but not limited to management practices identified in the Rainbow Creek Nutrient Management Plan. The time schedule for construction and implementation of proposed management practices shall reflect the shortest practicable time required to perform each task and shall include a final date for construction and implementation. The schedule may not be longer than that which is reasonably necessary to achieve compliance with the receiving water limitations contained in section VI of this General Order. *Third-Party General Order Section VII.C.6.n. and Individual General Order section VI.C.6.m. are deleted.*	

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		~~A detailed schedule for operation and maintenance of each current or proposed management practice.~~	
64	*Third-Party General Order section VIII.B* - As an overall comment on this section the Third-Party Group will be challenged to fulfill any portion of a WQRP if a minority of farms in the region are Members of a group. In essence, the Third-Party Group, and its Members, will be burdened with monitoring and testing for non-members in order to meet the requirement for showing that exceedances are attributable to non-Members. This will serve as a major disincentive to remain in a group when Members learn they carry the burden and cost of discovering the pollutant contributions of non-members.	By selecting monitoring locations in accordance with Attachment A section III.B.1 of the Third-Party General Order, the Third-Party Group will reduce or eliminate the likelihood that an exceedance of a water quality benchmark is due to non-Members. Moreover, under the terms and conditions of the Tentative General Orders, both Third-Party Group Members and individual Dischargers are subject to the same requirements to not cause or contribute to exceedances of water quality standards except where a clearly articulated program of management practice implementation with a finite time schedule such as that described in the WQRP is established. Both Third-Party Groups and non-member individual Dischargers are subject to the same burden of preparing and implementing a WQRP in the event that a water quality benchmark is exceeded. Where the source of an exceedance is from a Discharger not enrolled under either the Tentative General Orders or individual WDRs, the Discharger would be subject to administrative civil liability. In the Central Valley, failing to enroll in the irrigated lands regulatory program resulted in fines ranging from $10,000 to upwards of $300,000 by the Central Valley Regional Water Quality Control Board.	None necessary
65	*Third-Party General Order section VIII.D.3* – It is stated here that Dischargers have 180 days from the effective date of the General Order in order to submit a completed NOI, which will come through the Third-Party Group. The 180 day timeframe will be very difficult to meet. From the effective date of the Third-Party General Order the Third-Party Group must first apply for and receive a NOA from the San Diego Water Board before any work can begin. The Third-Party Group must then launch the enormous task of enrolling members	See response to Comment No. 47.	See response to Comment No. 47

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	and assisting members to complete their individual WQPPs. Creating electronically transmittable WQPPs will require the development of custom software. In this same timeframe the Third-Party Group is required to submit its Monitoring Program Plan. At best, we believe it will take 270 days for the Third-Party Group to be in a position to submit the NOI's for its members.		
66	*Third-Party General Order section IX.A.1* – This paragraph should be revised to clarify that the Third-Party Group is not the discharger under the Third-Party General Order. Thus, certain enforcement actions and violations of the Third-Party General Order do not apply to the Third-Party Group.	The San Diego Water Board agrees with the comment but does not agree that revision of Provision IX.A.1 is necessary. The requirements of the Third-Party General Order clearly articulate the requirements that apply to Third-Party Groups and the requirements that apply to Members of a Third-Party Group. As provided in section IX.F.1 of the Third-Party General Order, Third-Party Groups are tasked with assisting Members in carrying out certain terms and conditions of the order including but not limited to fee collection, conducting specified monitoring, maintaining a list of Members, and reporting monitoring results to the San Diego Water Board. Third Party Groups are not “Dischargers”. However, Members, and any non-Member owner or operator that cause or permit the discharge of waste are “Dischargers” and would bear ultimate responsibility for complying with the Third-Party General Order. Any violation or threatened violation of the conditions of the Third–Party General Order would subject Members, and any non-Member owner or operator to any remedies, penalties, process or sanctions as provided for under State law. (See Provision IX.F1 of the Third Party General Order.) To provide clarity sections IX.F.2 has been modified as follows: *Third-Party General Order section IX.F.2:* Enforcement Authority – Third-Party Groups Failure to comply with the applicable terms and	Modified Third-Party General Order section IX.F. 2

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		conditions of this General Order may result in revocation of approval to act as a Third-Party Group ~~termination of coverage under this General Order~~. Affected Dischargers would be required to join an approved Third-Party Group or obtain coverage under other applicable general or individual WDRs. In the event of any violation or threatened violation of the conditions of this General Order applicable to Third- Party Groups, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law.	
67	*Third-Party General Order section IX.A.3* - The title of this provision should be changed as "Duty to Mitigate" is not appropriate. A possible title would be "Reasonable Compliance".	To address the comment, the San Diego Water Board has modified the Tentative General Orders as follows: *Third-Party General Order section IX.A.3:* Duty to ~~Mitigate~~ Minimize or Prevent Discharges *Individual General Order section VII.A.3:* Duty to ~~Mitigate~~ Minimize or Prevent Discharges	Modified Third-Party General Order section IX.A.3 Modified Individual General Order section VII.A.3
68	*Third-Party General Order section IX.A.6* - We suggest that Members be given a minimum of five business days notice that consent will be requested for inspection. This will possibly avoid the initiation of the warrant process and avoid confrontational meetings.	As provided in section IX.A.6 of the Third-Party General Order the San Diego Water Board will inspect Agricultural Operations under the authority of Water Code section 13267 subd.(c) to ascertain whether WDRs are being complied with. While such inspections may be conducted without prior notice, the inspections must be made with the consent of the owner or possessor of the facilities, or if consent is withheld, with a duly issued warrant. While the San Diego Water Board has the legal authority to perform unnoticed inspections, the San Diego Water Board may elect to notify a Member/Discharger prior to conducting an inspection based on site-specific considerations, such as the purpose of the inspection, the findings of previous inspections, and the compliance history of the Agricultural Operation.	None necessary

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69	*Third-Party General Order section IX.D.2* - The record retention requirement in this section seems appropriate for Third-Party Groups. However, asking Members to retain all records and reports connected to the group monitoring process for five years, or even one year, is excessive and serves no purpose. Those records will be held by the Third-Party Group and readily available at any time to the Members.	It appears that the SDILRG is reading section IX.D.2 of the Third-Party General Order to require Third-Party Groups *and* their Members to *individually* retain all of the records pertaining to compliance with the Order. However, that is not the intention of section IX.D.2 of the Third-Party General Order. It is the expectation of the San Diego Water Board that Third-Party Groups *or* their Members *or* Third-Party Groups on behalf of their Members must retain all of the records pertaining to compliance with the Order for a period of five years. For instance, the monitoring information may be retained by the Third-Party Group only on behalf of their Members.	None necessary
70	*Third-Party General Order section IX.E.2-4* - Not allowing electronic signatures on document submittals will be a burden to Third-Party Groups and Members. Five reports per year (four quarterly Self-Inspection Reports and one Annual Self-Assessment) must be completed by each Member and submitted to the Third-Party Group. Each report carries a signature requirement. For a Third-Party Group with a reasonably to be expected 2,500 Members there would be a requirement to collect 10,000 physical signature pages annually which must then be scanned and submitted to the San Diego Water Board. Electronic signatures are in common use and should be allowed.	The San Diego Water Board agrees that electronic signatures are acceptable and has revised the Tentative General Orders as follows: *Third-Party General Order section IX.E.3:* <u>Signature and</u> Certification <u>Reports and information required under this General Order may be signed and certified electronically or in writing. Electronic signatures will have the same legal effect as written signatures.</u> Any person signing a document, plan, or report required by this General Order shall make the following certification: *Third-Party General Order section IX.E.4:* Each electronic document shall be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). ~~All electronic documents shall include scanned copies of all signature pages; electronic signatures will not be accepted.~~ *Individual General Order section VII.E.3:*	Modified Third-Party General Order sections IX.E.3. and IX.E.4 Modified Individual General Order sections VII.E.3 and VII.E.4

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		Signature and Certification Reports and information required under this General Order may be signed and certified 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 General Order shall make the following certification: *Individual General Order section VII.E.4:* Each electronic document shall be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). ~~All electronic documents shall include scanned copies of all signature pages; electronic signatures will not be accepted.~~	
71	*Third-Party General Order Attachment A section III.B.2.a Table A-1* - It should be Flow Velocity and Cross Sectional Area. Stream depth and width can be removed if cross sectional area is included. The calculation of cubic feet per second flow comes from this information. We find cubic feet per day to be an odd requirement.	The San Diego Water Board is requesting stream depth and width to understand not only the cross sectional area of the stream but also to provide more information regarding possible causative factors for changes in stream flow. For example, a decrease in stream depth may indicate accelerated sediment deposition resulting from an increase in the discharge of sediment from upstream sources. The San Diego Water Board has modified the units for flow in Table A-1 in Attachment A of the Third-Party General Order and Table A-1 in Attachment A of the Individual General Order to be cubic feet per second, rather than cubic feet per day, as requested.	Modified MRP Table A-1 in Attachment A of Third-Party General Order Modified MRP Table A-1 in Attachment A of Individual General Order
72	*Third-Party General Order Attachment A section III.B.2.a Table A-1* - We believe Chronic Toxicity should be removed as a monitoring requirement. We fear this testing could result in a very expensive endless loop of testing. Chronic Toxicity can be the result of a number of constituents that are not	Chronic toxicity testing is an essential component of an integrated approach to water quality-based toxics control. Aquatic toxicity tests (toxicity tests) utilize aquatic organisms to examine the adverse chronic effects of a given discharge. The results from these tests are used to detect aggregate toxic effects of known pollutants, and	None necessary

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	related to agriculture.	provide meaningful data when specific pollutants may not be known. Chronic toxicity testing in surface waters receiving agricultural operation discharges allows for an overall assessment of the health of the receiving water body by integrating all stressors affecting that water body, including pesticides, herbicides, and other agricultural chemicals that are not currently required to be tested for individually. The WQRP process will be especially important for evaluating the actual cause of any chronic toxicity determined in a water body. Also, as discussed in the response to Comment No. 64, by selecting monitoring locations in accordance with Attachment A section III.B.1 of the Third-Party General Order, the Third-Party Group will reduce or eliminate the likelihood that an exceedance of a water quality benchmark is due to non-Members.	
73	*Third-Party General Order Attachment A section III.B.2.c* - This section states dry season sample to be collected "*after the site has applied pesticides or fertilizers and during an irrigation event*." This appears to be an error because Third-Party Groups are doing hydrologic unit level monitoring, not individual farm site-specific. It is suggested the first sentence be deleted.	See response to Comment No.15.	See response to Comment No.15
74	*Third-Party General Order Attachment A section III.B.2.e* - We do not believe that crop type or crop rotation are sufficient reason for an increase in the frequency of surface water sampling. San Diego is a region of permanent crops and crop changes occur over lengthy periods of time. Those two criteria should be eliminated.	While it is true that Agricultural Operations that produce certain crops like avocados, nuts, and fruit do not routinely rotate their crops, there are some Agricultural Operations in the San Diego Region that do routinely rotate crops, such as those who grow nursery crops and vegetables. Moreover, Attachment A section III.B.2.e of the Third-Party General Order provides examples of factors that should be considered when determining whether or not an increased sampling frequency is warranted. It is not intended to be an exhaustive list of such factors.	None necessary
75	*Third-Party General Order Attachment A section IV.B.2.c* - This section states that Third-Party Groups shall "confer" and	The SMC (www.SoCalSMC.org) is a voluntary coalition of leading storm water and regulatory agencies in the	None necessary

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	"coordinate" with the Southern California Stormwater Monitoring Coalition (SMC) on Regional Bioassessment Monitoring. A clear explanation of the San Diego Water Board's scale and expectations of the Third-Party Group's role in working with SMC is needed.	Southern California area who have joined together via a cooperative agreement to address issues associated with storm water management. There are over 4,200 miles of perennial streams in the coastal watersheds of Southern California that provide habitat, drinking water, agriculture and industrial beneficial uses. Effective protection and management of these aquatic resources require an understanding of their overall health (or condition) and the major stressors (such as agricultural runoff) that affect their condition. In order to address these challenges, the SMC began monitoring stream conditions in 2009 using multiple indicators of ecological health. This survey documented the condition of perennial wadeable streams in the region and set a baseline for monitoring regional trends. The SMC is currently engaged in the implementation of a five year work plan for the years 2015 through 2019 to implement bioassessment monitoring to answer key management questions about the condition of streams in the region. The bioassessment monitoring program of the Third-Party General Order provides an excellent opportunity for Third-Party Groups to collaborate with the SMC bioassessment monitoring effort in ways that not only may reduce sampling costs but also enable integration of the two monitoring efforts to better answer key questions about the water quality impacts of agricultural discharges. The San Diego Water Board's purpose in requiring that Third-Party Groups "confer" and "coordinate" with the SMC on regional bioassessment monitoring is to promote discussion and coordination on issues such as sampling locations, sampling frequency and timing, biological indicator assessment and data interpretation to leverage opportunities for cost savings and efficiency.	
76	*Third-Party General Order Attachment A section IV.B.2.d* - This section states dry season sample "*shall be collected*	See response to Comment No.15.	See response to Comment No.15

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	after the Member(s) have (has) applied pesticides or fertilizers and during an irrigation event." At the regional scale it would not be possible to time sample collection with applications because all farms are not on coordinated schedules. It is suggested the first sentence be deleted.		
77	*Third-Party General Order Attachment A section VI.C* - Agricultural Operation should be Agricultural Operations.	The San Diego Water Board has revised the Third-Party General Order as requested.	Modified Third-Party General Order Attachment A, MRP section VI.C
78	*Third-Party General Order Attachment A section VI.F* - The monitoring team will undoubtedly change throughout the program. Keeping track of personnel not under their direct control would be a burden for Third-Party Groups. Stating the various qualified organizations in charge of monitoring should suffice instead of listing individuals.	The San Diego Water Board agrees that the monitoring team personnel may change throughout the program. In order to address this, the San Diego Water Board has modified the Tentative General Orders as follows (noting that the modifications also address Comment No. 83): *Third-Party General Order Attachment A, MRP section VI.F:* A description of the monitoring team and analytical laboratories, including names, titles, qualifications, and contact information of key personnel. Changes to the monitoring team should be included in the Annual Monitoring Report (MRP section VII.L). *Individual General Order Attachment A, MRP section VI.F:* A description of the monitoring team and analytical laboratories, including names, titles, qualifications, and contact information of key personnel. Changes to the monitoring team should be included in the Annual Monitoring Report (MRP section VII.L).	Third-Party General Order Attachment A, MRP section VI.F Individual General Order Attachment A. MRP section VI.F
79	*Third-Party General Order Attachment A section VII.G.1* - The term "applicable" puts the responsibility onto the Third-Party Group to determine what is applicable and what is not. It would seem VII.G.3 covers the [water quality] benchmarks	To provide clarity regarding the applicable water quality standards a summary description of applicable narrative and numeric water quality objectives has been provided in Fact Sheet Table B-10 of Attachment B of the Tentative	Modified Third-Party General Order Attachment A section VII.G.1

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	and VII.G.l can be removed.	General Orders. The Tentative General Orders have been modified as follows: *Third-Party General Order Attachment A MRP section VII.G.1:* Interpretations and conclusions as to whether applicable receiving water limitations in section VI of this General Order were exceeded during the monitoring period ~~attained~~ at each monitoring location. For the purposes of this analysis ~~section~~, an exceedance of an applicable receiving water limitation means a single exceedance of a Water Quality Benchmark listed on Table A-4 below. *Individual General Order Attachment A section VII.G.1:* Interpretations and conclusions as to whether applicable receiving water limitations in section VI of this General Order were exceeded during the monitoring period ~~attained~~ at each monitoring location. For the purposes of this section, an exceedance of an applicable receiving water limitation means a single exceedance of a Water Quality Benchmark listed on Table A-2 below.	Modified Individual General Order Attachment A section VII.G.1
80	*Third-Party General Order Attachment A section VII.H.1 -* The Third-Party Group cannot say if the groundwater is safe to drink; it is only testing for one constituent. It can say that it does or does not contain nitrate as NO_3.	The San Diego Water Board agrees with the SDILRG's comment and has modified the Tentative General Orders as follows: *Third-Party General Order Attachment A section VII.H.1:* Interpretations and conclusions as to whether the collected-groundwater samples are reported to have nitrate concentrations greater than the nitrate MCL of 45 mg/L as NO3. ~~is safe to drink samples~~ *Individual General Order Attachment A section*	Modified Third-Party General Order Attachment A section VII.H.1 Modified Individual General Order Attachment A section VII.H.1

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		VII.H.1: Interpretations and conclusions as to whether the collected groundwater samples are reported to have nitrate concentrations greater than the nitrate MCL of 45 mg/L as NO3. ~~is safe to drink samples~~	
81	*Third-Party General Order Attachment A section VII.I* - The requirement that data be reported by the Third-Party Group to CEDEN in addition to transmittal to the San Diego Water Board is an undue burden. We suggest the reporting to the San Diego Water Board satisfy all reporting requirements.	The San Diego Water Board does not agree that the submission of the required data to both CEDEN and GeoTracker is an undue burden on the Third-Party Groups. The Third-Party Group should shoulder the responsibility for monitoring data entry into systems such as CEDEN and Geotracker to help the San Diego Water Board to free its limited agriculture regulatory staff resources to focus on problem areas or dischargers.	None necessary
82	*Third-Party General Order Attachment A section VII.J* - GeoTracker can potentially provide specific location data of the wells being sampled on a public forum. We are concerned about protecting well-privacy and suggest this requirement be eliminated.	The San Diego Water Board disagrees. In June 2015, Senate Bill 83 amended Water Code section 13752 to mandate public access to well completion reports. Well completion reports are required to be filed with the Department of Water Resources (DWR) for all groundwater wells at the time that they are constructed. The reports are required to contain information regarding each well's location and construction, and the lithology of the subsurface, among other items. As a result of the Water Code amendment, all well completion reports are available to the public, except that personal information (e.g., an individual's name and address) must be redacted. Since well completion reports, including information about the location of the wells, are now publicly available by request from DWR, the State Water Board will no longer obscure groundwater well location information on GeoTracker or withhold other records that identify the precise location of water supply wells used by public water systems. Not only is this consistent with the Legislature's clear policy direction regarding the transparency of groundwater data, it will also help to	None necessary

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		facilitate efforts by governmental agencies and nongovernmental organizations to identify individuals and communities that are in need of infrastructure and replacement water supplies, and general research regarding groundwater quality. Nonetheless, GeoTracker includes both a Public Website and a Regulator Website. Regulators have access to both, but the general public access is limited to the Public Website. The San Diego Water Board intends to use the Regulator Website for information such as well locations. However, well locations would be available to the public under a Public Records Act Request.	
83	*Third-Party General Order Attachment A section VII.L* – The monitoring team will undoubtedly change throughout the program. Keeping track of personnel not under their direct control would be a burden for Third-Party Groups. Stating the various qualified organizations in charge of monitoring should suffice instead of listing individuals.	See response to Comment No. 78.	See response to Comment No. 78
84	*Third-Party General Order Attachment A Table A-4* - Nitrate + Nitrate (as Nitrogen) should be Nitrate + Nitrite (as Nitrogen). Total Nitrogen should be Nitrite as Nitrogen.	The San Diego Water Board has revised Table A-4 of the Third-Party General Order and Table A-2 of the Individual General Order to correct the reference to Nitrate + Nitrite (as Nitrogen).	Modified Third-Party General Order Attachment A Table A-4 Modified Individual General Order Attachment A Table A-2
85	*Third-Party General Order Attachment A section VII.N – Table A-4* - We believe Chronic Toxicity should be removed as a monitoring requirement. We fear this testing could result in a very expensive endless loop of testing. Chronic Toxicity can be the result of a number of constituents that are not related to agriculture.	See response to Comment No. 72.	See response to Comment No. 72
86	*Third-Party General Order Attachment B section I.D.2.a – Figure B-2* - There is no relevance to the San Diego Region	The San Diego Water Board does not agree that Figure	None necessary

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	of Figure B-2 or the accompanying text. If such a chart is needed, it should be representative of the San Diego Region. The chart and text should be removed.	B-2 in the Fact Sheet (Attachment B) should be removed. As discussed in the text immediately preceding Figure B-2 and in the reference for Figure B-2, Figure B-2 provides an overview of the impacts to surface water quality from agricultural activities on a nationwide basis. A specific discussion on water quality impacts from Agricultural Operations located within the San Diego Region is provided in the Third-Party General Order Attachment B section I.B.2.b. as well as in Third-Party General Order section I findings L and M.	
87	*Third-Party General Order Attachment B section I.G.7.d* - When fees and costs of compliance are discussed this section makes the assumption that 60,000 irrigated acres in the region will enroll in the Third-Party General Order. Regardless of the number of acres enrolled, the monitoring obligations and costs for Third-Party Groups will remain the same. Therefore, if less than 60,000 acres are enrolled the per acre cost of compliance will rise proportionally. It is our belief that the 60,000 acre estimation is overly optimistic based on our experience with the Agricultural Waiver. The prepared charts should be revised and it is our suggestion it show the costs that Members should expect at enrollments of 30,000, 40,000, 50,000, and 60,000 acres.	As requested, Fact Sheet Tables B-7 and B-8 of Attachment B to the Third-Party General Order have been modified to include cost estimates based on enrollments of 30,000, 40,000, 50,000, and 60,000 acres. As shown in Table B-8, the estimated annual compliance costs for a 4-acre Agricultural Operation that is a Member of a Third-Party Group with enrollment of 30,000, 40,000, 50,000, and 60,000 acres, ranges from $21 to $5,023. Annual WDR Fees and Third-Party Group fees (including monitoring and reporting fees) range between $21 and $24. The estimated cost to implement appropriate management practices is anticipated to range between $0 and $5,023 annually, depending on the specific needs of the Agricultural Operation and the current implemented management practices.	Modified Third-Party General Order Attachment B, Fact Sheet Tables B-7 and B-8 Modified Draft Initial Study, CEQA Environmental Checklist, Section 2, Tables 5 and 6