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MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

San Diego Regional Water Quality Control Board

**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**

June 9, 2016

Initial Study and Environmental Checklist
Adoption of General Waste Discharge Requirements for the
Commercial Agricultural Operations Regulatory Program

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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

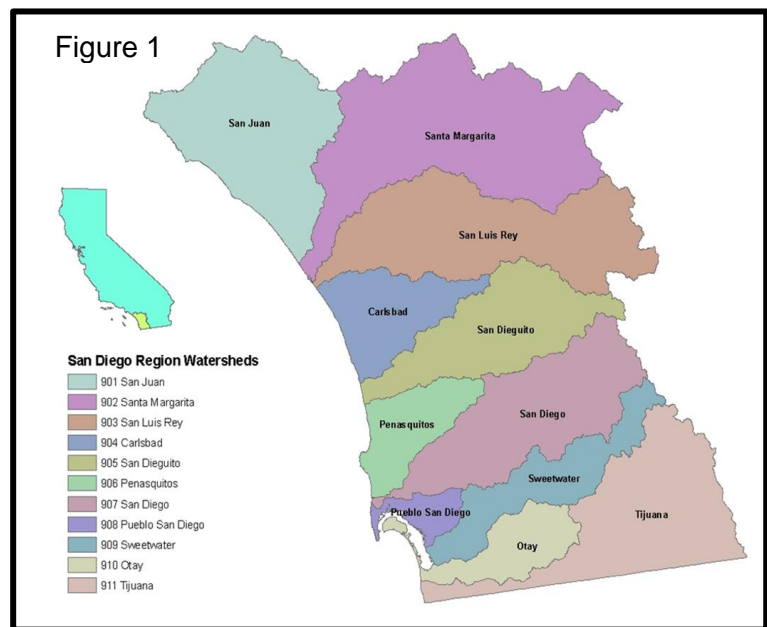
California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108-2700

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.



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, they are not exempt from the Porter-Cologne Water Quality Control Act, also known as the California Water Code (Water Code). Any

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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, 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).
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 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

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(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 or the General Individual Order. The requirements are similar. However, the General Third Party Group 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 fee.

Additional details of the proposed requirements are contained in the draft 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.

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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. Silt Fences
- ii. Straw Wattles or Fiber Rolls
- iii. Straw Bales
- iv. Mulch
- v. Riparian Buffers, Buffer Strips and Vegetated Swales
- vi. 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.

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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. 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

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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.

- | | |
|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Land Use and Planning |
| <input checked="" type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

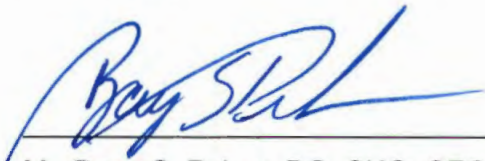
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J. DETERMINATION

On the basis of this initial evaluation:

<input checked="" type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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: June 9, 2016

Mr. Barry S. Pulver, PG, CHG, CEG
Engineering Geologist
California Regional Water Quality Control Board, San Diego Region

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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.

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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 not 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.

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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.² The enrollment fee was \$250 per acre up to a maximum of \$1,250.³ 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 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. 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 3 lists the anticipated

² <https://www.sdfarmbureau.org/SDRILG/Question-Irrigated-Lands-group.php#16>

³ <https://www.sdfarmbureau.org/SDRILG/SDRILGApplication.pdf>

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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).⁴

Table 3 – Anticipated Structural Management Practices Costs

Structural Management Practice ⁵	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
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 ⁶	\$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),⁷ 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.

⁴ https://efotg.sc.egov.usda.gov/references/public/CA/FY16_Practice_Payment_Scenarios_wBookmarks.pdf

⁵ 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.

⁶ 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

⁷ Per e-mail from Gary Bender, Ph.D., Farm Adviser Emeritus, University of California Agriculture and Natural Resources, dated May 16, 2016.

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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 ⁸	\$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 ^{9 10}	\$2,000	\$10,000
Annual Reporting ¹¹	na	\$1,000

Table 5. Estimated Water Quality Monitoring and Reporting Costs for Agricultural Operations that are Members of a Third-Party Group

Task	One-Time Cost	Annual Cost
Surface Water and Groundwater Monitoring Program Plan ¹²	\$0.30	na
Groundwater Monitoring (per Agricultural Operation)	\$100	na
Surface Water Monitoring (per acre) ¹³	na	\$4
Prepare a WQRP, if needed (per acre)	\$0.20	\$0.60
Annual Reporting (per acre)		\$1
Bioassessment (per acre) ¹⁴	\$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),

⁸ Cost assumes a qualified consultant prepares the Surface Water and Groundwater Monitoring Plan.

⁹ Cost assumes a qualified consultant prepares and implements the WQRP.

¹⁰ Cost assumes the WQRP is prepared to address an exceedance of nutrients with additional monitoring to be conducted for nutrients.

¹¹ Cost assumes a qualified consultant prepare the Annual Report.

¹² 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.

¹³ 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.

¹⁴ Bioassessment monitoring will be conducted every five years. The anticipated cost is the annualized cost per acre to conduct the bioassessment monitoring.

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the installation and maintenance of new structural management practices,¹⁵ 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 (when enrolled as a Member of a Third-Party Group) and \$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 (when enrolled as a Member of a Third-Party Group) and \$24,468 (when enrolled as an Individual) .

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	--
Annual Fee	--	\$458	--	\$3
Third Party Fees	--	--	\$1,040	\$40
Mulching with Natural Materials	--	\$348	--	\$348
Silt Fence	--	\$924	--	\$924
Straw Bales	--	\$2,268	--	\$2,268
Straw Wattles or Fiber Rolls	--	\$1,056	--	\$1,056
Filter Strip	--	\$414	--	\$414
Surface Water and Groundwater Monitoring Program Plan	\$2,000	--	--	--
Groundwater Monitoring, if needed	\$100	--	\$100	--
Surface Water/Edge of Field Monitoring	--	\$8,000	--	--
Prepare WQRP, if needed	\$2,000	--	--	--
Implement a WQRP, if needed	--	\$10,000	--	--
Annual Reporting	--	\$1,000	--	--
Bioassessment Workplan	--	--	--	--
Totals	\$4,150	\$24,468	\$1,190	\$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 and the revenue from these crops in San Diego County according to the 2014 County of San Diego Crop Report.¹⁶ Table 7 also lists the average per acre revenue and the estimated average revenue for a median-sized (4 acre) Agricultural Operation.

¹⁵ 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.

¹⁶ <http://www.sandiegocounty.gov/content/dam/sdc/awm/docs/Crop%20Report-Final.pdf>

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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 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

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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.¹⁷ 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.

¹⁷ PRC section 21083

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

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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.

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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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in Calif. Code Regs. title 14 section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 (CH₄) and nitrous oxide (N₂O) sources.¹⁸ 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.

¹⁸ http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_trends_00-13%20_10sep2015.pdf

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 a 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,

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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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place housing within a 100-year flood hazard area structures which would impede or redirect flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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 ratios, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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..

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, State, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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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.

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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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,¹⁹ 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

¹⁹ CCR. title. 14, section 15355.

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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.²⁰

²⁰ PRC section 21083; CCR title 14, section 15131