

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

Conditional Waiver of Waste Discharge
Requirements
for Discharges from Agricultural Operations in
the San Jacinto River Watershed, Riverside
County

TENTATIVE ORDER NO. RB-2015-0019

Staff Report

March 2015



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1. INTRODUCTION

Staff of the California Regional Water Quality Control Board, Santa Ana Region (Regional Board) recommend that the Regional Board adopt a conditional waiver of waste discharge requirements for discharges from agricultural operations in the San Jacinto River Watershed within the Santa Ana Region (Conditional Waiver) (Order No. R8-2015-0019, or Order), in accordance with California Water Code (Water Code) section 13269. This report describes the foundation for this recommendation.

The San Jacinto River Watershed includes the San Jacinto River and its tributaries, and Canyon Lake and Lake Elsinore and the tributaries to these lakes. This area (the Project area) is located in Riverside County.

Agricultural activities can generate pollutants such as sediment, pesticides, and nutrients that, when discharged to receiving water bodies, can degrade water quality, impair beneficial uses and cause nuisance conditions. Under the proposed Order, waste discharge requirements for these discharges by agricultural operators within the San Jacinto River Watershed would be waived, provided that the dischargers:

- implement management measures (MMs) and best practices (BPs), collectively known as best management practices or “BMPs”, that improve the quality of the waste discharged from agricultural operations;
- monitor the water quality effects of discharges from these operations on waters of the state and assess the efficacy of implemented BMPs; and,
- mitigate the effects of their discharges as necessary.

The goal of the Conditional Waiver program is to set conditions for discharges from certain agricultural operations within the Project Area that, when implemented, will assure that these discharges do not cause or contribute to violations of water quality standards in receiving waters. Staff calls this conditional waiver program the Conditional Waiver for Agricultural Discharges (CWAD) program, to distinguish it from other regional boards’ agricultural waiver programs that focus on irrigated agriculture, known collectively as the Irrigated Lands Regulatory Program (ILRP).

This staff report reviews the proposed Conditional Waiver, Order No. 2015-0019, and based on this review, recommends its adoption.

2. BACKGROUND

An updated Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the Regional Board on March 11, 1994, approved by the State Water Resources Control Board (State Board, or SWRCB) on July 21, 1994, and approved by the Office of Administrative Law on January 24, 1995. Subsequent amendments to the

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Basin Plan include a revised Total Dissolved Solids (TDS) and nitrogen management plan, Total Maximum Daily Loads (TMDLs) for impaired surface waters, and implementation plans associated with those TMDLs. The Basin Plan summarizes applicable water quality control policy, identifies ground and surface waters within the Santa Ana Region (Region), designates beneficial uses for those waters, establishes water quality objectives for the protection of those uses, prescribes implementation plans for achieving the objectives, and establishes monitoring and surveillance programs.

In 2004, the Regional Board amended the Basin Plan to incorporate an updated Total Dissolved Solids (TDS) and Nitrogen Management Plan for the Santa Ana Region. The management plan includes TDS and nitrate-nitrogen quality objectives for groundwater management zones (GMZ) established by the plan, revised TDS and nitrogen waste load allocations for wastewater discharges to the Santa Ana River, and specific changes to standards for surface waters throughout the Region. The TDS/Nitrogen management plan also included updated findings regarding assimilative capacity for both TDS and nitrogen in each GMZ. These amendments were approved by the State Water Resources Control Board on October 1, 2004 and by the Office of Administrative Law on December 23, 2004. The surface water standards provisions of the amendments were approved by the U.S. EPA on January 20, 2007.

Nitrogen and TDS assimilative capacity findings in groundwater management zones are reviewed regularly and may be revised. Most recently, updates to GMZ assimilative capacity findings were approved by the Regional Board in April 2014 (Resolution No. R8-2014-0005). With the exception of the San Jacinto Upper Pressure GMZ, for which maximum benefit objectives and a maximum benefit implementation plan have been established, all GMZs in the San Jacinto Watershed lack assimilative capacity for both TDS and nitrogen, i.e., TDS and nitrogen quality conditions in these GMZs exceed the applicable TDS and nitrogen objectives. Assimilative capacity findings have significant regulatory implications that affect the requirements in the recommended Conditional Waiver.

The Project Area covers the approximately 780 square mile San Jacinto River Watershed, which is shown on Attachment 1. The Project Area encompasses approximately 80,000 acres of land that are used for agriculture, including irrigated agriculture, dry farming, and livestock operations (see Attachment 2, San Jacinto Watershed Agricultural Land Use). At this time, in the Project Area, there are fewer than 100 agricultural operations of at least 20 acres¹ that discharge waste, or that have the potential to discharge waste, to waters of the state. The number and acreage of agricultural operations is decreasing as land in agriculture gives way to urban land uses.

¹ Based on analysis of 2010 aerial imagery and mapping of the Project Area

Point and non-point source waste discharges in the San Jacinto Watershed, including agricultural discharges, have contributed to exceedances of water quality objectives and impairment of beneficial uses in both Canyon Lake and Lake Elsinore. Accordingly, Lake Elsinore is included on the Clean Water Act section 303(d) list of impaired waters, due to elevated levels of nutrients (nitrogen and phosphorus), organic enrichment, PCBs, low dissolved oxygen, and toxicity (sediment and water column). Canyon Lake is included on the 303(d) list for nutrients and pathogens.

To address the nutrient impairment in the lakes, in 2004, the Regional Board adopted Nutrient Total Maximum Daily Loads (TMDLs) for Canyon Lake and Lake Elsinore. The TMDLs were subsequently approved by the State Water Board, Office of Administrative Law and the U.S. Environmental Protection Agency, and are now being implemented. These TMDLs established load allocations and waste load allocations for nitrogen and phosphorus inputs from specified sources, including agricultural activities.

The State Water Resources Control Board (SWRCB) approved a Plan for California's Non-Point Source (NPS) Pollution Control Program (Plan), and, in 2004, adopted a Policy for the Implementation and Enforcement of the NPS Pollution Control Program (http://www.waterboards.ca.gov/santaana/water_issues/programs/nps/index.shtml). This Plan and Policy provide the framework for regulating NPS pollutant discharges in California, which includes discharges from agricultural operations. Under the Policy, NPS discharges must be regulated by general or individual waste discharge requirements (WDRs), conditional waivers of WDRs, or Basin Plan waste discharge prohibitions. This proposed Conditional Waiver is intended to implement applicable parts of the Plan and Policy.

Pursuant to Water Code section 13263, regional boards are required to prescribe waste discharge requirements for proposed or existing discharges of waste to waters of the state, or, under Water Code section 13269, to waive those requirements, with conditions. Water Code section 13269 provides that a regional board may waive waste discharge requirements for a specific discharge or type of discharge if the regional board determines, at a properly noticed public meeting, that the waiver is consistent with the applicable water quality control plan (i.e., a Basin Plan) and is in the public interest. Water Code section 13269 establishes a 5 year duration for waivers, and provides for their review and renewal. Under section 13269, waivers must include monitoring, which may be done on an individual, a group, or watershed basis. The Regional Board may waive this monitoring requirement based on a determination that the discharges subject to the waiver do not pose a significant threat to water quality. Section 13269 also establishes that a condition of a waiver may be payment of an annual fee established by the State Board. The State Board has established such fees.

As part of a concerted effort to provide ample opportunities for Project Area growers, and other stakeholders, to contribute to the development of a regulatory program that would directly affect them, Regional Board staff formed a CWAD Program Advisory Group. This group has met periodically to discuss the Regional Board's regulatory

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approaches toward agriculture, and related matters. Members and the executive director of the Western Riverside County Agriculture Coalition (WRCAC), a non-government organization that represents many growers and livestock operators (collectively, “agricultural operators”) in the San Jacinto River Watershed in TMDL matters, are active, regular participants in meetings of the advisory group.

The advisory group members unanimously recommended that Board staff develop a Conditional Waiver as a control mechanism for agricultural operations, in lieu of other regulatory options, including individual or general WDRs, or a Basin Plan prohibition. The conditional waiver is expected to simplify and streamline the regulatory process. WRCAC has accepted the role of Group Administrator for agricultural operators wishing to collaborate on efforts to comply with the proposed Conditional Waiver program.

The overarching goal of this proposed Conditional Waiver is to improve and protect water quality and attain water quality standards in the Project Area by providing a program for regulating NPS discharges from agricultural operations. If not adequately regulated, NPS discharges from agricultural operations can cause or contribute to conditions of pollution or nuisance and to violations of applicable water quality standards. Additionally, this proposed Conditional Waiver program is intended to contribute to timely implementation of the load allocations specified for agriculture in the Nutrient TMDLs adopted to restore the water quality and beneficial uses of Canyon Lake and Lake Elsinore. The beneficial uses of these waters include warm water aquatic habitat, water contact recreation, and wildlife habitat².

² The beneficial uses of waters in the Project Area are summarized in findings of the proposed Conditional Waiver.

3. APPLICABILITY OF PROPOSED WAIVER

As proposed, this Conditional Waiver would apply to:

- Irrigated agricultural operations and otherwise unregulated livestock operations that are 20 acres or more in area.
- Irrigated agricultural operations and unregulated livestock operations that are smaller than 20 acres if they are part of a larger operation that has a cumulative area of 20 acres or more under the constructive control of a single entity. The 20 or more cumulative acres may include lands that are all irrigated or a portion of which is dry farmed and/or fallow, on a permanent or periodic basis, and upon which pesticides, fertilizers and/or manure, mulch or compost is applied.
 - The proposed Conditional Waiver would not apply to dairies already regulated by the Regional Board (General Waste Discharge Requirements for Concentrated Animal Feeding Operations (CAFO) (Dairies and Related Facilities) within the Santa Ana Region, Order No. R8-2013-0001, NPDES No. CAG018001 and its subsequent iterations.)
 - The proposed Conditional Waiver would not apply to point of sale nurseries that are not engaged primarily in production and are regulated under the Regional Board's Municipal Separate Storm Water (MS4) permit for Riverside County (Order No. R8-2010-0033, NPDES No. CAS 6180333, Riverside County Flood Control and Water Conservation District, County of Riverside and the Incorporated Cities of Riverside County within the Santa Ana Region - Area-Wide Urban Runoff Management Program, and its subsequent iterations). Likewise, parks, golf-courses, cemeteries, play grounds, recreational facilities, and similar facilities are regulated under the MS4 Permit and would not be subject to this proposed Conditional Waiver.
- Other agricultural operations, whether or not 20 cumulative acres in size and whether the operations entail irrigated agriculture, livestock operations, dry land farming or fallow land, that Regional Board staff finds to be a high risk for discharging wastes that could affect water quality. An operation, other than irrigated agriculture or livestock operations on 20 or more cumulative acres, would be considered high-risk if dry-weather runoff discharges are observed, or if topographic features, location, existing management practices or materials applied as part of the agricultural operations (e.g., fertilizers, pesticides or herbicides) represent a significant potential for waste discharges that could adversely affect water quality standards of receiving waters. These high risk dischargers would be required to file a Notice of Intent to be enrolled in this Conditional Waiver when notified to do so by Board staff.
- Agricultural waste discharges, including irrigation tail-water and stormwater runoff, whether such discharges are directed to surface waters or to land.

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These acreage applicability criteria are based, in part, on data produced in compliance with the requirement in the nutrient TMDLs for Canyon Lake and Lake Elsinore that calls for the Board to establish a list of all known agricultural operations in the San Jacinto River Watershed. This requirement was met with a data set that was produced by a WRCAC contractor using available, rectified GIS land use and parcel tax data layers to show parcels of 20 acres or more where an agricultural land use was occurring. These data are summarized on Attachment 2, San Jacinto River Watershed Land Use Map and in Attachment 3, Types of Agricultural Operations.

In collecting the data set of agricultural operations, it became apparent that there were some farming operations that consisted of many parcels that are individually less than 20 acres but are under the control of a single entity or grower. Collectively, these operations may be 20 acres or more. Board staff believes that these several small farming operations may pose a risk of discharge equal to or greater than that of a single agricultural operation of 20 acres or more. This is because several small operations that total 20 acres or more in area, under the control of a single operator, cumulatively have a greater perimeter length from which mismanaged discharges could potentially occur compared to a single operation of the same area, and because several smaller operations under the control of a single operator will likely not all be supervised simultaneously or equally and will therefore be at greater risk for mismanaged discharges. Therefore, the proposed Conditional Waiver establishes that agricultural operations that are cumulatively 20 acres or more in area are subject to the waiver. Future reconsideration of this Conditional Waiver may result in recommendations for a revised acreage (or other) qualifying criterion, based on experience and evidence regarding the efficacy of the currently recommended waiver in protecting water quality.

Under the terms of the proposed Conditional Waiver, and consistent with applicable law, both owners and operators of agricultural operations have responsibility for compliance with the conditions of the waiver. Appropriate management practices will need to be identified, implemented, maintained and documented to comply with waiver conditions. Many management practices will be operational in nature and under the direct control of the operator, while structural practices that remain in place through changes in operators or leaseholders will more likely be the responsibility of the landowner. In the event that a tenant operator of an enrolled agricultural operation violates waiver conditions, the Regional Board may hold both the owner and the operator accountable. Owners and operators may consider delineating their respective responsibilities with regard to complying with the Regional Board's proposed Conditional Waiver in lease agreements; however, both the owner and operator would be responsible for complying with all provisions of the Conditional Waiver.

Enrollees in this Conditional Waiver may form a Discharger Group or coalition with other enrollees for the purpose of collaborating on strategies and practices that enable

efficient compliance with this Conditional Waiver. See 4.B. DISCHARGER GROUPS, below.

4. SCOPE AND REQUIREMENTS OF THE ORDER

A. ENROLLMENT PROCESS

An individual discharger or discharger group may apply for coverage under the proposed Conditional Waiver. To enroll in this Waiver and obtain individual coverage under it, individual dischargers would be required to submit a complete NOI to the Executive Officer. For dischargers who wish to obtain coverage under and comply with the Waiver as part of a discharger group (see B. DISCHARGER GROUPS), each discharger would submit the NOI to the Group Administrator accepted by the Regional Board to carry out this responsibility. The Group administrator would then be responsible to forward the NOIs from each of the dischargers electing to be part of the group to the Executive Officer. The proposed Order specifies the information that is to be submitted in the NOI. The proposed NOI Form is an attachment to the proposed Conditional Waiver.

Upon receipt of complete NOIs, the Executive Officer would determine whether each discharger (including individual dischargers within a Discharger Group) is eligible for coverage under the Conditional Waiver. If so, the Executive Officer would issue a Notice of Applicability (NOA) to each individual discharger, or to the Group Administrator, authorizing coverage under the Conditional Waiver. If a specific discharge(s) cannot or should not be authorized under the terms and conditions of the Conditional Waiver, then the Executive Officer would provide written notification and identify the appropriate regulatory alternative. Operators and owners of facilities for which discharges cannot be authorized by the Conditional Waiver may be requested to submit a report of waste discharge, and obtain individual waste discharge requirements.

In the case of an incomplete NOI submittal, the person or Group Administrator submitting the NOI will be notified of deficiencies and will be given a reasonable period of time to provide the additional information needed to complete the NOI. These notices will clearly indicate that failure to address NOI deficiencies in a timely manner while continuing to discharge will be considered a violation of the Water Code and grounds for enforcement action in accordance with the Water Code and the State Board's Enforcement Policy.

B. DISCHARGER GROUPS

Individual agricultural dischargers may comply with this Conditional Waiver as a member of a Discharger Group. In order to qualify as a Discharger Group, the agricultural dischargers must identify a third party representative (Group Administrator) who is not a discharger under this Waiver. The Group Administrator will act as the agent for the group of individual dischargers for the purpose of complying with

enrollment and reporting requirements and conducting other program related activities, such as submitting enrollment documents, collecting and remitting annual State Board waste discharge fees, and providing/contracting for training, monitoring programs and the like. The choice of the third party Group Administrator must be approved by the Regional Board Executive Officer based on the demonstration that the proposed Administrator has the technical and financial capability to carry out the functions it would be responsible to undertake on behalf of its members.

The accepted Group Administrator will be expected to submit signed NOIs on behalf of agricultural operators who elect to participate in that group. The Group Administrator may submit plans and reports required as conditions of this Conditional Waiver on behalf of members of the group.

The formation, operation, management and funding of a discharger group or coalition is the responsibility of the individual dischargers who are represented by and who participate in the discharger group.

Around the state, third party administrators for groups of dischargers who have elected to form coalitions for the purpose of complying with agricultural waivers of WDRs include growers' associations, farm bureaus, and resource conservation districts. In the San Jacinto River Watershed, WRCAC has been given responsibility by its members to coordinate responses to the Lake Elsinore and Canyon Lake Nutrient TMDL implementation tasks on behalf of its members. WRCAC has also indicated its willingness to serve as a Discharger Group Administrator to undertake the following functions: implement one or more stakeholder outreach programs, conduct Notice of Intent (NOI) workshops, submit required reports on behalf of Discharge Group members, and contract for development and implementation of water quality monitoring program for agriculture operations. Agricultural operator dischargers who participate in a conditional waiver as a member of a group are eligible for reduced annual fees. Fees are reduced further for dischargers participating in a group if the Group Administrator manages fee collection and payment to the State Board.

C. MANAGEMENT MEASURES AND BEST PRACTICES

Dischargers receiving a NOA are expected to implement reliable and effective management practices and management measures (collectively, best management practices, or BMPs) in accordance with the requirements of the Order. "Reliable and effective BMPs" are BMPs that have been identified in an approved nutrient management plan, or other qualified technical resource, as having been vetted and shown to be effective locally.

The purpose of these BMPs is to prevent agricultural operations from discharging wastes that adversely affect water quality standards of the surface and ground waters

to which they discharge. This includes implementing BMPs necessary to achieve compliance with applicable TMDL load allocations and targets.

All enrollees in this proposed Conditional Waiver will be required to report annually on BMPs that are in use on their agricultural operations and, coupled with monitoring (see F. Monitoring Program), assess the efficacy of the BMPs. It is expected that the dischargers will use the results of this effectiveness assessment to identify and implement revised BMPs, which may include enhanced educational programs. Information on the type and size of BMPs, and when they were implemented, will need to be reported, as will documentation of participation in educational programs on reducing water quality impacts from agricultural practices.

D. TMDL IMPLEMENTATION

The Lake Elsinore and Canyon Lake Nutrient TMDLs require all dischargers in the San Jacinto River Watershed, including agricultural dischargers, to limit their discharges of nitrogen and phosphorus to surface waters. The TMDLs established limitations on discharges of these pollutants from different sources and land uses, expressed as waste load and load allocations. Compliance with these allocations and the TMDLs is to be achieved as soon as possible and no later than December 31, 2020. The final total phosphorus and total nitrogen TMDL load allocations assigned to agriculture are included in the proposed Conditional Waiver³. The Nutrient TMDLs also include an implementation plan that identifies specific tasks that are to be performed by responsible parties, including agricultural operation dischargers, in order to achieve the TMDLs. The proposed Waiver includes conditions that address these TMDL implementation requirements.

In order to implement the existing Nutrient TMDL requirements and to develop effective solutions for improving water quality in Lake Elsinore and Canyon Lake, responsible agencies and stakeholders formed the Lake Elsinore and Canyon Lake TMDL Task Force (TMDL Task Force)⁴. The Lake Elsinore and San Jacinto Watershed Authority (LESJWA) serves as the Task Force administrator. To facilitate timely action towards achieving the TMDLs, and to foster anticipated resource expenditure efficiencies, the TMDL implementation plan encourages responsible agencies/parties to participate in TMDL compliance activities in a coordinated fashion through the TMDL Task Force. Participation in the TMDL Task Force includes paying a fairly apportioned share of the cost of implementation measures that are being carried out by the TMDL Task Force.

³ Findings of the proposed Conditional Waiver include tables summarizing these load allocations.

⁴ The Task Force currently includes: US Air Force (March Air Reserve Base); March Joint Powers Authority; California Dept. of Transportation (Caltrans); California Dept. of Fish and Wildlife; County of Riverside; Riverside County Flood Control and Water and Water Conservation District; the cities of Lake Elsinore, Canyon Lake, Hemet, San Jacinto, Perris Moreno Valley, Murrieta, Riverside, Menifee, Wildomar, and Beaumont; Eastern Municipal Water District; Elsinore Valley Municipal Water District; and the Western Riverside County Agricultural Coalition (on behalf of concentrated animal feeding operators and agricultural operators within the San Jacinto watershed).

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However, individual agencies/parties, including agricultural operators, are permitted to implement TMDL tasks independently if they prefer. In this case, the individual agencies/parties assume the costs of implementation.

The Western Riverside County Agricultural Coalition (WRCAC) represents the interests of its member agricultural operators on the TMDL Task Force. WRCAC has been given responsibility by its membership to coordinate responses to TMDL implementation tasks on behalf of its members, and to collect from those members their apportioned share of TMDL implementation costs. WRCAC provides the funds collected to the LESJWA to support TMDL implementation.

The TMDL Task Force, including WRCAC, is implementing a Regional Board approved San Jacinto River Watershed-wide nutrient monitoring program. WRCAC has submitted a proposed Agricultural Nutrient Management Plan. WRCAC is also developing a recommended Pollutant Trading Program. WRCAC members are thus in compliance with these TMDL requirements. Regional Board staff is engaged in actions to compel other agricultural operators who are not members of WRCAC to comply with TMDL implementation requirements.

A detailed discussion of the nutrient problems in Lake Elsinore and Canyon Lake is provided in the documentation supporting the TMDLs (available on the Regional Board's website at http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/elsinore_tmdl.shtml). It is noteworthy that the largest source of nutrient inputs to these lakes is internal loading from sediments in the lakes, rather than external inputs such as from agriculture. The Nutrient TMDLs take this into account in several interrelated ways.

First, as described above, the implementation plan for the TMDLs requires the development and implementation of the Lake Elsinore Sediment Nutrient Reduction Plan and Canyon Lake Sediment Nutrient Treatment Plan.

Second, the phosphorus allocations assigned in the TMDLs to each of the external nutrient sources to Lake Elsinore, including agriculture, were calculated based on the assumption that internal loading of phosphorus would be reduced by thirty-five percent (35%) as the result of the operation of an aeration and mixing system in the Lake. Absent the successful operation of that system to achieve a 35% reduction in phosphorus loading from internal sediment, there would be no assimilative capacity for external phosphorus inputs to Lake Elsinore, i.e., the phosphorus allocations from external sources, including from agriculture, would need to be set effectively to zero. Compliance with these zero allocations would require that virtually all external inputs of phosphorus, including from agriculture, would need to cease.

In adopting the Nutrient TMDLs, the Regional Board recognized that the elimination of these external sources was infeasible, as a practical matter. Thus, the TMDLs provided

the opportunity for pollutant trading, whereby external dischargers could participate in one or more projects to reduce internal sediment loading and thereby provide assimilative capacity for their external discharges of phosphorus to the Lake. As noted above, the implementation plan for the TMDLs requires the responsible parties, including agricultural dischargers, to develop and submit a proposed Pollutant Trading Plan.

While the Nutrient TMDLs assumed that an aeration/system would be implemented and thereby provide assimilative capacity for external discharges of phosphorus to Lake Elsinore, the TMDLs did not assign the responsibility for doing so to any specific party(-ies). Rather, it was assumed that appropriate cost-sharing agreements and commitments to construct, operate and maintain the aeration/mixing system by and among the responsible parties, including agricultural dischargers, would be developed and implemented, likely under the auspices of the TMDL Task Force. It was also assumed that one or more responsible parties might propose an alternative to the aeration/mixing system to achieve the equivalent, requisite internal nutrient loading reductions, as part of their required Pollutant Trading Plans, e.g., implementation of a fisheries management program.

The Lake Elsinore Aeration and Mixing System (LEAMS) has been implemented and is operating successfully to reduce the internal loading of phosphorus (and nitrogen) from sediment in the Lake. To date, funding for the implementation, operation and maintenance of this system has been provided by the City of Lake Elsinore and the Elsinore Valley Municipal Water District (EVMWD). Funding commitments for the system were made by the City and EVMWD to a) provide offset credits for discharges of phosphorus and nitrogen in recycled water discharges by EVMWD to the Lake to maintain a stable lake level, and b) to allow the implementation of the aeration and mixing system as soon as possible and thereby facilitate water quality and beneficial use improvements in Lake Elsinore. However, other dischargers with allocations assigned in the TMDLs are expected to participate in the operation and maintenance of this system over the long term, or to implement an alternative strategy identified in an approved Pollutant Trading Plan. Participation in LEAMS or an alternative, approved nutrient reduction strategy is necessary to offset all external discharges of phosphorus to Lake Elsinore since without this system or an alternative approved nutrient reduction strategy there would be no assimilative capacity for any phosphorus inputs to the Lake.

As described above, this Conditional Waiver requires the development and implementation of an approved Pollutant Trading Plan(s) as one of the requisite TMDL implementation tasks. As stated in the TMDLs, the Regional Board encourages agricultural dischargers to collaborate with the TMDL Task Force and other responsible parties to formulate and implement a comprehensive plan to assure fairly-apportioned, long-term funding for the operation and maintenance of LEAMS, and other strategies designed, to reduce internal nutrient loading and thereby offset external discharges of nutrients to the Lake.

In summary, the application of the phosphorus load allocation assigned to agricultural discharges to Lake Elsinore is contingent on the participation by agricultural dischargers in the operation and maintenance of LEAMS, or an alternative internal nutrient loading reduction strategy in a manner to be established by a Regional Board-approved Pollutant Trading Plan. Agricultural dischargers are also required to implement specific tasks identified in the implementation plan for the TMDLs. The recommended Conditional Waiver implements these requirements.

E. TDS/NITROGEN PLAN IMPLEMENTATION

One of the major features of the San Jacinto River watershed, located in southwestern Riverside County, is the extensive groundwater resource that serves as a vital source of water supply in the area. Hydrogeology in the area is characterized by alluvium fills within the valley that serve as excellent permeable aquifers for groundwater storage. Groundwater replenishment occurs throughout the valley, with natural recharge of storm water occurring primarily where the foothills meet the valley floor. Due to high evapotranspiration rates within the San Jacinto River valley, rain or other waters that are applied in the valley are not as likely to reach underlying groundwater.

Salt levels in most of the groundwater management zones in the San Jacinto River Watershed, as expressed by the concentration of total dissolved solids (TDS), exceed the secondary drinking water standard of 500 mg/L. For most irrigation uses, water should have a TDS concentration under 700 mg/L. The TDS levels in many of the groundwater management zones in the San Jacinto River Watershed have increased over time as a result of land use and water management practices. Waste discharges from the agricultural industry have contributed to this water quality decline.

Irrigated agriculture in the Project Area requires large applications of water and fertilizer, which is high in salts. The high rates of evaporation and evapotranspiration that occur in the area allow TDS to become concentrated in the soil; carried by infiltrating water, this TDS migrates through the soil column over time and contributes to groundwater mineralization. Within the San Jacinto River watershed, significant increments of salts are also added by municipal and industrial water use, and the reuse and recycling of wastewater throughout the watershed. Since dairy manure used as fertilizer contains high levels of TDS, its excessive or long term use also contributes to groundwater mineralization.

The 2004 TDS/Nitrogen Management Plan included updated findings regarding assimilative capacity for both TDS and nitrogen in each of the Groundwater Management Zones (GMZs) that comprise the San Jacinto River Watershed. These findings are reviewed and updated to reflect conditions in the GMZs⁵. With the

⁵ Most recently, updates to GMZ assimilative capacity findings were approved by the Regional Board in April 2014 (Resolution No. R8-2014-0005).

exception of the San Jacinto Upper Pressure GMZ, for which maximum benefit objectives and a maximum benefit implementation plan have been established, all GMZs in the San Jacinto watershed lack assimilative capacity for both TDS and nitrogen, i.e., TDS and nitrogen quality conditions in these GMZs fail to meet the applicable TDS and nitrogen objectives.

As a result of these assimilative capacity findings, discharges that affect these GMZs, including discharges from agricultural operations, must be held to the applicable TDS and nitrogen objectives. This requirement is included as a condition of this Order. However, the Regional Board has recognized the inherent difficulties of specifying and complying with TDS and nitrogen waste discharge limits on agricultural discharges. This recognition is demonstrated in the Regional Board's approach in the regulation of dairy facilities throughout the Santa Ana Region. The Regional Board's (see Order No. R8-2013-0001, NPDES NO. CAG018001) "General Waste Discharge Requirements For Concentrated Animal Feeding Operations (Dairies And Related Facilities) Within The Santa Ana Region" provides the opportunity to offset TDS and nitrogen discharges through the development and implementation of Regional Board approved offset programs.

Consistent with this approach, the proposed Waiver calls for agricultural dischargers to participate in approved programs that offset the amount of TDS and nitrogen discharged that exceeds the TDS and nitrogen water quality objectives of the GMZs affected by these discharges.

The TDS and nitrogen requirements in the proposed Conditional Waiver are structured in a manner consistent with those specified in Order No. R8-2013-0001. Specifically, the Conditional Waiver requires that agricultural owners/operators: (1) collect data on the nitrogen and TDS quality of their discharges to ground (and surface) waters; (2) evaluate the effects of ongoing agricultural operations on ground (and surface) waters; (3) implement approved agricultural nutrient management plans, management measures and management practices to minimize nitrogen and TDS discharges; and, (4) develop and/or participate in Regional Board-approved offset programs as necessary.

With respect to manure application in the San Jacinto River Watershed, the proposed Conditional Waiver again relies on requirements consistent with those in Order No. R8-2013-0001. First, the disposal of manure to land is prohibited. Second, the application of manure on lands that overlie GMZs that lack assimilative capacity for TDS and/or nitrate nitrogen is prohibited, unless a plan, acceptable to the Executive Officer, is implemented that offsets the effects of that application on the underlying groundwater management zone. For all intents and purposes, since all GMZs within the San Jacinto River Watershed (except the San Jacinto Upper Pressure GMZ; see below) lack TDS and nitrate-nitrogen assimilative capacity, this means that land application of manure anywhere in the San Jacinto River Watershed is prohibited, unless an acceptable offset plan is implemented.

As noted above, only the San Jacinto Upper Pressure GMZ has assimilative capacity for TDS and nitrogen and this results from the implementation of a maximum benefit program and associated maximum benefit objectives for these constituents. The Regional Board will consider the allocation of assimilative capacity created by the implementation of the maximum benefit program only to discharges by those agencies/parties responsible for that program. At all times, the Regional Board retains the discretion to determine whether and how much assimilative capacity will be allocated among the responsible agencies/parties.

Therefore, absent a demonstration that agricultural operators are in part responsible for and contributing to the maximum benefit program for the San Jacinto Pressure GMZ and may therefore be entitled to some allocation of TDS/nitrogen assimilative capacity, there is no assimilative capacity available for TDS and nitrate-nitrogen inputs in the San Jacinto Upper Pressure GMZ. Once again, land application of manure, or other waste discharges that contribute nitrate-nitrogen and TDS to groundwater, would be permitted in the area overlying this GMZ only if an acceptable offset program is implemented.

To comply with the waiver, agricultural owners/operators will be required to routinely monitor and report on their nitrogen and TDS management activities.

F. MONITORING PROGRAM

By submitting an NOI, dischargers agree to perform individual monitoring or, if a member of a Discharger Group, to participate in a group monitoring program, and to submit annual monitoring reports. The Group Administrator would submit annual reports on behalf of the dischargers participating in the Discharger Group.

Dischargers who receive notice (NOA) that they have been authorized under the Conditional Waiver will be expected to submit a draft Water Quality Monitoring Program Plan (WQMPP) for approval by the Executive Officer. The purpose of the WQMPP is to establish an acceptable monitoring and reporting program that can be used to determine if discharges from enrolled agricultural operations are having an adverse effect on waters of the state and their beneficial uses, to determine compliance with applicable TMDL load allocations, and where necessary, to monitor trends in the amount of pollutants discharged to waters of the state. Based on discussions with stakeholders, Board staff expects that the Group Administrator will accept the responsibility to prepare a WQMPP for discharges, and submit it for approval.

The proposed Conditional Waiver specifies that individual dischargers, or the Group Administrator, must submit draft WQMPPs to Board staff for approval within 180 days of receipt of a Notice of Authorization. Dischargers would be required to implement the WQMPP upon approval. Since the composition of a Discharger Group may change over time, the Executive Officer may require periodic review and revision of the group's WQMPP. WQMPPs are to include the following:

- a. A receiving water monitoring program that identifies locations to be monitored, rationale for selection of monitoring locations, monitoring methods, constituents or parameters to be monitored, and monitoring frequency;
- b. A water quality and BMP reporting program; and,
- c. A Quality Assurance Project Plan (QAPP) that conforms to the guidance developed by the State Board's Surface Water Ambient Monitoring Program (SWAMP).

Water quality monitoring requirements for discharges that do not pose a significant threat to water quality may be waived by the Executive Officer [Water Code section 13269(a)(3)].

In addition, the proposed Waiver requires dischargers, or Discharger Groups, to report annually on payment of apportioned TMDL implementation fees to Western Riverside County Agriculture Coalition (WRCAC), or directly to the TMDL Task Force if the discharger is complying with the TMDLs on an individual basis.

G. WATER QUALITY IMPROVEMENT PLAN

If inspection findings or monitoring report data suggest that one or more enrolled dischargers are not practicing appropriate BMPs, or are discharging concentrations or loads of pollutants that cause or threaten to cause adverse impacts on water quality standards, the proposed Conditional Waiver includes conditions calling for dischargers to submit a Water Quality Improvement Plan (WQIP) for approval.

A WQIP is a plan for determining the source of the pollutant(s) discharge, identifying appropriate BMPs for controlling the pollutants at their source, implementing the identified BMPs according to a schedule, and monitoring the results. Once a WQIP is approved, its implementation is required.

H. MONITORING MANURE TRANSFERS

The extensive use of manure fertilizer within the San Jacinto River Watershed, indiscriminate and unlawful dumping of manure, and manure imports from outside the watershed pose a threat to effective nutrient management and water quality in the Project Area. To address these concerns, the proposed Conditional Waiver calls for agricultural owners/operators who accept control of manure to implement a comprehensive manure manifest system that would report manure generation, transport, and utilization within the watershed. The manifest system will be used to monitor nutrient and salt loadings that can be attributed to manure, and as a tool that can be used to assess the efficacy of, and adherence to, nutrient management and salt management plans. A tracking manifest will also contribute to the analysis of compliance with the Canyon Lake and Lake Elsinore Nutrient TMDLs.

I. OTHER REQUIREMENTS

Dischargers enrolled in the proposed Waiver would have the option to participate in a pollutant trading program, when and if such a program is developed and when such a program is approved by the Regional Board. Each Discharger's participation in an approved pollutant trading program is subject to Executive Officer approval. The intent of a pollutant trading program is to achieve water quality improvements in the most effective and efficient manner. For example, the control of agricultural nutrient inputs to Lake Elsinore to meet the established load allocation may be less effective than implementation, by agricultural operators, of measures to reduce internal sediment nutrient loading.

The proposed Waiver includes additional constraints on the land application of mulch, compost and manure (tentative Order No. R8-2015-0019, G. General Conditions and Other Reporting, #11 and 12)(see also E. TDS/NITROGEN PLAN IMPLEMENTATION) and requires that stockpiling of these materials not exceed 30 days prior to land application.

The proposed Waiver specifies certain discharge prohibitions intended to minimize or prevent water quality impacts from agricultural discharges, including:

1. The discharge of wastes to land or to surface waters shall not cause a condition of contamination, pollution or nuisance, as defined in Water Code Section 13050.
2. The discharge of wastes containing any substance in concentrations toxic to human, animal, plant or aquatic life, is prohibited.
3. During the period between November 15 and March 31 of each year, if the National Weather Service predicts rainfall in the forecast within 72 hours, application of chemical fertilizers (including nitrogen carriers of herbicides for foliar application), manure, and herbicides and other pesticides to agricultural operations that are subject to inundation by the San Jacinto River or its tributaries is prohibited.
4. The discharge of municipal solid waste subject to regulation according to Title 14 of the California Code of Regulations at agricultural operations.

5. ESTIMATED COMPLIANCE COSTS

In coordination with local growers and major stakeholders, Board staff have prepared a report in which the costs of some of the activities that will be necessary to implement this program have been roughly estimated. This report is included as Attachment 6 of this staff report.

6.CEQA – paragraph pending

7. PERIODIC REVIEW AND RECONSIDERATION

If the Conditional Waiver is adopted and dischargers subsequently enrolled, Regional Board staff will report to the Regional Board periodically regarding the status of compliance. These status reports will evaluate whether the Conditional Waiver is adequate to protect and/or improve water quality and to implement applicable provisions of the Canyon Lake and Lake Elsinore Nutrient TMDLs, or whether changes are needed. The evaluation will be based on data and analyses to be provided by the dischargers that characterize the discharges covered by the waiver, evaluate the effect of these discharges on waters of the state, and assess the effectiveness of BMPs that are being implemented to address waste discharges and the requirements of applicable TMDLs. If warranted by this evaluation, Board staff will recommend modification of the conditions of the waiver.

The Regional Board may review this Conditional Waiver at any time and may modify or terminate the waiver for individual dischargers, members of a Discharger Group, Discharger Groups, or in its entirety, as appropriate.

8. CONCLUSION AND STAFF RECOMMENDATION

Implementation of the proposed Conditional Waiver in the San Jacinto River Watershed will lead to the implementation of new and/or improved BMPs, additional water quality monitoring and reporting, and ongoing education and outreach opportunities by/with agricultural operators. These activities are expected to lead to: reductions in the amount of salts, sediment, pesticides, and nutrients discharged from agricultural operations; a greater understanding of the effect of these discharges on water quality; and, compliance with applicable water quality standards, including assistance in achieving established TMDLs.

Adopting a conditional waiver in lieu of the issuance of general or individual waste discharge requirements, the likely regulatory alternative, is in the public's interest since it is expected to streamline the regulatory process and use the Regional Board's and regulated community's resources more efficiently.

Staff recommends the adoption of Order No. R8-2015-0019, Conditional Waiver of Waste Discharge Requirements for Discharges from Agricultural Operations in the San Jacinto Watershed, Riverside County. If approved, this Conditional Waiver would expire in five years from the date of issuance, unless renewed.

Pursuant to Water Code section 13320, any aggrieved party may seek review of this Order, if adopted by the Regional Board, by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California 95812-0100, or delivered to the State Water Board at 1001 I Street, Sacramento CA, within 30 days of adoption of the Order.

Staff Report
Conditional Waiver of Waste Discharge Requirements
Order No. R8-2015-0019