

**Waste Discharge Requirements General Order
for Discharges from Irrigated Lands within the Central Valley Region
for Dischargers not Participating in a Third-party Group**

Response to Comments

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board or “board”) has provided opportunity for the public to submit written comments on the tentative Waste Discharge Requirements General Order for Discharges from Irrigated Lands within the Central Valley Region for Dischargers not Participating in a Third-party Group, Order R5-2013-XXXX (referred to as the “tentative Individual Order” or “Order”). This document contains the Central Valley Water Board staff’s written responses to comments received on the tentative Individual Order.

The tentative Individual Order was circulated for 33-days for public comment ending on April 22, 2013. Written comments were received during this comment period from the following.

	Commenter
1	Dobbas Family Ranch
2	Kings County Board of Supervisors
3	Superior Fruit Ranch
4	Sacramento River Source Water Protection Program
5	Community Water Center, Clean Water Action CA, CA Rural Legal Assistance Foundation (Environmental and Environmental Justice Communities)
6	California Farm Bureau Federation
7	Paramount Farming Company
8	Berry Blest Farm

Prior to circulating the tentative Individual Order for public comment, the board circulated a “draft” Order for public review and comment. The draft public review process that the board engaged in is not required by law or policy, but was conducted to help the board work with dischargers and other interested parties to develop the best possible policies for the protection of water quality while maintaining the viability of the Central Valley’s agricultural industry. The draft review period began on November 15, 2012 and closed on January 10, 2013. The draft Order was then revised based on written comments and comments received at a Central Valley Water Board meeting held on February 1, 2013. The board staff did not develop written responses to comments on the draft Order.

In its notices to interested persons, board staff has explained that, while written responses to comments on the tentative Individual Order would be provided, written responses to comments on the draft Order would not. Several commenters expressed an intent that all or some of their comments on the draft Order or other previous Irrigated Land Regulatory Program (ILRP)

documents, e.g., Irrigated Lands Program Tulare Lake Basin draft Order,¹ be incorporated into comments on the tentative Individual Order. The commenters did not provide any specific discussion of which comments in their previous letters had not been adequately addressed in the modifications from the draft to tentative Individual Order. Furthermore, the tentative Individual Order has been substantially modified from the draft Order; therefore board staff considers it a new document, different from the draft Order and previous ILRP documents. Despite being aware that written responses would only be provided in response to comments on the tentative Order, these commenters did not identify which of their previous comments were still germane to the tentative Individual Order or were inadequately addressed in previous comments. The board staff is not legally required to ascertain whether comments on prior drafts are still of concern to the commenter or are germane to the tentative Individual Order. Nor is it reasonable to expect that the staff would go through such an exercise. In light of the above, this response to comments does not include written responses to comments on the previous draft Order or other ILRP documents.

This response to comments is organized to include a series of master responses and singular responses. The master responses apply to broader issues addressing multiple comments. When issues are addressed in this broader context, the interrelationships between some of the individual issues raised can be better clarified. It is also possible to provide a single explanation of an issue that is more thorough than separate, narrowly focused responses would be. The master responses are presented below.

- [1. Certified low water quality impact farms – incentives](#)
- [2. Concern regarding expense, and “reasonable” regulations](#)
- [3. Development process, scope and requirements uncertainty](#)
- [4. Surface water pesticide monitoring](#)
- [5. Reduction in monitoring after three years with no exceedances](#)

The master responses are given first, followed by responses to the remaining singular comments. The following table lists the comment numbers that were answered in a master response, per comment letter. The master response numbers listed in the table below are hyperlinked to the master response location in this document. The letter number and name are hyperlinked to the beginning of the singular responses for that letter.

¹http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/tulare_lake_basin_area_wdrs/index.shtml

Master Response Key for Each Comment Letter

Letter	Comment number ²	Master Response Number
Dobbas Family Ranch	1-2	<u>1</u>
Kings County Board of Supervisors	2-1	<u>2</u>
	2-2	<u>3</u>
	2-3	<u>3</u>
Superior Fruit Ranch	3-1	<u>3</u>
	3-2	<u>2</u>
	3-3	<u>3</u>
Sacramento River Source Water Protection Program	4-2	<u>4</u>
	4-3	<u>5</u>
Community Water Center, Clean Water Action CA, CA Rural Legal Assistance Foundation (Environmental and Environmental Justice Communities)	5-5	<u>5</u>
California Farm Bureau Federation	6-3	<u>2</u>
Paramount Farming Company	7-2	<u>2</u>
	7-3	<u>3</u>
	7-4	<u>3</u>
Berry Blest Farm	8-1	<u>1</u>
	8-3	<u>4</u>

Master Response 1. Certified low water quality impact farms – incentives

Comment summary

Comments include the concern that the ILRP in general, and the tentative Individual Order in particular, do not provide a cost-effective option for those operations that are already implementing water quality management practices that protect water quality, especially in those areas with a low-threat to water quality. Commenters contend that the program should provide a cost effective, incentive-based alternative for such operations, perhaps through a model certification program.

Comments suggest that incentivized regulation is an unfulfilled promise of the ILRP. One commenter asserts that the tentative Individual Order lacks incentives. The commenter claims that for organic farms, the cleaner the farm, the greater the cost.

Other comments claim that the tentative Individual Order is not equitable because it would hold Dischargers liable for problems in other regions that they neither caused, nor contributed to. Commenters point to the pilot program under the current ILRP waiver program, stating that it comes close as an effective low-threat alternative, yet offers minimal benefit for actual cost incurred by participants, even with a high level of management practice documentation and supportive water quality monitoring data.

² Comment letters have been labeled with comment numbers along the right-hand margins and denoted with red lines. Refer to these comment letters, provided as a separate attachment to this document to determine comment numbers used for these responses to comments.

The commenters recommend that:

- The ILRP needs powerful incentives that transform the conventional landscape of the farm into something as waste discharge-free as possible.
- The Board should develop an individual order that would serve as a program model for progressive Dischargers in low threat regions who have implemented the maximum, or near maximum, number of beneficial management practices to protect water quality. Those Dischargers can gain little, except needless added economic burden in struggling rural agricultural communities, by further investments in program management overhead.

Response

Commenters contend that the ILRP and tentative Individual Order do not provide a cost effective alternative for operations implementing protective water quality management practices, especially in low-threat areas. The board staff does not agree. With respect to the comments on the ILRP in general, the third-party waste discharge requirements currently being developed provides a low cost alternative, including less monitoring and reporting for low vulnerability areas.³ By reducing the monitoring and reporting for low vulnerability areas in the third-party Orders, the board has provided cost savings to operations within these areas.

The individualized approach of the tentative Order, as compared to the group approach of the third-party Orders, inherently results in higher per discharger costs both to the board and individual operators. Commenters see these higher costs when compared with the third-party approach as an artificially imposed disincentive to enrollment under the tentative Order. However, the higher cost is attributable to three main factors that are inherent to regulating Dischargers individually versus as part of a third-party group: 1) the need for board interaction with many individual Dischargers, rather than a few third party groups, resulting in greater demands on staff resources – the staff cost per Discharger to administer the Order is much higher; 2) the need for farm specific monitoring, since the Discharger cannot rely on the representative monitoring being conducted by a third-party group; and 3) the need for individual Dischargers to provide reports and evaluations to the board on how identified water quality issues are being addressed (also see Master Response 2).

While the tentative Order's individualized approach results in higher per discharger costs than the third-party Orders, the tentative Order provides incentives for operations to institute effective management practices. The tentative Order includes the following incentives for operations to institute effective management practices.

- Surface water sampling for pesticides is not required where there is no discharge within 60-days of pesticide use and sampling is only required for materials used.
- Operations with monitoring results that achieve water quality requirements will qualify for reduced sampling as long as management practices are maintained.
- Operations in low-threat groundwater areas are not required to conduct a management practices evaluation program.
- Operations in low-threat groundwater areas are not required to certify nitrogen management plans.

³ The first of these waste discharge requirements was adopted by the board on 7 December 2012 (Eastern San Joaquin River Watershed WDRs, Order R5-2012-0116).

As an example, these incentives would reduce sampling requirements for an organic farming operation. The tentative Order only requires sampling of certain pesticides, many of which are not used by organic growers. Also, where organic growers (or any other Discharger) achieve water quality requirements, they will also qualify for reduced surface water monitoring.

One commenter recommended the inclusion of a cost effective model certification program. This concept was considered in the ILRP Program Environmental Impact Report (PEIR) (Alternative 3).⁴ Under this concept, the Discharger would develop a farm water quality plan for approval, or certification, by either the board or a third-party entity. Sampling requirements for qualifying Dischargers under this alternative would be reduced or eliminated. For this concept to work, the board must have assurance that practices implemented are resulting in achievement of water quality objectives. For example, the State Water Board's Nonpoint Source Policy (NPS Policy) requires the board to determine that there is a high likelihood that the program will attain stated water quality objectives and to include feedback monitoring. Such assurance is generally provided through water quality sampling, or other information that will verify that the practices are capable of achieving water quality requirements and are effectively implemented. Because the certification alternative (PEIR Alternative 3) did not include water quality monitoring, the board found that it is not fully consistent with required state policy and law given in the California Water Code, State Water Board Nonpoint Source Policy, and Resolution 68-16 – State Antidegradation Policy (see section IX, Appendix A, PEIR for a complete discussion and evaluation of program alternatives). Staff also notes that a staff-intensive individualized program approach would lead to high costs when compared with the third-party alternatives (Economics Report).⁵

Commenters suggest that some practices will always achieve water quality objectives such that water quality monitoring is unnecessary. Since the effectiveness of management practices depends on many factors (e.g., crop type, soil type, climate), the board must receive information necessary to determine whether the practices are protective of water quality. Absent a third-party, it is up to each Discharger to show that its chosen configuration of practices achieves surface and groundwater quality requirements. The tentative Individual Order establishes individualized surface and groundwater monitoring to provide this assurance.

⁴ ICF International. 2011. *Irrigated Lands Regulatory Program Final Program Environmental Impact Report*. Final and Draft. March. (ICF 05508.05.) Sacramento, CA. Prepared for: Central Valley Regional Water Quality Control Board, Sacramento, CA.

⁵ ICF International. 2010. *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program*. Draft. July. (ICF 05508.05.) Sacramento, CA. Prepared for: Central Valley Regional Water Quality Control Board, Sacramento, CA.

Others expressed concerns that the tentative Order's "one size fits all" approach would penalize Dischargers for problems in other areas that they do not cause or currently contribute to. The tentative Order is designed to determine whether the individual operation is in compliance with water quality requirements and does not consider information from other areas or operations. In fact, the tentative Order is relatively expensive because it does not utilize an approach where representative monitoring information is collected and reviewed to determine compliance for numerous operations under represented conditions. The tentative Individual Order essentially requires each operation to validate that practices are in place and are protective of water quality.

The options available to Dischargers under the ILRP include enrollment under third-party orders or under the tentative Individual Order. The third-party orders reduce sampling and reporting requirements where farming operations have implemented water quality management practices protective of water quality (low vulnerability areas). Having various compliance options for Dischargers provides an incentive-based program available to progressive operators as requested by commenters. The requirements in the tentative Individual Order are structured to provide incentives for operations that achieve water quality requirements. The higher administrative cost of the individual Order is the result of costs inherent to an individualized approach.

Master Response 2. Concern regarding expense and "reasonable" regulations

Comment summary

General comments regarding the expense of the tentative Order include:

- Costs will be unnecessarily high and prohibitive to the continuation of several farming operations in the Central Valley
- The costs versus the benefits to water quality must be considered
- There is no justification as to why the fees are so much higher under the Individual Order compared to the third-party orders.
- Throughout the Porter-Cologne Act, there is an underlying requirement of reasonableness to the regulation of water quality in the state. The tentative Order fails to meet this legal standard.
- Finding 20 states that reports are necessary, but no technical support or cost benefit analysis to support this position has been provided.
- Disclose the math and time study used to set costs for the tentative Individual Order.

Commenters also provide the concerns regarding finding 34 of the tentative Order. Concerns include that the finding incorrectly states that section 13141 does not necessarily apply in a context where an agricultural water quality control program is being developed through waivers and waste discharge requirements. Section 13141 does not provide that limitation, and the requirement is to look at the plain meaning of the statutory language. Given that this tentative Order proposes new costly regulatory components not previously analyzed during the environmental review stage, the board must analyze, evaluate, and estimate all of the costs of these new regulatory requirements.

Response

The commenters express a general concern that, the tentative Individual Order is "unnecessarily costly" and should not be more costly than participating in a third-party. Staff is

aware that the costs to an individual Discharger would be higher under this Order than under third-party orders; however, without a third-party, individual sampling and reporting are necessary to assess compliance. (see also Master Response 1).

One commenter asserts that the \$179.31 annual per acre estimated cost to Dischargers under the Individual Order is largely underestimated, that this cost exceeds many Dischargers' total annual water costs, and that the cost cannot be absorbed without significant and detrimental economic impacts. The commenter also states that the Water Board is bound by the California Water Code section 13267(b)(1), which states, in part, "*The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.*"

The board evaluated the potential economic effects to irrigated agriculture in the PEIR. In the PEIR, the board found that Alternative 5, which closely resembles the tentative Individual Order, could lead to additional loss of agricultural land in production when compared with lower cost, third-party alternatives. As described in Master Response 1, the higher cost is generally attributable to the individualized approach. This, among other reasons, is why the board's primary approach to the ILRP is to establish third-party orders, which are protective of water quality at a lower cost.

One commenter asserts that the Board's cost estimate is based on an assumption that local farmers have already implemented expensive management practice improvements and that farmers who have not made the improvements face higher potential costs. The Economics Report, which is the basis for the tentative Order's cost estimate, does not assume that farmers have already implemented management practices. In the report, the board attempted to estimate the existing level of practice implementation based on information collected in its Existing Conditions Report.⁶ The commenter is correct, however, that those operations that have not implemented any water quality management practices may have a higher compliance cost than the average estimate provided in the tentative Order; conversely, those with such practices in place may have a lower cost.

While the Water Code requires that the board consider the potential cost of the tentative Order, it does not require the consideration of costs versus benefits to water quality (i.e. a cost/benefit analysis). The Board's cost estimates are based on the best available information. The suggestions that the tentative Order's cost estimates are both too low and too high are not supported by any factual allegations. Board staff reiterates that Dischargers seeking to reduce their compliance costs may enroll under lower cost, third-party waste discharge requirements instead of the tentative Individual Order. The cost estimates are reasonable.

In response to a commenter's request that the board disclose the math and time study used to set costs for the tentative Order, the commenter is directed to Attachment A of the tentative Order. Attachment A provides information on the development of the cost estimate for the tentative Order. As described in Attachment A, cost estimates were derived using the Economics Report for the long-term ILRP. In response to this comment, the board has posted

⁶ California Regional Water Quality Control Board, Central Valley Region, and Jones and Stokes. 2008. *Irrigated Lands Regulatory Program Existing Conditions Report*. Sacramento, CA.

the spreadsheet used to estimate costs for the tentative Order on its website. The spreadsheet is available for download at:

http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/individual_growers_wdrs

The commenter also seems to indicate that the board has “set” costs for the tentative Order. This is not the case. The board has provided an estimate of the potential costs of the tentative Order; including fees, monitoring and reporting, and the costs associated with potential implementation of management practices. Aside from annual fees, which are set by the State Water Board, the disclosed costs estimate potential costs that an operation may incur to comply with the tentative Order. Those estimates should not be confused with annual fees set by the State Water Board. The largest portion of the estimated costs are associated with implementation of management practices (approximate average annual cost of \$121 per acre of \$184 per acre). It must be noted that this Order does not require that Dischargers implement specific water quality management practices.⁷ Individual operators will select management practices based on the unique conditions of their irrigated agricultural lands, water quality concerns, and other expected benefits. As such, the Board has estimated potential - not required - costs of implementing specific practices. Any costs for water quality management practices will be based on a market transaction between Dischargers and those vendors or individuals providing services or equipment and not based on an estimate of those costs provided by the board.

The approximate annual average cost for monitoring and reporting is \$54 per acre. Similar to management practice costs, this cost is not a fee set by the State Water Board, but is an estimate of potential monitoring costs. It is also important to note that the estimates are for the average Discharger; Dischargers with protective management practices already in place and that qualify for reduced monitoring would have lower costs for management practices and monitoring.

Commenters argue that the Board failed to provide technical support or cost benefit analyses regarding its position that plans and reports, such as farm water quality plans, exceedance plans, and annual monitoring reports, are needed from the Discharger and bear a reasonable relationship to their costs. Board staff disagrees, since the plans and reports are designed to ensure Dischargers are implementing relevant practices to protect water quality and staff has considered their cost. As described in Master Response 1, the NPS Policy requires the board to determine that there is a high likelihood that the program will attain stated water quality objectives and to include feedback monitoring. The board cannot evaluate whether the program is meeting objectives without the proposed feedback monitoring and reporting. The Information Sheet (Attachment A) provides further information explaining and supporting the need for plans and reports from the Discharger, as well as cost estimates for monitoring and reporting requirements.

The suggestions that the tentative Order is not reasonable, within the meaning of the Water Code, is not supported by any facts or analysis provided by any of the commenters. Board staff believes that it is reasonable to require Dischargers regulated by the Order to provide

⁷ Per Water Code section 13360, the Central Valley Water Board may not specify the manner in which a Discharger complies with water quality requirements.

information necessary to demonstrate compliance with its provisions. As described in Attachment A of the tentative Order, farm water quality plans provide information on overall implementation of practices to protect water quality; water quality monitoring provides feedback that practices are effectively achieving water quality requirements; and action plans provide the board with information on how the Discharger will address existing water quality problems.

The monitoring and reporting requirements have been crafted considering reasonableness and the Water Code's requirement to consider the burden of reporting. The Order takes a reasonable approach by tailoring the Discharger's monitoring and reporting requirements to the potential constituents of concern and the site-specific water quality threat. The Order also requires key information to be provided in an annual report. Annual reporting is a common requirement in California, and allows Dischargers to submit information in a cost-effective manner. Furthermore, Dischargers have the option to participate in a third-party program, which has lower administrative and monitoring costs. The third-party option provides financial relief to Dischargers. The commenters have not provided evidence that any of the proposed monitoring or reporting requirements are unreasonable or unnecessary.

One commenter takes issue with finding 34 of the tentative Order, which states that section 13141 of the Water Code "does not necessarily apply" to the tentative Order. In making this statement, the tentative Order has not taken a position on the applicability of that code section to the tentative Order. Instead, the tentative Order notes that costs of the long-term ILRP were estimated in its Basin Plans prior to the implementation of the tentative Order, consistent with section 13141 of the Water Code. The commenter has pointed to no authority requiring the board to affirmatively opine about a statute's applicability, as opposed to taking a neutral position as the tentative Order does. More importantly, the commenters have not established, or even asserted, that adoption of the tentative Order would violate Water Code section 13141.

The Central Valley Water Board has prepared a cost estimate for the long-term ILRP, and added it to its Basin Plans prior to implementation of this tentative Order. The State Water Resources Control Board approved these Basin Plan amendments on 17 July 2012. To estimate costs for this tentative Order, staff used the same study used to develop the Basin Plan amendments. The comment further claims that the tentative Order proposes new costly regulatory components not previously analyzed and states that the board must analyze, evaluate, and estimate all of the costs of these new regulatory requirements. The board has estimated the potential costs to Dischargers of the tentative Order. Detailed discussion of the estimated cost may be found in Attachment A, under the section titled "California Water Code Sections 13141 and 13241."

Master Response 3. Development process, scope, and requirements uncertainty

Comment summary

Comments related to the perceived uncertainty of the scope and requirements of the tentative Order include the concern that the Order is too broad, grouping all operations into a "one size fits all" strategy with no exceptions for small operations; the concern that current and future high vulnerability areas are unknown; and the concern that the Order requires a difficult determination of the exact source(s) of groundwater nitrate contamination. Additional comments asserted that the tentative Order is not well-planned and structured, and that the ILRP should assess potential alternatives, define and account for baseline conditions by specific geographic areas and provide measurable goals for each level of regulation, that if obtained,

result in a defined, decreased level of future reporting and monitoring. The board's "rush to regulate" has resulted in a deadline-driven process to apply a standardized and ineffective administrative burden on landowners with no measurable benefit to groundwater quality.

Another commenter is concerned that the ILRP has lacked a collaborative stakeholder process.

Finally, some commenters claim that the Board has not analyzed the beneficial impacts of the Order as well as of legacy nitrate issues. The commenter asks the board to engage in additional scientific studies, including carbon dating, before adopting the Order. The commenter also asks the board to hire a third party analytical group to conduct all of the monitoring required by the tentative Order, then design a program to mitigate the 'hot spots' discovered.

Response

The ILRP in the Central Valley Region is designed to primarily operate through third party groups, in order to effectively regulate tens of thousands of Dischargers within regional groups rather than through more costly direct regulation and interaction with the Water Board. In some cases, the third party approach may not be appropriate or effective, and this Order is intended to provide regulatory coverage in these isolated cases. In other words, this is not the primary regulatory tool for the ILRP, and is not designed to be complementary of the Board's primary approach. It provides flexibility to all Dischargers, as it provides a regulatory option for Dischargers that do not wish to be part of a coalition group.

The provisions within the Individual Order provide additional flexibility. These provisions essentially tailor the Order's requirements to the specific operation, including requirements for monitoring only pesticides used on the farm, the ability to petition the Executive Officer for monitoring reduction based on monitoring results, and a requirement for management practices evaluation workplans only in high vulnerability groundwater areas. In addition, this is a general order. An individual Discharger not wishing to enroll may therefore comply with the Water Code by submitting an application for individual waste discharge requirements specifically tailored to their operation, although the board may choose to regulate such Dischargers under the general order.

High vulnerability groundwater areas were designated in the tentative Order through provision III.C.1 and footnote 1 of the MRP. The designated high vulnerability groundwater areas are the Department of Pesticide Regulation's Groundwater Protection Areas and the State Water Board's Hydrogeologically Vulnerable Groundwater Areas, as well as operations that measure exceedances in monitoring conducted under III.C.2 of the MRP. High vulnerability groundwater monitoring is required in these areas.

Additionally, the Order states that high vulnerability groundwater monitoring will also be required for dischargers located within a high vulnerability area as identified in an approved third-party Groundwater Assessment Report (GAR). The third-party groups in the Central Valley Region are undergoing a significant effort to identify high vulnerability groundwater areas, and the board will utilize the work conducted by the third-party groups in refining the designated high vulnerability areas defined in the MRP. If there are any dischargers regulated under the Individual Order that the board determines, based on a third-party GAR, now fall into the high vulnerability category (and which they did not fall under based on the other criteria described in III.C.1 of the MRP), the board will notify the discharger of this vulnerability status change. Similarly, where third-party GARs indicate that an operation is within a low vulnerability area, previously designated as high vulnerability, the board will notify the discharger of the vulnerability status change. After GARs are submitted and those high vulnerability areas are

known, vulnerability status will not change for most dischargers, and for those that might have a status change, this will not be frequent. Events that could cause vulnerability status to change would be measured exceedances under III.C.2 of the MRP, and changes to DPR's Groundwater Protection Areas.

Water Board staff does not agree that it is necessary to identify the exact source of nitrate exceedances in order to reduce nitrate groundwater contamination. Rather than creating a program to identify each past contamination point, the ILRP focuses on the implementation of management practices that reduce or eliminate future nitrate impacts to groundwater. There are multiple sources that have added nitrates to groundwater. Nitrate added by both agricultural and non-agricultural sources has degraded and/or polluted groundwater beneath agricultural areas in California's Central Valley.⁸

Some commenters ask the board to conduct additional scientific studies and hire a third party analytical group to conduct monitoring then design a program to mitigate the 'hot spots' discovered. The third-party ILRP orders require just that. Those orders require the third-party to conduct representative monitoring and organize follow-up in areas with water quality problems. Staff is proposing that the Board adopt the tentative Order, which focuses on the implementation of management practices, while retaining the flexibility to modify it in the future if warranted by the results of the studies by the third-parties and others.

Board staff disagrees with the comments claiming that the ILRP has lacked a collaborative stakeholder process or that there is a "rush to regulate". Beginning in March and April 2008, the board conducted a series of CEQA scoping meetings to gather recommendations on the scope and goals of the long-term ILRP. During these meetings, stakeholders expressed a desire to be actively engaged in program development. The long-term Irrigated Lands Program Stakeholder Advisory Workgroup was formed to provide stakeholders the opportunity to work with staff to develop the long-term program. The workgroup included participants representing federal, state, and local government agencies; agricultural groups, environmental groups; and environmental justice groups. Over the course of nine months, the workgroup developed long-term program goals and objectives and a range of alternatives for consideration in the PEIR. During the development of the draft PEIR, board staff met multiple times with a variety of stakeholders to provide updates on the status of the draft PEIR and receive feedback.

The board certified the Final Program Environmental Impact Report for the ILRP (PEIR) in April 2011.^{9,10} In June 2011, the board directed staff to begin developing waste discharge requirements (orders) that would implement the long-term ILRP to protect surface and groundwater quality. During 2011, the board reconvened the Stakeholder Advisory Workgroup to provide additional input in the development of the orders. Also, during the same time, the board worked with the Groundwater Monitoring Advisory Workgroup to develop an approach for groundwater monitoring in the ILRP.

⁸ ICF International. 2011. *Irrigated Lands Regulatory Program – Program Environmental Impact Report*. Final and Draft. March. (ICF 05508.05.) Sacramento, CA. Prepared for Central Valley Regional Water Quality Control Board, Sacramento, CA. Appendix A, page 46.

⁹ ICF International. 2011. *Irrigated Lands Regulatory Program – Program Environmental Impact Report*. Final and Draft. March. (ICF 05508.05.) Sacramento, CA. Prepared for Central Valley Regional Water Quality Control Board, Sacramento, CA.

¹⁰ In accordance with CEQA, the Central Valley Water Board, acting as the lead agency adopted Resolution R5-2011-0017 on April 7, 2011, certifying the PEIR for the Irrigated Lands Regulatory Program.

With respect to the long-term ILRP, including the tentative Individual Order, board staff has engaged in multiple meetings with the coalitions, other agricultural representatives, environmental justice groups, and state agencies.¹¹ Also, as described above, the board included an additional “draft” public review step that is not required for board consideration of orders. In summary, board staff have engaged in numerous formal and informal meetings with stakeholders over the course of five years in developing this program. In addition, the board has held multiple public meetings and workshops to consider staff proposals, provide direction on the program, and to take action related to various elements of the program. Stakeholder engagement during development of the PEIR and the tentative Order has been extensive.

One commenter asked the Board to define and account for baseline conditions by specific geographic areas and provide measurable goals for each level of regulation, that if obtained, result in a defined, decreased level of future reporting and monitoring. Consistent with the commenter’s suggestion, the board prepared an Existing Conditions Report¹² to determine current baseline water quality conditions in irrigated agricultural areas throughout the Central Valley. That baseline informed the conclusions of the PEIR, which the Board has relied upon in the development of the tentative Order. Also consistent with the commenter’s request, as described in Master Response 1, the tentative Order reduces monitoring requirements where information collected indicates water quality requirements are being met and also reduces monitoring in low vulnerability groundwater areas.

Master Response 4. Surface water pesticide monitoring

Comment summary

One commenter requested that section V of the MRP be expanded to better describe the review and update process of the surface water pesticide monitoring list, such as review triggers, review timing, and the availability of public input. The commenter believes public input on pesticide monitoring is important.

Some commenters requested additional pesticides be added to the surface water pesticide monitoring list, including 2,4-D, 1,3-dichloropropene, methyl bromide, atrazine, and methamidophos. The commenters are concerned that these pesticides have significant agricultural use in the Sacramento Valley and may impact the drinking water beneficial use and other beneficial uses.

Response

The Information Sheet has been revised to describe staff’s intent to review the surface water pesticide list every five years. As part of that process, staff will inform interested persons of any proposed changes to the list of pesticides. In its review, staff intends to generally follow the same process staff used to prepare the tentative Order. Also, at any time interested persons have the option to request that the Executive Officer or the board make changes in the required monitoring.

Since the pesticides suggested by the commenters are not on the High Overall Relative-Risk Level Pesticides list (Pesticide TMDL Unit, 2009), 303(d) listed pollutants, or ILRP management plan pesticides, they were not considered for the initial surface water monitoring list. In response

¹¹ The Stakeholder Advisory Workgroup discussed the Individual Order at meetings held in January and February 2013.

¹² California Regional Water Quality Control Board, Central Valley Region, and Jones and Stokes. 2008. *Irrigated Lands Regulatory Program Existing Conditions Report*. Sacramento, CA.

to the comments received, staff has considered available information on these pesticides and consulted with DPR. Available surface water data is summarized below.

Pesticide	CEDEN monitoring data			Water quality objectives/criteria used to interpret narrative objectives		Registered for agricultural use in California?
	Count of Samples (a)	Count of Detections (a)	Maximum detection level (ug/l)	Lowest aquatic life toxicity value (ug/l) (b)	Municipal & domestic supply trigger limit (ug/l)	
Atrazine	3,888	425	0.966	0.6	1 (c)	yes
2,4-D	222	5	20	14	70 (c)	yes
Methyl bromide	44	0	-	0.8	9.8 (d)	yes
1,3-Dichloropropene	44	0	-	120	0.5 (c)	yes
Methamidophos	2,305	4	1.3	0.00022	0.35 (d)	no

- a. Count of samples and detections represent monitoring data available in the California Environmental Data Exchange Network (CEDEN), June 2013.
- b. USEPA ECOTOX database, endpoint of LC50 or mortality.
- c. Primary Maximum Contaminant Level (MCL) for drinking water.
- d. Integrated Risk Information System (IRIS) Reference Dose (listed when there is no MCL).

Staff has added atrazine and 2,4-D to the surface water monitoring table in the tentative Order due to detections of these constituents above a water quality objective or criteria used to interpret the narrative toxicity objective. Because methyl bromide and 1,3-dichloropropene have not been detected in surface water and DPR staff do not expect these fumigants to appear in surface water samples, the tentative Order does not require monitoring of these constituents. The board or Executive Officer may include these pesticides for monitoring in the future based on new information. Methamidophos is no longer registered for use in California, and is therefore not appropriate to monitor.

Master Response 5. Reduction in monitoring after three years with no exceedances
Comment summary

Some commenters expressed concern regarding provision 2 under section III.A of the MRP, which would allow a Discharger to petition the Executive Officer to eliminate monitoring requirements for a constituent if, after three consecutive years of monitoring for that constituent, there are no exceedances. The provision states that the petitioner may be granted in full or on the condition that the Discharger annually certify that water quality management practices have not changed since the exceedance-free monitoring period.

Commenters request that this provision be modified to include consideration of degradation trends as well as an assessment of exceedances. As currently written, there would be no consideration for degradation. Commenters also request that any monitoring reductions be accompanied by annual certifications that water quality management practices have not changed, as well as a confirmation monitoring sample once every three years during the period of peak risk to surface water.

There is also concern that three years of monitoring under the monitoring design of this program is insufficient for evaluating future risk, due to the range of flow and weather conditions that can occur over a longer time period that can contribute to water quality impacts.

Response

In response to the comments, staff has revised the tentative Order's MRP. Under the tentative MRP, the Executive Officer will not approve a petition to reduce monitoring frequencies for a constituent if monitoring shows a trend in degradation that threatens a beneficial use. In addition, the tentative MRP has been revised to provide that the maximum frequency reduction is one that reduces monitoring frequencies to one year of sampling for every five years; under the prior version of the MRP, monitoring for that constituent could have been permanently eliminated. Staff notes that the Executive Officer need not approve the maximum reduction in monitoring. Finally, in order to qualify for the monitoring reduction, the Discharger will need to annually certify that water quality management practices have not changed since the reduction was granted.

Staff agrees that flow, weather conditions, or management practices may change, potentially affecting water quality. In consideration of these factors, staff has proposed that the reduction in sampling be contingent upon the discharger maintaining the current level of water quality management practices. Sampling would still be required, but at a reduced frequency.

SINGULAR RESPONSES

Comment Letter 1

1-1. Description of those enrolling under this Order

Comment summary

The commenter suggests that finding 2 of the tentative Individual Order be expanded to include those Dischargers who voluntarily choose to enroll under this Order.

Response

Staff has revised the tentative Order based on the comment.

Comment Letter 2

All comment responses provided under Master Responses.

Comment Letter 3

3-4. Overarching state water program for all water-related issues

Comment summary

The commenter suggests that the state needs to approach water issues in a holistic fashion, where water quality, water storage, point source discharges, illegal dumping, and water rights are all incorporated; otherwise they feel that the ILRP will not yield improved water quality.

Response

The more holistic approach suggested by the commenter can be more readily achieved in the context of a third-party order. In fact, many of the current coalition groups are composed of or include water districts to help integrate water supply and water quality concerns. However, the Central Valley Water Board does not have the broad statutory authority to address all of the issues identified by the commenter, although it does engage in the development of the California Water Plan, in which many of those issues are addressed.

The Central Valley Water Board has a record of improving water quality in a variety of contexts, including point source discharges and irrigated lands, even in absence of water rights and the

other authorities suggested by the commenter. However, staff agrees with the commenter that the ILRP should be coordinated with other regulatory and non-regulatory programs to achieve maximum benefit to water quality. Such coordination is a stated goal of the long-term ILRP and is the primary reason the board is developing geographically based third-party orders to implement the long-term ILRP. The third-party relationship encourages the leveraging of resources and coordination among multiple agencies (e.g., Agricultural Commissioners, Resource Conservation Districts) to seek out efficient solutions to water quality problems. The tentative Order, which is geared toward evaluating and solving water quality concerns individually, is a necessary component of the long-term ILRP, but is not the primary focus for the long-term ILRP. While the tentative Order's approach may not promote coordination between Dischargers and other regulatory programs, the board maintains that the approach will achieve water quality goals.

Comment Letter 4

4-1. Surface water pesticide monitoring exemption in runoff GWPAs

Comment summary

The commenter has concerns with footnote c in Table 1 of the MRP, which states that "Discharge [surface water discharge] monitoring is not required for applied pesticides where the Discharger is implementing applicable DPR use requirement management practices for runoff groundwater protection areas [GWPAs] (CCR, Title 3, section 6487.4)." The commenter recommends this exemption be removed, because these GWPA management practices only apply to some pesticides in some areas. The commenter points out that outside of these areas and with other pesticides, DPR regulations have no oversight or enforcement authority. Additionally, these management practices were not designed to stop the transport of pesticides to surface water, or to address pesticides other than those impacting groundwater. For example, they do not address pesticides like pyrethroids that are transported to surface water via soil particles in surface water runoff. Finally, the commenter explains that surface water may be at risk to pesticide contamination through additional pathways such as aerial overspray, aerial drift, and levee seepage.

If the exemption is not removed, the commenter recommends the language be clarified that the exemption is limited to runoff GWPAs and only those pesticides where Dischargers have pesticide application permits requiring the use of DPR management practices.

Response

Since the referenced DPR GWPA management practices are intended to protect groundwater, staff has removed the exemption from surface water monitoring associated with implementation of these practices. The DPR GWPA management practices were not designed to protect surface water quality, although they may have surface water quality protection benefits in addition to groundwater quality protection benefits.

4-4. Definition of "immeasurable"

Comment summary

The commenter requests a clear definition of "immeasurable", or stated method for determining measurability. The commenter believes a clear definition is important since it determines whether or not surface water monitoring will be required.

Response

The board has revised the tentative Order (Footnote "b" of Table 1, MRP) based on this comment.

4-5. Total organic carbon (TOC) monitoring

Comment summary

The commenter recommends that TOC monitoring be required under the tentative Order, as it contends that agriculture is a known source of TOC discharges to water supplies. The commenter argues that the Water Board requires large municipal stormwater systems and some industrial dischargers to monitor for TOC, and that some TOC data has been collected under the Conditional Waiver Program at levels of interest to drinking water stakeholders. Further, the commenter points out that once the board's Drinking Water Policy is adopted, it will specifically clarify that the narrative water quality objective for chemical constituents includes drinking water chemical constituents of concern, including TOC.

Response

There is not currently a numeric water quality objective for TOC to use to assess compliance in the ILRP, and there are also no known TOC criteria to assess compliance with the narrative Chemical Constituents water quality objective. Based on existing policies and objectives, it is not clear to the Central Valley Water Board how TOC information would be used to determine Discharger compliance with the Order. The Executive Officer may consider adding TOC monitoring in the future as new information becomes available.

Comment Letter 5

5-1. Long-term vs. short-term water quality improvements

Comment summary

The commenter expresses concerns with nitrate contamination of groundwater supplies and the tentative Order's mechanisms for reducing nitrate loading in the short and long-term. The commenter contends that the Water Board is obligated to (1) improve water supplies where possible in shallow domestic wells in the short term; (2) limit the spread of existing contamination to current high quality waters; and (3) ensure long term restoration of the aquifer. The commenter states that the tentative Order refers only to the long term restoration of the aquifer, ignoring the more pressing and potentially solvable short-term issues (i.e., in shallow domestic wells).

Response

Staff disagrees with the commenter's statement that the tentative Order's approach to protecting groundwater supplies focuses only on long-term restoration and ignoring short-term issues. The tentative Order would establish requirements aimed at short-term reduction in nitrate loading that will benefit shallow groundwater supplies, and in the long-term will have beneficial effects on deeper aquifers. These requirements include the tentative Order's prohibitions, receiving water limitations, farm management performance standards, and mandatory nitrogen management plans. Applicable provisions are provided below as examples.

Wastes discharged shall not cause or contribute to an exceedance of applicable water quality objectives in the underlying groundwater, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance. [II.B.1]

Minimize percolation of waste to groundwater. [III.A.5]

Protect wellheads from surface water intrusion. [III.A.5]

Dischargers shall implement practices that minimize excess nutrient application relative to crop need.... [III.A.9]

The requirements apply to all dischargers under the tentative Order. Contrary to the commenter's assertion, implementation of the requirements will lead to a reduction in the discharge of nutrients to groundwater in the short-term and the long-term, and will work to reduce the spreading of existing contamination. The performance standards for managing nutrients in a manner to minimize application relative to crop consumption and minimizing percolation of waste to groundwater must be implemented in the short-term and will be evaluated as part of the Management Practices Evaluation Program (as is further described below). The prohibitions regarding backflow through a water supply and discharge down a groundwater well casing are in effect immediately and will ensure that protective practices are implemented to prevent the direct discharge of wastes through conduits to groundwater. The board is unaware of any reasonable additional standards that could be established immediately to further reduce discharge of nutrients to groundwater and the commenter has suggested no such additional standards.

The tentative Order would require monitoring and reporting to measure compliance with the Order's requirements. For example, each discharger must submit its farm water quality plan to the Central Valley Water Board. The plan will describe the practices the discharger employs to achieve the Order's requirements, including a nitrogen management plan. In high vulnerability areas, each Discharger will provide an additional report of the total nitrogen available and an estimate of crop consumption. These reporting requirements can help the board confirm that dischargers are implementing practices that reduce waste discharge to groundwater. Other monitoring and reporting requirements applicable to all operations include sampling of wells to characterize groundwater quality and provide long-term trend information.

In addition to requiring the implementation of the farm management performance standards and nutrient management plans, the Order requires dischargers within high vulnerability areas to institute a management practices evaluation program, or "MPEP." The MPEP must evaluate whether the practices instituted to achieve the Order's performance standards are protective of groundwater quality, and are achieving compliance with the Order's receiving water limitations for groundwater. If the practices are protective in high vulnerability areas, it stands to reason that such practices will be protective in low vulnerability areas. Board staff will use any applicable information gathered in the MPEP to evaluate compliance with performance standards for all dischargers, not just those in high vulnerability areas. Where practices are found to be not protective, the tentative Order would require additional practices in an iterative manner to achieve compliance with water quality requirements. Based on the information gathered in each Discharger's MPEP, the board may revise the Order in the future to further ensure the protection of groundwater quality.

5-2. Human Right to Water Act

Comment Summary

The commenter expresses concern that while the newly added finding 27 acknowledges the recently adopted state policy on the Human Right to Water (AB 685), it does not address the requirements of the statute (enacted as Water Code section 106.3)¹³. The commenter suggests the policy has several implications for board policies or regulations. The commenter indicates: 1) the Board should give preference and adopt policies that advance the human right to water; 2) the Board should refrain from adopting policies or regulations that run contrary to securing

¹³ As staff indicated in the beginning of this response to comments document, staff are not responding to general references to comments made on other ILRP documents. However, the commenter has cited a specific section of their previous letter that they believe applies to the tentative Order.

equal access to safe drinking water; and 3) the Board should note in its record of decision the consequences that its actions have on access to safe drinking water in California.

Comment Response

Staff has expanded finding 27 to further clarify that the board has considered the human right to water when developing the tentative Order. Finding 27 describes how various provisions of the tentative Order address the policy expressed in AB 685.

Board staff agrees that the court cases cited by the commenter establish that public agencies must consider factors mandated by applicable laws, but disagrees that the cases dictate the manner in which public agencies consider these factors or that all of the cases interpret statutes similar to AB 685. Even if the policy implications of the commenter were conceded, the commenter provides no discussion of any deficiencies in the tentative Order vis a vis AB 685 or any recommendations for remedies or changes.

While strictly speaking, AB 685 may not apply to the adoption of waste discharge requirements (as opposed to a “regulation” or “policy”) such as the tentative Order, the Board has considered the human right to water, consistent with the policy expressed in AB 685.

5-3. Anti-degradation policy

Comment summary

The commenters contend that the tentative Order fails to comply with the Anti-degradation policy. The Order contains the same or similar language that the commenters have petitioned the State Board to repeal. The Order allows degradation above water quality standards for up to 10 years, and has language in place for that period to be extended. Commenters suggest the following changes: (1) In response to staff’s decision to avoid the term “limited” degradation in the order, the board should establish a maximum amount of degradation at a level below the full degradation to the water quality objective that is currently allowed; and (2) WDR page 18, general provisions: restore performance standards contained in the prior draft that management practices prevent pollution and nuisance, and achieve and maintain water quality objectives and beneficial uses. The commenters also state that to the extent that the order allows for further degradation, the Board must engage in an analysis to determine if further degradation is consistent with maximum benefit to the people of California.

Response

The commenter provides the concern that the tentative Order is not consistent with antidegradation requirements (State Water Board Resolution 68-16). The comment suggests that the main fault for the inconsistency is the tentative Order’s time schedule provisions, allowing up to 10 years for full compliance with the Order’s receiving water limitations. Board staff agrees that it would be best for water quality if all dischargers could immediately change practices to ensure waste discharges are fully compliant with receiving water limitations, but is aware that it will take time to determine sources of waste, assess the potential practices available given site-specific conditions, and finally implement the selected practices.

The commenter is correct that the tentative Order’s time schedule provisions may allow up to 10 years for full compliance with receiving water limitations once a violation is detected. However, staff emphasizes that the 10-year timeframe is a maximum and does not default to 10 years. Instead, the provisions would require the discharger to propose a schedule that is as short as practicable with appropriate technical and economic justification. The Executive Officer may then approve the proposed time schedule or require modifications, such as a reduced timeframe.

The commenter is mistaken that there are provisions in place to further extend the 10-year time schedule. The provisions specifically limit a time schedule to a maximum of 10 years, linked to a particular identified water quality problem in a surface water or groundwater action plan. Action by the full Board would be required to extend a time schedule beyond the 10-year maximum limit, unless the Basin Plan identifies a longer time schedule.

Antidegradation requirements do not require instantaneous compliance or otherwise provide time limitations on achieving policy objectives; i.e., to ensure that best practicable treatment or control is in place and that degradation is not allowed above applicable water quality objectives. The Water Code, however, clearly provides the board with the discretion to prescribe time schedules within waste discharge requirements [section 13263(c)]. This discretion in implementing antidegradation requirements was explicitly recognized and endorsed by the California Court of Appeal, who wrote with respect to the Board's Dairy Waste Discharge Requirements that "[a] phased approach... is reasonable, and is authorized by section 13263, which allows the requirements of a regional water quality control board to contain a time schedule." *AGUA v. Central Valley Water Board*, 210 Cal.App.4th 1255, 1277.

Consistent with the Water Code and antidegradation requirements, the tentative Order establishes requirements that will result in the implementation of best practicable treatment or control by every Discharger (e.g., through farm management performance standards, nitrogen planning, farm planning, and feedback monitoring) and, as a ceiling, does not allow degradation above water quality objectives. The time schedule provisions in the tentative Order are intended to bring a Discharger into compliance with receiving water limitations as quickly as possible once violations are detected. This process, along with the performance standards and other requirements of the order, will ensure that all Dischargers reduce their waste discharges in the short-term (see further discussion under comment 5-1), while fully complying with objectives in the long-term. Nowhere does the tentative Order establish requirements that will allow discharge above an applicable water quality objective, outside a temporary Executive Officer approved time schedule. Likewise, nothing in the tentative Order exempts Dischargers from the performance standards, and other management practice implementation requirements.

The commenter contends that where the Order will allow further degradation, the board must engage in an analysis to determine if further degradation is consistent with maximum benefit to the people of California. As documented in the Information Sheet, the Board has conducted an analysis of whether the potential degradation of high quality waters authorized by the tentative Order is consistent with the maximum benefit to the people of California. The analysis is qualitative. Because of the widespread nature of irrigated agriculture and the numerous water bodies potentially affected, it is infeasible for the board to quantitatively review each potential waste discharge and receiving water scenario (tens of thousands) throughout the Central Valley, quantify its potential degradation of high quality waters, and determine whether that quantified degradation is consistent with the maximum benefit to the people of California.¹⁴ Instead, the board conservatively assumed that there are high quality waters receiving irrigated agricultural wastes that may be degraded by continued discharge. Operating under this supposition, the tentative Order applies requirements to minimize such degradation not just for

¹⁴ Further evidence of the infeasibility of such analysis is available by reviewing the Program Environmental Impact Report for the Irrigated Lands Regulatory Program. In this analysis, the board generally found that there is not information available to quantitatively analyze potential changes in agricultural flows due to proposed policy. On 21 May 2013, the Superior Court of Sacramento upheld the Board's Program Environmental Impact Report.

those operations discharging to a high quality water, but all operations; implement best practicable treatment or control; and ensure that waste discharge is not above an applicable water quality objective (see 1-3 below). The complete analysis is contained within the Information Sheet.

1. Farm and nitrogen management planning indicating practices in place to achieve the Order's requirements including farm management performance standards (to be submitted to the board)
2. Surface and groundwater feedback monitoring programs to evaluate effectiveness of implemented practices in achieving the Order's requirements (reported to the board)
3. Establishment of receiving water limitations, setting highest level at water quality objectives

The tentative Order's approach, generally outlined in 1-3, will result in the implementation of practices that will minimize waste discharge to surface and groundwater. As mentioned above, the numeric receiving water limitations establish a ceiling, but the farm management performance standards (listed in MRP section IV.C.5) and other requirements of the tentative Order provide additional requirements that will further minimize degradation. For example, under the performance standards, the tentative Order requires all Dischargers to implement practices to minimize waste discharge to surface water even where a discharge is currently meeting water quality objectives. In other words, there is no exemption from this requirement for Dischargers that are in compliance with the tentative Order's receiving water limitations. As another example, the nutrient performance standard requires minimization of nutrient application relative to crop consumption regardless of the concentrations of nutrients in the receiving groundwater. Therefore, where underlying groundwater is of high quality for nutrients, the tentative Order requires minimization of nutrient application relative to crop consumption, which will minimize waste discharge to groundwater and any associated potential degradation through the implementation of best practicable treatment or control. Where the underlying groundwater is not high quality, this standard will ensure that nutrient discharged is minimized, not just limited to the numeric objective. The information the board gathers through farm planning and monitoring will inform implementation of the tentative Order's performance standards.

These requirements are fully consistent with the antidegradation requirements, which limit additional controls to situations where a discharge may cause degradation of a high quality water. Board staff has proposed a finding that the degradation allowed under the tentative Order is consistent with maximum benefit to the people of the state, in consideration of factors listed in State Water Board guidance documents for determination of maximum benefit to the people. Staff notes that it has received no comments providing specific scenarios or information that potential degradation under the tentative Order would be inconsistent with that proposed finding.

The commenter recommends that the board establish a maximum amount of degradation at a level below the water quality objective. The comment implies that the amount must be expressed numerically, and may not be expressed narratively. Staff disagrees, and believes the tentative Order expresses such limits narratively. The tentative Order's performance standards, management practice implementation requirements, and monitoring requirements limit and reduce the waste discharges that may result in the degradation of high quality waters. As discussed earlier in response to this comment, it is infeasible for board staff to quantitatively review each potential waste discharge and receiving water scenario (tens of thousands) throughout the Central Valley, quantify each scenario's potential degradation of high quality

waters, and determine whether that quantified degradation is consistent with the maximum benefit to the people of California. By that same token, it is infeasible to quantify and numerically limit a precise amount of degradation below a water quality objective that is authorized by the tentative Order. Furthermore, the requested quantitative allocations are not required by State Water Board resolution 68-16 or any related State Water Board guidance documents.

Finally, the commenter recommends that the following farm management performance standards be included (from the previous draft).

- Prevent pollution and nuisance
- Achieve and maintain water quality objectives and beneficial uses

These two farm management performance standards are described within the receiving water limitations of the tentative Order (sections II.A and B). The receiving water limitations require that waste discharges not cause or contribute to an exceedance of a water quality objective, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance. Therefore, it is unnecessary to repeat these requirements under the farm management performance standards section of the tentative Order (section III.A.5).

5-4. Public input and access to reports

Comment summary

The commenter has concerns about the amount and type of information that will be made available to the board and/or the public. The commenter requests that staff clarify whether and how the following documents will be reviewed by staff and made available to the public: Management Practices Evaluation Workplans for Dischargers in high vulnerability areas; Management Practices Evaluation Reports, and Groundwater Action Plans (GWAP).

Response

The tentative Order specifies that GWAPs and the management practices evaluation workplan are subject to Executive Officer review and approval. Management Practices Evaluation Reports will be submitted to the Executive Officer. Water Board staff will therefore be reviewing these documents. The Information Sheet has been clarified to indicate that all approved and/or final reports or portions of reports that are not exempt from public disclosure in accordance with California law and regulations will be available for public inspection through Geotracker, the Central Valley Water Board Office, or the board's website.

5-6. Ten-year compliance time frame

Comment Summary

The commenter states that the management practices evaluation report is not due until year 8 of the order, two years before compliance is required. Yet the MRP language allows Dischargers whose practices are shown to be insufficient through that reporting process to propose and implement new practices under a new timetable negotiated with the Executive Officer. There is no indication that this failure will trigger enforcement action, and it is unclear how, with this requirement, compliance can be achieved in the 10-year time frame required by the order. In fact, this provision seems like an endless loop that Dischargers can exploit to avoid complying with water quality objectives.

Response

The commenter describes the tentative Order's time schedule for compliance as an "endless loop." Purported reasons for this characterization include the general concern that, where the final management practices evaluation report finds that practices are not protective of water

quality, the board requires additional practices under a time schedule for compliance of up to 10-years (see response to comment 5-1). As provided in response to comment 5-2, allowing a time schedule for compliance is fully consistent with the Water Code. In the development of the tentative Order the board has been mindful of the fact that the Discharger cannot be expected to fix a problem without knowledge of the problem –hence the need for the MPEP. The tentative Order will establish a stepwise process to immediately institute practices to minimize discharges (e.g., nitrogen management; prevent backflow; wellhead protection); evaluate the protectiveness of practices; and finally, where practices are not adequate, additional requirements to institute new practices to solve the problem.

Commenter seems to incorrectly interpret the time schedule provisions of the tentative Order, assuming that the maximum time schedule of 10-years is applicable from adoption of the tentative Order. This is not the case. Time schedule provisions specifically limit a time schedule to 10-years, linked to a particular identified water quality problem in a surface water or groundwater action plan (groundwater and surface water exceedance plans have been renamed to “groundwater/surface water action plans”). A discharger, upon identification of a water quality problem triggering the preparation of an action plan, must propose a time schedule that is as short as practicable. This process will ensure that practices are implemented and monitoring conducted to verify the effectiveness of newly instituted practices (MPEP, and surface water monitoring). The tentative Order has been modified to clarify that time schedules are specific to the constituent that triggers the action plan. Essentially, if a groundwater action plan is triggered by a nitrate problem, the associated time schedule in the action plan will have a maximum limit of 10-years regardless of whether additional information collected under the MPEP indicates that practices are not protective for nitrate (i.e., an action plan cannot be triggered for the same constituent more than once). In this scenario, the time schedule in the approved groundwater action plan could not exceed 10 years regardless of whether exceedances of nitrate are measured in the future. In other words, the tentative Order does not allow the extension of a time schedule based on additional exceedances measured after the approval of the action plan.

The board concurs with the commenter that it is important to achieve water quality goals as quickly as possible. This is why time schedule provisions do not default to 10-years, but must be as short as practicable (see response to comment 5-3). Board staff is confident that the tentative Order’s process will lead to reductions in waste discharge, implementation of best practicable treatment or control, and compliance with receiving water limitations. The purpose of the MPEP is to determine whether existing management practices are protective of groundwater quality. If at any time, existing management practices are found not to be protective based on information collected through the MPEP, the discharger must submit a groundwater action plan within 60 days and implementation must begin immediately. The purpose of the action plan is to adjust management practices to ensure groundwater quality is protected. Provision VI.D of the tentative Order requires that an action plan be submitted within 60 days of receipt of data indicating that its discharge is causing or contributing to an exceedance of water quality objectives.

The groundwater action plan must contain a time schedule for compliance with the receiving water limitations, which cannot exceed ten years from the date that the plan is submitted. However, whatever time schedule is proposed in the action plan must be justified and approved by the Executive Officer. Justification for any time schedules will need to include specific evidence as to why the time is needed. In many cases, a time schedule shorter than ten years may be warranted. For example, if a Discharger measures nitrate exceedances and their action

plan entails reducing nitrogen applications and calibrating equipment, this could occur right away, and years to implement this approach would not be justified.

If a discharger does not come into compliance with the receiving water limitations by the deadline within the approved time schedule, they will be out of compliance and enforcement will be pursued.

Comment Letter 6

6-1. Definition of “waste”

Comment summary

Comments provide that the tentative Order expands the definition of “waste” from that provided in the Water Code so as to include “*earthen materials, inorganic materials, organic materials such as pesticides and biological materials... such water may directly impact beneficial uses or may impact water temperature, pH and dissolved oxygen.*” Specifically, comments question the basis and authority for departing from the Water Code’s definition of waste.

Response

Section 13050(d) of the Water Code specifies that “*waste’ includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.*” The definition of waste in the tentative Order repeats this language word for word and also provides a citation to the Water Code section 13050(d). For clarity purposes, the tentative Order also provides examples of wastes that fall under the definition of waste in section 13050(d). The commenters have not provided any evidence that the examples of “wastes” potentially discharged from irrigated lands described in the tentative Order would not fall within the Water Code section 13050(d) definition of waste. All of the examples provided in the tentative Order’s definition of waste are in liquid, solid, or gaseous form and could be discharged as a direct result of crop production, livestock production (i.e., irrigated pasture), or wetland management (i.e., the human “production” or creation of wetland habitat), which are all activities of human origin.

6-4. Receiving water limitations

Comment summary

The commenter claims that the tentative Order’s receiving water limitations are overly expansive and establish an unrealistic standard that holds dischargers accountable to the smallest *de-minimus* contribution. The tentative Order’s receiving water limitations are summarized below for reference.

- Wastes discharged shall not cause or contribute to an exceedance of applicable water quality objectives in surface water/underlying groundwater, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance.

Response

The receiving water limitations establish that discharge from the field must not cause or contribute to exceedance of water quality objectives in receiving waters. For example, consider a field discharging directly to a surface water body. If the field’s discharge contains waste at a level greater than a water quality objective, but the surface water receiving the waste remains below the water quality objective, the limitation is not violated. However, if the same discharge causes the receiving water to exceed a water quality objective, the discharge limitation would be

violated. Similarly, if the same discharge is above water quality objectives and the receiving water is above objectives, that discharge is contributing to an exceedance of the water quality objective and, therefore, the receiving water limitation is violated. In the scenario where the waste discharge is below the water quality objective and the receiving water exceeds objectives, the discharge limitation would not be violated. This is because the waste discharge is not contributing to the problem; on the contrary, it would be helping to dilute the receiving water for the particular constituent.

Therefore, concern that the requirement for discharges to not “cause or contribute” to an exceedance establishes that irrigated agriculture is accountable for *de-minimus* discharge is not a correct interpretation of the limitations. Only discharges causing or contributing to the exceedance of the objective, would be in violation of the limitation. *De-minimus* discharges (e.g., below water quality objectives) would actually improve receiving waters for the constituent of concern and would not be in violation of the limitations.¹⁵ In summary, the receiving water limitations are not overly expansive and do not hold Dischargers accountable for the smallest *de-minimus* contribution.

6-2. PEIR analysis

Comment Summary

The commenter contends that the tentative Order goes beyond the alternatives analyzed in the PEIR by establishing end-of-field discharge limitations and farm management performance standards, and therefore, not all potentially adverse environmental impacts of the tentative Order have been identified, disclosed, and analyzed in the PEIR. The commenter states that reliance on the PEIR for CEQA compliance is inappropriate.

The commenter also questions the board’s authority to require mitigation measures within the tentative Order for farm level activities. Implementation of management practices at the farm level, which is the heart of the Order, is not subject to a discretionary approval by the board. Commenter further states that mitigation measures that cannot be legally imposed need not be proposed or analyzed.

Response

As a preliminary matter, Board staff disputes the commenter’s contention that the tentative Order’s receiving water limitations would establish water quality objectives as “end-of-field” discharge limitations. The tentative Order establishes receiving water limitations with triggers for development of action plans or studies (the specific trigger limits will be contained in the Notice of Applicability). Rather than requiring that Dischargers monitor discharge water and upstream/downstream receiving waters, which could be two to three times as many samples, each Discharger has two options. They can either compare discharge water monitoring results to the trigger limits and adjust practices based on those results, or conduct additional studies of the discharge water and upstream/downstream receiving water to determine if they are causing or contributing to an exceedance of a receiving water limitation. The decision is left to the Discharger on how to proceed once exceedances are measured, as opposed to numeric effluent limitations, which, if exceeded, constitute permit violations.

¹⁵ This general description of *de-minimus* discharges is applicable to most waste constituents, but does not necessarily apply to all situations. For example, mass loading objectives, additive toxicity, or bacterial organisms may be dealt with by the board in a different manner when determining whether a particular discharge is contributing to an exceedance.

The potential environmental effects of implementation of receiving water limitations in the ILRP have been evaluated in the PEIR. Regulatory requirements for Alternative 5 of the PEIR, on which the tentative Order is based, include the requirement that Dischargers prevent nuisance conditions and/or exceedance of water quality objectives in state waters associated with waste discharge from their irrigated agricultural lands.¹⁶ This requirement is similar to the tentative Order's receiving water limitations. For reference, the tentative Order's receiving water limitations are summarized in response to comment 6-4 above.

Even assuming, for the sake of argument, that the receiving water limitations were not already analyzed in the PEIR, the commenter still has not demonstrated that reliance on the PEIR is improper. A public agency may rely on a program EIR for CEQA compliance, for subsequent program activities if it "finds pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required." CEQA Guidelines § 15168(c). Board staff has proposed the required finding in Attachment D of the tentative Order. The commenter provides the general concern that environmental impacts have not been adequately addressed, but provides no substantive information on why it disagrees with the proposed finding (e.g. the types of unaddressed impacts or additional mitigation measures that may be necessary).

The remaining concern that the tentative Order's farm management performance standards would apply requirements not analyzed in the PEIR, potentially leading to additional environmental impacts, is also unfounded.

Pages 3-15, 3-21, and 3-27 of the PEIR describe requirements for development of individual farm water quality management plans (FWQMP) in Alternatives 3-5. Under these alternatives, all Dischargers would have been required to develop and implement a FWQMP. Minimum requirements for FWQMPs would include:

FWQMPs must be "*aimed to minimize waste (e.g., nutrients, pesticides, sediment, and pathogens) discharge to surface water and groundwater (to include wellhead protection practices).*" [PEIR pages 3-21 and 3-27, Program Description, "Alternatives 4 and 5"]

"FWQMP content would at a minimum include...(4) applicable information on management practices used to achieve general ranch/farm management objectives and reduce or eliminate discharge of waste to groundwater and surface waters..." [PEIR page 3-15, Program Description, "Alternatives 3-5"]

Practices instituted to comply with FWQMPs and other provisions under PEIR Alternatives 3-5 include requirements to minimize, reduce or eliminate waste discharge to surface and groundwater; implement wellhead protection practices; and prevent nuisance conditions and exceedance of water quality objectives. These practices are all consistent with the tentative Order's farm management performance standards. A review of each performance standard with reference to the PEIR requirements basis is provided below.

- a. Minimize waste discharge offsite in surface water – consistent with PEIR requirements for FWQMPs [Alternatives 3-5, see above]
- b. Minimize percolation of waste to groundwater – consistent with PEIR requirements for FWQMPs [Alternatives 3-5, see above]
- c. Protect wellheads from surface water intrusion – consistent with PEIR requirements for FWQMPs [Alternatives 3-5, see above]

¹⁶ PEIR, page 3-28

- d. Prevent pollution and nuisance – consistent with PEIR Alternative 5 requirements to prevent nuisance conditions and exceedances [page 3-28, PEIR]
- e. Achieve and maintain water quality objectives and beneficial uses – consistent with PEIR Alternative 5 requirements to prevent nuisance conditions and exceedances [page 3-28, PEIR]
- f. Minimize or eliminate the discharge of sediment above background levels – consistent with PEIR requirements for FWQMPs [Alternatives 3-5, see above, minimize “sediment” discharge]
- g. Minimize excess nutrient application relative to crop consumption – consistent with PEIR requirements for FWQMPs [Alternatives 3-5, see above, minimize “nutrient” discharge] and PEIR requirements for nutrient management plans [Alternative 5, page 3-27, PEIR, “provides protection for both surface and groundwater...avoid exceeding the crop’s nutrient requirements...”]

Even assuming, for the sake of argument, that the performance standards were not already analyzed in the PEIR, the commenter still has not demonstrated that reliance on the PEIR is improper. A public agency may rely on a program EIR for CEQA compliance, for subsequent program activities if it “finds pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required.” CEQA Guidelines § 15168(c). Board staff has proposed the required finding in Attachment D of the tentative Order, along with a listing of potential environmental impacts, the written findings regarding those impacts consistent with CEQA Guidelines, and the explanation for each finding. The commenter provides the general concern that environmental impacts have not been adequately addressed, but provides no substantive information on why it disagrees with the proposed finding (e.g. the types of unaddressed impacts or additional mitigation measures that may be necessary).

The commenter also provides the concern that the board does not have the authority to require certain CEQA mitigation measures under the tentative Order. These very mitigation measures are identified in the PEIR and were unsuccessfully challenged on the same grounds in Sacramento Superior Court. On 21 May 2013, the Superior Court issued a final ruling that rejected the claim that the identified mitigation measures were legally deficient, on the stipulation that “additional CEQA review” means that “if a future discretionary approval by the Board would require additional CEQA review, such review will be undertaken.” The tentative Order relies on those lawful mitigation measures, which have been clarified consistent with the final ruling. The Board staff continues to rely on the PEIR’s mitigation measures, absent a final court ruling that they are legally deficient. *Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.

6-5. Settling ponds, basins, and tailwater recovery systems

Comment Summary

The comment provides that the Water Board is exceeding its authority under the Water Code in provision III.A.8 by requiring the construction of settling ponds, basins, and tailwater recovery systems, thus dictating the manner in which individual Dischargers minimize sediment and erosion.

Response

This provision does not require that all Dischargers regulated under this Order install these systems. Rather, the provision requires that where these systems exist or will be installed, they will need to be managed in a way to prevent impacts to waters of the state. The provision has been modified to clarify this intent. Because dischargers retain discretion on how they may

comply with the sediment and erosion performance standard, the tentative Order does not dictate the manner of compliance in contravention of Water Code section 13360.

6.6 Trade Secrets

Comment summary

The commenter states that Farm Water Quality Plans (FWQPs) will contain intellectual property, trade secrets, and proprietary information, such as information on pesticide application, nutrient management, irrigation practices, crop rotations, and best management practices. The commenter feels the information has no correlation or nexus to the Water Board's authority to regulate water quality. The commenter further states that prior to any request for the entire FWQP to be submitted, the Water Board must make a finding showing the necessity of the data and information required to be submitted and how such data is related to water quality. Even upon submittal, such information must remain confidential, believing that the Porter-Cologne Act explicitly provides protection to Dischargers for intellectual property, trade secrets, and proprietary information.

Response

The NPS Policy requires, among other things, that any nonpoint source program (ILRP is a nonpoint source program) describe the practices to be implemented and provide feedback monitoring. (See Master Response 2). The board is prevented by Water Code section 13360 from prescribing specific management practices to be implemented. However, it may set forth performance standards and require dischargers to report on what practices they have or will implement to meet those standards. Consistent with the NPS Policy, the tentative Order requires Dischargers to report on the practices that are or will be implemented to protect water quality.

Board staff disagrees that reporting requirements for pesticide application, nutrient management, irrigation practices, crop rotations, and best management practices are unnecessary and have no nexus to the regulation of water quality. For example, information on the types of pesticides used will be considered in evaluating necessary monitoring, nutrient and irrigation management practices, and crop types. It will also be considered in evaluation of the farm management performance standards in light of monitoring data (e.g., MPEP results). While water quality data provides necessary information on whether objectives are being achieved, management practice information is also necessary because it can provide information on whether the farm performance standards are being achieved; e.g., to minimize waste discharge, implement wellhead protection measures, etc. The Information Sheet (Attachment A) provides further information explaining and supporting the need for and benefits to be received from the plans and reports from the Discharger, and how it bears a reasonable relationship to the burden of the reports.

In response to the comment, staff clarifies that the tentative Order does not require monitoring of pesticide use, only that the Discharger indicate the types of pesticides used and the recommended rates.

In regards to information confidentiality concerns, provision VII.4 of the tentative Order describes the process whereby dischargers can assert that a report or a portion of a report is exempt from public disclosure in accordance with California laws and regulations, including the Public Records Act, Water Code section 13267(b)(2), and the California Food and Agriculture Code. Dischargers may invoke this procedure to protect trade secrets, secret processes, and other information exempt from disclosure requirements under the Public Records Act.

Comment Letter 7

The commenter incorporates by reference prior comments submitted for different documents (e.g., comments on the third-party WDRs for the Tulare Lake Basin and third-party WDRs for the Eastern San Joaquin River watershed). As described in the introduction to this response to comments, board staff cannot speculate which of the previous comments the commenter is referring to, why previous written responses have been inadequate (Eastern San Joaquin WDRs), and which of the comments are applicable to the tentative Order.

7-1. Groundwater regulations' applicability to all Dischargers in the ILRP

Comment summary

The commenter opposes any assertion that all irrigated lands discharge to groundwater, and recommends that the program should exclude lands overlying unusable groundwater. The commenter recommends that the Nitrate Hazard Index (NHI) be utilized to assess a specific site's potential to discharge waste to groundwater. Such a program would incentivize action where needed without burdening Dischargers whose practices are already protective of groundwater or who do not have a "potential to discharge."

Response

The commenter provides concern with any general assertion that irrigated lands discharge waste to groundwater. The tentative Order does not assert that all operations unequivocally discharge waste to groundwater, only that all operations have the potential to discharge waste that may affect groundwater quality. California Water Code Section 13260(a)(1) requires that a ROWD be filed by, "Any person discharging waste, or proposing to discharge waste, within the region that could affect the quality of waters of the state, other than into a community sewer system." Page 143 of the PEIR, (Appendix A) includes the following discussion with respect to regulating potential waste discharges from irrigated agricultural operations to groundwater:

Operations associated with irrigated agriculture involving the application of materials and constituents directly or indirectly to land may leach waste into groundwater, potentially causing degradation, or causing or contributing to exceedances of water quality objectives. Because all irrigated agricultural operations could affect groundwater quality, they have been considered in the scope of the Long-term ILRP. There may be cases where leaching of waste could not affect groundwater quality; however, this would be difficult to determine without intensive site-specific information. In implementing the Long-term ILRP, the Central Valley Water Board would consider such site-specific information, as provided by irrigated agricultural operations, to reevaluate whether a particular waste discharge could affect groundwater quality.

The basis for the position that most, if not all, irrigated agricultural operations discharge or propose to discharge waste that could affect groundwater quality to some degree and over some period of time is based upon review of groundwater quality data, the physical properties of water, the principles of irrigation, and the leaching process. As described in Section III.C.2 of the PEIR, Appendix A, a considerable number of wells in the Central Valley have high levels of nitrate. The use of chemical nitrogen-based fertilizers has been found to be a potential cause of nitrate contamination of groundwater in agricultural areas (see pages 99–100 of the PEIR, Appendix A). Also, DPR's Groundwater Protection Program has found pesticides in groundwater from irrigated agricultural use. Water is a natural solvent that dissolves a variety of compounds contained within the soil (e.g., salts, minerals, certain polar organics). The resulting solute may include nutrients, pesticides, salts, or other naturally occurring or applied chemicals. During irrigation, water/solutes infiltrate the soil and pass downward to the root zone of the crop where a portion of this subsurface water is taken up by the plant's root system. The remaining

water passes below the root zone and can no longer be utilized by the crop. This process is acknowledged by state and local agencies to provide necessary groundwater recharge in areas within the Central Valley.

Operations may enroll under the tentative Order to obtain regulatory coverage for waste discharges from irrigated lands. The board is not mandating every operation to enroll under the tentative Order. In fact, Finding 1 of the tentative Order explains that the Order applies to waste discharges from irrigated lands that could affect ground and/or surface waters of the state. Thus, irrigated lands that do not discharge waste that could affect the quality of waters of the state are not subject to the requirements of the Order. These findings are consistent with Porter-Cologne Water Quality Control Act section 13260 (a) (1), which states that, a person discharging waste or proposing to discharge waste, within any region that *could affect* the quality of waters of the state, other than into a community sewer system must submit a report of waste discharge and be subject to waste discharge requirements. Water from irrigated agricultural operations contains waste as defined in section 13050(d), therefore; farmers discharging such waste in an amount that could affect the quality of surface water or groundwater are subject to the board's regulation. If an operation believes it is not subject to the requirements of the Order, it may submit a report to the board describing the waste discharge (e.g., whether there is a potential to affect groundwater quality). Upon review of the report, the board may choose to waive the requirement to obtain WDRs, issue individual WDRs specific to the operation, or seek to enroll the operation under the Order. This is a site-specific analysis that will be considered by the board for each specified case.

Also, if a Discharger believes the underlying groundwater is unusable for a particular designated beneficial use, the applicable Basin Plan would need to be amended to modify or remove the designated beneficial use. The Central Valley Water Board is currently engaged with stakeholders through the Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS) process, which will address issues such as the appropriate designation of beneficial uses as such designations apply to salt and nitrate. A discharger could pursue a Basin Plan amendment if the identified groundwater qualifies for de-designation under the Basin Plan. If a discharger were to pursue a Basin Plan amendment and wish to adjust their regulatory requirements during the time the amendment is in development, the discharger would need to apply for individual waste discharge requirements.

The commenter recommends the use of the Nitrate Hazard Index (NHI) to evaluate whether there is the potential to discharge waste to groundwater. Information on the NHI is available on the University of California (UC) website:

http://ucanr.edu/sites/wrc/Programs/Water_Quality/Nitrate_Groundwater_Pollution_Hazard_Index/

Essentially, the NHI works with an overlay of soil, crop, and irrigation information. Based on the three components, an overall potential hazard number [for nitrogen to pollute groundwater] is assigned and management practices are suggested, where necessary. The use of the NHI to evaluate whether there is a discharge to groundwater is not supported by the model's documentation for interpretation. The reader is directed to the document titled "*Interpretation of Nitrate Groundwater Pollution Hazard Index Number, a supporting document for the UC Center for Water Resources Nitrate Groundwater Pollution Hazard Index.*" This document is accessible on the UC's website:

<http://ucanr.org/sites/wrc/pdfs/HINumberInterp.pdf>

This supporting document for the UC Center for Water Resources NHI states that “...*some groundwater degradation can occur even with a hazard index of 1.*” The supporting document further states that under lower NHI numbers (1 to 20) “...*the farmer must still implement sound management practices but extraordinary procedures are not required.*” The document clearly indicates that, even under low NHI numbers, wastes can be discharged in an amount that degrades groundwater. As described above, the Water Code requires a ROWD where a waste discharge could affect the quality of state waters. The tentative Order will provide regulatory coverage for the waste discharge and ensure the protection of groundwater quality. The tentative Order also utilizes the concept of vulnerability to assign more intensive groundwater monitoring only in areas of high vulnerability. Also, as stated throughout this comment response, the third-party orders will provide Dischargers with a cost effective cooperative monitoring approach to evaluating effects of waste discharges to groundwater.

The purpose of the NHI, as stated on the UC’s website is “*To provide information for farmers to voluntarily target resources for management practices that will yield the greatest level of reduced nitrogen contamination potential for groundwater by identifying the fields of highest intrinsic vulnerability.*”¹⁷ The index can be used by Dischargers to help target management practices to achieve the greatest level of reduction of nitrogen contamination. Using the index in this manner should help Dischargers to minimize the cost of management practices to protect water quality. The tentative Order’s monitoring program will provide the necessary feedback to ensure that any degradation that may occur from waste discharge is not causing exceedance of water quality objectives.

7-5. Tentative Court Ruling (3/28/13) setting aside PEIR

Comment summary

The Sacramento Superior Court Judge issued a tentative ruling to the Central Valley Water Board (Case Number 34-2012-80001186 [Consolidated Case Number RG12632180]) to “set aside its certification of the PEIR, and to prepare, circulate, and certify a legally adequate EIR (consistent with this ruling) before proceeding with any additional project approvals.” Based on this tentative ruling, the commenter suggests that the board delay approval of the Individual Order until after the completion of the new EIR and use the time to revise the design of the long-term program.

Response

The board had delayed consideration of approval of the final order pending the Superior Court’s ruling. On 21 May 2013 the Superior Court issued a final ruling, which rejected claims that the PEIR was inadequate. The final ruling renders this comment moot. The Board can continue to rely on the PEIR as it moves forward to implement the long-term ILRP. *Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.

Comment Letter 8

8-1. Costs of Compliance / bad focus

Comment summary

The commenter provides concern that the costs to Dischargers under the tentative Order are not explicitly determined by the amount of pollution its farm creates, and that the program should be designed in this manner. The commenter provides the example that if Farm B

¹⁷ http://ucanr.edu/sites/wrc/Programs/Water_Quality/Nitrate_Groundwater_Pollution_Hazard_Index/

pollutes twice as much as Farm A, the costs that Farm B has to pay should be twice as much as the costs that Farm A has to pay. The commenter further expresses that management practices costing more will be used less among farmers, which results in the cleaner farm paying more for compliance than the polluting farms. The goal of the ILRP should be to reward non-polluters, by focusing on those that have implemented protective management practices.

Response

Program annual fees are set by the State Water Board and are based on staff costs to implement the program. Some Water Board programs establish fees based on a threat to water quality and complexity schedule, partially similar to the commenter's suggested approach. While farms may have varying threat to water quality, the complexity of regulation also needs to be considered. In the Economics Report, the board found that the highest cost of regulation is under the individualized approach given in Alternative 5, the basis for the tentative Order. Even though some individual operations may discharge higher levels of waste, it is clear that most, if not all, operations have the potential to discharge waste that may affect state waters, and the highest complexity for the board is to evaluate each operation individually. While the State Water Board's annual fee schedule does not base costs on the gradient of waste loading associated with operation type, it does attempt to establish this gradient by scaling fees based on operation size. The fee schedule attributes higher fees for those operations not participating in a third-party ILRP order, as the Board will incur more per capita costs in regulating such operations. Board staff will forward the Commenter's suggestions regarding the fee schedule to the appropriate State Water Board staff. Information regarding the State Water Board's fee schedule, including contact information, can be found at:

<http://www.waterboards.ca.gov/resources/fees/>

The commenter also concludes that the cost of a management practice is related to effectiveness in protecting water quality. Board staff agree that many Dischargers who implement practices to protect water quality are incurring greater expenses than Dischargers who have not implemented such practices.

Additionally, Dischargers whose surface water monitoring shows that management practices already in place are protective of water quality will not need to spend additional money installing management practices, and are eligible for reduced monitoring requirements if water quality problems are not identified. These incentives are further described under Master Response 1.

While staff agrees that practices, rather than monitoring, protect water quality, the board needs the proper information to determine whether practices are protecting water quality. See also Master Response 1.

8-2. Incentives

Comment Summary

The commenter contends that monitoring under this program is focused on finding exceedances. It also states that the stated goal of the ILRP is to minimize discharge and provide incentives that minimize the discharge. The commenter finds no incentives for organic farms, and sees potential disadvantages in that the cleaner the farm, the greater the regulatory cost. The commenter feels that "incentive regulation" is an unfulfilled promise of the ILRP. The commenter expresses that Title 7 of the Code of Federal Regulations, Part 205 recognizes organic farming as a set of "*practices...[that] maintain or improve...water quality.*" The commenter does not believe the ILRP holds farmers accountable for their wastes, but instead holds them accountable for their exceedances.

Response

The commenter is correct that one of the five stated objectives of the ILRP involves providing incentives to minimize waste discharge to state waters. Also, one of the four stated goals of the ILRP involves minimizing waste discharges.¹⁸

The tentative Order focuses on meeting receiving water limitations through the implementation of management practices as needed, as well as monitoring the effectiveness of the practices in meeting the receiving water limitations. The commenter contends that costs of the tentative Order will be higher for organic growers, but does not supply specifics as to how this is the case. The current State Water Board fee structure for Dischargers enrolled under this Order is dependent upon acreage enrolled, regardless of the farm type (e.g., organic/conventional). If organic farmers already have many management practices in place that are shown to be protective of water quality, they will not incur higher costs because those Dischargers would not need to bear the expense of implementing new practices. See Master Response 1 as well as response 8-1 for additional information.

8-3. Addition of atrazine

Comment Summary

The commenter requests that atrazine be added to the surface water monitoring program.

Response

See Master Response 4; atrazine has been added to the surface water monitoring program.

¹⁸ ILRP goals and objectives are described in Attachment A, Information Sheet.