

**Waste Discharge Requirements General Order  
for Growers within the Eastern San Joaquin River Watershed  
that are Members of the 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 Growers within the Eastern San Joaquin River Watershed that are Members of the Third-Party group, Order R5-2012-XXXX (referred to as the “tentative Order”). This document contains the Central Valley Water Board staff’s written responses to comments received on the tentative Order.

The tentative Order was circulated for 31-days for public comment ending on August 6, 2012. Written comments were received during this comment period from the following.

	<b>Commenter</b>
1	Community Water Center, Clean Water Action CA, CA Rural Legal Assistance Foundation
2	Environmental Protection Agency
3	Agricultural Organizations
4	Dr. Thomas Harter, UCCE Groundwater Hydrology Program
5	California Farm Bureau
6	San Joaquin County & Delta Water Quality Coalition
7	Westside San Joaquin River Watershed Coalition
8	East San Joaquin Water Quality Coalition
9	Southern San Joaquin Water Quality Coalition
10	Innovative Ag Services, LLC
11	CV-SALTS Technical Advisory Committee
12	Bud Hoekstra
13	California Sportfishing Protection Alliance
14	Paramount Farming Company

Prior to circulating the tentative 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 April 13, 2012 and closed on May 21, 2012. The draft Order was then revised based on written comments and comments received at a Central Valley Water Board Workshop

held on June 7, 2012. 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 Order would be provided, written responses to comments on the draft Order would not. Several commenters expressed an intent that all of their comments on the draft Order or other previous Irrigated Land Regulatory Program (ILRP) documents, e.g., Irrigated Lands Program Environmental Impact Report (PEIR),<sup>1</sup> are to be incorporated into comments on the tentative 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 Order or addressed in a previous response to comments. Furthermore, the tentative 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 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 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 that may address 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. Tentative Order development –process concerns
2. Concern regarding expense, “reasonable” regulations
3. Templates for farm evaluations, sediment and erosion control plans, and nitrogen budgets
4. Sediment and erosion control plans
5. Annual nitrogen budgets
6. Third-party summary reporting for farm evaluations and nitrogen budgets –square mile, or section, level summary
7. Design of settling ponds, basins and tailwater recovery systems –responsible charge
8. Toxicity testing (aquatic)
9. Discharge limitations
10. Applicability of the Irrigated Lands Program Environmental Impact Report
11. Preliminary groundwater vulnerability area designations
12. Mitigation measures
13. CEQA concerns regarding finding 31 of the tentative Order
14. Third-party responsibilities regarding determining individual Member compliance with the tentative Order
15. Time schedule for compliance
16. Surface water pesticide monitoring
17. Coordination with DPR’s Groundwater Protection Program

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<sup>1</sup> 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 Water Quality Control Board, Sacramento, CA

18. Attendance tracking at grower outreach third-party events
19. Annual updates to farm evaluations
20. Member sign up 120-day period
21. Initial farm evaluation timelines
22. Surface water management plan due dates
23. Private property
24. Removing the representative groundwater monitoring program from tentative Order and creating a separate order for all third-parties
25. Finding 36

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.

#### Master Response Key for Each Comment Letter

Letter	Comment number <sup>2</sup>	Master Response Number
<a href="#">1. Clean Water Action et. al.</a>	1-1	<a href="#">17</a>
	1-2	<a href="#">5</a>
<a href="#">2. U.S. Environmental Protection Agency</a>	2-3	<a href="#">3</a>
	2-5	<a href="#">8</a>
<a href="#">3. Agricultural Organizations</a>	3-1	<a href="#">1</a>
	3-2	<a href="#">5</a>
	3-6	<a href="#">24</a>
	3-7	<a href="#">2</a>
<a href="#">4. Thomas Harter, Ph.D.</a>	no master responses	
<a href="#">5. California Farm Bureau</a>	5-1	<a href="#">13</a>
	5-2	<a href="#">25</a>
	5-4	<a href="#">9</a>
	5-5	<a href="#">4</a>
	5-6	<a href="#">5</a>
	5-7	<a href="#">23</a>
	5-8	<a href="#">7</a>
	5-9	<a href="#">3</a>
	5-10	<a href="#">4, 5</a>
	5-11	<a href="#">8</a>
	5-12	<a href="#">11</a>
	5-13	<a href="#">10</a>
	5-14	<a href="#">12</a>
	<a href="#">6. San Joaquin County &amp; Delta Water Quality Coalition</a>	6-2
6-3		<a href="#">2</a>
6-4		<a href="#">4, 7</a>
6-5		<a href="#">15, 24</a>
<a href="#">7. Westside San Joaquin River Watershed Coalition</a>	7-1, 7-2	<a href="#">2</a>
	7-3	<a href="#">20</a>

<sup>2</sup> 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 (Attachment 1).

Letter	Comment number <sup>2</sup>	Master Response Number
	7-6	21
	7-7	4, 2, 3
	7-8	7
	7-9	5
	7-10	12
	7-11	6
	7-12	22
8. East San Joaquin Water Quality Coalition	8-1	24
	8-2	5, 6
	8-3	3
	8-4, 8-5	4
	8-6	5
	8-7	14
	8-8	8
	8-9	11
	8-11, 8-12	9
	8-13, 8-14	15
	8-16	12
	8-21	25
	8-22	17
	8-23	5
	8-25	18
	8-26	23
	8-27	7
	8-28	10
	8-29	18
8-31	21	
8-34	22	
8-36	16	
8-47	10	
9. Southern San Joaquin Water Quality Coalition	9-3	20
	9-4	13
	9-7	23
	9-8	18
	9-9	14
	9-10	19
	9-11	4
	9-12	5
	9-14	2
10. Innovative Ag Services, LLC	10-5	5
	10-7	3
	10-8	5
	10-10	5
11. CV-SALTS	no master responses	
12. Bud Hoekstra	no master responses	
13. CA Sportfishing Protection Alliance	no master responses	
14. Paramount Farming Co.	14-2	1, 2

## **Master Response 1. Tentative Order development –process concerns**

### ***Comment summary***

After review of the tentative Order and the subsequent release of the administrative draft Order for the Tulare Lake Basin, it has become apparent that waste discharge requirements are very similar. Given the Central Valley Water Board's approach to adoption of the orders which have similar requirements for all growers, commenters believe it would be a more equitable approach to have all stakeholders at the table for discussions regarding requirements that the board envisions would be replicated in all third-party areas. In the current process, growers outside the East San Joaquin Water Quality Coalition (ESJ Coalition) would be likely forced to adhere to requirements adopted in the tentative Order without an equal opportunity to participate. Similar to the above discussion, comments include the concern that the tentative Order is precedent setting and the board should consider a broader stakeholder process for those portions of the Order that would be applicable in other third-party areas.

Other comments provide the concern that the Irrigated Lands Regulatory Program (ILRP) has lacked a collaborative stakeholder process altogether.

### ***Response***

The comments that the ILRP has lacked a collaborative stakeholder process are incorrect. 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, board staff gathered input on how stakeholders would like to be involved in the development of the program –with stakeholders expressing 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 the board in the development of the long-term program. The workgroup was comprised of a broad range of participants representing federal, state, and local government agencies; agricultural groups, environmental 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 PEIR in April 2011.<sup>3</sup> 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.

Specifically in the development of the tentative Order for the Eastern San Joaquin River Watershed (tentative Order) and the draft Order for the Tulare Lake Basin, board staff has engaged in multiple meetings with the coalitions, other agricultural representatives, environmental justice groups, and state agencies. Also, as is described above, the board included an additional “draft” public review step for both Orders, a step that is not required for the development of waste discharge requirements.

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<sup>3</sup> 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.

The Eastern San Joaquin River Watershed Order is the first to be considered by the board as part of the long-term ILRP. As has been the case throughout the process, all interested persons will have an opportunity to provide comments and testimony to the board when their specific waste discharge requirements are up for consideration. Given the open public process and opportunity to participate, no party's interests are prejudiced by the board's considering the Eastern San Joaquin River Watershed Order first. In addition, the board opened the hearing on the Eastern San Joaquin River Watershed Order in Bakersfield to give interested persons in the southern San Joaquin Valley an opportunity to comment on those aspects of the Eastern San Joaquin River Watershed Order that they believe could set a precedent for the Tulare Lake Basin Order.

Should the board adopt the tentative Order, it will provide a starting point of discussion for other ILRP orders. As with other Water Board programs, the board will likely want to maintain consistency and equity in the general regulatory approach towards discharges from irrigated lands. However, each order adopted by the board is a separate board action and must be supported by the facts and findings particular to that order.

The administrative draft Tulare Lake Basin Order and the Eastern San Joaquin River Watershed tentative Order are similar. This is because staff identified no compelling reasons to recommend any major differences in the overall approach for protecting water quality in these areas. When the Tulare Lake Basin Order comes before the board for consideration, all parties will be able to provide recommendations and comments on which components should be similar to the Eastern San Joaquin River Watershed Order and which should be different.

The board staff maintains that separate orders are still warranted for these two areas. Some of the main reasons for this position include:

- There are two different third-parties with distinct approaches for protecting water quality in these areas
- The two areas are regulated by different Basin Plans
- As information is collected in the implementation of the ILRP there may be reason to update one of the orders to include new requirements instead of applying any change to both areas

In summary, the board is not legally obligated to, but has the discretion to utilize relevant regulatory language of the tentative Order's requirements when adopting other Orders addressing irrigated lands discharges. The board may make adjustments to the requirements upon consideration of the circumstances and issues specific to each geographic area for which an Order would apply. The outcomes of subsequent orders are in no way prejudiced by the current action, since interested parties have an opportunity to provide comments on this proposed action and will be able to discuss with the board different requirements that should be applied to their orders. An additional informal stakeholder process to discuss general provisions of the tentative Order (i.e., provisions that may apply broadly to other orders) is not warranted given the almost four years of informal and formal dialogue that has already occurred.

## **Master Response 2. Concern regarding expense, "reasonable" regulations**

### ***Comment summary***

General comments regarding the expense of the tentative Order include:

- Costs have not been considered
- The costs versus the benefits to water quality must be considered

- 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.
- There is nothing in the tentative Order that explains what will be done with all of the information collected and reported on from farm evaluations, sediment and erosion control plans, and annual nitrogen budgets
- The tentative Order will shift the third-party's efforts away from assisting growers to improve water quality and instead force the third-party to focus primarily on collecting and cataloging vast amounts of data that may or may not be needed in the future
- The level of staffing required to successfully implement the tentative Order will be enormous and the associated water quality benefits of many of those requirements will be minimal

### **Response**

There are comments describing the concern that in general, the tentative Order “*proposes new costly regulatory components not previously analyzed during the environmental review stage, so the board must analyze, evaluate, and estimate all of the costs of these new requirements.*” While the tentative Order is not fully described by any one alternative analyzed in the Economics Report,<sup>4</sup> it has been built from components of the alternatives analyzed in the report. Board staff has used the costs outlined in the Economics Report to estimate the cost of the tentative Order. The cost estimate is provided in Attachment A of the tentative Order. The board has, therefore, considered the estimated cost of the tentative Order.

While the Water Code requires that the board consider the potential cost of the tentative Order, it does not require the board to prepare a cost benefit analysis that balances costs against benefits to water quality. Commenters argue that farm evaluations, sediment and erosion control plans, and nitrogen budgets (“nitrogen management plan summaries” in the revised tentative Order) will impose costly paperwork burdens that will not benefit water quality. The board staff disagrees, since the plans are needed to verify that growers are implementing relevant practices to protect water quality. Also, as described in Master Responses 3-5, the board staff has estimated the costs of all elements of the tentative Order.

One commenter asserted that section 13000 of the Water Code describes that the state is required to regulate water quality “*reasonabl[y], considering all demands being made and to be made on those waters.*” Similarly, under section 13050, “*pollution means any alteration of the quality of water which may unreasonably affect*” the waters of the state. While each Regional Board is required to ensure the “*reasonable protection of beneficial uses,...*” it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. (section 13241 [setting forth the Act's water quality objectives].) The comment suggests that, in general, the tentative Order is not reasonable.

The suggestion that the tentative Order is not reasonable is asserted, but not supported by any facts. The board staff believes that it is reasonable for the dischargers regulated by the Order to provide evidence or indication that they are complying with its provisions. As

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<sup>4</sup> 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

described in Attachment A of the tentative Order, farm evaluations and nitrogen management plan summary reports (previously “nitrogen budgets”) provide information on overall implementation of practices to protect water quality, in some ways serving as a surrogate to individual water quality sampling. Many other board programs require individual sampling of waste discharges to assess impacts to water quality. For the ILRP, the board has recognized that it may not be reasonable to require tens of thousands of growers to sample their waste discharge. Also, the burden of such monitoring would be extensive (see analysis for Alternative 5, Economics Report). Consequently, the tentative Order relies on a regional monitoring approach and evaluation of management practices at representative sites, coupled with farm-specific planning, evaluations, and reporting. Considering this, board staff disagrees that the tentative Order’s approach is unreasonable. On the contrary, the approach has been crafted considering the reasonableness of the requirements and the needs to consider the burden of reporting.

Finally, staff notes that the commenter’s characterization of Water Code section 13000 as a legal requirement is not accurate. Water Code section 13000 is a legislative finding that declares legislative intent. While such declarations are useful in ascertaining the goals of the Porter-Cologne Act, those declarations should not be mistaken for legally enforceable requirements that apply to the adoption of waste discharge requirements. Requirements for adoption of waste discharge requirements are set forth in Article 4 of Chapter 4 of the Porter-Cologne Act. Similarly, the citation to language within Water Code section 13241 is misplaced; that language only applies when a regional water board sets water quality objectives in its basin plan.

The board staff disagrees with comments suggesting that the tentative Order does not specify what will be done with all of the information collected and reported from farm evaluations, sediment and erosion control plans, and nitrogen management plan summaries. Attachment A of the tentative Order provides discussion of how the information will be used in the case of farm evaluations and nitrogen management plan summaries.

It must be noted that sediment and erosion control plans will not be reported to the board. However, the sediment and erosion control plans are an important tool for the grower to identify and document practices implemented to protect downstream receiving waters from sediment discharges.

Another concern raised by commenters is that the tentative Order, because of the reporting requirements, will shift the third-party’s efforts away from assisting growers to improve water quality and instead towards collecting and cataloging vast amounts of data that may or may not be needed in the future. The reports required by the tentative Order are needed to determine whether its requirements are effective and whether waste discharges from irrigated agriculture are causing water quality problems. If anything, requiring Members to report on practices that have been implemented will help third-parties and the board to focus on Members that need assistance and may be contributing to water quality problems.

The board estimated staffing needed under each of the PEIR alternatives and came to the conclusion that an approach with a well-functioning third-party group will minimize staffing costs. The administrative structure of the tentative Order is based largely on Alternative 2 of the PEIR. An additional 2-3 staff members were estimated to be needed to implement Alternative 2 Central Valley-wide, along with additional third-party resources necessary to

implement the groundwater program.<sup>5</sup> The projections for additional resource needs provide staff's best estimate given knowledge of the current ILRP and other Water Board programs. Board ILRP staffing levels will not immediately change with the adoption of the tentative Order. Program staffing is based on the resources provided by the legislature through the budgeting process and the distribution of those resources by the State Water Board. Using this process, the State Water Board may request additional resources in the future, which may result in additional staffing.

Commenters recommend that any ILRP should provide measurable goals for each level of regulation that, if obtained, results in a defined, decreased level of future reporting and monitoring. Board staff agrees with this comment and considers the tentative Order's flexibility for focusing on vulnerable areas and associated monitoring and reporting to be consistent with these recommendations. For example, if an area is under a surface water quality management plan (SQMP) and the water quality problem is solved through improved practices, the plan may be completed and the associated level of monitoring and reporting would be reduced.

In response to comments, staff has made revisions to the tentative Order to reduce some of the reporting requirements. The Executive Officer has been given the discretion to reduce reporting frequency, even in high vulnerability areas, if year to year changes in the information reported are minimal. In addition, staff has included new provisions to reduce the reporting requirements for small farms. This will help to minimize costs while achieving water quality goals of the ILRP.

### **Master Response 3. Templates for farm evaluations, sediment and erosion control plans, and nitrogen management plan summary reports**

#### ***Comment summary***

Under the tentative Order, the Central Valley Water Board would work with the third-party and other entities (e.g., technical experts, stakeholders) to develop templates that help members comply with requirements for farm evaluations, sediment and erosion control plans, and nitrogen budgets ("nitrogen management plans" in the revised tentative Order) (templates). The Order specifies that the Executive Officer will review and approve the templates prior to requiring members to develop the plans. The comments regarding this proposed process range from general support to concerns over whether the templates can be approved by the Executive Officer without adoption by the board. Comments included:

- The templates need to be developed by those directly in agriculture, with the assistance of professionals that work with agriculture (qualified agronomists and/or agricultural engineers), and not interested party advocates
- The process for the development of the templates has become akin to new permit requirements that require action and adoption by the board and should be removed from the tentative Order
- Templates need to be available for review prior to board adoption of the tentative Order
- One set of templates should be developed for all ILRP orders
- Costs of farm evaluations, sediment and erosion control plans, and nitrogen budgets cannot be determined without first developing templates

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<sup>5</sup> Economics Report, page 2-23

## **Response**

The tentative Order has been modified in response to comments to provide an option for the third-party to develop the templates in consultation with the Central Valley Water Board and other entities (e.g., other third-party groups, technical experts). This revision is similar to the prior version of the tentative Order (draft Order), which specified that the templates were to be developed by the third-party and approved by the Executive Officer. Board staff does not have concerns regarding the capabilities of third-party groups to work with technical service providers to develop the templates. The main concern with the draft Order's proposed process was that it may lead to substantially different templates for each ILRP order. To address this concern, the revised tentative Order specifies that the third-party may work with other water quality coalitions and commodity groups to develop the templates (a "group option"). This will ensure that the data gathered are consistent, facilitating analysis of the data by third-party groups, the board, and the public. The process provided in the revised tentative Order will also ensure consistency and fairness to growers that will be subject to other ILRP orders, and reduce the potential administrative burden associated with requiring each third-party to develop these templates.

Third-party groups and technical service providers are the technical experts and must be involved in the development of the templates. It is also important for other interested parties to be involved because the templates will be used to gather information regarding individual member compliance with the tentative Order's requirements and to gather data to determine effectiveness of the Order in protecting water quality. As such, interested parties, especially those that are affected directly or indirectly by irrigated agricultural waste discharges, should have opportunity to comment on the templates.

The templates will not establish new water quality limitations, objectives, or other waste discharge requirements. The templates will be used to set a standardized format for gathering information associated with Members' compliance with the performance standards of the Order (e.g., implementation of management practices, nitrogen management, and sediment and erosion prevention). Consequently, the templates will indirectly require Member submission or creation of technical or monitoring program reports within the meaning of the Water Code (or CWC). Technical or monitoring program reports may be required by the Executive Officer pursuant to section 13267 of the CWC.

Comments describing that these templates are considered a new process and must be subject to board review and adoption are not correct [commenters cite CWC section 13223(a)]. Section 13223 describes delegation authorities between the board and Executive Officer. There is no legal requirement that the board review or approve Water Code section 13267 requirements to prepare technical or monitoring reports, nor templates that indirectly require reporting or creation of such reports in a standardized format.

The revised tentative Order's Monitoring and Reporting Program (MRP) sets forth the Board's expectation for the type of information that the templates will collect or facilitate. Should a group exercise its option to propose a template for Executive Officer approval, the submitted template will have to meet the criteria set forth in the MRP. Should the Executive Officer develop a template on its own, board staff expects that the template will be developed based on the same criteria. Since the templates to be developed by or approved by the Executive Officer will indirectly require the reporting or creation of technical reports, they are not subject to Water Code section 13223.

Comments suggesting that the templates should be available prior to board consideration of the tentative Order are similar to the concern described above regarding delegation of authorities to

the Executive Officer. Delaying the tentative Order to develop templates would delay implementation of groundwater monitoring and other provisions designed to reduce waste discharge to groundwater. The board staff believes that such delays are unnecessary, since ample opportunity will be provided to the agricultural community and other interested parties to provide input on the templates as they are being developed.

Board staff disagrees with the comment that the costs of farm evaluations, sediment and erosion control plans, and nitrogen budgets cannot be estimated without first developing templates. The Central Valley Water Board analyzed the costs and potential economic impacts of long-term ILRP alternatives in the Economics Report. The costs of developing individual farm water quality management plans and certified nutrient management plans have been estimated in the Economics Report. It is anticipated that preparing farm evaluations, sediment and erosion control plans, and nitrogen management plans using the templates would be similar, if not lower, in cost than developing comprehensive individual farm water quality management plans. Nevertheless, costs for developing the farm evaluation, sediment and erosion control plans, and nitrogen management plans have been estimated using the costs for individual farm water quality and certified nutrient management plans in the Economics Report. Staff disagrees that the costs of these plans cannot be estimated, since such plans have been developed in other contexts. Due to the availability of those cost estimates, staff was able estimate the costs of the evaluations and plans without having first developed the templates.

#### **Master Response 4. Sediment and erosion control plans**

##### ***Comment summary***

The tentative Order includes the requirement that all members that may discharge to surface water must develop and implement a sediment and erosion control plan. The tentative Order also describes that the plan must be written, amended, and certified by a qualified registered professional. Comments regarding sediment and erosion control plans include:

- The requirement is unnecessarily broad and overly expansive
- Requiring plans where there is any “potential to discharge surface water offsite,” creates edge-of-field discharge limitations for sediment, which is inappropriate as it is neither a receiving water limitation nor a proper waste discharge requirement
- The requirement fails to take into account that growers in some areas may have collective management practices at the end of a drain, or systems to collect and return runoff, even though the tailwater moves offsite first
- Recommendation that plans only be required of parcels that are most likely to have runoff to surface waters
- Hiring a specialist to prepare and certify such plans is a costly endeavor, the cost of which has not been analyzed by the board; also, it is unknown if these experts will be available for all growers
- Not an effective or necessary requirement to achieve water quality objectives
- The tentative Order should reflect that in some cases, growers have the educational background, qualifications and experience to be classified as Qualified Developers such as certified soil scientist under the American Society of Agronomy
- It is pointed out that such certification requirements are used by the State Water Board’s Construction Stormwater Program. An agricultural regulatory program is vastly different than a stormwater program. Although certain regulatory requirements may be appropriate for short-term construction programs, they are not necessarily appropriate for long term agricultural activities.
- The Construction Stormwater Program is an NPDES program and the ILRP is adopted under state law only. Thus, this certification requirement should be deleted. At the least,

the plans could be based on a template created by the coalitions and the professionals listed above rather than created individually by the professionals for each Member.

### **Response**

Based on the comments received, the tentative Order has been modified to require sediment and erosion control plans in areas with sediment and erosion control problems. This adjustment will narrow the scope of this requirement while still working to achieve water quality goals. The tentative Order has also been modified to allow a broader range of qualified persons to develop the sediment and erosion control plan. Staff agrees that focusing the requirement to prepare sediment and erosion control plans in problem areas is appropriate and that there are a broader range of qualified persons that can assist in preparation of the plans beyond those listed in the tentative Order.

Sediment and erosion control plans are an important tool in ensuring that growers take proactive measures to minimize sediment discharges to prevent beneficial use impacts and not just to establish such plans after an impact has been documented. Reducing sediment discharges will reduce impacts of sediment on beneficial uses, such as filling spawning gravels and clogging filters of downstream users, and will also reduce impacts from sediment bound materials, such as pesticides.

Other comments include concerns that the requirement for all growers with the potential to discharge surface water offsite to develop sediment and erosion control plans would essentially create an edge-of-field discharge limitation for sediment. The provision has been modified, so that it is no longer as broadly applicable. However, staff disagrees that requiring sediment and erosion control plans constitutes “edge-of-field discharge limitations” for sediment, as that term typically refers to numeric effluent limitations. The requirement for the plan ensures that growers evaluate their operations and put in place management practices to minimize or eliminate impacts on downstream receiving waters. There are no numeric effluent limitations that apply at the edge-of-field.

Commenters describe that the requirements applicable at a short-term construction site are not appropriate for long-term agricultural activities. Board staff agrees that practices for agricultural operations will be different than practices for construction sites in general. However, there are shared similarities such as protecting bare soil from erosion using polyacrylamides, sizing sediment basins, minimizing runoff velocity, etc. These practices may be used on construction sites and agricultural lands to minimize sediment movement in stormwater. However, there are many complexities associated with agriculture not shared by the Construction Stormwater Program. These include managing irrigation water, pesticides, and nutrients to produce crops. Consequently, the board staff recognizes that the Qualified Developers listed in the tentative Order, which are the same as those listed by the Construction Stormwater Program, are not the only or best qualified resources to develop comprehensive sediment and erosion control plans for growers. Agricultural “resource entities,” such as NRCS, UC Extension, third-party groups, and RCDs have the technical background to provide growers with recommendations for such plans. In recognition of this, the tentative Order has been modified to remove the requirement that sediment and erosion control plans be written, amended, and certified by a Qualified Developer. Instead, the tentative Order includes requirements that growers work with agricultural resource entities and/or Qualified Developers to develop a sediment and erosion control plan.

Commenters provide that in some cases, growers have the educational background, qualifications and experience to be classified as Qualified Developers. The board staff agrees

that there are likely additional professions that should be recognized as Qualified Developers. Commenters assert that certified soil scientists under the American Society of Agronomy should be considered Qualified Developers. The tentative Order has been modified to list certified soil scientists as Qualified Developers. Also, to ensure that other skill sets may be recognized in the future, the Order provides flexibility for the Executive Officer to approve Qualified Developers upon request by the third-party.

Commenters are also concerned that there may not be enough Qualified Developers available to develop sediment and erosion control plans for all growers. As described above, the requirement for developing sediment and erosion control plans has been narrowed in the revised tentative Order to include only those operations that may discharge sediment or cause erosion in surface water. Also, the tentative Order has been modified to require that growers “work with” Qualified Developers or resource entities to develop a sediment and erosion control plan where required. In this scenario, growers will be developing the plan in consultation with Qualified Developers and/or resource entities. Because the tentative Order requires that the grower implement the recommendations of Qualified Developers/resource entities, the process should result in the best possible plans without the requirement for a Qualified Developer to actually write, amend, and certify these plans. Also, it should be recognized that the plans will be based on a template. This should reduce the administrative cost of developing the plans – consistent with commenter recommendations. Also, broadening the field of Qualified Developers to include resource entities and third-parties should help to ensure availability of sufficient resources to assist growers in the development of sediment and erosion control plans.

Some commenters claim that the cost of certification has not been considered by the board. While the board did not previously estimate a separate cost of sediment and erosion control plans or the certification of such plans, it has considered the costs of individual farm water quality management plans (FWQMPs) under PEIR Alternatives 3, 4, and 5. As described in the PEIR, 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 page 3-21 and 3-27, Program Description, “Alternatives 4 and 5”]. A sediment and erosion control plan would be a necessary component of an individual FWQMP. Therefore, the PEIR has already estimated the costs of sediment and erosion control plans as a component of the FWQMP. The board has estimated a cost for “certification” of individual farm plans as part of Alternative 3. As described in the PEIR, this alternative would require the board, or other technical entity to review and approve or certify the farm plan.<sup>6</sup> As further described in the Economics Report, “*Certification costs represent Central Valley Water Board staff or contracted personnel reviewing and approving farm plans.*”<sup>7</sup> The Economics Report includes a cost estimate for this certification step based on what the California Certified Organic Farmer (CCOF) charges growers for their certification service (to include an office exercise and a field visit). The estimated cost for certification of farm plans was not originally included in the tentative Order’s cost estimate. The cost estimate in the tentative Order and Information Sheet, Attachment A, has been updated to include the certification cost.

## **Master Response 5. Annual nitrogen budgets**

### ***Comment summary***

The tentative Order includes the requirement that all members must develop proposed and final annual nitrogen budgets (“nitrogen management plans” in the revised tentative Order). Proposed annual nitrogen budgets must be prepared or approved by a certified nutrient

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<sup>6</sup> See page 3-13, PEIR

<sup>7</sup> See page 2-21, Economics Report

management plan specialist for Members in high vulnerability groundwater areas. Major concerns regarding annual nitrogen budgets include:

- Annual nitrogen budgets should analyze “nitrogen” application, not “nutrient” application
- Expensive requirement for growers, costs of which have not been analyzed by the board
- The tentative Order should allow additional flexibility in areas where irrigated agriculture has a lower propensity to impact water quality. Annual nitrogen budgets should only be required in high vulnerability groundwater areas.
- Recommendation that the tentative Order state that Members are “encouraged” to prepare annual nitrogen budgets instead of requiring budgets for all Members.
- Comment that the board seems to be treating irrigated agriculture like confined animal feeding operations (CAFO). Nutrients are not a by-product of operations, but an expensive input. Nitrogen budgets need not be as extensive as that of a CAFO, and should comprise a simple sheet inducing growers to ensure appropriate nutrient application.
- Professional certification of nitrogen budgets will provide a degree of professionalism and quality; a set of technical standards should be developed during the public process to ensure consistency
- Professional certification of nitrogen budgets is not an effective or necessary requirement to achieve water quality objectives
- Nitrogen budgets should not be used as “regulatory endpoints” or compliance limits
- Nitrogen budgets need to be used as “regulatory endpoints”

### **Response**

The board staff agrees that nitrogen management plans (previously “nitrogen budgets”) are intended to analyze nitrogen application. The tentative Order has been modified to address this comment.

Requiring all Members in high vulnerability groundwater areas to develop nitrogen management plans is a reasonable requirement considering the risk nitrogen poses to groundwater quality. A nitrogen management plan is a low cost pollution-prevention practice that is consistent with good agronomic practices. Due to the greater risks and potential impacts to groundwater quality, the revised tentative Order requires Members in high vulnerability areas to implement a certified nitrogen management plan. A certified plan may be developed in one of the following ways: individual Members may attend training to self-certify their nitrogen management plan; or Members may rely upon recommendations from a technical resource entity (e.g., NRCS, UC Extension) or an approved certifier. The tentative Order also includes the flexibility for the board’s Executive Officer to approve an alternative certification method. Members in high vulnerability areas must also provide nitrogen management plan summary reports to the third-party. Members in low vulnerability areas are not required to provide nitrogen management plan summary reports, unless requested by the board. To address cost concerns, the provisions have been changed to reduce reporting frequency for small farms and to allow the Executive Officer to reduce reporting frequency for other Members if year to year changes are minimal. In addition, certification options have been significantly broadened.

A template for nitrogen management plans will be developed by the third-party or the board. The use of a template will help to reduce costs associated with developing nitrogen management plans while working to achieve water quality goals. The template will also help to provide a set of technical standards to ensure consistency, as suggested in comments received. As described in the tentative Order, the board intends to develop the template in coordination with the third-party and other agricultural groups and experts to ensure the template is

applicable and relevant for Members.<sup>8</sup> Comments urging the simplification of nitrogen management plans will be considered in the development of the template. Some commenters believe that there is substantial difference between a CAFO and irrigated lands operation, as nitrogen is a waste or by-product of a CAFO versus an expensive input in the irrigated lands scenario. The board's staff recognizes this difference. However, regardless of whether excess nitrogen was initially applied as a waste or as a required input, excess nitrogen discharged to groundwater can negatively impact groundwater quality.

As described above, in high vulnerability groundwater areas the tentative Order requires that Members prepare and implement a certified nitrogen management plan. This requirement was included to ensure that nitrogen management plans are developed by qualified individuals and ultimately to ensure that discharge of nitrogen to state waters is minimized. It is especially important to rely on technical experts in the irrigated lands program because of the large number of regulated operations in relation to board staffing and expertise. It is not feasible for the board to review all nitrogen management plans to ensure the protection of water quality. Consequently, the board must rely on trained individuals to ensure that plans will meet the requirements of the tentative Order. The board staff agrees with comments describing that professional certification of nitrogen management plans will provide a degree of professionalism and quality.

There are number of comments regarding the potential use of nitrogen management plans. Some comments describe that nitrogen management plans should be used as "regulatory endpoints," i.e., establish nitrogen application rate limitations. Specifically, comments describe that the board "...should set a level for appropriate deviation from median for crop-based nitrogen budgets." In addition, commenters assert that universal standards, such as those applied for nutrient management in the Dairy Program, should be set for irrigated lands.

In order to establish a nitrogen application rate limitation, as specified above, or universal standards for nutrients in the ILRP, the board would first need to establish a link between fertilizer use and leaching of nitrogen-containing wastes (e.g., nitrates) to groundwater under multiple scenarios. For example, some crop types may need higher nitrogen ratios than others. Comments received during the development of the PEIR have indicated that applying too little nitrogen may have similar effect as applying too much nitrogen in that crops may "shut down," reducing the amount removed in the root zone and encouraging leaching of nitrates. Consideration of these processes reveals a complex system that varies not only by crop type, but also with geologic factors (depth to groundwater, conditions within the groundwater) and ambient conditions (e.g., soil temperature). Because of these complexities, the board does not have enough information to develop a crop-based nitrogen application rate limitation. As more information is collected, the board may reconsider this issue.

Some of the commenters recommending that nitrogen application rates be established as regulatory endpoints (i.e., enforceable limits) are concerned that the tentative Order will not provide adequate means to enforce water quality requirements. They express concerns with timelines allowed for developing and implementing groundwater monitoring programs. These comments further recommend that nitrogen management enforcement should be conducted and that any fines should be applied to projects that will help to provide safe drinking water to communities with nitrate contaminated groundwater. For the reasons described above, nitrogen use information will not be used to establish specific regulatory endpoints at this time. The

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<sup>8</sup> Tentative Order, page 27.

board staff agrees that projects working to provide safe drinking water to communities with nitrate contaminated groundwater are needed and will look to support these efforts in the future.

Commenters have also expressed that nitrogen application rates should not be used as “regulatory endpoints.” The tentative Order does not establish such “endpoints” for nitrogen application rates, e.g., limitations or benchmarks. Information from the nitrogen management plan summary report will be used in evaluating the efforts of Members to comply with the tentative Order and evaluating threat of nitrate leaching to groundwater. As data are collected under the ILRP, the board may reconsider whether nitrogen application rates may be a useful regulatory endpoint. Any such change would require revision of the Order and approval by the board.

It is important to note that, although no regulatory endpoints are being established for nitrogen use, the board will use the reported nitrogen use information together with results of the management practices evaluation studies to evaluate compliance. For example, the studies may determine that an elevated ratio of total nitrogen applied to crop need (e.g., 1.X or greater) results in impacts to groundwater quality for a specific crop type under specific site conditions. Growers whose nitrogen application rates are elevated would be expected to take corrective action or would not be in compliance with the Order, were they to maintain the elevated application rates. The board could then require the grower to conduct site-specific monitoring or the board could take other informal or formal enforcement action.

The board also received comments recommending that “final nitrogen budget” be renamed to “final nitrogen record.” The commenter provides that the suggested terminology will improve the clarity of the tentative Order, mainly because the term “budget” infers the meaning of what will or is planned to occur. The board staff has changed the terminology to “nitrogen management plan” to refer to the plan prepared for anticipated nitrogen applications to the crop for the upcoming crop year and “nitrogen management plan summary report” to refer to the information reported to the third-party regarding nitrogen management efforts during the prior crop year.

There were comments that the cost of the certification requirement has not been considered by the board. The board has considered the costs of certified nutrient management plans in the Economics Report as part of PEIR Alternatives 4 and 5.

### **Master Response 6. Third-party summary reporting for farm evaluations and nitrogen budgets –square mile, or section, level summary**

#### ***Comment summary***

The MRP specifies that the third-party will be required to provide data collected for farm evaluations and nitrogen budgets (“nitrogen management plan summary reports” in the revised tentative Order) to the section level in biannual reports to the board. Comments regarding this requirement are summarized below.

- Support for section level reporting
- Summarizing and reporting data at the section level is unnecessary, extremely costly, and unreasonable as compared to the need
- The requirement would involve complicated reporting of many variables across five counties versus DPR’s system, which is applicable to fewer variables across one county; given the section level scale has proven unmanageable for DPR, the same scale will be more problematic for third-parties

- Data at the section level will not necessarily line up with section lines on a map, requiring significant third-party effort to establish which practices are implemented in each section
- Because location of practices with respect to surface and groundwater is not available within each section, providing information on a section level does not provide any relative or correlated information with respect to surface water or groundwater quality
- Reporting on the section scale could lead to misuse of data that could harm Members
- The third-party should be allowed to develop an appropriate scale based on watershed and/or groundwater basin characteristics

### **Response**

At the section scale, there is the concern that any member of the public could potentially associate practices with a single operation. Commenters are concerned that reporting at the section scale will allow parties to misinterpret data and harm Members within each section. Commenters suggest that this could lead to harm of Members through misuse of information, threats, and environmental terrorism. Generally, concerns regarding privacy of information such as fertilizer practices and other management practices would also fall under this general concern (confidentiality of information). In response to these and other concerns regarding section level reporting, the tentative Order has been revised to require the third-party to report information from farm evaluations and nitrogen management plan summary reports to the township level (thirty-six sections).

The tentative Order would allow the third-party time to conduct Member outreach and give Members time to improve their management practices. However, if some Members are not improving their practices despite the outreach, the board needs to be able to follow-up with those Members. The easiest method for evaluating individual Member progress would be to have the information reported by individual. However, to address the concerns from agricultural representatives, the data can be associated with a township rather than associated with the Member that provided the data. In order to ensure that the board is able to evaluate whether Members are implementing management practices to meet ILRP water quality goals and target areas for follow-up, the tentative Order has been modified to 1) initially require more frequent summary reports from the third-party at the township level and 2) require that the third-party provide farm evaluation and nitrogen management information for individual Members to the board upon request. The board staff intends to conduct targeted regular audits of third-party held information regarding farm evaluations and nitrogen management plan summary reports. In summary, the board staff does not have any evidence to back the claims that reporting information at the section level will expose third-party Members to the harms alleged. However, staff believes that annual reporting of information at the township level and the board's ability to obtain information associated with individual Members is adequate during the first years of the implementation of the Order. Should the township level reporting prove to be inadequate, the board may consider other options.

Commenters also provide concerns that the board intends to use the data collected to potentially identify Members that require compliance and enforcement activities. Commenters are especially concerned where these activities may relate to nitrogen management plan summary reports (previously nitrogen budgets). The concern of whether nitrogen application information may be used as "regulatory endpoints" for compliance is discussed in Master Response 5. The management practice and nitrogen management information reported by the Members represent the only information provided by the Member that could be used to evaluate an individual Member's progress in protecting water quality. As a regulatory agency, the board must not only establish requirements, but also evaluate compliance with those requirements.

The information provided by the Members, along with other information, will be used to prioritize board compliance and enforcement activities.

### **Master Response 7. Design of settling ponds, basins and tailwater recovery systems – responsible charge**

#### ***Comment summary***

The tentative Order includes requirements that all newly constructed or modified settling ponds, basins and tailwater recovery systems be designed by or under the direct supervision of, and certified by, an California licensed Civil Engineer or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work. Concerns regarding this requirement include that this will impose an additional and unreasonable cost with no added water quality benefit. Also, that irrigated agricultural operations have been designing and constructing settling ponds, basins, and tailwater recovery systems, and there is no information to suggest that farmer-created facilities are problematic with respect to water quality or that farmers are unable to continue to competently develop such facilities. Commenters also provide concerns that there is no justification for this requirement in the tentative Order and that costs have not been considered. Some commenters recommend that the requirement should be removed from the tentative Order.

#### ***Response***

Board staff agrees that the requirement for a licensed engineer to assume responsible charge for newly constructed settling ponds, basins, and tailwater recovery systems is not necessary in all cases. The tentative Order has been revised accordingly.

### **Master Response 8. Toxicity testing (aquatic)**

#### ***Comment summary***

The tentative Order requires aquatic toxicity testing for three species (*Ceriodaphnia dubia*, *Pimephales promelas*, and *Selenastrum capricornutum*). Attachment B of the tentative Order describes that the testing follow specified USEPA testing methods. Some comments regarding toxicity testing suggest that chronic toxicity testing should be required by the tentative Order. Other comments argue that the order should only require acute toxicity testing and that all references to chronic toxicity testing should be removed.

#### ***Response***

Commenters indicated that acute toxicity testing measures adverse effect (usually mortality) on a group of test organisms during short-term exposure, while chronic tests measure sub lethal effects and are usually conducted over a longer period. A pollutant can have a significant impact on an aquatic community without producing short-term mortality, such as by reducing growth or reproductive ability. Commenters argue that the exposure of organisms in creeks and rivers of the Eastern San Joaquin River Watershed is chronic and therefore, chronic testing is most appropriate for assessing impacts of irrigated agricultural waste discharges to aquatic life. Also, commenters describe that requiring chronic toxicity testing in the tentative Order would be consistent with the Los Angeles and Central Coast Water Boards' conditional waivers for irrigated agriculture, the draft Delta Regional Monitoring Program's focus on chronic toxicity, and the draft Statewide Policy for Toxicity Assessment and Control.

Board staff agrees that chronic toxicity testing would provide more information on the sub-lethal effects of irrigated agricultural waste discharges on receiving waters. This information may be useful in waterways that are otherwise meeting water quality objectives, but will not likely lead to additional program implementation in waterways already under a surface water quality

management plan (SQMP) for toxicity or other constituents of concern, such as pesticides. For example, if a waterbody is under a SQMP for exceedances of chlorpyrifos, it would follow that chronic toxicity monitoring should show sub-lethal effects. Requiring chronic toxicity monitoring in these cases would add cost without providing substantial new information. The reader is directed to pages 35-44 of the PEIR, Appendix A. These pages include maps showing watersheds exhibiting acute toxicity and watersheds with exceedances of pesticides and other constituents of concern. These maps indicate that much of the Eastern San Joaquin Watershed area includes waterways with exceedances of objectives and that exhibit acute toxicity.

The East San Joaquin Water Quality Coalition (ESJ Coalition) estimates that chronic toxicity testing would increase toxicity testing costs by approximately 81 percent. This is a significant increase in cost. Pursuant to Water Code section 13267, the board must ensure that the additional benefits gained from chronic toxicity testing are reasonable given the increased costs. Given the ongoing activities in many Eastern San Joaquin River Watershed waterways to address toxicity related issues, the board staff does not believe that the increased costs are justified at this time. However, the board intends to reconvene the technical issues committee (TIC) to discuss ILRP surface water monitoring concerns –such as when and where chronic testing may be necessary, when and where pesticides that should be monitored, etc. Commenters are encouraged to engage with the board staff during the TIC process regarding this and other surface water monitoring concerns.

Board staff notes that *Selenastrum capricornutum* testing is the short-term chronic method because acute test methods do not exist. The *S. capricornutum* testing being conducted for the current program has always been the short-term chronic method that is in the tentative Order. Should state policy or law require such testing for *C. dubia* or *P. promelas*, the Executive Officer can amend the tentative Order's MRP to include chronic toxicity provisions.

Other comments express concerns that chronic testing should not be required because the tentative Order requires both acute and chronic toxicity testing. The tentative Order requires the short-term chronic method to be used for *S. capricornutum* because acute methods do not exist and because the coalitions are conducting this test in the current program. This does not represent a change from the toxicity testing that coalitions are currently performing. The tentative Order has been modified to clarify this point. The commenters are concerned that chronic toxicity testing will increase costs, but will not increase protection of waterways as compared to the current acute toxicity monitoring coupled with monitoring of pesticides and other constituents of concern. The board staff does not agree with the broad reaching statement that chronic toxicity testing will not provide increased protection. Chronic toxicity testing in waterways that are assumed to be meeting toxicity objectives based on acute toxicity testing may not be meeting objectives if chronic toxicity testing demonstrated sublethal effects.

## **Master Response 9. Discharge limitations**

### ***Comment summary***

The tentative Order includes discharge limitations for surface and groundwater. The discharge limitations are summarized below for reference:

- Wastes discharged from Member operations 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.

Comments regarding the discharge limitations include two main concerns. These concerns include 1) the tentative Order's convention of "discharge limitations" essentially establishes that water quality objectives would apply at the "edge-of-field" instead of in the receiving waters, and 2) the requirement that Member operations not cause or "contribute" to an exceedance would establish an unrealistic standard that holds Members accountable to the smallest contribution.

### **Response**

To clarify that the limitations are not "edge-of-field" or "effluent" limitations, the "discharge limitations" in the tentative Order have been renamed to "receiving water limitations."

The 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 would be violating the receiving water limitation. In the scenario where the waste discharge is below the water quality objective and the receiving water exceeds objectives, the receiving water limitation would not be violated.<sup>9</sup> In this case, 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.

In light of the above, board staff disagrees with commenters who assert that the receiving water limitations make irrigated agriculture accountable for *de-minimus* discharges. 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) can actually improve receiving waters for the constituent of concern.

## **Master Response 10. Applicability of the Irrigated Lands Program Environmental Impact Report**

### **Comment summary**

In general, commenters contend that the tentative Order goes beyond the alternatives analyzed in the PEIR, and therefore, not all potentially adverse environmental impacts of the tentative Order have been identified, disclosed, and analyzed in the PEIR.

Specific concerns include that the tentative Order would establish edge-of-field discharge limitations and farm management performance standards. Commenters contend that these elements were not part of the alternatives under the PEIR. Examples include concerns that farm management performance standards require implemented management practices to: (1) minimize waste discharge offsite in surface water; and, (2) minimize percolation of waste to groundwater.

Commenters provide that, in order to comply with the performance standards and to meet water quality objectives at the edge-of-field, growers under the tentative Order will most likely need to avoid having any irrigated return flow or stormwater leaving the field, and will need to avoid irrigation applications that result in groundwater recharge. With respect to

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<sup>9</sup> Note that this scenario could be more complicated for certain cases, such as a bioaccumulative substance, for which the concentration of the discharge may not be as important in determining whether beneficial uses are protected as the mass discharged.

surface waters, commenters contend that this will result in a dramatic decrease in water available for aquatic life, especially in water bodies dependent on agricultural drainage for all or parts of the year. For groundwater, comments provide that this will mean a dramatic decrease in groundwater recharge in all groundwater basins, and in particular in overdrafted basins.

Commenters argue that the PEIR did not adequately analyze the above-described impacts; stating that the PEIR does not discuss universal application of farm management practices that minimize (or eliminate) irrigation return flows and groundwater recharge. Commenters recommend that the board prepare a supplemental EIR to address these impacts.

### **Response**

The above characterization that the tentative Order would establish water quality objectives as “edge-of-field” discharge limitations is incorrect. The reader is directed to Master Responses 4 and 9 for discussion regarding this concern.

The remaining concern that two of the tentative Order’s farm management performance standards (described above) 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 growers 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”]

As shown above, practices instituted to comply with FWQMPs under PEIR Alternatives 3-5 include requirements to minimize, reduce or eliminate waste discharge to surface and groundwater.

The commenters argue that management practices implemented to comply with the farm management performance standards would lead to different or more ubiquitous application of practices than under the analyzed PEIR alternatives, ultimately causing more severe environmental impacts than the alternatives analyzed in the PEIR. For this to be true, the farm management performance standards would need to be different than the requirements contained in the PEIR alternatives. This is not the case as the two farm management performance standards outlined in the comments, repeated here for reference *“(1) minimize waste discharge offsite in surface water; and, (2) minimize percolation of waste to groundwater,”* are nearly identical to the FWQMP requirements given for Alternatives 3-5 of the PEIR. Therefore, the comments describing that the tentative Order’s farm management performance standards would lead to a decrease in surface water for aquatic life and decrease in groundwater recharge greater than Alternatives 3-5 of the PEIR are incorrect. Board staff further notes that the CEQA Guidelines do not require a subsequent Environmental Impact

Report to be prepared under the circumstances presented unless the Board determines, based on substantial evidence in light of the whole record, that there is a substantial increase in the severity of previously identified significant effects. 14 CCR § 15162.

As described in more detail in Attachment A, tentative Order, the tentative Order is based on Alternatives 2-5 of the PEIR. Consequently, the tentative Order will lead to implementation of management practices, installation of monitoring wells, and potential loss of agriculture resources similar to that described for these alternatives of the PEIR. Attachment D, Findings of Fact and Statement of Overriding Considerations, of the tentative Order provides a listing of environmental impacts, the written findings regarding those impacts consistent with CEQA Guidelines, and the explanation for each finding.

### **Master Response 11. Preliminary groundwater vulnerability area designations**

#### ***Comment summary***

Under the tentative Order, groundwater vulnerability designations will be proposed by the third-party, and refined and updated periodically per the groundwater assessment report (GAR) and monitoring report processes. The Executive Officer will make the final determination regarding the irrigated lands groundwater vulnerability areas.

Comments regarding this proposed process included:

- High vulnerability areas should be limited to DPR Groundwater Protection Areas
- The Order should not contain any pre-defined ideas about what may be high vulnerability areas, as this approach defeats the purpose of conducting a GAR
- Pesticide or toxicity exceedances not resulting entirely from agricultural operations (i.e., “contributions” versus “sole cause”) should be allowed to fall into low vulnerability areas.

#### ***Response***

Attachment E, tentative Order has been revised to provide that areas meeting the requirement for a GQMP will be considered high vulnerability areas. In addition, the tentative MRP has been revised to clarify that certain information must be considered by the third-party in identifying the high vulnerability groundwater areas. In designating these areas, the third-party must consider those areas that have been identified by the State Water Board as Hydrogeologically Vulnerable Areas, areas identified as California Department of Pesticide Regulation Groundwater Protection Areas, and areas identified by the Central Valley Water Board with exceedances of water quality objectives for which irrigated agriculture waste discharges may cause, or contribute to the exceedance. This process provides the flexibility for the third-party to provide data and information to demonstrate that some of these areas should be designated as low vulnerability areas –as suggested in some comments. The third-party can justify, subject to Executive Officer approval, why certain exceedances should not cause an area to be classified as high vulnerability. These vulnerability designations will be proposed by the third-party using a combination of physical properties (e.g., soil type, depth to groundwater), management practices (irrigation method, crop type, nutrient application and removal rates), water quality data and available groundwater quality assessments. The refinement process is not static but dynamic; groundwater vulnerability designations will continue to be updated and refined periodically as conditions warrant.

Restricting vulnerability areas to those defined under DPR’s program will reduce the flexibility of the program to target all areas with vulnerable groundwater, and ultimately could undermine the effectiveness of the program in cases where an area not identified as vulnerable to pesticides may be vulnerable to other agricultural waste discharges (e.g., nitrate). Additionally, if water

quality objectives are not met in an area for which irrigated agriculture is a contributing source, then the underlying aquifer has already been demonstrated to be vulnerable to waste discharges, whether or not those areas are in a DPR Groundwater Protection Area.

Some comments provide that areas where groundwater exceeds water quality objectives (referred to as a “water quality problem”) for which irrigated agriculture is a contributing source (as opposed to the sole source) should be considered low vulnerability. Such an approach would not lead to the development of a groundwater quality management plan (GQMP) to reduce contributions by irrigated agriculture and would instead allow operations to contribute to pollution of groundwater. This would be inconsistent with the Water Code’s requirement for the Order to implement the Basin Plan (section 13263) and inconsistent with the Antidegradation Policy (any authorized degradation must not exceed applicable water quality objectives). While there may be multiple sources of a water quality problem, the Water Code is clear that waste discharges must be of high enough quality to implement the water quality objectives within the Basin Plan and to consider the beneficial uses to be protected. As defined by the Order, “contribute” to a water quality problem means that the waste discharge is exceeding water quality objectives. It is therefore appropriate to characterize areas where irrigated agriculture is contributing to a groundwater quality problem as high vulnerability groundwater areas subject to additional requirements under the Order.

## **Master Response 12. Mitigation measures**

### ***Comment summary***

The Water Board does not have the legal 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 tentative Order, is not subject to a discretionary approval by the board (see Pub. Resources Code, § 21080; CEQA generally applies only to discretionary projects). Mitigation measures that cannot be legally imposed need not be proposed or analyzed. (CEQA Guidelines, § 15126.4(a)(5).) This section should be eliminated.

### ***Response***

As described in the PEIR, CEQA Guidelines Section 15126.4 directs lead agencies to describe feasible mitigation measures that could minimize significant adverse impacts. Section 15126.4(a)(2) specifically states that mitigation measures for impacts resulting from a plan or policy, such as the long-term ILRP, can be incorporated into the plan or policy. In order to be considered feasible, a mitigation measure must be fully enforceable through permit conditions, agreements, or other legally binding instruments.

PEIR, Chapter 5, section 5.1.2, Significance Determinations and Mitigations, discusses the long-term ILRP’s approach to mitigation, stating that the Central Valley Water Board will enforce the identified mitigation through inclusion of measures in the “ILRP enforcing mechanism” (e.g. waste discharge requirements, waivers). In fact, these measures are proposed to be included as enforceable conditions to this tentative Order, which relies upon the PEIR for CEQA compliance. This approach to mitigation and mitigation monitoring is consistent with the direction of CEQA Guidelines section 15126.4(a)(2).

The Central Valley Water Board regulates discharges to waters of the state from irrigated agricultural operations. Members regulated by the Order are bound by the terms of its requirements, including mitigation measures in the form of prohibitions, discharge specifications or provisions. In this way, the mitigation measures that were proposed in the PEIR can be binding on the Order’s enrollees and are therefore legally feasible. However, growers who believe they cannot comply with the Order’s mitigation requirements may opt out of the Order and seek individual waste discharge requirements. The issuance of individual waste discharge

requirements is a discretionary action for the Central Valley Water Board, providing for CEQA review. In these cases, the individual grower may work with the Central Valley Water Board to develop alternative mitigation or consider undertaking individual CEQA review to deal with potentially significant effects of changes in management practices. Thus, the mitigation measures required by the tentative Order do not go beyond the jurisdiction of the Central Valley Water Board and are not legally infeasible.

Under the tentative Order, Members would not be mandated to implement particular water quality management practices. The tentative Order leaves the choice of management practices needed to reach water quality goals to the Members. However, when a management practice selected by a Member to achieve compliance with the terms of the tentative Order has the potential to create significant environmental impacts, mitigation is required to maintain regulatory coverage.

**Master Response 13. CEQA concerns regarding finding 31 of the tentative Order**  
**Comment summary**

Comments were received indicating that finding 31 incorrectly specifies that the PEIR includes six alternatives. Also, comments provide that the finding needs to include a discussion that the loss of productive farmland is an impact associated directly and indirectly with specific compliance activities growers may conduct in response to the tentative Order's regulatory requirements.

**Response**

In regards to the comment that the PEIR only included five alternatives, the reader is referred to Master Response 2.2.3 of the PEIR (page 2-5). Applicable portions of the response are included below for reference.

*"...Alternative 6, although developed concurrently with the administrative draft of the PEIR, was incorporated into the Draft PEIR and circulated with the Draft for public and agency review. The location of this alternative and its analysis is clearly indicated in the introduction to Chapter 3, Program Description, on page 3-1 of the Draft PEIR. The ability of the decision maker and the public to compare the environmental merits and deficiencies of Alternative 6 to the other alternatives was clearly considered and effectively supported by making those comparisons on pages 171-173 in Draft PEIR Appendix A, which is, in fact, a part of the Draft PEIR and was circulated with the Draft PEIR. Commenters' reliance on *Vineyard Citizens for Responsible Planning v. City of Rancho Cordova* (2007) 40 Cal.4th 412, for the supposed proposition that the location of Alternative 6 in the appendix constitutes a violation of CEQA law is misplaced, as *Vineyard* only stands for the proposition that key data cannot be "buried in an appendix" in a manner that a "reader . . . could not reasonably be expected to ferret out." Far from burying the discussion of Alternative 6 in an appendix, the Draft PEIR specifically calls out and highlights the discussion of Alternative 6 in the Appendix, and that discussion, in turn, is based on full disclosure of significant impacts and potential mitigation in the body of the Draft PEIR."*

It must also be noted that the State Water Board did not disturb the Central Valley Water Board's position that the PEIR contained six alternatives even though arguments to the contrary were made as part of water quality petitions filed challenging the Central Valley Water Board's certification of the final *Irrigated Lands Regulatory Program – Program Environmental Impact Report* and approval of the *Short-term Renewal of the Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands*.<sup>10</sup> In his April 26, 2012

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<sup>10</sup> SWRCB/OCC Files A-2173(a) and (b).

petition dismissal letter, the State Water Board's Executive Director, pursuant to authority delegated to him from the State Water Board, ruled that the petitions failed to raise substantial issues appropriate for review.

Concerns that finding 31 (finding 32 in the revised tentative Order) needs to specify impacts to agriculture resources from potential loss of productive farmland, needs to be considered in light of the finding's discussion of all potential significant adverse impacts to environmental resources. The finding provides that *"The requirements of this Order are based on elements of Alternatives 2 through 6 of the PEIR. The PEIR concludes that implementation of some of these elements has the potential to cause significant adverse environmental impacts. Such impacts are associated, directly and indirectly, with specific compliance activities growers may conduct in response to the Order's regulatory requirements...."* The finding does not specifically call out any of the resource areas with potential significant impacts except for reference to agriculture resources: *"...because the cost of this Order is expected to fall within the range of costs described for Alternatives 2 through 6, significant impacts to agriculture resources under this Order will be similar to those described in the PEIR."* Instead of listing specific resource areas with potential significant impacts, the finding points the reader to Attachment D of the tentative Order: *"A listing of potential environmental impacts, the written findings regarding those impacts consistent with § 15091 of the CEQA Guidelines, and the explanation for each finding are contained in a separate Findings of Fact and Statement of Overriding Considerations document (Attachment D), which is incorporated by reference into this Order."* Attachment D clearly describes potential significant impacts to agriculture resources. From this, it is clear that finding 31 does not need to be modified to call out impacts to agriculture resources, as these impacts are already described and more information may be obtained in Attachment D.

**Master Response 14. Third-party responsibilities regarding determining individual Member compliance with the tentative Order**  
**Comment summary**

Commenters describe that finding 22 of the tentative Order and other associated provisions suggest that the third-party may be ordered to conduct field specific studies to identify sources of water quality problems. Commenters are concerned that the third-party could be put in the position of inspecting and monitoring individual Member discharges from irrigated agricultural operations to surface waters and groundwater, potentially placing third-parties into an enforcement role. Commenters do not believe this to be an appropriate role for the third-party.

Commenters are also concerned that the tentative MRP includes provisions to suggest that the board may require the third-party to conduct site-specific field studies of an identified Member's operation (see tentative MRP, page 10). There are comments opposing these provisions. Also, comments include questions of whether the board has authority under Water Code section 13267 to require that third-party groups conduct monitoring of an individual Member's discharge.

Comments provide that where the third-party has developed a water quality management plan that includes the need for field studies to verify the effectiveness of management practices, then such studies may be appropriate. But in all cases, the use of field studies must be at the discretion of the third-party – not mandated by the board.

Other comments further indicate that the third-party should not be required to report Members to the board that have (1) failed to implement improved water quality management practices within the timeframe specified by an applicable SQMP/GQMP; (2) failed to respond to an

information request associated with any applicable SQMP/GQMP; (3) failed to participate in third-party monitoring studies for which the third-party is the lead; or (4) failure to submit required fees to the third-party (tentative Order, provision IV.C.9).

### **Response**

The board staff does not intend for the third-party to conduct monitoring to determine whether a specific individual Member is in compliance with the Member requirements of the Order. The potential for the Executive Officer to require the third-party to conduct field studies is in the context of filling data gaps that cannot be addressed through the regional monitoring efforts. The tentative Order and MRP include provisions to require technical reports of the third-party in situations where regional monitoring does not allow the board to determine potential sources of water quality problems or identify whether management practices are effective. Specifically, finding 22 (finding 23 of the revised tentative Order) of the tentative Order states that *“Such technical reports are needed when regional monitoring or other available information is not sufficient to determine the effects of irrigated agricultural waste discharges to State waters.”* The language in the Order has been clarified.

Water Code section 13267 specifically provides the board with the authority to require *“any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge . . . [to] furnish, . . . technical or monitoring program reports which the regional board requires.”* Comments provide that third-parties are not dischargers, thus the board cannot require such reports, except to the extent as agreed upon by the third-party. When serving as a third-party, the third-party is acting on behalf of their Members, who are subject to section 13267. By agreeing to represent the dischargers governed by the Order, the third-party is agreeing to take on the obligations that would otherwise be assigned directly to the discharger for providing certain technical reports. Failure to provide required technical reports on behalf of Members would result in revocation of the third-party’s approval to represent dischargers governed by the Order. Requirements for the third party to conduct field studies are based on the third-party’s agreement to take on Member responsibilities, not on any Water Code section 13267 authority the board may claim to have over the third-party.

Other commenters argue against these provisions, stating that requiring the third-party monitor an individual farm would not be a reasonable use of funds, considering the requirements of section 13267 (the burden of the report, including the costs of these reports, must bear a reasonable relationship to the need for the report and benefits to be obtained). Comments provide that requirements to monitor individual fields would impose unreasonable cost. As stated above, the technical report requirements of the third-party would not be instituted to determine whether individual Member’s waste discharges are in compliance with the tentative Order’s requirements. Instead, the board would require such reports to supplement regional monitoring to help determine potential sources of water quality concerns and verify the effectiveness of water quality management practices. Further, the requirements are not based on any Water Code 13267 authority the board may claim to have over the third-party.

Finding 10 of the tentative Order describes that the third-party will be responsible for fulfilling regional requirements and conditions (e.g., surface and groundwater monitoring, regional management plan development and tracking). Some comments assert that the third-party should not be required to report Members that have failed to implement improved water quality management practices or respond to an information request associated with any applicable SQMP/GQMP, failed to participate in third-party monitoring studies, or failed to submit required

fees to the third-party (see provision IV.C.9, tentative Order). If the third-party does not furnish this information, it is unclear how the third-party could adequately fulfill its responsibilities for conducting regional monitoring and developing water quality management plans as described in finding 10. Commenters have provided that third-parties should not function in an enforcement capacity, nor have the authority to do so.

If a Member refuses to implement a Water Board approved SQMP/GQMP or participate in regional monitoring, an inequity is created between the non-compliant Member and the Members complying. Since Members are not enrolled directly with the board and their individual information is not being sent to the board, one of the only methods for the board to determine compliance is by having the third-party identify Members per the conditions of provision IV.C.9 of the tentative Order. While the third-party is not required to “conduct enforcement activities,” it is required to report information to the board demonstrating that it is fulfilling its responsibilities and otherwise continues to be eligible to serve as a third-party

### **Master Response 15. Time schedule for compliance**

#### ***Comment summary***

The tentative Order would establish a ten-year compliance time schedule. Essentially, members may be allowed a maximum of ten years to fully comply with the tentative Order’s receiving water (formerly discharge) limitations. Concerns with the tentative Order’s time schedule provisions include: ten years is an aggressive timeframe –the board needs to be able to modify the schedule; provisions must be specifically related to causes or significant contributions from irrigated agriculture and not compliance (with water quality objectives) in the receiving water itself; and all timelines for compliance are unrealistic, and should be extended by at least double.

#### ***Response***

The board staff agrees that in some cases the ten year compliance schedule may be aggressive. Because of this concern, the tentative Order provides that the *“The Central Valley Water Board may modify these schedules based on evidence that meeting the compliance date is technically or economically infeasible, or when evidence shows that compliance by an earlier date is feasible...”*

The tentative Order is consistent with comments that the time schedule provisions must be related to contributions from irrigated agriculture as opposed to being solely focused on the water quality objectives of the receiving water. The time schedule provisions are related to a Member’s compliance with the receiving water limitations. As described in Master Response 9, these limitations are related to the Member’s waste discharge and its effect on receiving waters. Therefore, a Member may be in compliance with the limitation even though the receiving water is not achieving water quality objectives.

Other comments recommend that all time frames for compliance should be doubled to 20 years from the date of management plan submittal. The State Water Board’s NPS Policy addresses time schedules. According to the Policy, time schedules “may not be longer than that which is reasonably necessary to achieve an NPS implementation program’s water quality objectives.” It is not clear why it would take a grower 20 years to adjust their management practices in a manner that is protective of water quality. No justification for the necessity of such an extended time schedule for coming into compliance was provided. While there may be cases in which 10 years is not enough time to achieve compliance with receiving water limitations, in general, it should not take 10 years to achieve compliance.

In the case of a pollutant-specific, site-specific exceedance occurring in a watershed, the board

would expect Members to implement practices to meet receiving water limitations much sooner than 10 years after the management plan submittal. The types of management practices that are protective of water quality are also common agricultural practices. These practices (e.g., improved nutrient management, use of better irrigation methods) do not take years to implement, although optimizing the practice may take several growing seasons and costly capital improvements may need to be implemented over several years. The board staff believes the 10-year maximum compliance time frame is reasonable and does not find justification that it is necessary to double all maximum allowable time schedules.

#### **Master Response 16. Surface water pesticide monitoring**

##### ***Comment summary***

Comments recommend that Attachment A of the tentative Order should be modified to specify that the board will work with DPR and third-parties to develop a process for selecting the pesticides for monitoring.

##### ***Response***

Attachment A includes the following statement: *“Board staff will work with DPR to develop a list of pesticides for monitoring by the third-party.”* Commenters recommend that this statement be amended to describe that the board will work with DPR and third parties to develop a process for determination of pesticides that should be monitored. To help with determination of a process and specific pesticides for monitoring, the board will work with DPR, third-parties, and engage the Technical Issues Committee, which has previously convened to address technical issues related to implementation of the Irrigated Lands Regulatory Program. Attachment A has been modified to reflect this process.

#### **Master Response 17. Coordination with DPR’s Groundwater Protection Program**

##### ***Comment summary***

The tentative Order provides a coordinated approach with DPR to regulating pesticides in groundwater. Essentially, the tentative Order will focus groundwater efforts, e.g., nitrogen management plans, monitoring, and reporting on nitrates and salts. DPR’s Groundwater Protection Program focuses on preventing pesticides from reaching groundwater. Together, the two programs will work to protect groundwater quality. There were a wide variety of concerns regarding the tentative Order’s approach. The concerns are summarized below.

- DPR's program does not comply with the Antidegradation Policy, or with the Pesticide Contamination Prevention Act, so the Board cannot cede its responsibilities for protecting water quality and preventing degradation to DPR
- Groundwater trend monitoring workplans should include monitoring for those pesticides listed in Title 3, Cal. Code Regs. § 6800(b) (6800(b) pesticides) and used within DPR groundwater protection areas that are not being monitored by DPR's shallow groundwater or soil monitoring programs
- The tentative Order should defer in its entirety to DPR’s Groundwater Protection Program with respect to controlling agricultural pesticides in groundwater

##### ***Response***

The tentative Order’s approach is consistent with the objective described in the PEIR and the tentative Order, which is to promote coordination with other regulatory programs to minimize duplicative regulatory oversight while ensuring program effectiveness. To promote cooperation to protect water quality from the adverse effects of pesticides, DPR and the State Water Board signed a Management Agency Agreement (MAA) in 1997. The MAA, and its companion document, the California Pesticide Management Plan for Water Quality, strive to coordinate

interaction, facilitate communication, promote problem solving, and ultimately ensure the protection of water quality. As part of that cooperative effort, the board would not cede any authority to DPR and it has not done so with this tentative Order. Two of the prohibitions of discharge specifically mention pesticides (the discharge of waste into groundwater via backflow through a supply well and discharge of waste into a groundwater well casing). In addition, there are four farm management performance standards that apply to pesticides (as well as other wastes): minimize percolation of waste to groundwater; prevent pollution and nuisance; achieve and maintain water quality objectives and beneficial uses; protect wellheads from surface water intrusion.

In general, DPR has regulatory authority to establish requirements on the *use* of pesticides in order to protect human health and the environment. The Central Valley Water Board has regulatory authority to establish requirements on the discharge of any type of wastes to surface and groundwater, including pesticides. The tentative Order includes provisions to protect groundwater quality from discharges of all wastes from irrigated lands – there are no exceptions for pesticides.

Some comments provided a review of DPR's Groundwater Protection Program, stating the opinion that DPR's program does not meet established state policy and law. While the commenters assert that DPR's program violates the anti-degradation policy, it does not provide any details for that particular position. Instead the commenter focuses its arguments on its belief that DPR's program violates the Pesticide Contamination Protection Act. In response to those particular comments, DPR has provided a discussion regarding some of the comments in a memo to the Central Valley Water Board, dated August 30, 2012.<sup>11</sup> The memo is attached to this response to comments for reference. DPR's August 30, 2012 memo does not indicate major concerns within the ESJ Watershed area for 6800(b) pesticides.

Board staff has reviewed the information provided by DPR. As stated in the DPR memo, only one 6800 (b) pesticide, hexazinone, associated with agriculture has been detected - in three of the 1,257 wells sampled in the Eastern San Joaquin River Watershed area. DPR engaged in a formal review process, including public hearings, to evaluate whether hexazinone polluted groundwater.<sup>12</sup> Based on the August 30, 2012 memo and a review of the process used for hexazinone, board staff concur there is no evidence of pollution associated with 6800(b) pesticides. Therefore, there is no reasonable basis for requiring monitoring of 6800(b) pesticides at this time.

Whether future monitoring for DPR's 6800(b) pesticides is necessary under the tentative Order will be based on review of data and discussions with DPR, consistent with the MAA. DPR's Groundwater Protection Program has a well-established program for monitoring pesticides in groundwater. Therefore, it is reasonable for the board to coordinate with DPR in monitoring for pesticides.

Comments suggesting that the board should defer entirely to DPR's Groundwater Protection Program for pesticides in groundwater would be contrary to the statutory requirements of Porter-Cologne. As described above, the agencies have committed to coordinating on pesticide issues. This coordination is based on the authorities of each agency, and is consistent with one

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<sup>11</sup> Duncan, D. Department of Pesticide Regulation. Sampling for Pesticides on the Groundwater Protection List (Title 3, California Code of Regulations section 6800[b]). August 30, 2012 –memo to Joe Karkoski, Central Valley Water Board.

<sup>12</sup> See [http://www.cdpr.ca.gov/docs/emon/grndwtr/hexazinone/subcommittee\\_findings.pdf](http://www.cdpr.ca.gov/docs/emon/grndwtr/hexazinone/subcommittee_findings.pdf) and [http://www.cdpr.ca.gov/docs/emon/grndwtr/hexazinone/directors\\_decision.pdf](http://www.cdpr.ca.gov/docs/emon/grndwtr/hexazinone/directors_decision.pdf) .

of the stated objectives of the PEIR. DPR does not have the same authorities as the board, and does not intend to take on the board's responsibility for pesticide discharges to groundwater. Likewise, the board does not intend to take on DPR's responsibilities for pesticide use (nor does the board have the same authorities as DPR).

### **Master Response 18. Attendance tracking at grower outreach third-party events**

#### ***Comment summary***

The tentative Order requires the third-party to conduct education and outreach events to inform Members of program requirements, water quality problems that need to be addressed, and the management practices available to address those issues. Each Member with parcels in a high vulnerability area or management plan area is required to attend at least one of these third-party outreach events per year. It is optional for other Members to attend third-party outreach events. The tentative Order also requires the third-party to maintain attendance lists for these outreach events, and provide the Water Board with an annual summary of the events conducted, how many Members attended the events, and which Members failed to meet this requirement.

Commenters assert that the third-party cannot and should not be required to track attendance at these events because some of these outreach events will be held by other groups outside the control of the third-party. Additional comments provide that the requirement to require growers to attend at least one third-party outreach meeting per year is unreasonable.

#### ***Response***

In response to the first concern, the tentative Order has been modified to require Members to confirm with the third-party that they attended an annual outreach event only if they are in a high vulnerability area.

The board staff believes it is reasonable to require Members within a high vulnerability or SQMP/GQMP area to attend at least one outreach meeting per year -as there should be several meetings held by the third-party throughout the year (as is currently occurring). The third-party generally schedules these meetings at times convenient for growers' schedules; Members in these areas will need to prioritize their schedules to attend at least one of these important events. It is imperative that Members within SQMP/GQMP areas and high vulnerability areas are aware of water quality problems and the practices that should be implemented to address the problems.

### **Master Response 19. Annual updates to farm evaluations**

#### ***Comment summary***

The tentative Order requires that Members in high vulnerability areas or in areas subject to a SQMP/GQMP must update their farm evaluation annually and submit it to the third-party. Other Members must update their farm evaluations every five years and submit it to the third-party. Ideas proposed by the comments on this topic include:

- Annual updates to farm evaluations are too frequent
- Farm evaluations should only be required in areas with known threats
- Annual updated farm evaluations will be recasts of virtually the same information every year
- The amount of paperwork received by the third-party will fill dozens of file storage boxes with documents the third-party will not review

#### ***Response***

Farm evaluation requirements are designed to occur at a reasonable frequency based on vulnerability factors and water quality problems. It is reasonable to initially require growers in high vulnerability areas and in areas subject to management plans to update their farm evaluations every year. These growers need to continue to re-assess the practices on their farm and implement additional or different practices in response to water quality monitoring results and nitrogen management plan summary report results. This annual re-assessment will aid Members in meeting the other requirements of the tentative Order, which include such things as meeting water quality objectives, preventing unreasonable effects to beneficial uses, or causing or contributing to pollution or nuisance. However, once Members have implemented practices and the year to year changes in practices are minimal, the frequency of farm evaluations may be reduced. The tentative Order has been modified to allow for the Executive Office to reduce the frequency of reporting.

Members who are in a low vulnerability area will only be required to update their farm evaluations every five years, since it is more reasonable to assume that practices in these areas are already protecting water quality and do not require reassessment as often.

The Central Valley Water Board staff expects the third-party to develop tools that will facilitate the electronic submittal of information. The board staff concurs that a process that relies on submitting paperwork will be much less efficient than electronic submittal and will not allow for the effective evaluation of the information provided.

See Master Responses 2 and 6, regarding utilization of farm evaluations as a “surrogate” to water quality monitoring in response to the comment that farm evaluations should only be required in areas with known threats.

See Master Response 6 in regards to the need for third-party summary reporting in response to whether the farm evaluation will be reviewed by the third-party or the board.

## **Master Response 20. Member sign up 120-day period**

### ***Comment summary***

The tentative Order proposes that all current coalition group Members should submit their Notice of Certification (NOC) and all new growers should submit their membership application to the third-party within 120 days of third-party receipt of a Notice of Applicability (e.g., Executive Officer approval of the third-party to represent Members under the tentative Order).

Commenters provide that this 120-day time frame is not long enough, especially considering that the third-party has up to 30 days at the beginning of this time frame to provide the NOC to Members. This could leave Members only 90 days to complete their NOC.

### ***Response***

The board staff intends to coordinate with the third-party to conduct aggressive outreach in the area to ensure current participants and non-participants in the Coalition Group Conditional Waiver are aware of the Order. The 120-day time frame is based on ensuring that outreach efforts are effective (a long time frame would not incentivize growers to sign-up right away after hearing about the new requirements). Future orders under the ILRP are not bound by the timeline identified in this Order (See Master Response 1). Additionally, it is not clear why an extended period of time is needed for an existing Member to certify their understanding that a new set of requirements applies to its parcel.

## **Master Response 21. Initial farm evaluation timelines**

### ***Comment summary***

The tentative Order requires growers to complete and submit a farm evaluation to the third-party

within 90 days of Executive Officer approval of the farm evaluation template. The third-party has 30 days to provide the farm evaluation template to its Members starting at the beginning of the 90-day period, so Members may have only 60 days to complete the evaluation, or less time, depending on when they become Members of the third-party. Commenters recommended that this 90-day time frame for farm evaluations be extended. One commenter suggested that Members be given six months to complete the farm evaluations.

### **Response**

The tentative Order has been modified to extend the farm evaluation timeline to 1 March 2014 for all members, except Members in low vulnerability areas with Small Farming Operations, who have until 1 March 2017. The change provides additional time while ensuring that management practice information will be submitted to the third-party in time for preparation of its annual report to the board.

### **Master Response 22. Surface water management plan due dates**

#### **Comment summary**

The tentative Order requires that surface water management plans be submitted within 45 days of the plan being triggered (see provision V.III, tentative Order). Comments were submitted requesting that this deadline be extended to 60 days.

### **Response**

The tentative Order has been modified to extend the due date for newly triggered management plans to 60 days.

### **Master Response 23. Private property**

#### **Comment summary**

Provision 13 is inconsistent with Water Code section 13267 and hampers private property rights. Water Code section 13267(c) states that any inspection “*shall be made with the consent of the owner or possessor of the facilities or, if the consent is withheld, with a warrant duly issued pursuant to the procedure set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the Code of Civil Procedure.*” As currently drafted, provision 13 ignores Section 13267 and attempts to allow inspections of private property at any time without notice to or consent from the landowner or obtaining a necessary warrant.

### **Response**

In response to the requests that the inspection provisions be revised to conform to Water Code section 13267(c), staff has proposed a late revision. The late revision would replace the language in provision 13 with the following text: “The Member understands that the Central Valley Water Board or its authorized representatives, may, at reasonable hours, inspect the facilities and irrigated lands of persons subject to this Order to ascertain whether the purposes of the Porter-Cologne Act are being met and whether the Member is complying with the conditions of this Order. To the extent required by Water Code section 13267(c) or other applicable law, the inspection shall be made with the consent of the Member, owner or authorized representative, or if consent is withheld, with a duly issued warrant pursuant to the procedure set forth in Title 13 Code of Civil Procedure Part 3 (commencing with section 1822.50). In the event of an emergency affecting the public health and safety, an inspection may be performed without the consent or the issuance of a warrant.” This language tracks that of Water Code section 13267(c), and is intended to address the constitutional and statutory concerns raised by the commenters. The provision is consistent with section 13267 of the Water Code, as it will result in notice being provided to an authorized representative prior to an inspection of facilities and does not change the Water Board’s obligation to obtain consent or

~~obtain a warrant absent consent. While the tentative Order does require Members to provide consent for inspections conducted during reasonable hours, the board's inspectors would not attempt a forcible entry if the inspectors do not obtain consent from an authorized person or obtain a warrant. Instead, the board would consider pursuing a formal or informal enforcement action for violation of the tentative Order or would otherwise seek to obtain a warrant. In response to the comment about notice, staff is proposing revisions that clarify that consent would be required only after the Member or its authorized representative receives notice from the board inspector.~~

~~Not only are the inspection provisions consistent with Water Code section 13267, they are consistent with Water Quality Order WQO 2004-0003 (*Agricultural Water Quality Coalition*), a State Water Board precedential decision. That decision reviewed inspection provisions within a 2003 waiver issued under the Central Valley Water Board's irrigated lands regulatory program. The provisions reviewed were nearly identical to the provisions in the tentative Order. In *Agricultural Water Quality Coalition*, the State Water Board first noted that the inspection requirements "are standard in most regulatory actions by the State Board and regional boards." (*Id.*, at p. 14) Indeed, since adoption of the *Agricultural Water Quality Coalition* decision, both the State Water Board and the Central Valley Water Board have adopted waste discharge requirements that include similar inspection provisions. (See, e.g. General Waste Discharge Requirements for Land Application of Biosolids, Order 2004-0012, at D.17; Waste Discharge Requirements General Order for Existing Milk Cow Dairies, Order No. R5-2007-0035, Standard Provisions and Reporting Requirements, at B.15.)~~

~~After noting that inclusion of inspection requirements was a standard practice, the State Water Board then explained, "[i]t is inappropriate that where a discharger seeks a right to discharge to waters of the state, that it should be expected to consent to reasonable access to its property." (*Id.*, at p. 14) The State Water Board also emphasized that "all discharges of waste into waters of the state are privileges, not rights" in explaining why reasonable inspection requirements are so common. (*Ibid.*, at footnote 33) The tentative Order, as revised (see above), provides a reasonable procedure consistent with the expectation that permittees or their authorized representatives will provide consent for compliance inspections upon receiving notice from the board's staff.~~

~~One commenter asserted that the inspection provisions are inconsistent with a trial court decision reviewing challenges to the board's conditional waivers adopted in 2003 (Orders R5-2003-0826 and R5-2003-0827). *Deltakeeper et al v. Central Valley Water Board et al.* (Super. Ct. Sacramento County, 2004, No. 04CS00235) and *California Farm Bureau Federation et al, v. State Water Board et al.* (Super. Ct. Sacramento County, 2004, No. 04CS00264). While the trial court ruling is not binding or precedential here, the board staff does not concur with the characterization of the ruling. Staff believes that the inspection provisions are consistent with, and are a natural extension of, the trial court's ruling. While the trial court did instruct the board to amend the inspection provisions of those waivers, the purpose was for the board to align the language of the waivers with the board's stated intent that a grower's withholding of consent would not be considered a violation of the waivers; significantly, the remand was not based on a ruling that the inspection provisions violated the Water Code. In fact, the trial court indicated that it might have otherwise agreed with the State Water Board that dischargers might be expected to consent to access in exchange for the protection of the waiver.~~

## **Master Response 24. Removing the representative groundwater monitoring program from tentative Order and creating a separate order for all third-parties**

### ***Comment summary***

Commenters contend that the representative groundwater monitoring program (RGMP) should not be included in the tentative Order at this time, because (a) several third-parties want to create a regional RGMP and there are current discussions underway about how best to develop it; (b) as written, the RGMP workplan would be due before the RGMP deadline for all the other third-parties, and if approved by the Executive Officer, they would have to begin implementation earlier than other third-parties, creating inequitable conditions for the ESJ Coalition; and (c) the RGMP needs to be coordinated with several entities that have specialized expertise to assist in developing an appropriate RGMP. Commenters contend that the deadlines for the ESJ Coalition should not precede those of other third-parties so as to put them at a financial disadvantage.

### ***Response***

To help clarify the goals and intent of the groundwater monitoring program, provisions for the RGMP have been modified to include renaming the RGMP to the “management practices evaluation program,” or MPEP. The MPEP will be developed to accomplish the same goal as the RGMP – primarily evaluating the effectiveness of management practices in protecting groundwater quality. However, groundwater quality monitoring is just one of the tools that the third-party can use to conduct the necessary studies to evaluate management practices effectiveness. Although the previously described RGMP allowed for other alternatives to groundwater quality monitoring, the description of the MPEP now focuses more on the intent of the studies rather than a particular method for completing them. The Central Valley Water Quality Control Board encourages cooperation between third-party groups in implementing the terms and conditions of the tentative Order. In order to address concerns regarding MPEP development and to foster cooperation, the board staff has included an option to allow the ESJ Coalition to join together with other third-party groups in the development of a regional/group MPEP. A joint workplan can be developed that ensures the work conducted in the different third-party areas is synchronized. The joint workplan would not be due for approximately 2 ½ years after the Order is adopted. Because all other ILRP orders are expected to be adopted within 1 year, the Members of the Eastern San Joaquin River watershed third-party should not incur MPEP costs prior to similarly situated growers in other areas of the Central Valley.

## **Master Response 25. Finding 36**

### ***Comment summary***

Finding 36 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. With the templates for annual nitrogen budgets, farm evaluations, and sediment and erosion control plans not created, costs have not been analyzed. Staff has not attempted to balance cost with the water quality benefits. The level of staffing required to successfully implement the tentative WDR will be enormous and the associated water quality benefits of many of those requirements will be minimal.

### ***Response***

The commenters take issue with a finding in the tentative Order 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.

As stated above, the Central Valley Water Board 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 July 17, 2012. To estimate costs for this tentative Order, staff used the same study used to develop the Basin Plan amendments. As discussed in Master Responses 2 and 3, staff believes the cost estimates for this tentative Order are appropriate and include the elements required by the tentative Order.

Finally, the commenters note that the Central Valley Water Board has not attempted to determine whether the estimated costs of compliance are balanced by the water quality benefits of the tentative Order. While the board staff has considered economic and water quality factors in the development of the tentative Order (see e.g., tentative Order, Attachment A), the Porter-Cologne Water Quality Control Act does not require a cost-benefit analysis in conjunction with the development of waste discharge requirements (see also Master Response 2).

## **SINGULAR RESPONSES**

### **Comment Letter 1**

#### **1-3. Recommendation to include requirements for fertilizer use reporting**

##### ***Comment summary***

A barrier to enforcement is the limited amount of information to be made public by the third-party groups in their biennial reports to the board. While nitrogen budgets ("nitrogen management plan summary reports" in the revised tentative Order) are extremely useful for planning and reporting, they only provide a ratio of nitrogen applied versus nitrogen removed. Reporting of fertilizer application on the same square mile basis will, when combined with the nitrogen ratio, provide important information about nitrogen loading to groundwater. This information will be critical both to understanding groundwater monitoring data and in prioritizing Members for inspection and enforcement. Fertilizer use, much like pesticide use, is not a confidential trade secret and is an indicator that should be provided as part of the nitrogen budgets ("nitrogen management plan summary reports" in the revised tentative Order) to determine nitrogen loading of groundwater.

##### ***Response***

This comment describes a concern that there will be limited information made public by third-party groups under the tentative Order. The board staff disagrees with this concern. The tentative Order establishes requirements for the third-party to submit reports to the board. The reports will provide Member information, management practices, and nitrogen management plan summary reports at the township level (see response to Comment 13-3 and Master Response 6). Also, the board will continue to make third-party monitoring and management plan reports available online to facilitate public review.

This comment also describes a need for an estimate of the potential amount of nitrogen that could leach to groundwater. However, it must be understood that this number would only be an estimate of potential to leach due to the complexity of nutrient management (see Master Response 5). The MRP has been modified to require that the third-party's MPEP develop an annual estimate of the potential mass loading of nitrogen to groundwater and other transport and storage mechanisms in high vulnerability groundwater areas.

## **Comment Letter 2**

### **2-1. Support for farm management performance standards and nitrogen budgets**

#### ***Comment summary***

The commenter provides support for the Order's approach to control nonpoint source pollution. Specifically, the commenter supports the farm management performance standards and approach to control nutrient discharges to surface and groundwater with the development of nitrogen budgets.

#### ***Response***

The board staff recognizes the commenter's support for nitrogen management plans (previously "nitrogen budgets") and farm management performance standards.

### **2-2. Prevention of toxicity**

#### ***Comment summary***

Bullet "e" of the farm management performance standards should be amended to read "e. prevent pollution, toxicity and nuisance."

#### ***Response***

The commenter's suggestion to add preventing "toxicity" to the farm management performance standards would not increase the tentative Order's water quality protection as the performance standards already provide requirements to "*achieve and maintain water quality objectives and beneficial uses.*" Water quality objectives include basin plan narrative toxicity objectives, requiring that "*All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.*"

### **2-4. Water Board establishment of trigger limits**

#### ***Comment summary***

The commenter supports the Water Board establishing the trigger limits for waste constituents, rather than third parties, to ensure consistency between orders.

#### ***Response***

The board staff recognizes the commenter's support for board establishment of trigger limits. The tentative Order describes that the board will develop trigger limits in consultation with the Department of Pesticide Regulation (for pesticides) and other agencies as appropriate. Interested parties will have an opportunity to comment on the trigger limits before they are finalized.

### **2-6. TMDLs**

#### ***Comment summary***

This comment provides support for the tentative Order's approach for addressing impairments. Also, the commenter recommends that SQMPs should include TMDL loading information and management practices recommendations for individual growers, where TMDLs are available, or are newly developed.

**Response**

The board staff agrees that, where applicable, SQMPs should include TMDL loading information and management practice recommendations. This requirement is captured in the revised tentative Order under section VIII.K, Total Maximum Daily Load (TMDL) Requirements:

*Approved TMDLs in the Basin Plan that apply to water bodies within the third-party's geographic area and have allocations for irrigated agriculture shall be implemented in accordance with the applicable Basin Plan provisions. Where required, the third-party shall coordinate with Central Valley Water Board staff to develop a monitoring design and strategy for TMDL implementation. Where applicable, SQMPs shall address TMDL requirements.*

**2-7. Coordination with other regulatory actions and financial assistance programs****Comment summary**

The commenter encourages the board to coordinate regulatory actions with technical and financial assistance programs to improve water quality and enhance the long-term viability of agriculture.

**Response**

The board staff agrees with the commenter and will look for opportunities to coordinate with financial assistance programs in the development and implementation of the long-term irrigated lands program.

**2-8. Program focus: management practice implementation****Comment summary**

The commenter recommends focusing on the implementation of practices to reduce percolation of wastes to groundwater in the high vulnerability areas as a complement to its current emphasis on monitoring groundwater quality. Any incentives the board can put in place for growers to reduce discharges are likely to result in more immediate water quality improvements.

**Response**

As provided in Attachment A, tentative Order, the goals of the tentative Order are to:

*“Understanding that irrigated agriculture in the Central Valley provides valuable food and fiber products to communities worldwide, the overall goals of the ILRP are to (1) restore and/or maintain the highest reasonable quality of state waters considering all the demands being placed on the water; (2) minimize waste discharge from irrigated agricultural lands that could degrade the quality of state waters; (3) maintain the economic viability of agriculture in California’s Central Valley; and (4) ensure that irrigated agricultural discharges do not impair access by Central Valley communities and residents to safe and reliable drinking water. In accordance with these goals, the objectives of the ILRP are to:*

- *Restore and/or maintain appropriate beneficial uses established in Central Valley Water Board water quality control plans by ensuring that all state waters meet applicable water quality objectives.*
- *Encourage implementation of management practices that improve water quality in keeping with the first objective, without jeopardizing the economic viability for all sizes of irrigated agricultural operations in the Central Valley or placing an undue burden on rural communities to provide safe drinking water.*
- *Provide incentives for agricultural operations to minimize waste discharge to state waters from their operations.*

- *Coordinate with other Central Valley Water Board programs, such as the Grasslands Bypass Project WDRs for agricultural lands total maximum daily load development, CV-SALTS, and WDRs for dairies.*
- *Promote coordination with other regulatory and non-regulatory programs associated with agricultural operations (e.g., DPR, the California Department of Public Health [DPH] Drinking Water Program, the California Air Resources Board [ARB], the California Department of Food and Agriculture, Resource Conservation Districts [RCDs], the University of California Extension, the Natural Resources Conservation Service [NRCS], the USDA National Organic Program, CACs, State Water Board Groundwater Ambient Monitoring and Assessment Program, the U.S. Geological Survey [USGS], and local groundwater programs [SB 1938, Assembly Bill [AB] 3030, and Integrated Regional Water Management Plans]) to minimize duplicative regulatory oversight while ensuring program effectiveness.”*

The tentative Order’s provisions and requirements will continue to reflect management practice implementation as the focus of the ILRP, as the goals and objectives describe. Specifically, farm evaluations, nitrogen management plans, and management practice implementation and reporting through SQMP/GQMPs will work to reduce waste discharges to state waters.

### **Comment Letter 3**

#### **3-3. Individual grower data should remain on-farm**

##### ***Comment summary***

It is essential for a successful program that all required reports should be kept on farm and reported only to the third-party (coalition) as necessary in a more defined high vulnerability area. The board should only have access to summary data from the coalition and no individual grower data should be made available. Reporting directly to the board or to any other entity will diminish the coalition’s effectiveness and purpose.

##### ***Response***

The tentative Order’s requirements generally match the recommendations made by the commenter. Nitrogen management plan information will be submitted to the third-party only in high vulnerability areas and then this data will be summarized by township and submitted to the board. Farm evaluations will be submitted to the third-party and then summarized by township in a report to the board. Sediment and erosion control plans will be kept on-farm. However, the tentative Order does require the third-party to provide individual Member-reported information, such as nitrogen management plan summary reports, upon request by board staff. This is to ensure that the board may follow-up on information reported in summary reports and ultimately enforce the requirements of the Order. There may also be cases where the board needs to request specific data from Members in isolated situations, but as long as the third-party structure works and the tentative Order’s requirements are being met, Members will not, in general, report directly to the board.

#### **3-4. Support for the coalition group structure**

##### ***Comment summary***

The commenter supports keeping the coalition group structure in its current format and urges the board to continue this relationship. The current structure with the coalitions as the intermediary is a vital component for increasing participation and efficiency. The structure began with the conditional waiver and continues to build trust and relationships with the grower community.

**Response**

The board staff recognizes the commenter's support for keeping the coalition group, or "third-party" structure as an integral part of the ILRP. Staff agrees that it can be an effective system as long as all parties involved are able to meet the requirements of the tentative Order.

**3-5. Farms under 100 acres in size****Comment summary**

The commenter recommends that the ILRP focus on farms with more than 100 acres, because small farms (less than 100 acres) make up 52 percent of the total number of farms, yet they only represent five percent of the total farmland (based on USDA census data in California). The commenter states that including these smaller farms adds enormous cost burdens to third-party groups and the board while not improving water quality.

**Response**

While small farms do account for minimal overall acreage, there is no information to suggest that waste discharges to surface and groundwater from small farms do not cause impacts or exceedances of water quality objectives; especially localized impacts in high vulnerability areas. However, the board staff is concerned about the burden the tentative Order places on small farms considering their reduced ability to absorb increased costs. Therefore, the tentative Order has been modified to reduce the reporting burden on small farms in an effort to reduce costs while maintaining water quality goals. A less than 60 acre definition of small farms was selected for the revised tentative Order based on further input from the agricultural representatives.

**Comment Letter 4****Comment summary**

In this letter, the commenter provides that the ILRP has all the elements necessary for a successful groundwater monitoring program that provides necessary flexibility for implementation. The commenter also suggests that the ILRP would benefit from a clearer outline and rationale of the regulatory approach taken to monitor waste discharge to groundwater from the non-point sources regulated under the ILRP. The commenter provides suggested modifications and reorganization to help provide, in the commenter's opinion, a more clear discussion of the groundwater monitoring program described in Attachment B of the tentative Order.

**General response to Comment Letter 4**

In response to comments received concerning ambiguity in the tentative Order's groundwater monitoring requirements, the groundwater monitoring workplan sections of the tentative Order have been modified to clarify the intent of the groundwater monitoring effort in the ILRP.

While the majority of the proposed changes are primarily for clarification purposes, the commenter does suggest farm management practices monitoring as an element for demonstrating the performance of an individual Member with respect to the potential for waste discharge. This suggestion has been incorporated into the development of the "Management Practice Evaluation Program" section of the tentative MRP (Attachment B to the Order). The commenter's suggestions also include that the MPEP (previously the "RGMP") may utilize existing monitoring wells where appropriate. Attachment A includes this suggestion.

## **Comment Letter 5**

### **5-3. Finding 54**

#### ***Comment summary***

Finding 54 has been significantly revised to now incorporate numerous independent clauses into one paragraph. Specifically, the clause regarding the privilege to discharge waste into waters of the state needs to be separate and independent from clauses regarding coalition duties such as contact information of members, as well as access to private properties. Given that each of these topics is mutually exclusive, the clauses should not be merged into the same finding paragraph.

#### ***Response***

The comment is noted. However, staff is not proposing any changes to the text of the finding. Staff does not agree that the topics within finding 54 (finding 55 in the revised tentative Order) are mutually exclusive. The topics covered by the finding are related to what constitutes reasonable site access as contemplated by State Water Board Order WQO 2004-0003 (*Agricultural Water Quality Coalition*).

## **Comment Letter 6**

### **6-1. Individual farmer monitoring program concerns**

#### ***Comment summary***

The Central Valley Water Board is exceeding its jurisdiction by establishing a WDR program that is designed to be a very expensive research project to determine if there is a current discharge from any particular farm that actually threatens water quality. The board needs to take a step back, look at the expense of the program it has outlined, and critically assess whether the expense is justified. The immensely expensive paperwork exercise proposed by the tentative Order will not help improve water quality. The board needs to adopt an order that is consistent with the scope of its jurisdiction. This order continues to exceed the board's jurisdiction by treating every farmer as a discharger without justification.

#### ***Response***

The commenter appears to be mistaking the regional approach to monitoring put forth in the tentative Order for an individual monitoring approach. In the case of surface water monitoring, the current ILRP's regional approach will generally be continued in the tentative Order. For groundwater, neither trend monitoring nor the management practices evaluation program (MPEP) (previously the representative groundwater monitoring program) is directed at an individual Member. In the case of trend monitoring, existing shallow groundwater supply wells will be utilized to track trends in groundwater quality over time. A Member's well may be chosen for trend monitoring; however, the well will be used to characterize a geographical area (determined by the spacing of wells proposed by the third-party group) not a single farming operation. The use of existing shallow groundwater supply wells was chosen in an attempt to minimize costs. In the case of the MPEP, the effectiveness of management practices to protect groundwater quality will be determined not for each Member, but for varying classes of practices/commodities/physical conditions. From this approach, Members properly implementing practices found to be protective of groundwater quality (or equivalent) would be assumed to be in compliance with the tentative Order's water quality requirements. Trend and MPEP monitoring are meant to serve as an alternative to individual groundwater monitoring at each operation. Individual surface/groundwater quality monitoring is generally required of dischargers regulated by the Central Valley Water Board.

In regards to the commenter's reference to the tentative Order as an expensive paperwork exercise that may not benefit water quality, the reader is referred to Master Responses 2, 5, and 6 for discussions of reasonableness of the tentative Order's requirements and the need for farm evaluations/ nitrogen management information.

With respect to the board's jurisdiction, finding 18 of the revised tentative Order clearly explains that Division 7 of the Porter-Cologne Water Quality Control Act provides the board with authority to regulate waste discharges that could affect the quality of the waters of the state, which includes both surface water and groundwater. 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 irrigation 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.

## **Comment Letter 7**

### **7-4. Beginning of timeframe for submittal of NOCs and NOIs**

#### ***Comment summary***

Sections VII A.2 and 3 of the tentative Order contain time schedules for growers to become Members of the third-party. Section A.2 is linked to Executive Officer issuance of approval of the third-party (notice of applicability, or "NOA"). Section A.3 is linked to the overall effective date of the Order.

#### ***Response***

This inconsistency in the tentative Order has been corrected by linking both sections' time schedules to Executive Officer issuance of a NOA to the third-party. Additionally, see Master Response 20 regarding the sign-up period.

### **7-5. Due date for first membership list**

#### ***Comment summary***

In the tentative Order, coalitions are given 150 days from the issuance of the coalition's NOA to submit membership lists to the Central Valley Water Board. These 150 days are reduced to 30 days when one considers that growers are given 120 days from the issuance of the NOA to enroll with the third-party as "Members;" through a notice of confirmation (NOC) for existing Members, and a notice of intent (NOI) for new Members. Section VIII.C of the tentative Order sets forth a list of requirements to be included in the membership list. Coalitions have thousands of members and parcels to be compiled into a list with significant other information including but not limited to owner, operator, section, township and range, address and phone number, county APN, and irrigated acreage. The commenter contends that, if the board wants these lists to be complete and accurate they must give coalitions the time necessary to compile an accurate list.

### ***Response***

Considering that the third-party will need to collect and report new information for each Member in addition to the previously required information under Order R5-2006-0053 and the third-party will have many new Members to enroll and track, the tentative Order has been modified to require that the first membership list be due within 180 days of receiving an NOA from the board, which is 60 days after the Notice of Confirmation is due from existing Members and 60 days after the deadline for new Members to join the third-party group by directly applying to the third-party (Provision VII.A.1 of the Order). It is important to note that the board will not be able to begin compliance and enforcement efforts towards non-Members until it has received the Membership List from the third-party.

### **7-13. Phase-in of tentative Order's requirements**

#### ***Comment summary***

The commenter states that the board needs to phase in the implementation of the new requirements so as not to disrupt the current efforts to address water quality issues. The comment includes concerns that unrealistic deadlines and ineffective phase-in of requirements will lead to board enforcement on unachievable measures (e.g., unrealistic timelines). The commenter provides that the effort to communicate with existing and potential new Members will take significant time (not reflected in the current timelines).

### ***Response***

The tentative Order has been modified to extend deadlines for the phase-in of requirements in response to comments. Examples include providing more time for Small Farming Operations to complete required reports. Also, the tentative Order allows the third-party to prioritize certain requirements (e.g., establishing priorities within high vulnerability groundwater areas). These adjustments should provide reasonable time frames for the third-party and Members to meet requirements while balancing the need to protect water quality.

### **Comment Letter 8**

### **8-10. Management practices and groundwater vulnerability determinations**

#### ***Comment summary***

This comment provides the concern that the tentative MRP proposes that management practices should be used in identifying vulnerable areas. The commenter contends that this would be inappropriate as it implies that vulnerability determinations should be made on a field scale, which is not the purpose of the GAR.

### ***Response***

The tentative MRP does not require that vulnerability be determined based on a "field scale" analysis of management practices or physical characteristics. Also, the revised tentative MRP provides the flexibility for the third-party to provide the rationale for proposed vulnerability determinations.

### **8-15. Proposed removal of groundwater quality management plan requirements**

#### ***Comment summary***

The commenter recommends that groundwater quality management plan (GQMP) trigger requirements be removed from the Order. The comment provides that rather than having GQMPs triggered as proposed in the tentative Order, the GAR should identify areas where the third-party should concentrate its efforts on education and outreach to its Members, as well as identifying management practices for implementation. These areas would be prioritized in the GAR and progress would be reported in monitoring reports and review of trend monitoring data.

Additional actions related to improved irrigation and fertilizer practices would be developed through the RGMP (“MPEP” in the revised tentative Order). The commenter proposes that relevant time schedules could be included in the GAR or in a GQMP and that section XII, Time Schedule for Compliance, of the tentative Order should be appropriately modified.

### **Response**

The tentative Order allows for the development of a “Comprehensive Groundwater Quality Management Plan” as part of the GAR instead of separate GQMPs (section VIII.H of the revised tentative Order). The process envisioned for the comprehensive plan is very similar to that proposed by the commenter, whereby the plan would be submitted with or possibly as part of the GAR. Updates to the comprehensive plan would be done as part of the management plan progress report. The triggers for GQMPs remain in the tentative Order so that there is direction on which areas must be considered in the GAR and the comprehensive groundwater quality management plan, while the time frame for submittal of separate GQMPs would no longer apply if an applicable comprehensive groundwater management plan is in effect. Considering that the tentative Order provides a process very similar to the commenter’s suggestion, modifications are not necessary.

## **8-17. Anti-degradation policy and high quality waters**

### **Comment summary**

- a. The tentative Order incorrectly characterizes application of the state's antidegradation policy by implying that the application of the policy is triggered by *“any activity which discharges a waste to existing high quality waters,”* (see page 8). The antidegradation policy is triggered when the board is taking an action that may cause degradation to high quality waters. It is not applicable if the Central Valley Water Board's action will not cause degradation.
- b. Even though application of the antidegradation policies may be triggered for changes that have already occurred, such an application only occurs when the changes have not already been reviewed for consistency with those policies. “In other words, discharges from irrigated agriculture were found to be consistent with Resolution 68-16 in 1982, and therefore only a Central Valley Water Board action that would degrade water quality is subject to the state and federal antidegradation policies. As already indicated, the proposed action would not degrade water quality but would improve water quality. Accordingly, the action taken here does not trigger application of the state or federal antidegradation policies.”

### **Response**

The text of the tentative Order has been revised to clarify that the antidegradation policy is triggered when the Central Valley Water Board authorizes the degradation of high quality waters.

Staff disagrees with the comment that the antidegradation policy is not triggered by the action in the tentative Order. This is because the fundamental premise of the comment – that the Order does not authorize degradation – is flawed. As Attachment A of the tentative Order states: “[t]his Order allows limited degradation of existing high quality waters.” Staff looked at current water quality conditions and determined that some surface waters and groundwaters are high quality and subject to Resolution 68-16. The Order authorizes limited degradation of high quality waters.

The 1982 order did not authorize degradation of groundwater to the same degree. Resolution 82-046 included waivers for “agricultural commodity wastes” that were “[s]mall, seasonal and confined to land,” and discharges of tailwater from facilities “[o]perating to minimize sediment to meet Basin Plan turbidity objectives and to prevent concentrations of materials toxic to fish or wildlife.” Neither of these provisions authorized degradation of groundwater. The negative

declaration supporting the resolution found that the covered discharges were small in volume, non-toxic and would have no adverse water quality impacts. The tentative Order covers a significantly expanded universe of operations. Staff agrees that a new antidegradation analysis generally is not required for degradation that was previously authorized, based on the plain language of Resolution 68-16, absent a new or expanded discharge or a reduction in treatment requirements. However, the body of knowledge has vastly increased since 1982 about groundwater quality, the impacts of irrigated agriculture and the types and effectiveness of water quality management practices. Agricultural practices that may have been state of the art in 1982 may no longer represent BPTC. Even where Resolution 68-16 does not require a new antidegradation analysis, nothing precludes the board from updating a prior analysis when circumstances have changed significantly or significant new information is available. The State Water Board has held that regional water boards can, and should, take preventative action to regulate discharges that may affect the quality of the waters of the state from degradation. (State Water Board Order No. WQ 82-2 (Marina County Water Dist.), p. 16.) As such, the Board staff has properly determined that adoption of this order triggers application of the state antidegradation policy. Further discussion of staff's antidegradation analysis is provided in Attachment A of the tentative Order, in the section entitled "Statement of Policy with Respect to Maintaining High Quality Waters in California (State Water Board Resolution 68-16)."

## **8-18. Finding 5**

### ***Comment summary***

Finding 5 attempts to clarify what the tentative Order is not intended to regulate. However, by omitting other agricultural facilities within this list, it is implying that the tentative Order is intending to regulate water quality in other parts of agricultural facilities, and in particular, as it leaves the field regardless of whether the return flows or storm water runoff causes or contributes to violations of receiving water quality standards.

The comment includes reference to section 13000 of the Water Code, which establishes that: "*...activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.*" The commenter provides that regulation of water quality at the edge-of-field is not reasonable and that waste discharge requirements must be related to conditions of the receiving waters (Water Code section 13263(a)).

### ***Response***

Finding 5 has been modified to remove the references to the types of structures that may convey surface water on an agricultural field to ensure the finding does not inadvertently suggest an unintended limitation.

Stormwater and irrigation water return flows contain waste as defined by section 13050(d). The discharge of these flows may affect the quality of receiving waters. Therefore, these discharges are subject to regulation by the Central Valley Water Board. 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 is subject to waste discharge requirements (Water Code section 13260). Therefore, violation of a receiving water standard is not a prerequisite to regulation under waste discharge requirements.

The board staff disagrees that the finding implies that the tentative Order is intending to regulate water quality in other parts of agricultural facilities. This finding clearly establishes that the tentative Order is not intended to regulate water quality within the Member's agricultural fields.

The commenter must also consider Finding 1, which clearly establishes that the tentative Order is to serve as waste discharge requirements for waste discharges from “irrigated lands.” The tentative Order would not apply to other facilities or operations, with waste discharges, located near or within those irrigated lands (e.g. other waste producing operations owned by the Member).

The comment also provides concerns over whether the discharge of irrigation water or stormwater from agricultural property should be regulated (these discharges of waste may affect the quality of state waters; see Findings 14-20 of the tentative Order). An important distinction must be made when considering this comment in regards to what is meant by “regulation” of water quality as it leaves the irrigated agricultural field (edge-of-field). For the purposes of this discussion, regulating water quality at the edge-of-field would entail ensuring that the wastes discharged in irrigation water/stormwater are of high enough quality to ensure that the discharge does not cause or contribute to an exceedance of a water quality objective in the receiving waters (see section III of the tentative Order, Receiving Water Limitations). This is consistent with the commenter’s concern that waste discharge requirements be related to conditions in the receiving waters.

It is expected that each Member will conduct operations to ensure that its waste discharge does not cause exceedance of water quality objectives in the receiving water. Accordingly, there is an edge-of-field responsibility associated with discharging waste under the tentative Order. Because individual Members have a responsibility regarding their waste discharge, it is reasonable to regulate water quality at the edge-of-field, after which the Member has little or no control over their discharge. The tentative Order does not establish edge-of-field “numeric effluent limitations” as seems to be the concern of the comment.

#### **8-19. Nitrate: compound and/or contaminant**

##### ***Comment summary***

The next to last sentence of finding 14 is confusing. It should state, "Depending on the frequency of application and the amount applied, certain soluble compounds, such as nitrate, may share common pathways to groundwater with soluble pesticides." Nitrates should not generally be classified as contaminants unless they cause or contribute to an exceedance of a water quality objective in waters of the state.

##### ***Response***

The tentative Order has been revised in consideration of this comment. However, it must be noted that while nitrate in groundwater may not always cause “contamination” within the meaning of Water Code section 13050(k), nitrate is considered a waste under the definition provided in section 13050(d) of the Water Code. As such, waste discharges of nitrate by irrigated agricultural operations must not cause/contribute to an exceedance of a water quality objective in receiving waters.

#### **8-20. Individual monitoring program**

##### ***Comment summary***

Finding 21 states that Members must comply with an individual monitoring and reporting program, as specified by the board or Executive Officer. As written, it implies that by being subject to the terms of the Order that a Member is automatically subject to any individual MRP issued by the board or Executive Officer. The commenter contends that this is not consistent with the Water Code and recommends revising the finding to clarify that any individual MRPs will be ordered pursuant to and in accordance with the provisions of Water Code section 13267.

**Response**

The finding has been revised in consideration of this comment (finding 22 in the revised tentative Order).

**8-24. “Improve and protect” water quality****Comment summary**

Provisions IV.A.3 and IV.B.6 would require Members to implement management practices that do more than achieve compliance with water quality standards (“to improve and protect water quality”). Such a requirement exceeds the Central Valley Water Board's regulatory authority. The commenter recommends that this requirement be removed.

**Response**

Provisions IV.A.3 and IV.B.6 of the tentative Order have been modified to remove the suggestion that Members are required to improve water quality.

**8-30. Subwatershed groups and other groups acting on behalf of the third-party****Comment summary**

Provision IV.C.10 includes the requirement that activities conducted on behalf of the third-party by subsidiary groups (e.g., subwatershed groups) meet the requirements of the tentative Order. The comment provides that there are no subwatershed groups in the East San Joaquin Water Quality Coalition, therefore this provision does not apply. The commenter recommends removal of the provision.

**Response**

The text referring to subsidiary groups has been removed. However, the provision has been maintained, since the tentative Order provides options for the third-party to work with other groups (group options) to comply with certain requirements (e.g., development of templates, development and implementation of the MPEP).

**8-32. Due date of first nitrogen budget worksheets****Comment summary**

As proposed, the first annual nitrogen budget (“nitrogen management plan summary report” in the revised tentative Order) could be required to be submitted by March 1, 2013, which would be 5 months after the adoption of the tentative Order if adopted at the October 2012 Central Valley Water Board meeting. This is an unreasonable timeline; it should be changed so they are not due any sooner than March 1, 2014.

**Response**

The tentative Order has been modified as suggested to ensure that Members and third-parties have a reasonable amount of time between availability of the approved nitrogen management plan template and submittal of the first nitrogen management plan summary reports by Members.

**8-33. Groundwater monitoring workplan submittal timelines****Comment summary**

Provision VIII.F: The timing of submittal of the trend and representative groundwater quality monitoring workplans should start from Executive Officer approval of the groundwater assessment report (GAR), not from receipt of the Notice of Applicability from the Executive Officer (i.e., approval of the third-party to represent Members). This is because until the GAR is approved by the Executive Officer, it will be difficult for the third-party to develop groundwater monitoring workplans.

**Response**

The tentative Order has been modified so that trend and MPEP (previously “RGMP”) monitoring workplan due dates are tied to Executive Officer approval of the GAR.

Regarding comments recommending removal of the MPEP monitoring requirements from the tentative Order, see Master Response 24.

**8-35. Question 4 – surface water quality monitoring questions**

**Comment summary**

Attachment A contains a series of questions that the tentative Order’s surface water monitoring program is designed to answer. The fourth question should be modified to read: "Are irrigated agricultural operations of Members in compliance with the provisions of the WDR?"

**Response**

The tentative Order has been modified as suggested by this comment.

**8-37. Toxicity clarification**

**Comment summary**

The commenter recommends modification of the section titled “Surface Water Management Plans,” Attachment A, as follows. Recommend changing the sentence that contains "algae toxicity, sediment toxicity, minnow toxicity, and water flea toxicity" to "sediment toxicity to *Hyalella azteca*, and water column toxicity to algae (*Selenastrum capricornutum*), fathead minnows (*Pimephales promelas*), and water fleas (*Ceriodaphnia dubia*)."

**Response**

This recommended change has been made to Attachment A of the tentative Order.

**8-38. Table 2, Attachment A trigger limits for pH**

**Comment summary**

The commenter recommends modification of Table 2, Attachment A, as follows. The trigger limit for pH should be updated from "6.5-8.5" to "< 6.5 or > 8.5".

**Response**

This recommended change has been made to Attachment A of the tentative Order.

**8-39. Attachment A references to federal surface water discharge permitting provisions**

**Comment summary**

The commenter recommends that all references to Title 40, Code of Federal Regulations (CFR) section 122.44(d) and its provisions be deleted from Attachment A, because these apply only to federal National Pollutant Discharge Elimination System (NPDES) permits and not state-issued waste discharge requirements. When interpreting narrative objectives for state-issued waste discharge requirements, the Central Valley Water Board must rely on associated provisions in the Basin Plan - not federal permit provisions.

**Response**

All references in Attachment A to 40 CFR 122.44(d) have been removed.

**8-40. References to Quality Assurance Project Plan Guidelines**

**Comment summary**

The tentative MRP references Quality Assurance Project Plan (QAPP) Guidelines on pages 19, 20, 21, 23, and 24. It also states that the East San Joaquin Water Quality Coalition's existing QAPP "...is acceptable for use by the third-party." It is recommended that the reference to QAPP Guidelines be updated to reference the approved existing QAPP for the East San Joaquin Water Quality Coalition.

**Response**

Changes have been made to Attachment B to reference the East San Joaquin Coalition's existing QAPP where appropriate.

**8-41. Represented monitoring sites**

**Comment summary**

The comment provides the following recommendation.

Tentative MRP, Provision III.A.2: In the last paragraph of this section, the first sentence should be revised as follows: "Any watershed areas where irrigated lands discharge to surface waters that do not contain a monitoring site...."

**Response**

The sentence has been clarified. It is important to note that even in the absence of surface water discharge, Members may affect surface waters through mechanisms such as overspray or drift of pesticides.

**8-42. Missing footnote**

**Comment summary**

Tentative MRP, Table 2: The third row of Table 2 lists a site name of "TBD<sup>1</sup>" with the footnote reference leading to no footnote.

**Response**

Table 2 has been modified to address this concern.

**8-43. Toxicity clarification**

**Comment summary**

Tentative MRP, Provision III.C.4.b: The first sentence of the third paragraph states that pesticide analysis should be performed on sediment samples that exhibit "*greater than or equal to a 20 percent reduction in organism survival compared to the control....*" However, the trigger limit for *Hyalella* toxicity, the organism to which this provision applies, is less than 80 percent survival of the organisms compared to the control (Table 2, Attachment A). This section of the MRP should be changed to remove "*or equal to*" to be consistent with the water quality trigger limit.

**Response**

Attachment B, tentative Order has been modified to address this concern.

**8-44. Groundwater trend monitoring for total kjeldahl nitrogen**

**Comment summary**

This comment recommends that total kjeldahl nitrogen (TKN) monitoring be removed from the trend groundwater monitoring program. The commenter contends that TKN monitoring is unnecessary and provides no useful information.

**Response**

Groundwater trend monitoring for TKN has been removed from the tentative MRP.

#### **8-45. Clarifying edits**

##### **Comment summary**

Tentative MRP, Provision IV.D.2: The statement on line 7 of the top paragraph should read "groundwater monitoring data are collected..."

##### **Response**

In response to comments received concerning ambiguity in the tentative Order's groundwater monitoring requirements, the groundwater monitoring workplan sections of the tentative Order and MRP have been modified to clarify the intent of the groundwater monitoring effort in the ILRP.

#### **8-46. First monitoring report due date**

##### **Comment summary**

Tentative MRP, Provision V.C: The May 2014 due date for the first monitoring report does not work with respect to groundwater. The earliest that a groundwater monitoring report could be provided, pending approval and implementation of workplans, would be sometime in 2016.

##### **Response**

The monitoring report provisions are designed to require that the third-party summarize and analyze activities and data collected for the identified reporting period. In the event that data are not collected for groundwater due to the timing issues described in the comment, the monitoring report would just state that no groundwater quality monitoring was conducted pending the approval and implementation of the groundwater quality monitoring workplan.

#### **Comment Letter 9**

#### **9-1. 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 "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.

## **9-2. Membership for owner or operator**

### ***Comment summary***

The commenter supports the change from the draft Order to the tentative Order to require only the owner or the operator to obtain membership in the third-party, rather than both obtaining membership.

### ***Response***

The board staff recognizes the commenter's support to require only the owner or operator to obtain membership in the third-party, rather than requiring both to obtain membership. It is important to note that whichever of the two parties (owner or operator) obtains membership is obligated by the tentative Order to notify the other party of the membership (see provision VII.A).

## **9-5. "High quality waters" vs. "quality waters"**

### ***Comment summary***

In 1968, the State Water Board wanted to provide special protection for the state's pristine "high quality waters" as distinct from mere "quality waters", which would be those represented by waters meeting the Basin Plan standards. For those pristine high quality waters, the antidegradation policy provided for specific regulatory efforts. This general order should identify those waters which are classified as high quality, and those which are only quality waters.

### ***Response***

Appendix A to the PEIR and Attachment A of the tentative Order describe in detail the proposed approach to compliance with State Water Board Resolution 68-16. As mentioned in the PEIR, very little guidance has been provided by the State Water Board with respect to applying the antidegradation policy to a general permit where multiple water bodies are affected by various discharges, some of which may be high quality waters and some of which may by contrast have constituents at levels that already exceed water quality objectives. In the context of the tentative Order, which aims to regulate discharges to a very large number of water bodies, each with numerous constituents, making comprehensive determinations as to water quality is a near impossible task. There is no comprehensive, waste constituent-specific information for all water bodies in the permit area available for current conditions.

With that said, Attachment A of the tentative Order explains how data collected by the Central Valley Water Board, dischargers, educational institutions, and others demonstrate that many water bodies within the Eastern San Joaquin River Watershed are already impaired for various constituents that are or could be associated with irrigated agricultural activities. As described in Attachment A, there are surface water quality management plan requirements for the following constituents and indicators: ammonia, arsenic, chlorpyrifos, copper, DDE, diazinon, diuron, dissolved oxygen, electrical conductivity, *E. coli*, lead, molybdenum, nitrate, pH, simazine, total dissolved solids, thiobencarb, algae toxicity, sediment toxicity, fathead minnow toxicity, and water flea toxicity. These surface water bodies within the watershed not meeting water quality objectives would not be considered "high quality waters" with respect to these constituents. Those same data collection efforts also indicate that surface water bodies within the watershed meet objectives for particular agriculturally-related constituents and would be considered "high quality waters" with respect to those constituents.

Similarly, as described in Attachment A, 22 percent of sampled square mile sections (i.e., sections containing wells for which sampling information is available) had a maximum nitrate level above applicable water quality objectives. The groundwater represented by these wells may not be considered "high quality" with respect to nitrates. However, available data show that

currently existing quality of certain water bodies is better than the water quality objectives; for example, deeper groundwaters, represented by municipal supply wells, are generally high quality with respect to pesticides and nitrates. Degradation of such waters can be permitted only consistent with the state and federal antidegradation policies.

Attachment A also describes how the State Water Board has not distinguished between the level of treatment and control required under best practicable treatment or control [BPTC] (required if degradation of high quality waters is authorized) and what can be achieved through “best efforts” (required under State Water Board precedent for regulation of already degraded waters). This is because the State Water Board applies the same factors in determining “best efforts” as it does in interpreting BPTC (see State Water Board Order Nos. WQ 79-14 and WQ-2000-07). Accordingly, the tentative Order proposes to apply BPTC and “best efforts” equally to high quality waters and already degraded waters. The request to create a comprehensive inventory of high quality waters is neither feasible nor would it affect the ultimate management practice requirements of the tentative Order, as it applies BPTC and “best efforts” equally throughout the coverage area. Nothing in the antidegradation policy itself or its guidance documents indicates that an inventory of high quality waters is required.

#### **9-6. Requirement to continue implementing existing surface water quality management plans**

##### ***Comment summary***

Section I.1 of the tentative Order clarifies that the existing waiver terminates with the adoption of the tentative Order. There is no continuation or extension provision for continuation of existing obligations (i.e., development of management plans, etc.). This should be fully understood by the Central Valley Water Board and clarified.

##### ***Response***

The tentative Order specifies that the third-party is obligated to continue to implement existing management plans. Specifically, provision VIII.H.1 states that *“Existing SQMPs [surface water quality management plans] that were developed and approved under the previous Order (Conditional Waiver Order R5-2006-0053) continue to apply under this Order and shall be implemented as previously approved.”*

#### **9-13. Representative groundwater monitoring program uncertainty**

##### ***Comment summary***

The representative monitoring provisions are so uncertain they cannot be effectively responded to as [they are] vague, uncertain and arbitrary. The commenter provides that it has asked for clarity on this requirement, and staff has intentionally kept this requirement secret, which is improper for regulation notice and development. Commenter describes that originally, it was told that this requirement could mostly be satisfied with monitoring existing wells, but has been informed, more recently, that the program may require from 200 to 500 new monitoring wells. The commenter provides that this is exactly the “unreasonable” regulation foreclosed by the Water Code.

##### ***Response***

In response to comments received concerning ambiguity in the tentative Order’s groundwater monitoring requirements, the groundwater monitoring workplan sections of the tentative Order have been substantially modified to clarify the intent of the groundwater monitoring effort in the ILRP.

The commenter seems to be mistaking the flexibility built into the tentative Order's management practices evaluation program (MPEP) (previously the "representative groundwater monitoring program") with ambiguity and secrecy. The commenter has apparently also confused the trend monitoring program with the effort to evaluate management practice effectiveness. The MRP specifically states that existing wells can be used for trend monitoring, but makes no such statement regarding the MPEP.

Staff has engaged in an open and transparent process. Staff met with the Groundwater Monitoring Advisory Workgroup in open meetings regarding ILRP groundwater monitoring and conducted numerous meetings with interested parties on the subject. Also, the board has conducted two public workshops where the proposed groundwater monitoring was discussed.<sup>13</sup> See Master Response 1 for a discussion of the process the board has engaged in to develop the long-term ILRP and tentative Order.

The MPEP is intended to be developed by the third-party groups with the goals of determining whether existing practices and new practices are protective of groundwater quality in high vulnerability groundwater areas. The board has not dictated the MPEP, but has provided a broad framework by which third-party groups can collaboratively develop a monitoring program which will meet the stated objectives. Since the board does not know exactly what the third-party will propose, there is ambiguity as to exactly what the management practices evaluation program will look like.

It has been estimated that the MPEP may require the installation of 200 to 500 monitoring wells spread out across the entire Central Valley, not within an individual third-party area. This estimate is based on consideration of other programs, such as the Dairy Program, but is not based on specific information about agricultural operations and Central Valley groundwater conditions. The estimate of the number of wells also assumed that the third-party would primarily rely on monitoring wells to evaluate the effectiveness of management practices. The actual number of wells needed, if any, for the MPEP will need to be proposed by third-parties after completion of GARs and development of workplans.

See also Master Response 2 regarding the reasonableness of the tentative Order.

## **9-15. California Environmental Quality Act challenge timing**

### ***Comment summary***

The PEIR, which provides in large part the basis for the Central Valley Water Board to consider approving the tentative Order is being challenged by both the environmental community and some coalition groups. The tentative Order should not be adopted until the CEQA challenges (*San Joaquin County Resource Conservation District, et al. vs California Regional Water Quality Control Board, Central Valley Region*) are heard and determined by a court.

### ***Response***

The Central Valley Water Board is under no legal obligation to await the outcome of the two CEQA challenges prior to adopting the tentative Order. The filing of a CEQA action does not automatically stay operation of the PEIR. Nor have any of the parties obtained a stay or any other preliminary relief from the superior court. Accordingly, the board may continue to rely upon the PEIR to process approvals for projects covered by the PEIR. *Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.

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<sup>13</sup> Central Valley Water Board workshop June 7, 2012 (Rancho Cordova); Central Valley Water Board workshop August 21, 2012 (Tulare).

## Comment Letter 10

### 10-1. Missing information

#### **Comment summary**

The comment states that the tentative Order does not provide enough information regarding (1) identification of high and low vulnerability areas and (2) templates for farm evaluations, sediment and erosion control plans, and nitrogen budgets (“nitrogen management plans” in the revised tentative Order) to evaluate the Order’s effectiveness in protecting water quality and its effects on growers and service providers in the region.

#### **Response**

The tentative Order provides a process by which templates will be developed. Attachment A provides the rationale, general goals, and the proposed use of farm evaluations, sediment and erosion control plans, and nitrogen management plans. The information provided describes how the information will be used to evaluate compliance with the tentative Order. See Master Responses 3-6.

The tentative Order provides a general definition of high and low vulnerability areas and describes a process by which the third-party will further refine and develop these areas. See also Master Response 11. The board staff believes that establishing these processes allows the board to move forward with its water quality protection efforts, rather than waiting until the available information has been gathered and evaluated. In addition, it is appropriate to put the information gathering burden on the dischargers (or, in this case, their third-party representative), rather than board staff.

### 10-2. Estimated cost of compliance

#### **Comment summary**

The tentative Order estimates the total cost of compliance at \$100 million or \$120 per acre, annually, yet the information to quantify those costs are not included.

#### **Response**

The cost estimate for the tentative Order is based on the work conducted in the Economics Report.<sup>14</sup> Information on how the cost estimate was quantified is provided in Attachment A to the tentative Order, under the section titled “California Water Code Sections 13141 and 13241.”

### 10-3. Nutrient management requirements

#### **Comment summary**

The UC Nitrate Report identified the land application of nutrients as a primary source of groundwater pollution, yet the tentative Order provides very little information on the requirements to manage nutrients.

#### **Response**

The tentative Order establishes requirements for all Members to manage nutrients in a manner that will “...*minimize excess nutrient application relative to crop need.*” (provision IV.B.8); requirements for development of nitrogen management plans; and a groundwater monitoring program to provide feedback on the effectiveness of nutrient management in meeting water quality goals. See also Master Responses 3, 5, and 6.

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<sup>14</sup> ICF International. 2010. *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program*. July. (ICF 05508.05.) Sacramento, CA. Prepared for: Central Valley Regional Water Quality Control Board, Sacramento, CA.

#### **10-4. Nutrient management standards**

##### ***Comment summary***

References to National Resources Conservation Service (NRCS) 590 Nutrient Management Standards are very broad and not specified for California, and cannot be used to evaluate the tentative Order.

##### ***Response***

Because the nitrogen management plan templates will be developed through a collaborative process, including technical experts and third-parties, the MRP has been modified to require that NRCS 590 be considered when developing the template. See also Master Response 5.

#### **10-6 Informational needs**

##### ***Comment summary***

More information is needed before the tentative Order should be considered for adoption.

##### ***Response***

The information provided in the tentative Order and other supporting documents, such as the PEIR and Economics Report is adequate for the development of and board consideration of the tentative Order.

#### **10-9. Nutrient applications are proprietary**

##### ***Comment summary***

A nutrient management plan and the actual records of nutrient applications are proprietary information that should not be submitted for public record that can be easily accessed and potentially misused or copied.

##### ***Response***

The tentative Order does not require Members to submit nitrogen management plans or actual records of nitrogen applications directly to the Central Valley Water Board. The third-party will summarize nitrogen management plan summary reports and submit the information as a part of the monitoring report, but this will not include data identifiable to specific farms. Additionally, in the case where a Member or the third-party would be required to submit farm-specific data, provision IX.4 describes the process whereby Members or the third-party 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. The commenter has not indicated how this process is inadequate, and if so, how it should be revised.

#### **10-11. Nutrient regulations**

##### ***Comment summary***

Many different types of crop nutrients are needed (e.g., organic and inorganic fertilizers, different elemental forms of nutrients) for crops, yet they all pose risks to water quality, so no one nutrient form, crop, geology, or management practice should be exempt from nutrient regulations.

##### ***Response***

The Groundwater Monitoring Advisory Workgroup (GMAW) members reached consensus that the most important constituents of concern related to agriculture's impacts to the beneficial uses of groundwater are nitrate and salinity. In addition to addressing the widespread nitrate problems, the presence of nitrates in groundwater at elevated levels would serve as an indicator

of other potential problems associated with irrigated agricultural practices. Various forms of nitrogen will need to be considered, since they pose different risks to water quality. See also Master Responses 1 and 5.

## **Comment Letter 11**

### **11-1. CV-SALTS**

#### ***Comment summary***

The CV-SALTS Executive Committee requests that the board encourage irrigated agriculture to actively participate in the CV-SALTS process and that agricultural interests be responsive to future data requests from CV-SALTS as these needs are identified.

#### ***Response***

Finding 40 of the tentative Order provides that the board intends to coordinate with CV-SALTS in the implementation of the Order. Also, the tentative Order requires that the groundwater quality assessment report and groundwater monitoring workplans be submitted to the board and the Central Valley Salinity Coalition for review. This process will encourage coordination.

## **Comment Letter 12**

### **12-1**

#### ***Comment summary***

Attachment E: In definition 48, April 200 probably means April 2000.

#### ***Response***

Definition 48 of Attachment E has been modified to read "April 2000" instead of "April 200."

### **12-2. Toxicity definition**

#### ***Comment summary***

Attachment E: In definition 42, toxicity probably should include epigenetic markers.

#### ***Response***

The board staff believes that the definition of toxicity is adequate.

### **12-3. Phosphorous**

#### ***Comment summary***

Attachment E, definition 24: The definition for nutrient states, "*Any element taken in by an organism....*" This leaves out phosphorus. Phosphorus is taken up as a molecular ion, not as an element.

#### ***Response***

The commenter is correct; however, typically in soil science, a plant nutrient – as defined in Attachment E of the tentative Order is "*Any element taken in by an organism which is essential to its growth and which is used by the organism in its metabolic process.*" Phosphorous is included in this definition regardless of the form in which the plant is able to utilize it.

### **12-4. Mokelumne River and the antidegradation policy**

#### ***Comment summary***

Note on antidegradation policy: In 1968, US Congress passed antidegradation laws. These were incorporated into the Clean Water Act. These give special consideration to Upper Mokelumne River watershed that is not covered by state antidegradation policies.

### ***Response***

Both state and federal antidegradation policies apply to surface waters such as the Mokelumne River. As stated in Attachment A to the tentative Order, the State Water Board has interpreted Resolution 68-16 to incorporate the Federal Antidegradation Policy in situations where the policy is applicable. Thus, by establishing compliance with Resolution 68-16, the tentative Order has also established its compliance with the federal antidegradation policy.

## **Comment Letter 13**

### **13-1 Tentative Order does not protect water quality**

#### ***Comment summary***

The commenter states that the tentative Order fails to protect surface and groundwater and violates explicit requirements in Porter-Cologne, the state's Nonpoint Source Policy, antidegradation requirements and CEQA. Commenter contends that simply placing waiver conditions or selective components of the ILRP under the cover of waste discharge requirements in order to eliminate requirements to revisit waivers every five years does nothing to protect water quality.

### ***Response***

This comment does not provide specific concerns regarding the alleged failure of the tentative Order to protect surface and groundwater quality and violate state law and policies. More information is needed to respond to this comment. As described in Attachment A, the tentative Order is protective of surface and groundwater quality and is consistent with state law and policy.

### **13-2 Incorporation of previous comments**

#### ***Comment summary***

The commenter incorporates by reference prior comments submitted for different documents (e.g., Draft and Final PEIR) regarding purported inconsistencies with Porter-Cologne, the Antidegradation Policy, Nonpoint Source Control Policy and CEQA.

### ***Response***

See the introduction to this response to comments. The board has provided the commenter with written responses during the development of the PEIR and other documents referred to in this comment. The board staff cannot speculate which of previous comments the commenter is referring to and why previous written responses have been inadequate for the commenter.

### **13-3. The Central Valley Water Board needs more farm-specific data to implement the program effectively**

#### ***Comment summary***

Commenter provides that it is impossible to implement an effective, protective or legally adequate regulatory program where the board does not know the owner/operator or location of specific discharge points, the constituents discharged, whether the owner/operator has implemented specific control measures to reduce or eliminate pollution or if any specific implemented measures are effective. Every other regulatory program protecting water quality administered by the board requires a discharger to identify the discharge points, the constituents and concentrations discharged, measures implemented to control pollution and the results of implemented measures. The general orders regulating construction and industrial stormwater runoff are illustrative. The General Industrial Stormwater Permit regulates some 1,890 industrial facilities from welding shops, junkyards and recycling facilities to major

factories. The General Construction Stormwater Permit regulates some 2,470 construction sites (5,500 prior to the economic downturn).

Both of these programs (collectively, “Stormwater Program”) have been successful, despite the board having only about ten percent of the staff it has identified as necessary to adequately implement the program. Implemented management measures or best management practices (BMPs) are obvious. Pollution prevention plans are required. Board staff and the general public can easily review the annual reports to determine if water quality standards are being violated and whether management measures and BPTC have been implemented or are effective. Recalcitrant parties are easily identified and are required to provide reports of additional measures implemented to reduce pollution. And, more importantly, improved compliance is obvious and documented. Contrast this with the ILRP that, after a decade, cannot identify any specific implemented management measures and is unable to quantify or document any progress toward improving water quality, other than a few occasional isolated enforcement actions undertaken when the program is up for review. Aggregate or summarized information provided by third parties cannot substitute for specific information on specific activities that violate water quality standards and impair waterways or specific measures implemented to reduce pollution.

### **Response**

The commenter provides in this comment that an effective program will include:

- Owner/operator information and location
- Location of discharge points
- Constituents discharged and concentrations
- Water quality management practices implemented by the owner/operator

The tentative Order contains many of these elements as described below.

*Owner/operator information.* The tentative Order requires the third-party to submit annual participant lists to the board that include information such as: the name, parcel number(s) – and county located within, contact information, and irrigated acres for each Member. In the current ILRP, staff frequently uses this information while conducting field surveillance for pollution discharges.

*Location of discharge points.* The tentative Order requires that each Member submit a farm evaluation to the third-party. The MRP specifies that farm evaluations will include information such as location of the farm, surface water discharge points, management practices implemented to protect surface and groundwater quality, location of in service wells and abandoned wells and whether wellhead protection practices have been implemented. Third-parties will summarize this information and report it to the board (see Master Response 6). The summary will provide this information for board analysis and follow-up. If there is a need for the farm-specific information mentioned by the commenter for a specific area, the Central Valley Water Board can obtain it from the third-party.

*Constituents discharged and concentrations.* The board has compiled much information regarding the types of constituents discharged by irrigated agricultural operations. This information is included in the Existing Conditions Report,<sup>15</sup> PEIR, and the Board’s ILRP files.<sup>16</sup>

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<sup>15</sup> California Regional Water Quality Control Board, Central Valley Region, and Jones and Stokes. 2008. *Irrigated Lands Regulatory Program Existing Conditions Report*. Sacramento, CA.

Concentrations of discharged constituents are not known for each field. However, the ILRP surface water data collected provides ranges of these constituents in waterways dominated by irrigated agricultural waste discharges. Through these information sources, the board builds upon its understanding of the constituents that are discharged by irrigated agricultural operations

*Water quality management practices implemented by the owner/operator and effectiveness.* Farm evaluations will include information on water quality management practices implemented by the owner/operator. See discussion above under “location of discharge points.” Management plans require third-parties to evaluate the effectiveness of practices implemented. Ongoing monitoring will provide information regarding the overall results of water quality practices implemented –as illustrated below by example.

The tentative Order achieves many of the measures described by the commenter of an effective regulatory program.

Staff agrees with the comment regarding the success of the Stormwater Program. While there are similarities between the Stormwater Program and the ILRP, there are some distinct differences. For example, the tentative Order includes groundwater management and monitoring, and its monitoring program includes a complex list of pesticides, toxicity, and other constituents while the Stormwater Program does not include groundwater management and generally uses indicator parameters for monitoring (e.g., pH, chemical oxygen demand, oil and grease). These differences lead to a significant increase in the complexity of the tentative Order when compared with the Stormwater Program, ultimately requiring more resources for program implementation (e.g., costs, staffing, expertise).

The commenter notes that in the Stormwater Program, implemented management practices are obvious, and pollution prevention plans are required. Under the current ILRP, the East San Joaquin Water Quality Coalition has been successful at reporting specific management practices newly implemented (see discussion below under the first bullet), as well as tracking reductions in water quality exceedances –this management plan approach will continue under the tentative Order. Additionally, the tentative Order will require sediment and erosion control plans, nitrogen management plans, farm evaluations, and SQMP/GQMPs, which are all forms of pollution prevention plans.

The commenter notes that Stormwater Program annual reports are easily reviewed by the general public to determine if water quality standards are being violated and whether management practices and BPTC have been implemented or are effective. Recalcitrant parties are easily identified and are required to provide reports of additional measures implemented to reduce pollution. Under the tentative Order, third-party reports, monitoring and reporting program plans, management plans, management plan update reports, and staff review letters will all continue to be available for public review on the Central Valley Water Board’s website. Additionally, board staff will use the annual lists of noncompliant members submitted by the third-party to conduct enforcement activities (see response to comment 13-5).

Examples of the effectiveness of the tentative Order’s regional management plan approach are described below.

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<sup>16</sup> ILRP water quality data is available at:  
[http://www.waterboards.ca.gov/centralvalley/water\\_issues/irrigated\\_lands/water\\_quality\\_monitoring/data/program\\_participants](http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/water_quality_monitoring/data/program_participants)

- Under the current ILRP, coalition group management plan update reports identify specific management practices implemented. For example, the East San Joaquin Water Quality Coalition April 1, 2012 Management Plan Update Report identifies specific management practices newly implemented within the Dry Creek and Duck Slough watersheds. Within the Dry Creek watershed (see Table 18 of the report), three growers started shutting off outside nozzles when spraying outer rows next to sensitive areas (524 acres); one grower installed a sediment settling pond (121 acres); one grower grew filter strips at least 10 feet wide around the field perimeter (28 acres); one grower grew grass row centers (107 acres); two growers installed tailwater recirculation systems (443 acres); and one grower reduced the amount of water used in surface irrigation (162 acres). In the Duck Slough watershed (see Table 19 of the report), four growers installed sediment settling ponds (1,148 acres); four growers shut off outside nozzles when spraying outer rows next to sensitive areas (646 acres); one grower installed a micro-irrigation system (279 acres); and three growers reduced the amount of water used in surface irrigation (764 acres). Maps identifying parcels are associated with the management practice implementation data. This report also identifies many other specific management practices implemented in other watersheds (see Table 36 of the report). Existing surface water quality management plans will continue to be implemented under the tentative Order.
- The East San Joaquin Water Quality Coalition has also been able to quantify and document measurable progress towards improved water quality. In 2006, 10 percent of chlorpyrifos samples collected resulted in exceedances, and in 2011 zero percent resulted in exceedances. In 2006, 20 percent of copper samples resulted in exceedances, and in 2011 seven percent resulted in exceedances. In 2006, 16 percent of *Ceriodaphnia dubia* toxicity tests resulted in significant water column toxicity, while in 2011 two percent resulted in significant toxicity.<sup>17</sup>

#### **13-4. Inadequate surface water monitoring program**

##### ***Comment summary***

The commenter contends that it is impossible to protect surface water quality with the number of monitoring sites proposed for the Eastern San Joaquin River Watershed. The comment provides that the East San Joaquin Water Quality Coalition is comprised of six zones comprising 987,058 irrigated acres, with only one core monitoring site in each of the six zones. Discharger specific sampling or, at a minimum, a statistically significant sampling of specific discharges is fundamental to providing the information necessary to adequately regulate specific sources of pollution that collectively comprise the largest identified source of pollution to Central Valley waterways.

##### ***Response***

The commenter recommends sampling of individual field surface water discharges. The commenter asserts that the watershed sampling proposed under the tentative Order is not adequate to protect water quality. The Water Code does not specify any minimum sampling requirements for waste discharge requirements. The State Water Board's Nonpoint Source Policy (NPS Policy) provides some direction regarding sampling for nonpoint source control programs, such as the ILRP. Key Element 4 [of the NPS Policy] requires that an NPS program include feedback mechanisms so that the Central Valley Water Board, regulated operations, and the public can determine whether the program is effective. As explained below, compliance

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<sup>17</sup> East San Joaquin Water Quality Coalition. April 1, 2012. Management Plan Update Report. Pages 129-130.

with that particular section of the NPS Policy has been addressed in the development of the tentative Order.

To provide feedback on whether surface water goals are being achieved, the tentative Order requires surface water quality monitoring, tracking of management practices, and evaluation of effectiveness of implemented practices. The surface water monitoring that would be required by the Order includes regional monitoring at a core site within each of six zones delineated by the East San Joaquin Water Quality Coalition based on consideration crops grown and other geophysical factors. The monitoring at these sites will be developed using such information as pesticides used, past monitoring results, toxicity, etc., to determine the sampling periods when surface waters are most threatened by discharge from irrigated agricultural fields. When a water quality objective or trigger limit is exceeded at a core site, the third-party is required to sample at sites “represented” by the core site. Surface water monitoring at represented sites will generally be sites further up the watershed; and in areas that are represented by the core site, but not necessarily within the watershed (e.g., sites with similar crops and other conditions). This monitoring will help to determine whether the water quality problem is general to all represented areas, or may be sourced to a sub-area. Sampling of receiving waters in this manner will allow the board to efficiently evaluate compliance with water quality objectives and determine whether any trends in degradation are occurring at the watershed level. If continued monitoring triggers a surface water quality management plan (SQMP), additional sourcing, management, and sampling requirements will apply. For reference, a SQMP is triggered when there is more than one exceedance of a water quality objective/trigger level at a sampling location within a three-year period, or where there is a trend of degradation that threatens a beneficial use.

SQMPs will include identification of practices that will be implemented to address the water quality problem and a process to evaluate the effectiveness of those practices in addressing the problem. Where sources of the water quality problem are unknown, the third-party will conduct source studies to determine the source. As described in the MRP, Appendix MRP-1, “...*the third-party must evaluate the feasibility of field studies as part of their source identification study proposal...If field studies are not proposed, the third-party must demonstrate how the alternative source identification method will produce data or information that will enable the determination of contributions from irrigated agricultural operations....*” Under the SQMP, the third-party will be required to report on the implementation of practices by its Members and conduct additional monitoring to evaluate whether the SQMP is working to achieve water quality goals (described as “special project monitoring” in the MRP).

In addition to the core/represented site and SQMP monitoring approach, the tentative Order provides that technical reports will be required “*Where monitoring required by this Order is not effective in allowing the board to determine the effects of irrigated agricultural waste discharge on state waters or the effectiveness of water quality management practices being implemented....*” [section VIII.I, tentative Order] Other feedback mechanisms include reporting of water quality management practices in place under farm evaluations.

The core and represented site monitoring, SQMP processes, technical reports, and management practices reporting under the tentative Order will track the iterative implementation of practices to ensure that program goals are achieved. The feedback mechanisms required by this Order are consistent with Key Element 4 of the NPS Policy.

The commenter provides that the tentative Order’s monitoring approach is inadequate to protect surface water quality and cannot provide information on discharges higher in the watershed. The board disagrees with the commenter. As described above, the surface water monitoring

approach will provide watershed-level information to broadly identify whether there are water quality problems. Also, where needed, technical reports will be required to provide information to supplement regional monitoring. Where water quality problems are identified, additional monitoring will be initiated that will provide information to identify sources through represented site monitoring, source studies, SQMP monitoring, and technical reports. Also, where necessary, commodity/field specific information will be gathered to evaluate effectiveness of management practices.

The board staff agrees that sampling of individual waste discharges to surface water from each irrigated agricultural field would provide comprehensive characterization of waste discharges to surface waters from individuals. Individual field monitoring could be used to estimate each Member's waste discharge and provide whether the discharge from each field is achieving water quality objectives. The board has considered the benefits of individual field monitoring in the development of the long-term ILRP. Pages 94-95 of Appendix A, PEIR, provides the following discussion regarding individual field monitoring and regional monitoring approaches.

*“...the waste discharge characteristics of runoff from each farm would be determined [under farm-based monitoring]. However, with this approach, it will be difficult to characterize the actual effects agricultural waste discharges are having on receiving water bodies. A good example is where a farm discharges to a large river. Farm-based monitoring would not necessarily provide enough information to tell whether the discharge is affecting the river's water quality.”*

As described in the PEIR, monitoring only discharges from fields would not provide the needed information to determine the effects on receiving water bodies. This is a concern because water quality objectives do not apply to field effluent, but to receiving waters. State policy and law require that waste discharge requirements implement water quality objectives, which apply within receiving waters. To address this problem, the commenter's recommended field monitoring program may also need to sample receiving waters to determine the effects of each field's discharge on the receiving waters ([field]+[upstream receiving water]+[downstream receiving water]). The board considered this individual monitoring program as one of the long-term ILRP alternatives –PEIR Alternative 5.

In evaluating Alternative 5, the board found that the cost of individual monitoring coupled with the increased board staffing to regulate individual Member fields in the commenter's suggested approach would impose a substantial cost on the industry. In fact, economic analysis of the alternative revealed that the increased cost could cause widespread impacts to the industry, including loss of land in production, value of production, revenue; and decreased employment. For these reasons, the alternative was found inconsistent with ILRP Goal 3, to maintain the economic viability of agriculture.<sup>18</sup>

The commenter suggests that at a minimum, statistically significant sampling of specific discharges is necessary. Such an approach would come at less cost than the cost of monitoring every field discharge. However, the cost could be substantial depending on how many field monitoring sites are determined to be “statistically significant”. Although field discharge monitoring is not required, the board retains the authority to require such monitoring by Members of the third-party, if needed to assess individual compliance.

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<sup>18</sup> PEIR, Appendix A, pages 127-129

### **13-5. The ILRP is a voluntary program**

#### ***Comment summary***

The ILRP is a voluntary program for irrigated lands waste discharges.

#### ***Response***

The Central Valley Water Board staff disagrees with the commenter's characterization. Members of the third-party are regulated by the Order and must comply with all applicable requirements. Failure of the Members to comply can result in the imposition of administrative civil liability. Members and third-parties that do not meet the Order's requirements are subject to enforcement activities by the Board. See findings 49 and 50 of the tentative Order for information on enforcement priorities. Enforceable requirements are not characteristic of a voluntary program.

### **Comment Letter 14**

### **14-1. Compliance with the ILRP by enrolling acres; Westside/Eastside overlap areas**

#### ***Comment summary***

The commenter states that its operation has met the requirements of the ILRP by enrolling all of its irrigated acreage with the Westside Coalition. Additionally, the commenter requests revised language in the Order that excludes irrigated acreage that previously received coverage under the Westside Coalition and will continue to be covered under the ILRP Order that governs the Westside Coalition area.

#### ***Response***

The flexibility the commenter is requesting exists in the tentative Order. Finding 3 of the tentative Order provides that growers within the Eastern San Joaquin River Watershed may be enrolled by the terms of the tentative Order or through another third-party group recognized for that area. The finding provides that these growers would not be required to obtain coverage through two third-party groups to comply with the ILRP. Should the board approve the tentative Order, the commenter may choose to enroll all or some of its acreage under the tentative Order, or continue under the Westside Coalition, which is currently a recognized third party group operating pursuant to the Coalition Group Conditional Waiver (Resolution R5-2011-0032).