

Waste Discharge Requirements
for Growers within the Western San Joaquin River Watershed
that are Members of a Third-party Group
Order Number R5-2014-xxxx

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 for Growers within the Western San Joaquin River Watershed that are Members of a Third-party Group, Order R5-2014-xxxx (referred to as the “tentative Order” or “Order”). This document contains written responses to comments that were timely received on the tentative Order.

The tentative Order was released for public review on 29 October 2013 with the comment period ending on 2 December 2013. Five comment letters received by the deadline were submitted by:

1. [Westside San Joaquin River Watershed Coalition](#)
2. [Grassland Water District and Grassland Resource Conservation District](#)
3. [California Farm Bureau Federation](#)
4. [California Sportfishing Protection Alliance and California Water Impact Network](#)
5. [Paramount Land Company, LLC and Paramount Pomegranate Orchards, LLC](#)

Prior to circulating the tentative Order for public comment, the board circulated a “draft” Order for public review. The draft public review and comment 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 14 June 2013 and closed on 15 July 2013. The board staff did not develop written responses to comments on the draft Order, however comments were taken into account and multiple changes to the Order have been made.

This response to comments on the tentative Order includes responses that apply to broader issues addressing a theme recurring in multiple comments (general responses), and responses to individual comments (specific responses). The general responses are given first, followed by itemized comments and responses associated with each letter. Finally, this response to comments includes as an attachment a separate response to Exhibits contained within comment letter 4. This separate response was necessary because Board staff was unable to determine whether the CSPA exhibits were provided to support the contentions in CSPA’s comment letter or whether CSPA intended for the board to consider additional comments in the exhibits that were not reflected in the CSPA letter.

GENERAL RESPONSE

1. Concerns regarding costs, cost-benefit analysis, and burden of implementing new requirements in the Order

Comment summary

Several comments were received related to costs and burden of the programs new and additional requirements. In particular:

- The new and additional requirements are burdensome, overwhelming, and difficult to implement due to the increased scope of enforcing the program on all irrigated acres throughout the Central Valley.
- Loss of farm businesses as a result of the program are not acceptable.
- Growers cannot pass on this and other regulatory program costs to consumers. Central Valley farmers regulatory costs exceed those of those in other states or the world, yet the growers must trade in a global market.
- If the program is not efficient, readily implementable, flexible, and adaptable over time, it will fail to meet the goals of maintaining agricultural viability and improving water quality.
- Cost-benefit analysis of implementing the program in relation to costs to agriculture and benefits to water quality should be performed.

General Response 1

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.

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 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, where there is a less costly method for evaluating compliance. Also, the burden of such individual monitoring would be extensive (see analysis for Alternative 5, Economics Report). Consequently, the tentative Order relies on a representative 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. To the contrary, the approach has been crafted considering the reasonableness of the requirements and the needs to consider the burden of reporting relative to the benefits of the reporting.

The Order takes a reasonable approach by tailoring the monitoring and reporting requirements to the potential constituents of concern and the water quality threat. The Order also requires key information to be provided by Members to the third party annually for summarization and submittal to the Regional Board in an annual report. The third-party reporting structure allows Members to submit information in a cost-effective manner.

In summary, the Order has been crafted in consideration of concerns raised regarding the cost of compliance and the potential effect on the viability of some irrigated agricultural operations. The Order will result in the collection of information necessary to confirm compliance by the regulated growers and includes enforceable requirements to ensure those growers implement the practices necessary to protect water quality. The commenters have not provided evidence that any of the proposed monitoring or reporting requirements are unreasonable or unnecessary.

SPECIFIC RESPONSES

Comment Letter 1 - Westside San Joaquin River Watershed Coalition

1-1. Timelines for deliverables and requirements

Comment summary: The proposed due dates for Third-party and grower deliverables are provided as specific dates in the tentative Order, which are predicated upon an adoption date of January 9, 2014. Should the adoption date change, the commenter requests that the proposed due dates be adjusted, as needed, and in coordination with representatives of the Westside Coalition.

Response: The board staff agrees with the commenter and will coordinate with the Westside Coalition to make adjustments in due dates (as needed) if the Order adoption date changes.

1-2. Lack of comment does not signify agreement

Comment summary: Specific comments have not been provided on all findings and statements made in the tentative Order, but failure to comment does not signify agreement. The commenter reserves the right to pursue any objections in the future, even if not commented on within the context of the tentative Order.

Response: The purpose of the opportunity to provide written comments and testify at the public hearing is to make the Central Valley Water Board aware of any objections interested parties may have, so the board may consider those comments and address those comments prior to a board decision. The commenter should be aware that they may be foregoing their rights to raise objections to the tentative Order should the commenter fail to do so in their written comments or testimony at the board hearing.

1-3. Previous comments incorporated by reference

Comment summary: The commenter incorporates by reference prior comments submitted for different documents and filed on behalf of the Westside Coalition by Somach, Simmons & Dunn on September 27, 2010, as well as comments filed by the San Joaquin River Exchange Contractors Water Authority on September 27, 2010.

Response: Board staff cannot speculate which of the previous comments the commenter is referring to, why previous written responses have been inadequate, and which of the comments are applicable to the tentative Order. The board staff is not legally required to ascertain whether comments on prior drafts or other ILRP documents are still of concern to the commenter or germane to the tentative Order. As such, this response to comments does not include written responses to comments on the prior draft or other ILRP documents.

1-4. Requirements will be overwhelming for farmers to implement

Comment summary: The commenter asserts that new and additional requirements in the tentative Order are burdensome and implementation will be difficult for the regulated parties. The board has not accounted for the effects of increasing the scope of enforcement of water quality requirements to every acre of land in the Central Valley.

Response: See General Response 1.

1-5. Loss of farm businesses

Comment summary: The board should refrain from demanding unnecessary or unachievable actions and should be realistic and flexible. Putting farmers out of business to avoid any effects on water quality is unacceptable.

Response: See General Response 1.

1-6. Language not consistent with desired process

Comment summary: Provision IV.C.7, page 24: A change in language was made in the tentative Order requiring the third-party to provide the NOC form and Farm Evaluation template to Members within 30 days of receiving an NOA. This does not match the previously crafted language and does not support the desired implementation strategy. The commenter requests this provision be revised as follows: *The third-party will provide a notice of the requirements and process to complete NOC forms and Farm Evaluation Plan to Members within 30 days of receiving an NOA from the Central Valley Water Board.*

Response: Provision IV.C.7 of the tentative Order has been modified as suggested to allow the Third-party to provide Members with a notice of the requirements and process for the NOC and Farm Evaluation Plan within 30 days of the NOA, and will not require that the actual forms be provided within 30 days.

1-7. Member payment of State Water Board Fees

Comment summary: Provision IV.C.11, page 25: Under the current third-party's administrative organization, the Members' State Water Board fees and all other program costs are generally paid by each of the participating Water Districts, which separately handle collection of program fees. These fees are collected from the Members as part of the overall rates they are charged for program costs; Districts do not invoice Members specifically for the State Water Board fees. Therefore, the commenter would like the last sentence of Provision IV.C.11 removed.

Response: The intent of this provision is to assure that all State Water Board fees are paid based on a full Membership List provided by the third-party group. The mechanism for collecting the fees is not dictated by the board. Provision IV.C.11 has been modified to parallel the State Water Board fee regulations, which indicate the responsibility of the third-party is to manage fee collection and payment.

1-8. New membership acceptance and approval

Comment summary: Provision V.4, page 25: The second sentence should be restored to the previous language as follows: "...received notification from the third-party that the third-party will accept the Discharger as a Member." Otherwise, the third-party would be required to admit the new Member prior to board issuance of an NOA, potentially creating costly errors and administrative burdens.

Response: Under the Conditional Waiver, the board had a process similar to that requested by the commenter. Unfortunately, there were a number of instances in which the Coalition indicated it would accept the grower as a Member and the grower received a notice of applicability (NOA) from the board, but never followed up to join the Coalition. The board's experience with the Eastern San Joaquin River Watershed Order has demonstrated that ensuring the grower has become a Member before issuing the NOA avoids the problem the board and coalition experienced with the process under the Conditional Waiver. To ensure the third-party is aware of a Member

receiving an NOA from the board, board staff will provide a courtesy copy of each NOA issued to the third-party.

1-9. Consistency of due dates

Comment summary: Provision VII.D.1, items 'a' and 'b', page 30: To provide consistency, the date in the final sentences in subsections 'a' and 'b' should be 15 April annually, instead of 1 March.

Response: Staff has reviewed the tentative Order and the dates for preparing and updating the nitrogen management plan are consistently 15 April. Based on staff discussion with the Coalition representatives, staff understands that the Coalition prefers to maintain the 1 March submittal date for the nitrogen management plan summary report.

1-10. Reporting frequency reduction

Comment summary: Provision VII.D.1.c, page 30: The tentative order gives the Executive Officer the discretion to approve a reduction in the frequency of submission of Nitrogen Management Plan (NMP) Summary Reports after 1 March 2018, if the third-party demonstrates that year to year changes in these reports are minimal and implemented practices are achieving the performance standard. The commenter requests that the Executive Officer be given the flexibility to approve such a reduction starting after 1 March 2017.

Response: Staff is not proposing to change the initial date for approving a reduction in NMP Summary Report frequency. The commenter states that the tentative order requires submission of four annual summary reports before a reduction in reporting frequency can be considered and requests that this opportunity be available after three reports are submitted. However, based on the schedule given in Provision VII.D.b and WDR Table 1, the first report is due 1 March 2016. The third report would be due 1 March 2018, after which the third-party can request a reduction in reporting frequency.

1-11. Application for a new third-party group

Comment summary: Provision VIII.A.6, page 32: The commenter is concerned about the addition of language that allows a new third-party to apply to represent growers within all or a portion of the Order watershed area. Concerns include: handling monitoring data and records that pertain to the new third-party area; addressing objections to the new third-party; harming funding commitments in the original third-party; and how a transition would be accomplished. The details of such a process have not been addressed and the current organization does not easily lend itself to such a division. A recommendation is made to delete Provision VIII.A.6.

Response: The board staff agrees that specific details of how a transition would be accomplished are not included in Provision VIII.A.6. However, staff does not believe that the details can be pre-determined, but would depend on the nature of the new third-party application. Since any third-party application must thoroughly address the factors in VIII.A.1-4, the ability to carry out third-party responsibilities is paramount and would be carefully examined. Staff is not proposing any changes in the text of the provision because it may be reasonable for a viable new third party to apply in the future. The concerns raised by the commenter can be addressed, if necessary, by the existing third-party at the time an application is submitted by a potential new third-party group.

1-12. Basin Plan Amendment Workplan

Comment summary: Provision VIII.L, page 38: The commenter states that the requirement to submit a Basin Plan Amendment within 120 days of the Groundwater Assessment Report is unrealistic, given the complexity and costs associated with pursuing a Basin Plan Amendment. There could potentially be an overlapping process with CV-SALTS, resulting in duplicated effort and costs. A 120-day deadline should not be set for seeking a basin plan amendment.

Response: Provision VIII.L requires the third-party to submit a Basin Plan Amendment Workplan, not the actual amendment. The required elements of the workplan are given in section V.D of the MRP. Staff believes that 120 days is sufficient time to prepare and submit a workplan proposal.

1-13. SQMP burden, including costs

Comment summary: Section VI.A.2 of Attachment A, Information Sheet, last paragraph: The commenter disputes the conclusion that the burden of the SQMP, including costs, is reasonable and believes it is not supported by the language therein. The board doesn't know what the costs of implementation will be, nor if individual monitoring and reporting would be required, should a regional approach not be effective.

Response: A Surface Water Quality Management Plan (SQMP) is the mechanism under this Order to address surface water quality problems that are identified through the representative monitoring approach. The alternative to the development of an SQMP by the third-party is for the individual growers to report to the board on how each grower is: addressing the identified water quality problem; conducting the required monitoring; and evaluating the effectiveness of its practices. Board staff believes it is valid to compare the cost of an individual monitoring and reporting approach to the regional planning and reporting approach and have concluded the SQMP is a reasonable, less costly approach to provide the board with information required to demonstrate compliance. The board has provided estimates of the individual monitoring and reporting costs in its general WDRs for growers that are not part of a third-party group (Order No. R5-2013-0100) and has analyzed those costs in the program EIR. The board, therefore, understands what the potential costs are should growers fail to protect water quality through the regional planning approach described by the SQMP requirements.

Board staff believes the findings and Information Sheet provide sufficient justification for the reasonableness of the requirement for growers to address water quality problems and for the growers (through reports submitted by the third-party) to demonstrate they are addressing the identified water quality problems. The commenter has not identified an alternative reporting requirement that the commenter believes would be consistent with Porter-Cologne.

1-14. GQMP burden, including costs

Comment summary: Section VI.B.6 of Attachment A, Information Sheet: Same comment as for SQMP above, made for GQMP.

Response: The commenter provided no additional comments regarding the Groundwater Quality Management Plan, but referred to their comment on the Surface Water Quality Management Plan. Board staff refers the commenter to the response on the SQMP and believe the same response applies to the reasonableness of

requiring a GQMP to address groundwater quality problems.

1-15. Development of Trigger Limits

Comment summary: The commenter states that board staff cannot simply pick “trigger limits” that are valid numeric interpretations of applicable narrative objectives after receiving comments from interested parties. The commenter further states that such values must be scientifically justified and satisfy legal requirements for establishing enforceable water quality objectives.

Response: The tentative Order does not indicate that staff will pick trigger limits. A process has been described in section VII of the Monitoring and Reporting Program wherein the Executive Officer provides trigger limits to the third-party following consultation with the Department of Pesticide Registration and other agencies as appropriate. As part of this process, interested parties, including the third-party, will be given the opportunity to review and comment on the proposed trigger limits before the Executive Officer provides the final trigger limits. Per the Basin Plan’s *Policy for Application of Water Quality Objectives*, narrative water quality objectives are considered legally enforceable objectives. Furthermore, compliance is evaluated using relevant information submitted by the discharger or other interested parties, and relevant numeric criteria and guidelines from other agencies or organizations (see, e.g. *A Compilation of Water Quality Goals*, as referenced in the Basin Plan). Such information and data would only be considered if the information and data meet the requirements described in the Basin Plan. Finally, if any interested party does not agree with a trigger limit provided by the Executive Officer, it can request the Board to review the Executive Officer’s decision.

It is important to note that the water quality triggers are used to determine when a management plan must be developed. The Executive Officer has authority to establish, through the use of trigger limits, a method for determining compliance with the Order’s provisions requiring the preparation of a management plan and with its receiving water limitations. (*Russian River Watershed Committee v. City of Santa Rosa* (9th Cir. 1998) 142 F.3d 1136; *CASA v. City of Vacaville* (2012) 208 Cal.App.4th 1438.) The management plan is submitted pursuant to the board’s authority under Water Code section 13267. Should the board wish to enforce the trigger limit against an individual grower, the grower would be afforded due process through the applicable board proceeding to raise any objections regarding the trigger limit or provide evidence to support the grower’s interpretation of the applicable narrative water quality objective.

1-16. CEQA Mitigation Measures

Comment summary: The commenter maintains that the proposal to impose mitigation requirements on individual Members is not warranted and creates a compliance hurdle for the third-party group to administer. The changes in the tentative order that address the ruling of Judge Frawley are unduly harsh.

Response: In the court’s final ruling on 21 May 2013, Judge Frawley rejected claims that several of the mitigation measures are not feasible, the Board does not have the power to impose mitigation measures, and the mitigation measures impose excessive costs. The tentative Order relies on those lawful mitigation measures, which have been clarified consistent with the final ruling. The Board staff continues to rely on the PEIR’s mitigation measures, absent a final court ruling that they are legally deficient. *Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.

The changes to the Order were made to clarify the arguments made to the court indicating that failure or inability to implement applicable mitigation measures would require any additional CEQA analysis that would take place as part of a separate discretionary action by the board. Board staff is unclear on which comments in the commenter's previous submittal are potentially still germane despite the court's rejection of the arguments presented by a number of parties regarding mitigation measures. Since there are no new issues or arguments being raised by the commenter that have not already been addressed by the court proceeding, board staff refers the commenter to the court's final ruling.

1-17. Mass balance and conceptual model

Comment summary: The task of developing a mass balance and model of the fate of constituents of concern is beyond the resources of the third party. The tools and data needed to produce a conceptual model and mass balance do not exist. The available data are not likely to produce a conceptual model that is capable of calculating a mass balance.

Response: Staff disagrees that the work plan approach described in Section IV.D.1 of the MRP is beyond the resources of a third-party and that the tools and data do not exist. The objective of the Management Practices Evaluation Program (MPEP) is to determine which management practices (or suite of practices) are protective of groundwater quality for a given area and crop type. The MPEP process allows the third-party to demonstrate, through a limited number of representative site-specific studies, which practices are protective of water quality. These site-specific studies can then be related to practices being implemented in other areas under similar conditions. However, a method is needed to relate (or extrapolate) the site-specific studies to areas in which the studies are not conducted. A conceptual model and mass balance provides such a method, although the third-party group can propose an alternative that is equivalent to a conceptual model/mass balance approach.

In its simplest form, a mass balance compares inputs and outputs to a system. This concept is generally used by growers whenever they assess irrigation water needs of a crop (e.g., how much water is applied [the input] versus where the water goes (e.g., crop uptake, evaporation from the soil surface, leaching to groundwater) [the output]). Using nitrogen as an example, the required mass balance need not be more complex than necessary to show whether nitrogen applied to a field or crop was balanced by nitrogen contained in the harvested portion of the crop along with any storage in soil or losses to atmosphere or soil water. For the MPEP, the mass balance is not applied by each grower, but is an analysis conducted by the third-party to evaluate the effect of Members' discharges in a high vulnerability area for constituents of concern. It is important to note that the requirement for a mass balance is contained in many Board orders, such as the Dairy General Order, R5-2007-0035. In the Dairy General Order, crop advisors and other consultants calculate the amount of nitrogen applied and removed on a field by field basis for each dairy enrolled under that order.

In addition, the conceptual model/mass balance approach has been used by the University of California, Davis to evaluate nitrates in groundwater in the Tulare Lake Basin and Salinas Valley (see <http://groundwater.nrate.ucdavis.edu/files/139110.pdf>) and is in development as part of the Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS) process (see <http://www.cvsalts.com/index.php/committees/technical-advisory/conceptual-model-developments/102-initial-conceptual-model-icm.html?highlight=WyJtYXNzliwiYmFsYW5jZSjd>). The

third-party group, therefore, can rely on a significant amount of technical analysis already conducted in preparing its mass balance and conceptual model.

It is also important to note that if the third-party cannot develop a useful conceptual model and mass balance as suggested by the commenter, the other option available to the board is to require site-specific groundwater monitoring in order to determine compliance with applicable groundwater quality requirements. The board must be able to relate the results of the site-specific studies to the actions of individual growers. The board is not starting with an individual monitoring approach, since the board believes the approach outlined in the MPEP is an effective and more cost effective method for evaluating compliance.

1-18. Summary of Reported Nitrogen Data

Comment summary: The commenter believes that the requirements described in Attachment B, section V.B., Report Component 19, are excessively complicated and overestimate the quality and timeliness of data received.

Response: Central Valley Water Board staff disagrees with the commenter that the requirements for the Summary of Reported Nitrogen Data are excessively complicated and burdensome. Because Members submit their Nitrogen Management Plan Summary Report to the third-party, and not directly to the Board, it is appropriate for the third party to summarize that data in a way that will allow board staff to evaluate whether Members are implementing nitrogen management related practices to meet the requirements of the Order and, if needed, target areas or Members for follow-up. The tentative Order allows the third-party to provide commonly used statistical summaries of the information collected from individual members in tabular or graphical form. The third-party's assessment of Nitrogen Management Plan information will include comparisons of farms with the same crops, similar soil conditions, and similar practices. The summary will also include a quality assessment of the collected information by township and a description of corrective actions if deficiencies were identified. The comment regarding the timeliness of the data is unclear. Without some third-party analysis and reporting of nitrogen management in high vulnerability areas associated with nitrate problems, the board would likely need to require individual groundwater monitoring and assessment to determine each grower's compliance with the Order.

It is important to note that CDFA's Task Force and SWRCB's Expert Panel are currently investigating nitrogen management and nitrogen tracking issues. The deadlines for preparation of a nitrogen management plan and associated reporting have been established to allow the board to make any necessary adjustments to the Order based on the findings and recommendations of the Task Force and Expert Panel prior to the established compliance dates.

1-19. Submittal of individual data records from Farm Evaluation Reports

Comment summary: The commenter contends that the requirement to provide individual data records identified to the township level will undermine trust between growers and the third party and does not serve any purpose.

Response: The commenter does not indicate why the requirement to provide data records that are not associated with a particular grower would weaken trust between growers and the third party. The alternative to the grower providing to the information to the third-party is to provide it directly to the board.

Board staff disagrees with the commenter that no purpose is served in providing the board with individual data records of management practices information. The data are needed to verify that growers are implementing relevant management practices to protect water quality. Submittal of farm evaluations will provide information on individual grower implementation of practices to protect water quality, in lieu of water quality sampling of individual farming operations. Further discussion of the basis for this requirement can be found in the Information Sheet in the section "Spatial Resolution of Nitrogen Management Plan and Farm Evaluation Information".

1-20. Attachment C

Comment summary: Attachment C should be titled "Mitigation Measures" to clarify that individual Members are not subject to CEQA, as noted by Judge Frawley.

Response: Individual Members are subject to the mitigation measures developed by the board as part of its CEQA analysis and findings. The title is appropriate and the content of Attachment C is consistent with Judge Frawley's final ruling.

1-21. Attachment D, Impact AG-1

Comment summary: Impact AG-1 in Attachment D finds that the conversion of farmland to nonagricultural use is a significant and unavoidable impact of the tentative Order and specific considerations make mitigation and alternatives infeasible. The commenter asserts that the statement "...specific considerations make mitigation alternatives infeasible" to putting agricultural lands out of business is not supported. There should be allowance for time to develop a basin plan amendment to de-designate uses not made of the water body or other alternative.

Response: The components of the Order are found within the range of alternatives identified in the program EIR certified by the board. The impact to agricultural resources identified in Attachment D is consistent with the findings and analysis contained in the program EIR. As stated in Attachment D, there are specific overriding economic, legal, social, technological or other benefits that outweigh the unavoidable adverse environmental effects to agricultural resources. Further, Attachment D describes why the six potential project alternatives analyzed in the program EIR are not feasible. Staff disagrees that the finding is not supported.

However, staff is aware of the potential impact of additional costs on some agricultural lands, especially producers of lower value crops. The Order, like other third-party Orders in the irrigated lands regulatory program, is structured to minimize costs while providing the board with the information it needs to evaluate compliance with the Order's requirements. The suggestion to allow time for a basin plan amendment to address beneficial use issues has been incorporated into the Order for groundwater.

It is important to note that pursuit of a basin plan amendment does not guarantee a change in beneficial uses. The Order must implement the adopted water board plans and policies and cannot be structured to provide indefinite relief from those plans and policies. Therefore, the finding regarding agricultural impacts is appropriate, since the board cannot speculate on future changes to board plans or policies that could fully mitigate such impacts.

1-22. Attachment II.D, Mitigation Measures

Comment summary: The commenter contends that changes in the tentative order to address CEQA mitigation are unnecessarily harsh because a grower that cannot avoid

an adverse effect must seek a separate WDR. It is unclear whether this solves the CEQA issue addressed in the ruling by Judge Frawley.

Response: See response to comment 1-16. The changes to the Order were made to clarify the arguments made to the court indicating that failure or inability to implement applicable mitigation measures would require any additional CEQA analysis that would take place as part of a separate discretionary action by the board. The Board staff continues to rely on the PEIR's mitigation measures, as clarified, absent a final court ruling that they are legally deficient. *Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.

1-23. Costs incurred by growers

Comment summary: The commenter contends growers cannot pass on this and other regulatory program costs to consumers. Central Valley farmers regulatory costs exceed those of those in other states or the world, yet the growers must trade in a global market.

Response: See General Response 1.

1-24. Program efficiency, flexibility, adaptability

Comment summary: The commenter is concerned that if the program is not efficient, readily implementable, flexible, and adaptable over time, it will fail to meet the goals of maintaining agricultural viability and improving water quality.

Response: See General Response 1.

Comment Letter 2 - Grassland Water District and Grassland Resource Conservation District

2-1. Importance of Managed Wetlands

Comment summary: The commenter states that it is critical for state and federal public agencies to encourage and endorse continued management of California's wetlands as an important public resource.

Response: The board staff agrees that continued management of California's wetlands as a state and federal public trust natural resource is necessary.

2-2. Lack of evidence or need for requiring for requiring coverage of managed wetlands in the order

Comment summary: Because pesticides and fertilizers are not applied to managed wetlands, and wetland management prevents and minimizes sediment discharge and erosion, the board provides no evidence, examples, or studies to support the inclusion of managed wetlands as dischargers of pollutants under the tentative order.

Response: Board staff acknowledges that potential sources of pollutant discharges from managed wetlands are limited. Many wetland management activities are different from agricultural management activities and therefore the timing and nature of potential effects on water quality are different. Seasonal wetlands are typically flooded between August and October and drawn down in spring between March and May. Depending on spring weather conditions, the type of wetland vegetation that is being encouraged, or the need to discourage certain species, irrigation can occur any time from May through July and can vary in both frequency and duration. Irrigation of a

relatively limited acreage of cropland also occurs during summer. Crops grown to provide food or habitat for waterfowl include irrigated pasture, small grains, corn and winter wheat. Flood-up and drawdown periods typically result in some discharge flows from wetlands.

Infrastructure in managed wetlands includes levees, water control structures, and other features to control the timing, depth, and duration of flooding. Examples of infrastructure maintenance activities include levee repair, and water control structure, ditch, and swale cleaning. Habitat and vegetation management activities include disking and mowing in seasonal wetlands following the drawdown period.

Although wetlands are known to filter, transform and remove pollutants, there are examples where managed wetlands are known to discharge pollutants that impair water quality. Because wetland water management involves artificial flooding and drawdown cycles, water discharged from managed wetlands may carry high levels of decomposing organic material and nutrients, thus causing high biological oxygen demand that decreases dissolved oxygen to detrimental levels in receiving waters.

Board staff reviewed some of the information available for wetlands in the Westside San Joaquin River Subbasin; San Luis NWR; Grassland RCD and Volta, Los Banos, and North Grassland Watershed Areas. One study demonstrated that BOD loads from the Grassland Watershed to the SJ River were proportional to flow during June-October and wetland and irrigated agriculture drainage both negatively impacted water quality in the watershed (Stringfellow et.al. 2008¹). In another study, loading rates of nutrients and organic carbon increased in the San Joaquin River in October and November with the release of wetland drainage². Studies, and reports available in Central Valley Water Board files, indicate that the Grassland area wetlands are also of a source of elevated salt levels.³ These studies and reports are specific to issues associated with the Grasslands wetland discharges and provide sufficient evidence that the discharges from the Grasslands wetlands contain wastes that could affect the quality of waters of the state.

In addition, the managed wetlands that would be regulated under the proposed Order have been regulated under the Conditional Waiver since 2003, suggesting the parties responsible for those managed wetlands believed their discharges required regulatory coverage. However, should the commenter or any other wetland managers wish to pursue an alternative method of complying with Porter-Cologne (e.g., individual WDRS or a WDR specific to managed wetlands), staff will work those wetland managers to further explore those alternatives.

¹ Stringfellow WT, Hanlon JS, Borglin SE, Quinn NWT. (2008). Comparison of wetland and agriculture drainage as sources of biochemical oxygen demand to the San Joaquin River, California. *Agricultural Water Management* 95: 527-538.

² Kratzer CR, Dileanis PD, Zamora C, Silva SR, Kendall C, Bergamaschi BA, Dahlgren RA. (2004). Sources and Transport of Nutrients, Organic Carbon, and Chlorophyll-a in the San Joaquin River Upstream of Vernalis, California, during Summer and Fall, 2000 and 2001. USGS Water-Resources Investigations Report 03-4127.

³ Quinn, NWT. (2009). Environmental decision support system development for seasonal wetland salt management in a river basin subjected to water quality regulation. *Agricultural Water Management* 96: 247-254.

2-3. Risk of sediment discharge

Comment summary: The commenter asserts that the potential is unlikely for erosion and sediment discharge from managed wetlands. There is a lack of evidence that drainage channels, access roads, or stream crossings contribute to discharge of excess sediment. Three drainage channels that leave the Grasslands area are already monitored for turbidity and total dissolved solids. It would be 'virtually impossible' to distinguish background sediment levels from any being discharged.

Response: Board staff disagrees with the assertion that activities performed to maintain managed wetlands do not have the potential to cause erosion and sediment discharge from drainage channels, access roads and stream crossings. The commenter has not provided evidence that wetland management activities do not contribute sediment to receiving waters. Activities such as plowing, disking, and mowing are performed for weed and vegetation management. Such activities may create conditions where soils are vulnerable to erosion and sediment is discharged during periods of water movement from the disturbed wetlands to drainage channels and other receiving waters. Board staff agrees that monitoring conducted in drainage channels that leave the Grasslands area (Salt Slough, Mud Slough, and Los Banos Creek) would provide useful data for assessing if sediment is being discharged at elevated levels and contributing to water quality problems.

Board staff does not agree that it is 'impossible' to ascertain background sediment levels. Turbidity and total suspended sediments in source waters for the managed wetlands could be monitored, as could internal water bodies that are draining from vegetated wetlands and channels.

The Order includes the submittal of a Sediment Discharge and Erosion Assessment Report. In that report, the third-party group will have an opportunity to evaluate whether managed wetlands are a potential source of sediment that could degrade or pollute surface water.

2-4. Wetland-specific farm evaluation template

Comment summary: In response to previous comments regarding the applicability of the farm evaluation template to managed wetlands, the tentative order authorizes a third party entity to propose a "managed wetlands" farm evaluation template within 60 days of receiving an NOA, which evaluates management practices associated with managed wetlands that could affect the quality of surface water or groundwater. The commenter states that further direction is needed from the board because the order provides no examples of wetland management practices that could negatively affect water quality.

Response: Staff has provided examples of wetland management practices that could affect water quality in the response to comment #2-2. Staff believes that the flexibility provided in the tentative Order, which allows the third-party to develop a managed wetlands evaluation template in coordination with wetland managers, provides the best means for addressing the unique management activities conducted on managed wetlands. Wetland managers have previously provided detailed information about managed wetland activities (USFWS, 2004⁴) which can be used as a basis for developing an appropriate managed wetlands evaluation template. Note that wetland

⁴ U.S. Fish and Wildlife Service. (2004). Watershed Evaluation Report, Wetland Sub-area: San Joaquin Valley Drainage Authority – Westside San Joaquin River Watershed Westside Coalition. San Luis National Wildlife Refuge Complex, Los Banos, CA.

managers may rely on other wetland planning documents that they have prepared when completing the anticipated evaluation template in the future.

2-5. Sediment and Erosion Control Template

Comment summary: The commenter contends that the sediment and erosion control template is not applicable to managed wetlands because it contains a checklist of irrigation and cultural practices that are not used on managed wetlands. Some of the cultural practices listed are implemented as a matter of course in managed wetlands (e.g. vegetative buffers, holding ponds, native vegetation, etc.).

Response: Staff agrees that the draft Sediment and Erosion Control Plan Template is not applicable for developing a sediment and erosion control plan for managed wetlands, if required. The Order has been modified to allow the third-party group to submit a wetland-specific Sediment and Erosion Control Plan Template within 60 days of Executive Officer approval of the Sediment Discharge and Erosion Assessment Report.

2-6. Financial burden imposed by requiring managed wetlands to join third-party group

Comment summary: Wetlands are not managed for profit. Requiring managed wetlands to join a third-party entity, pay administrative costs, and develop templates would create a financial burden without evidence supporting the need for such regulation.

Response: Porter-Cologne applies to all dischargers of waste, including entities that are not managed for profit. The proposed Order is an option available to obtain necessary regulatory coverage. Wetland owners/operators may obtain regulatory coverage through other means (see response to Comment 2-2). Board staff has made adjustments to the proposed Order that should reduce potential costs to managed wetland owner/operators. Board staff has also included additional references in the Information Sheet and in response to Comment 2-2 regarding the potential impacts of managed wetlands on water quality.

Comment Letter 3 - California Farm Bureau Federation

3-1. Similarities between the Tentative Order and other Long-Term ILRP WDRs

Comment summary: The commenter argues that the Tentative Order is a duplication of previously adopted Long-term ILRP WDR's with only minor revisions. The commenter contends that each coalition unique geographic characteristics and that each Long-term ILRP WDR should be individually drafted specific to the region it regulates.

Response: Board staff acknowledges similarities between the Tentative Order and other waste discharge requirements (WDR's) within the Long-term ILRP. The similarities in structure are purposeful, since these WDR's deal with discharges from irrigated lands to groundwater and surface water. It is appropriate for the general approach and regulatory structure for addressing similar discharges to be similar. The general approach of monitoring surface water and groundwater quality, conducting studies to determine whether practices are protective of groundwater quality, and reporting on key aspects of management practice implementation are fundamental to determining whether Members of the third-party are in compliance with the Tentative Order's requirements. The Tentative Order and other Long-term ILRP WDR's have a

structure that includes treating high vulnerability areas and low vulnerability areas differently (more reporting and monitoring requirements are associated with high vulnerability areas).

While there are similarities between the Tentative Orders, there are key differences as well. For example, the surface water monitoring program is different in the Tentative Order than other Long-term ILRP WDR's. In addition, the reports provided by the third-party (e.g., the Groundwater Quality Assessment Report or GAR) will be based on the area-specific conditions, which in turn, will drive the regulatory approach (e.g., identification of the high vulnerability areas where growers need to submit nitrogen management plan summary reports). In addition, provisions have been added to the Order that acknowledge the unique saline groundwater conditions in some areas of the Order's coverage. Reduced requirements would apply if the third-party chooses to pursue a basin plan amendment to address those unique conditions.

The templates to be developed by the water quality coalitions and commodity groups for required reports are an example of a similarity that will benefit all growers by simplifying reporting requirements. There are also provisions in the Tentative Order that provide an opportunity for the third-party to submit comments on the templates regarding any changes that should be made to reflect the unique conditions in the area.

The commenter does not provided any examples or suggestions of what should be changed in the tentative Order to tailor it to the area covered.

3-2. Definition of Waste

Comment summary: The commenter contends that the Tentative Order's definition of waste is an overly broad expansion of a statutorily defined term and the term waste should be limited to its definition found in §13050(d) of the California Water Code.

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 §13050(d). For clarity purposes, the Tentative Order also provides examples of wastes that fall under the definition of waste in §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 §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.

3-3. Irrigation conveyance structures

Comment summary: The commenter believes that the language in Finding 5 of the Tentative Order should be revised to include specific provisions limiting regulation of water traveling within on-farm and between farm conveyance structures.

Response: The Tentative Order does not exempt water in conveyance structures that are operated by multiple Members or run through or along multiple Members properties and such an exemption is not intended or described by Finding 5. A discharge of waste by a Member into a channel that is used by other Members may result in a negative impact on the beneficial uses of that water for those other Members, or on other designated beneficial uses.

Once the water and any wastes associated with it are out of the control of the Member or not being beneficially used by the crop, it is consistent with Porter-Cologne and appropriate for the board to subject that waste discharge to the requirements of the Order.

3-4. Compliance with the California Environmental Quality Act (CEQA)

Comment summary: The Tentative Order is not sufficiently within the range of the Program Environmental Impact Report (PEIR) because it includes provisions substantially different from elements in the PEIR alternatives, such as end-of-field discharge limitations, farm management performance standards, and associated costs. The commenter believes that reliance of the PEIR for CEQA compliance is inappropriate.

Response: As described in the Information Sheet to the Tentative Order (Attachment A), the requirements of the Order include regulatory elements that are also contained in the six alternatives analyzed in the PEIR; therefore, Staff believes that the Tentative Order is sufficiently within the range of alternatives evaluated in the PEIR.

As a preliminary matter, Board staff disputes the commenter's contention that the tentative Order's receiving water limitations would establish water quality objectives as "end-of-field" discharge limitations. The Tentative Order does not include "discharge limitations," but includes "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, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance. 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 receiving water 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.⁵

⁵ 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

The potential environmental effects of implementation of receiving water limitations in the ILRP have been evaluated in the PEIR. Regulatory requirements for Alternatives 2-5 of the PEIR, on which the tentative Order is based, include the requirement that dischargers prevent nuisance conditions and/or exceedance of water quality objectives in state waters associated with waste discharge from their irrigated agricultural lands. This requirement is similar to the tentative Order's receiving water limitations.

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

The remaining concern that the tentative Order's farm management performance standards would apply requirements not analyzed in the PEIR, potentially leading to additional environmental impacts, is also unfounded. The commenter does not provide justification or examples supporting the claim that farm management performance standards are outside of the scope of the PEIR and that costs associated with farm management performance standards were not considered during the economic analysis portion of the PEIR.

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

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

3-5. California Water Code Section 13141 and 13241

Comment summary: Section 13141 of the California Water Code states in part that “prior to implementation of any agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan”. The commenter states that Finding 41 incorrectly concludes that a new cost analysis is unnecessary given that the Basin Plan includes an estimate of potential costs and sources of financing for the Long-term ILRP. The commenter contends that the Tentative Order proposes new costly regulatory components not previously analyzed during the environmental review or when adopted in the Basin Plan.

Response: Board staff disagree that the Tentative Order proposes new regulatory components that were not considered during the environmental review (see Response 3- 4 above). The economic analyses completed within the PEIR and subsequent incorporation of these cost estimates into the Basin Plan sufficiently addresses §13141 and §13241 of the California Water Code.

The State Water Board recently concluded that Water Code section 13141 is “applicable only to an agricultural water quality control plan that is adopted within a water quality control plan.”⁶ Since staff is proposing that the Board adopt the agricultural water quality control plan within waste discharge requirements as opposed to the Board’s Basin Plan, the tentative Order cannot violate Water Code section 13141 here, as the statute is not applicable.

Nevertheless, the Central Valley Water Board prepared a cost estimate for the long-term irrigated lands regulatory program, and added it to its Basin Plans prior to implementation of this Order. The State Water Resources Control Board approved these Basin Plan amendments on 17 July 2012. To estimate costs for the tentative Order, the Board staff used the same study used to develop the Basin Plan amendments and supplemented the study based on the tentative Order’s requirements. Finally, Board staff has confirmed that the estimated costs of the tentative Order fall within the range included in the Basin Plan estimate. Adoption of the tentative Order would not violate Water Code section 13141.

In addition, the Information Sheet includes a discussion of how costs were considered (see Section XV) and how those costs were derived from costs associated with elements of the PEIR alternatives. No further cost analysis is required by Water Code section 13241 and no evidence has been provided to demonstrate where the cost estimates are deficient.

3-6. Coordination and cooperation with other agencies

Comment summary: The commenter recommends adding the following as an additional finding under the Coordination and Cooperation With Other Agencies section of the Tentative Order:

“The United States Department of Agriculture Natural Resources Conservation Service (NRCS) administers a number of programs related to water quality. NRCS can provide technical assistance to growers and has identified practices that are protective of the environment and are feasible in an agricultural setting. The NRCS Environmental

⁶ See State Water Board Order WQ 2013-0101, *In the Matter of the Review of Conditional Waiver of Waste Discharge Requirements Order No. R3-2012-0001*, at p. 15

Quality Incentives Program (EQIP) provides cost share assistance for management practice installation. The NRCS has also provided assistance with research of management practice effectiveness. The third-party and its Members are encouraged to utilize the information and resources available through the NRCS to meet the requirements of this Order.”

Additionally, the commenter requests that nitrogen management plan deadlines be modified to allow for the incorporation of future recommendations from Task Force discussed in Finding 51 of the Tentative Order.

Response: The proposed finding regarding NRCS has been added to the Tentative Order.

The deadlines for preparation of a nitrogen management plan and associated reporting have been established to allow the board to make any necessary adjustments to the Tentative Order based on the finding and recommendations of the California Department of Food and Agriculture (CDFA) Task Force and the State Water Resources Control Board (SWRCB) Expert panel prior to the established compliance dates. The commenter does not specifically identify how the existing deadlines would inhibit the integration of the Task Force and Expert Panel findings or recommend an alternative deadline.

3-7. Discharge Limitations

Comment summary: The use of “shall not cause or contribute” to an exceedance of applicable water quality objectives is overly expansive and creates an unreasonable standard that is undefined, ambiguous, and holds farmers and ranchers liable for even the smallest de minimus contribution. The commenter proposes the removal of the words “or contribute to” from Provisions III.A and III.B of the Tentative Order.

Response: As stated above, the Tentative Order does not include discharge limitations (see Response B.4 above). In light of the discussion in Response B.4, board staff disagree 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 receiving water limitation. De-minimus discharges (e.g., below water quality objectives) can actually improve receiving water quality for the constituent of concern.

3-8. Nitrogen Management Plans

Comment summary: Rather than requiring all growers to prepare a nitrogen management plan, the Tentative Order should be revised to allow growers that are not located within designated high vulnerability areas flexibility in the nitrogen management planning requirements.

Response: Board staff disagrees that nitrogen management planning requirements should be reduced for growers outside high vulnerability areas. Low vulnerability areas are not “no vulnerability” areas. The potential to discharge waste that could affect groundwater from irrigated agricultural operations exists in these areas even if physical or hydrologic site conditions do not warrant a high vulnerability designation. The impacts from irrigated agricultural application of nitrogen need to be addressed in all areas of the Tentative Order regardless of groundwater vulnerability designation. Nitrogen management planning is an efficient farming practice as well as a management practice that should help growers meet the requirement to minimize

excess nutrient application relative to crop consumption. The Nitrogen Management Plan is kept on-site and Members in low vulnerability areas do not have to submit a Nitrogen Management Plan Summary Report to the third-party.

3-9. Template Requirements

Comment summary: The commenter requests that the words “or equivalent” be added to the Farm Evaluation section (section VII.B) and the Nitrogen Management Plan section (section VII.D) of the Order. The commenter contends that addition of this language is needed to enable the third-party to take advantage of the option of proposing modifications in these templates.

Response: Staff does not agree that the referenced sections need to be modified for the third-party to comment on the templates provided by the Executive Officer (see section VIII.C of the Order). This section provides the third-party and other interested parties with thirty (30) days to comment on proposed templates. This comment step will occur prior to the Executive Officer providing the final templates. Once those templates are provided (with potential modifications based on comments), Sections VII.B and VII.D require the Member to use those provided templates. Adding the “or equivalent” language could suggest to the Member that a different method for reporting could be used. One of the purposes of the templates is to ensure consistent reporting from the Member to the third-party and the board, a purpose that would be defeated by allowing other templates to be used.

3-10. Basin Plan Amendment Workplan

Comment summary: The commenter appreciates the inclusion of a process for the third-party to pursue a basin plan amendment to address the appropriateness of a beneficial use designation.

Response: The commenter is supportive of the provision. No further response is required.

3-11. Toxicity testing

Comment summary: As currently drafted, the Tentative Monitoring and Reporting Program (MRP) language could be interpreted that both acute and chronic toxicity testing is required for all toxicity tests. The commenter recommends adding a footnote to section III.B.3 of the MRP to specify that the use of chronic testing is appropriate only for toxicity testing for *Selenastrum capricornutum*.

Response: Board staff disagrees with the commenter that the language could be interpreted that both acute and chronic toxicity testing is required for all toxicity tests and does not believe that the proposed footnote would provide further clarification.

3-12. Submission of individual data records

Comment summary: The commenter questions the need for third-parties to submit individual data records used to develop the management practice summary submitted by the third-party group and suggests this section requirement be removed.

Response: Please see responses to comments 1-18 and 1-19.

Comment Letter 4 – California Sportfishing Protection Alliance and California Water Impact Network

4-1. Regional [Surface Water] Monitoring Inadequate

Comment summary: Regional [surface water] monitoring cannot provide a sound basis for curtailing and preventing pollution from farms. Data collected so far proves “folly” of relying exclusively at not looking at individual discharges. Downstream monitoring stations cannot and do not measure water quality occurring five miles upstream.

Response: See response to comment 4-14.

4-2. Staff watered down program based on unreasonable fears

Comment summary: Staff have watered down the program based on fears that they don’t want to air the dischargers’ “dirty laundry” or in response to a fear of being sued by third-parties.

Response: The tentative Order has been designed based on a reasoned consideration of applicable laws and policies, along with board direction regarding this Order and the irrigated lands regulatory program in general. The characterization of the basis of the program is inaccurate and without foundation. The tentative Order does not include any discussion related to not airing “dirty laundry” or concerns about lawsuits from third-parties.

4-3. Staff have failed to demonstrate that farm-specific monitoring and more direct control over dischargers involve unreasonable costs

Comment summary: Staff “hides behind a rhetoric of poverty”. The farms on the west-side generate billions of dollars in profits. Staff has “failed to articulate any evidence demonstrating that farm specific monitoring and more direct control over the west-side dischargers involve unreasonable costs.”

Response: Staff has relied on the cost and economic analysis conducted as part of the Program Environmental Impact Report, with some minor modifications (e.g., change in fees), to evaluate the costs and potential economic impact of the proposed Order. The analysis included estimates of the change in the value of production; change in net revenue; and change in irrigated acreage from existing conditions for the five programmatic alternatives analyzed in three basins – the Sacramento River Basin; the San Joaquin River Basin; and the Tulare Lake Basin. That analysis showed that the costs associated with universal farm-specific monitoring and direct oversight by the Central Valley Water Board (Alternative 5) had the most significant negative impact in terms of reductions in value of production; net revenue; and irrigated acreage compared to all other alternatives (Alternatives 1-4), including the third-party led alternatives.

Using the results from the Economics Report (Table 2-22) for the San Joaquin River basin, the projected cost of Alternative 5 (similar to the Commenter’s farm specific approach) is an average of \$182.95 per acre per year, with a projected \$47.98 per acre annual cost for monitoring and \$8.20 per acre for administration (primarily board staff costs). The estimated average cost of this Order is \$116.90 per acre annually with an estimated average annual cost of \$3.78 per acre for monitoring. For the approximately 500,000 acres in the Western San Joaquin River watershed, the additional \$66.05 per acre average annual cost for an individual monitoring/direct

regulatory oversight approach would increase costs for the whole watershed by approximately \$33 million per year, or an over 50 percent higher estimated annual cost.

The costs associated with Alternative 5 would result in a projected loss of 58,000⁷ acres of irrigated lands, as compared to the estimated loss associated with this Order of approximately 36,000 acres (see Attachment D, page 17). The Economics Report and PEIR also include estimates of the state staffing levels approximately eighteen times higher to manage thousands of dischargers directly versus working with a third-party group.⁸

The additional costs and potential additional loss of Important Farmland associated with direct, individual regulation can be avoided should growers be able to successfully protect water quality under the proposed third-party administered Order. The successful monitoring, reporting, and outreach efforts by the Coalition and the improvements in water quality under the Coalition Group waiver suggest that providing a less costly alternative for a grower to comply with Porter-Cologne is reasonable, appropriate, and high a strong likelihood of success.

The characterization of a “rhetoric of poverty” is inaccurate and without foundation. Staff has not provided any discussion regarding income levels of farmers relative to poverty levels as a basis for any of the requirements in the tentative Order.

The Commenter suggests that staff is obligated to demonstrate that farm specific monitoring and more direct control involve unreasonable costs. Staff is not aware of any legal requirement to select the most costly regulatory option, unless it can be shown that those costs are unreasonable.

The tentative Order represents a less costly approach (as compared to Commenter's suggested approach) for achieving the board's policy goals and meeting its legal obligations. However, the tentative Order includes numerous provisions for additional field specific monitoring and reporting of individual grower information, if the third-party and their Members are not successfully protecting water quality (e.g., inadequate progress in implementation of a surface water quality management plan can field studies; on-site verification of practices; or revocation of coverage under the tentative Order).

In addition, the board has already adopted a general WDR to regulate growers individually, along the lines of the approach the Commenter has suggested. This more costly regulatory approach is available to be applied immediately to individual dischargers or areas, if dischargers under the third-party based tentative Order are not meeting the Order's requirements.

⁷ Staff calculated the potential loss of agricultural land for the commenter's proposed approach (similar to Alternative 5) from Table 5.10-6, Volume I of the draft PEIR based on the ratio of irrigated lands covered by the tentative Order to the total irrigated lands in the San Joaquin River Basin (this is the same methodology as described in Attachment D, pages 16 and 17 for calculating potential loss of Important Farmland under the tentative Order).

⁸ From Table 2-16 of the Economics Report comparing Alternatives 2 and 5.

4-4. Evidence not sufficient for findings supporting authorization of degradation

Comment summary: There is not sufficient evidence to support authorizing degradation of every surface and groundwater throughout the WDR area.

Response: The rationale for allowing degradation of high quality waters as proposed in the tentative Order is justified and well described in the findings and Information Sheet. Additional discussion of the support for findings related to degradation can be found in subsequent responses to the commenter's more specific comments presented below.

4-5. As Proposed, The Order Would Not Waive Filing of Reports of Waste Discharge By All Dischargers Within the WDR Area.

Comment summary: The exclusive means for avoiding the requirement for a discharger to file a Report of Waste Discharge is to issue conditional waiver pursuant to Water Code section 13269. Unless the Central Valley Water Board proposes to adopt a conditional waiver pursuant to Water Code section 13269, the Board must require each discharger covered under the Order to file a Report of Waste Discharge.

Response: Board staff disagrees with the commenter's interpretation of Porter-Cologne. While staff agrees that the Board would be authorized to waive the requirement to file a report of waste discharge if it issued a conditional waiver pursuant to Water Code section 13269 (as it has done historically since 2003), the plain language of the Porter-Cologne provides separate authorization for the Board to issue waste discharge requirements to dischargers in the absence of receiving a report of waste discharge from the discharger.

As acknowledged by the commenter, Water Code section 13263(d) reads, "the regional board may prescribe [waste discharge] requirements although no discharge report has been filed." The plain language of this provision means that the Board is explicitly authorized to issue waste discharge requirements where, as here, it has not received reports of waste discharge from the growers regulated by the general waste discharge requirements. General waste discharge requirements are authorized pursuant to Water Code section 13263(i). The separate authorizations for issuing conditional waivers or general waste discharge requirements in the absence of reports of waste discharge are located in different sections of the Water Code. The placement of each explicit authorization in different locations of the Code is not significant, and does not support the commenter's argument that the regulating these discharges in the absence of reports of waste discharge is exclusively reserved to conditional waivers. In fact, this Board, the State Water Board, and other Regionals Boards throughout the state have, as a matter of practice, issued general waste discharge requirements that authorize discharges without requiring reports of waste discharge to be submitted in compliance with Water Code section 13260.

The commenter tries to assign significance to Water Code section 13264 as signaling that reports of waste discharge are required for General WDRs but not for conditional waivers. That section, which applies to the initiation of a new or materially changed discharge, does not appear to apply to the discharges to be regulated by the tentative Order, which have been ongoing for several decades and have previously been regulated under a conditional waiver.

4-6. The Regional Board Has No Authority To Deputize Third-Parties To Hold Section 13267 Reports For The Regional Board And Insulate The Reports From Public Disclosure.

Comment summary: The farm evaluations report must be provided directly to the board, and not to a deputized third-party. Requiring a report to be submitted to a third-party violates the requirement that reports prepared pursuant to Water Code section 13267 be submitted directly to the Regional Board.

Response: Board staff disagrees that the tentative Order's requirement for Members to prepare farm evaluation reports, have them available for regional board review upon request, and to have them submitted to their third party representative violates the Water Code. Requiring dischargers to keep records and make them available to the Board upon request has been common practice among State Water Board and the regional boards for decades and does not violate Porter-Cologne. In fact, Water Code section 13383 (applicable to NPDES permits), explicitly authorizes the regional boards to "establish monitoring, inspection, entry, reporting, *and recordkeeping requirements.*" (italics added).

The commenter asserts that the language of Water Code section 13267(b)(1) requiring a discharger to "furnish, under penalty of perjury, technical or monitoring reports which the regional board requires" eliminates the Board's discretion to impose recordkeeping requirements, and instead require all reports to be submitted directly to the Board. Board staff disagrees, and is has a different interpretation of the cited language. The tentative Order requires members to prepare the report, which "shall be maintained at the Member's farming operations headquarters or primary place of business, and must be produced upon request by Central Valley Water Board staff." The proposed requirement is therefore authorized by Water Code section 13267, as it requires the member to furnish the report in the manner "which the regional board requires" (i.e. maintained at the business, and be available for production upon Board request). The tentative Order imposes a recordkeeping requirement, and those records must be furnished upon request. The commenter's interpretation would result in the absurd result that recordkeeping requirements are authorized by Porter-Cologne for Board's NPDES program, but are prohibited by the other sections of the Porter-Cologne Act.

In addition to staff's position that the recordkeeping requirements are authorized by Porter-Cologne, it also asserts that it is appropriate to require these reports to be submitted to the third-party in addition to being available upon request. Since 2003, the Board has used a coalition approach to regulating discharges from irrigated agriculture. This approach was reviewed by the State Water Board in 2004, and was allowed to remain in place. (State Water Board Order 2004-0003). The requirement to submit farm evaluation reports reflects the advancement of the program to require members to submit more detailed information to its third-party representative. It is appropriate that the third-party representative receive and review the information contained within each members' farm evaluation report. The additional requirement to submit the report to the third-party representative in no way supersedes or eliminates each member's obligation to maintain the report at its business, or to produce the report upon request from the Board. If the Board staff receives a copy of the report, it would be subject to public disclosure under the California Public Records Act.

- 4-7. If the Regional Board Makes the Findings Under the High Quality Waters Policy to Allow Degradation in Both Surface and Ground Waters Throughout The 500,000 Acre WDR Area, the Regional Board Will Have Abused Its Discretion and Proceeded in a Manner Inconsistent With the Law.

Comment summary: As detailed below in the letter, the tentative Order violates the State's Antidegradation Policy.

Response: This is a general introductory comment introducing more detailed comments that follow. In response, Board staff maintains that the tentative Order fully complies with the State Antidegradation Policy. The responses to the detailed comments are provided below.

- 4-8. The Regional Board Cannot Allow Degradation Under the High Quality Waters Policy Prior to Identifying the High Priority [sic, High Quality] Waters in the WDRs' Geographic Area.

Comment summary: Neither board nor staff have reviewed the available data and determined which waterbodies are high quality waters. Because board does not know which waters are high quality waters, the board lacks the information necessary to apply the antidegradation policy balancing test. The board must first identify which of the waters in the order area are high quality waters; there should be a search of the data to determine the best water quality for every segment in the watershed.

Response: Nothing in the State Antidegradation Policy itself, its guidance documents, or published appellate decisions indicates that the regional board must determine the best quality of the receiving waters that have existed since 1968, and from that compile an inventory of all high quality waters within the permit area for all constituents of concern. The commenter cites *Asociacion de Gente Unide por el Agua v. Central Valley Water Board [AGUA]* (2012) 210 Cal.App.4th 1255, 1271 in support of its position. However, that court decision did not specifically require the Central Valley Water Board to conduct an inventory of high quality waters. Nor did the court prepare an inventory itself. Instead, the court assumed that the State Antidegradation Policy applied throughout the region for nitrate based on its finding that "at least some of the water affected by the Order is high quality water." This is essentially the same approach taken by the tentative Order, which proposes to apply BPTC and "best efforts" equally to high quality waters and already degraded waters.

Appendix A to the PEIR and the tentative Order's Information Sheet (Attachment A) describe in detail the Central Valley Water Board's approach to compliance with the Anti-Degradation Policy. As mentioned in the PEIR, very little guidance has been provided by the State Water Board with respect to applying the State 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 have constituents at levels have exceeded water quality objectives at all times since 1968. 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 receiving water bodies in the permit area. As a result, the Central Valley Water Board did not prepare an inventory of all 'high quality receiving waters' within the permit area. Although the commenter claims such an exercise is legally required, they do not provide any discussion, reference, or State Board or Regional Board guidance supporting their claim, other than the *AGUA* case discussed above.

4-9. Staff's Proposal Would Have the Regional Board Determine That Degradation is Authorized Even for Parameters and Waterbody Reaches That, Although High Quality, Discharges are Not Currently Degrading

Comment summary: The comment alleges that the tentative Order proposes a blanket authorization for farms in the WDR area to degrade waters even for pollutants at the monitoring locations that they cannot show any reason degradation is necessary for the public benefit or any other reason. The commenter asserts that the tentative Order would authorize degradation even where there is no discernable discharge degrading high quality waters.

Response: The commenter asserts the tentative Order, including its receiving water limitations, provides a "blanket authorization" for degradation. The Central Valley Water Board disagrees that the tentative Order authorizes a "blanket" amount of degradation of high quality waters. That assertion misreads the tentative Order by viewing in isolation the Receiving Water Limitations (which prohibit discharges that cause or contribute to exceedances of water quality objectives) to the exclusion of all other waste discharge requirements contained in the tentative Order.

To the contrary, and as described below, the tentative Order, when viewed as a whole, establishes requirements that will limit degradation of high quality waters (where applicable) through the implementation of BPTC by all covered dischargers (e.g., through farm management performance standards, nitrogen planning, farm planning, and feedback monitoring). The receiving water limitations provide additional restrictions that overlay the other requirements. This provides a regulatory ceiling that prohibits all discharges, including discharges to waters that are not high quality, from causing or contributing to exceedances of water quality objectives.

While the receiving water limitations establish a ceiling for degradation, the tentative Order's farm management performance standards, and management practice implementation requirements will limit and reduce the waste discharges that may result in the degradation of high quality waters. Farm management performance standards (listed in the Information Sheet) and other requirements of the tentative Order provide additional requirements that will further limit degradation. For example, the performance standards require all members to implement practices to minimize waste discharge to surface water even where a discharge is currently meeting water quality objectives. In other words, there is no exemption from this performance standard for members that are in compliance with the tentative Order's receiving water limitations. As another example, the nutrient performance standard requires minimization of nutrient application relative to crop consumption regardless of the concentrations of nutrients in the receiving groundwater. Therefore, where underlying groundwater is of high quality for nutrients, the tentative Order requires minimization of nutrient application relative to crop consumption, which will minimize waste discharge to groundwater and surface water and any associated potential degradation through the implementation of best practicable treatment or control. This minimization requirement is in stark contrast with the commenter's assertion that the tentative Order provides a "blanket authorization" for the degradation of high quality waters. Other examples of farm management performance standards or related prohibitions include minimization of sediment discharges and percolation of waste to groundwater, the protection of wellheads from surface water intrusion, and prohibitions against discharging waste into groundwater through backflow or groundwater well casings.

With respect to the commenter's implication that more stringent requirements should apply in situations where there is "no discernable discharge degrading water," Board staff disagrees. As noted in the tentative Information Sheet, "Resolution 68-16 does not require Members to use technology that is better than necessary to prevent degradation. As such, the board presumes that the performance standards required by this Order are sufficiently achieving BPTC where water quality conditions and management practice implementation are already preventing degradation. Further, since BPTC determinations are informed by the consideration of costs, it is important that discharges in these areas not be subject to the more stringent and expensive requirements associated with SQMPs/GQMPs. Therefore, though Members in 'low vulnerability' areas must still meet the farm management performance standards described above, they do not need to incur additional costs associated with SQMPs/GQMPs where there is no evidence of their contributing to degradation of high quality waters." The tentative Order triggers requirements for additional management practices (through management plan requirements) when trends of degradation that threaten beneficial uses are detected. This is the appropriate trigger and avoids requiring technology better than necessary to prevent degradation.

4-10. The Regional Board Does Not Have Sufficient Evidence to Establish that Any Given Discharger's Degradation of Surface and Ground Waters Throughout the WDR Area Will Maximize Benefits to the People of California.

Comment summary: The commenter asserts that the board's analysis of whether the degradation of high quality waters authorized by the Order is in the maximum benefit to the people of the state must be quantitative and specific to each particular discharger. The Board is not in an evidentiary position to apply the factors relevant to maximum public benefit and to declare any degradation acceptable under the Antidegradation Policy. A region-wide basis for economic analysis does not provide any evidence relevant to whether authorizing a discharge from any particular farm in the order area will be consistent with the maximum benefit to the people of California. Monitoring will not be able to discern water quality changes upstream and as such cannot be used to make a finding that any such changes will be of maximum benefit to the people of California.

Response: As documented in the Information Sheet, Board staff has conducted an analysis of whether the potential degradation of high quality waters authorized by the tentative Order is consistent with the maximum benefit to the people of California. The analysis is qualitative. The commenter's assert that the board's analysis must be quantitative and specific to each particular discharger. The suggested approach is infeasible for a general order that authorized by Water Code section 13263(i) and is set to regulate thousands of individual dischargers.

Because of the widespread nature of irrigated agriculture and the numerous water bodies potentially affected, it is infeasible for the board to quantitatively review each potential waste discharge and receiving water scenario (tens of thousands) throughout the Central Valley, quantify its potential degradation of high quality waters, and determine whether that quantified degradation is consistent with the maximum benefit to the people of California. Instead, board staff conservatively assumed that there are high quality waters receiving irrigated agricultural wastes that may be degraded by continued discharge. Operating under this supposition, the tentative Order applies requirements to minimize such degradation not just for those operations discharging to a high quality water, but all operations; requirements to implement best practicable

treatment or control or “best efforts”; and requirements to ensure that waste discharge is not above an applicable water quality objective.

Despite the quantitative limitations inherent to general orders, Board staff has proceeded to propose a “maximum benefit” determination in consideration of factors listed in State Water Board guidance documents. As described in the tentative Order and its attachments, board staff has considered (1) past, present, and probable beneficial uses of the water (specified in Water Quality Control Plans); (2) economic and social costs, tangible and intangible, of the proposed discharge compared to the benefits, (3) environmental aspects of the proposed discharge; and (4) the implementation of feasible alternative treatment or control methods, which are the factors listed in the State Water Board’s 1995 Question and Answers document recommended for consideration in determining the “maximum benefit to the people of the state.” That guidance document acknowledges that the determination is “based on considerations of reasonableness.” The commenter’s suggestion that the analysis must be made on a discharger-by-discharger basis is not reasonable for a general order regulating thousands of dischargers. Staff’s qualitative analysis of compliance with the State Antidegradation Policy is reasonable under the circumstances.

4-11. The Regional Board Cannot Authorize Degradation of all Waters Within the WDR Area Because the Proposed WDR Conditions, Even if Complied With, Will Only Further Demonstrate That the Authorized Discharges will Result in Water Quality Less Than the Basin Plan’s Water Quality Objectives.

Comment summary: The tentative Order will not ensure compliance with applicable water quality objectives as evidenced by the tentative Order’s proposed ten-year compliance schedule. Furthermore, the monitoring scheme is not sufficient to detect violations of water quality objectives for large expanses of the watersheds upstream of the monitoring stations.

Response: The tentative Order proposes a finding that the discharges to high quality waters authorized by the tentative Order comply with the State Antidegradation Policy. Specifically, the Information Sheet reads: “The receiving water limitations in section III of the Order, the compliance schedules in section XII, and the Monitoring and Reporting Program’s requirements to track compliance with the Order, are designed to ensure that the authorized degradation will not cause or contribute to exceedances of water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.” This statement is fully supported by evidence in the record.

The receiving water limitations in the tentative Order, combined with the time schedule provisions, are intended to bring a Discharger into compliance with water quality objectives as quickly as possible once violations are detected. This process, along with the performance standards and other requirements of the tentative Order, will ensure that all Dischargers reduce their waste discharges in the short-term, while fully complying with water quality objectives in the long-term.

Antidegradation requirements do not require instantaneous compliance or otherwise provide time limitations on achieving policy objectives; i.e., to ensure that best practicable treatment or control is in place and that degradation is not allowed above applicable water quality objectives. The Water Code, however, clearly provides the board with the discretion to prescribe time schedules within waste discharge requirements [section 13263(c)]. Further, the State Board’s regulations encourage time schedules in situations like these where it appears that not all growers covered by

the tentative Order can immediately meet the tentative Order's receiving water limitations.⁹ Using time schedules to implement antidegradation requirements was explicitly recognized and endorsed by the California Court of Appeal, who wrote with respect to the Central Valley Water Board's Dairy Waste Discharge Requirements that "[a] phased approach... is reasonable, and is authorized by section 13263, which allows the requirements of a regional water quality control board to contain a time schedule." *AGUA v. Central Valley Water Board*, 210 Cal.App.4th 1255, 1277.

The diffuse nature of nonpoint source pollution may not allow the board or dischargers to immediately determine the practices causing or contributing to the exceedance of objectives, nor to determine the most effective and practicable remedies. Therefore, the compliance time schedules provide up to 10 years for the determination of which practices are protective and a process for establishing timelines to implement those practices (through Groundwater Management Plans, Surface Water Quality Management Plans, or the Management Practices Evaluation Program). However, the 10-year timeframe is a maximum and does not default to 10 years. Instead, the tentative Order would require the discharger to propose a schedule that is as short as practicable with appropriate technical and economic justification. It would be unreasonable to require immediate compliance prior to generating the information needed to understand how to address the problem and providing time to implement the corrective actions.

The Board's monitoring and reporting system is representative and is designed to detect whether members are causing or contributing to exceedances of water quality standards. For a discussion of the adequacy of the representative monitoring approach, see response to comment 4-14.

4-12. The Regional Board Does Not Have Sufficient Evidence to Establish that All Dischargers Within the WDR Area are Implementing the Best Practical Treatment Controls for Discharges to Surface Waters and Ground Water.

Comment summary: Without requiring information about what each individual discharger is implementing for management practices and data regarding the practices' effectiveness to control pollutants, there is no evidence upon which the Board can base a finding that each discharger will implement BPTC.

Response: As required by the Antidegradation Policy when authorizing degradation of high quality waters, the Tentative Order proposes a finding that the Order will result in the implementation of BPTC. This proposed finding is appropriate and supported by evidence in the record. The commenter has not shown otherwise.

The Information Sheet (under the heading "Consistency with BPTC and the 'Best Efforts' Approach") goes into great detail explaining the proposed finding that the tentative Order will result in the implementation of BPTC where applicable.

BPTC is not defined in Resolution 68-16. However, the State Water Board has provided guidance in its 1995 Question and Answers document on the numerous factors the Boards may consider in determining BPTC: "To evaluate [BPTC], the discharger should compare the proposed method to existing proven technology; evaluate performance data, e.g., through treatability studies; compare alternative methods of treatment or control; *and/or* consider the method currently used by the

⁹ See 23 Cal.Code.Reg., section 2231, subd.(a).

discharger or similarly situated dischargers.” The costs of the treatment or control “should also be considered.” Board staff considered each factor to the extent applicable in determining that the tentative Order will result in the implementation of BPTC.

In the Information Sheet, the staff explained the multi-step approach it took in determining that the tentative Order will result in the implementation of BPTC. The first step in the approach was to analyze the minimum performance standards and other requirements that all Members enrolled under the under must meet. First in comparing the tentative Order’s proposed performance standards with published federal and state management measures for irrigated agriculture, the Information Sheet reflects consideration of “existing proven technology,” “methods currently used by similarly situated dischargers,” and of “promulgated technologies,” three factors recommended by the State Water Board guidance for the determination of BPTC.

As described in the Information Sheet, the second step of staff’s BPTC analysis considered the General Order’s iterative requirements for implementation, planning, studies, and reporting. This iterative aspect of the Order results in additional planning and implementation measures in areas where water quality problems are observed. For example, the Order requires development of water quality management plans (surface or groundwater) that must be implemented by growers where irrigated agriculture is causing or contributing to exceedances of water quality objectives or where degradation trends are observed that threaten to impair a beneficial use. The management plans include requirements to investigate sources, develop strategies to implement practices to ensure waste discharges are protecting water quality, and develop a monitoring strategy to provide feedback on the effectiveness of the management plan. Under these plans, additional practices will be implemented in an iterative manner, following the results of the studies and investigations required for management plans. This mechanism further supports the Board’s finding that BPTC will be implemented, as these requirements will facilitate the collection of information necessary to demonstrate the performance of the practices. Furthermore, the management plans will facilitate the “evaluation of performance data” as suggested by State Water Board guidance in the determination of BPTC. The Management Practices Evaluation Program (MPEP) required by the General Order in groundwater areas defined as “high vulnerability” requires a similar set of additional requirements that will be implemented based on the evaluation of performance data.

Finally, the Information Sheet describes the tentative Order’s overall costs and its impacts to the agricultural economy prior to its adoption. Consideration of costs is one of the factors listed in State Water Board guidance for determination of BPTC. Staff’s consideration of costs and economics – as suggested by State Board guidance - was integrated throughout its analysis of the tentative Order, and further support the proposed determination that the practices and actions required by the Order constitute BPTC.

The robust monitoring and reporting requirements of the tentative Order, combined with the enforcement tools, provide further assurance to the board that BPTC will be implemented by growers. In addition to the representative surface water monitoring, the tentative Order contains requirements for the growers to produce reports to demonstrate how they are meeting the farm management performance standards (Farm Evaluations; Nitrogen Management Plans; Nitrogen Management Plan Summary Reports and Sediment Discharge and Erosion Control Plans). The third-

party will produce evaluations of management practices and conduct additional monitoring or studies as part of the management plan process. The third-party will also assess areas vulnerable to sediment discharge and erosion. In addition, board staff has in the past and will continue to conduct inspections of individual growers to evaluate compliance with the proposed Order. The board will, therefore, have a great deal of information available to it (in addition to the results from the representative surface water monitoring efforts) to evaluate individual grower compliance. These factors provide further evidence supporting the finding that the tentative Order will result in the implementation of BPTC where applicable.

4-13. The Proposal to Authorize Degradation Admits That Implementation of the Proposed WDRs Will Continue to Degrade Water.

Comment summary: The proposed Order abandons any effort to avoid degradation of high quality waters and therefore violates the State Antidegradation Policy. Also, the proposed Order violates the State Antidegradation Policy because requirements are not geared to address degradation but exceedances of water quality objectives. Finally, the proposed Order inappropriately allows the Executive Officer to relieve the third party of management plan requirements if members meet applicable water quality objectives or if management plans will not likely remedy the exceedance.

Response: As discussed in various responses above, Board staff maintains that its antidegradation analysis fully complies with the State Antidegradation Policy. That degradation may occur under the tentative Order is not determinative. Board staff agrees that degradation of high quality waters may occur. The tentative Order authorizes such potential degradation under the terms and conditions of the Order. The potential degradation of high quality waters authorized by the tentative Order fully complies with the State Antidegradation Policy.

The commenter asserts that the tentative Order's requirements are not geared towards addressing degradation but exceedances of water quality objectives. Staff disagrees. As described in detail in response to comment 4-9, the tentative Order will limit degradation of high quality waters (where applicable) through the implementation of BPTC by all covered dischargers (e.g., through farm management performance standards, nitrogen planning, farm planning, and feedback monitoring). The receiving water limitations provide additional restrictions by prohibiting all discharges, including discharges to waters that are not high quality, from causing or contributing to exceedances of water quality objectives.

In addition to the requirements that will apply universally to limit degradation of high quality waters, the tentative Order requires the third party to prepare management plans (groundwater or surface water) whenever "irrigated agriculture is causing or contributing to a trend of degradation of surface water that may threaten applicable Basin Plan beneficial uses." Management plans can therefore be triggered even in the absence of exceedances of water quality objectives, and will further limit degradation when trends that threaten beneficial uses are identified. As described in response to comment 4-9, however, additional practices are not required by the antidegradation policy when the existing practices and water quality practices are preventing degradation.

Finally, changes have been proposed to the tentative Order regarding the commenter's concern that the Executive Officer may relieve the third party of management plan requirements under specific conditions. First, staff has proposed to

delete the provision allowing the Executive Officer to determine that a management plan is not required if management plans will not likely remedy the exceedance. Next, staff has responded to the commenter's concern that management plans may not be required in areas with trends of degradation exist but are not causing or contributing to water quality exceedances. In response to that concern, staff has proposed language clarifying that management plans will be required as long as the problem that triggered the management plan requirement has not been resolved. That clarification preserves the Executive Officer's ability to determine that a management plan triggered by exceedances of water quality objectives is not required if irrigated agriculture does not cause or contribute to exceedances of water quality objectives. Management plan requirements would no longer be appropriate in a situation where evidence shows that irrigated agriculture is not causing or contributing to a water quality problem.

4-14. Monitoring Surface or Ground Waters Many Miles Downstream of Pollution Sources Will Neither Detect Nor Prevent Degradation or Upstream Exceedances of Water Quality Objectives.

Comment summary: Monitoring stations in the tentative order are the same as under the conditional waiver, and those stations cannot and will not detect violations of WQO or degradation beyond a short distance upstream. Upstream violations and degradation will go undetected, which is not in compliance with the antidegradation policy.

Response:¹⁰ The commenter has incorrectly represented the surface water monitoring program; has applied conclusions and statements made on the Conditional Waiver and Dairy Order that are inapplicable to the specific facts related to this Order; and has failed to consider all information that will be available to the board to evaluate compliance and all requirements imposed on the growers to prevent unauthorized degradation and exceedances of water quality objectives.

Contrary to the commenter's assertion, the representative monitoring program is not meant to ensure that one site exactly duplicates another site. Board staff has never asserted one monitoring station "measures" water quality at another monitoring station, nor does the tentative Order rely on one monitoring station measuring water quality at another monitoring station. The monitoring program is designed to include a sufficient number of sites, parameters, and frequency of monitoring to be able to identify water quality problems and be representative of the effect of irrigated lands discharges on receiving waters. The monitoring program must also "collect sufficient information to answer critical questions" developed by the previous conditional waiver.¹¹

¹⁰ Note that the comment heading refers to groundwater, however, the commenter presents no argument or discussion related to the requirements of the groundwater program. Therefore, the staff response does not include a discussion of the groundwater program.

¹¹ Tentative Order, Attachment B, Section III. Those critical questions are: (1) Are receiving waters to which irrigated lands discharge meeting applicable water quality objectives and Basin Plan provisions? (2) Are irrigated agricultural operations causing or contributing to identified water quality problems? If so, what are the specific factors or practices causing or contributing to the identified problems? (3) Are water quality conditions changing over time (e.g., degrading or improving as new management practices are implemented)? (4) Are irrigated agricultural operations of Members in compliance with the provisions of the Order? (5) Are implemented management practices effective in meeting applicable receiving water limitations? and (6) Are the applicable surface water quality management plans effective in addressing identified water quality problems?

The commenter has not considered that the land use around all of the monitored sites is primarily, if not exclusively, agriculture. The land use immediately upstream of the monitored sites is agriculture and the mix of crops around the monitored sites is similar to the crop mix in unmonitored areas. Therefore, it is reasonable to use the results from the monitored sites to draw conclusions regarding water quality impacts in areas with similar crops and similar practices that are not being monitored. Under the tentative Order, if a water quality problem (e.g. exceedance of a water quality objective) is detected at a monitoring site, it is assumed that those same problems exist in the upstream sites represented by the discharge. In fact, if a management plan is triggered by monitoring results at the downstream site, the remedial activities required at the downstream monitoring site and all upstream areas represented by the downstream monitoring site.

As a general matter, such inductive reasoning is applied to results from all monitoring programs (both regulatory and scientific studies), since it is not possible to monitor all locations at all times for all constituents. The design of any monitoring program requires some judgment (based on a reasoned evaluation of available information) of how best to answer the questions of interest by determining what to monitor, how frequently to monitor, where to monitor, when to monitor, and the quality of the information needed. There are no hard and fast rules on monitoring program design and different technical experts can come to reasonable conclusions that differ in terms of what constitutes an appropriate monitoring design to meet certain objectives or answer certain questions.

As discussed in the Information Sheet at section VI.A, the surface water monitoring program has been carried over in part from the preceding conditional waiver, which also required creation of a representative monitoring program explicitly required to enable such determinations to be drawn. The Coalition Group was required to provide technical justification and identify which representative sites in an MRP Plan that was to be approved by the Executive Officer. This specific plan was approved by the Executive Officer as complying with all the requirements of that Monitoring and Reporting Order, which, as noted above, requires this sort of representative monitoring to be sufficient to give adequate information about water quality throughout the Coalition area¹². Neither the commenter nor any other party has challenged this previous determination by the Executive Officer or the current MRP Order under which the Coalition is currently operating.

The tentative Order continues to explicitly require the representative monitoring program to enable such determinations to be drawn. MRP, Section III.A reads, "The third-party shall ensure that discharge monitoring sites are representative of all areas and all types of irrigated agricultural waste discharge within the entire third-party area. Surface water monitoring sites shall be located to characterize water flow, quality, and irrigated agricultural waste discharges within the entire third-party area. Select monitoring sites are also designated as representative of water quality conditions and irrigated agricultural waste discharges (e.g., in adjacent smaller subwatersheds with similar waste discharges and receiving water conditions)." That section also specifies that "Any area with irrigated agricultural waste discharge that does not contain a monitoring site due to issues of access or location downstream of urban influence must be represented by another monitoring site within the region with similar land use

¹² The Executive Officer subsequently issued an MRP Order - R5-2008-0831, which incorporated the monitoring sites identified as representative in the originally approved monitoring plan.

and cultural practices.” In this way, the program under the tentative Order is able to have information about water quality throughout the area, without having to go to the expense of putting a monitor at the edge of every field. If it turns out that a given Coalition's representative monitoring system proves to fail to do this, it would not be in compliance with the Order's requirements, and the monitoring plan would have to be adjusted to maintain coverage under the program.

Evidence in the record supports the efficacy of the surface water monitoring requirements proposed by the tentative Order. The representative monitoring program required by the previous waiver has already identified many of the major surface water quality problems, having triggered multiple management plans for a number of constituents. Although not universally positive, many of the general trends suggest there have been improvements in water quality (see Figure 5 of the Information Sheet). There have also been changes in management practices that appear to generally correspond with the improvement in water quality (see Information Sheet discussion). These results suggest that the monitoring design is robust enough to identify water quality problems and that the types of water quality problems are similar throughout the Western San Joaquin River watershed. In light of those results, a representative monitoring approach is sufficient and the individual monitoring approach proposed by the commenter is unlikely to reveal any new issues that have not already been identified.

The commenter suggests that the board will not know which particular farms are responsible for the water quality problem. This statement, and the general argument in the comment, suggests that for a nonpoint source problem, where the pollutant sources are often diffuse and difficult to identify, the only legally or technically valid approach under the Antidegradation Policy is to track down individual sources through an intensive individualized monitoring program. Board staff disagrees, as the requirements of the Antidegradation Policy, must be harmonized with the Water Code's requirement that any monitoring required be reasonable and cost-effective. (See Wat. Code, § 13267, subd. (b)(1).)

The individualized monitoring approach was extensively studied when developing the Program EIR. Pages 94 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 and staff resources. This is significant in light of the Water Code's requirement that any monitoring required be reasonable and cost-effective. (See Wat. Code, § 13267, subd. (b)(1).) The 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.¹³

In contrast to the significantly more costly approach advocated by the commenter, the tentative Order will enable the Board to assure, as required by the Antidegradation Policy, that water quality objectives will not be exceeded and degradation will not be authorized in the absence of BPTC. This is a more reasonable approach because it focuses resources on changing practices that are contributing to the problem; track the implementation of those improved practices; evaluate the effectiveness of those practices; and track changes in water quality to determine whether the problem is being addressed. This approach harmonizes antidegradation requirements with the reasonableness requirements of the Water Code section 13267.

The reasonableness of this approach is reflected in surface water quality management plan the third-party will develop and growers are obligated to implement when a water quality problem is identified. The third-party will identify potential sources, the types of practices required to address the problem, evaluate the effectiveness of those practices, report on the practices that have been adopted, establish a specific schedule with performance goals and milestones, and report on progress in addressing the water quality problem.

As stated in the tentative Order, if inadequate progress is being made through the third-party led effort, then the Executive Officer will take additional action. Those actions may include field specific monitoring studies; on-site verification of implementation of practices; or requiring growers in the impacted area to be regulated directly by the board. The board staff believes the approach outlined in the tentative Order is reasonable, since it starts with an approach that can address the identified problem at a lower cost, but still includes a process for a more stringent regulatory regime if needed.

The commenter has introduced testimony from the Conditional Waiver proceedings, including testimony from a board staff person during the 2003 CEQA scoping meetings. Board staff believes such testimony is only tangentially related to the proposed Order. The Conditional Waiver and the proposed Order are significantly different in many respects, including many of the monitoring and reporting requirements and new obligations in the proposed Order imposed on growers and the third-party that were not included in the Conditional Waiver. For example, under the proposed Order, there are more obligations for growers to report on their practices (i.e., the Farm Evaluations) and document their efforts to protect water quality (e.g.,

¹³ PEIR, Appendix A, pages 127-129

Nitrogen Management Plans, Sediment Discharge and Erosion Control Plans), along with the monitoring and evaluation requirements of the third-party.¹⁴

In addition, the testimony on the Conditional Waiver was applicable to the Central Valley as a whole and not directed to the unique conditions of the area governed by this Order or the area specific requirements of the proposed Order. It is not at all clear that those providing testimony or written comments on the Conditional Waiver and its perceived shortcomings would reach the exact same conclusions considering the new and different requirements in the proposed Order.

The commenter also draws inappropriate parallels between the Appellate Court's conclusions regarding the adequacy of the groundwater monitoring program under the Dairy General Order and the surface water monitoring described in the proposed Order. There is no scientific evidence or technical justification provided by the commenter as to how one can equate monitoring of a groundwater supply well with monitoring a surface water body.

The streams monitored in the proposed Order will have a travel time from the field to the monitored site on the order of hours or days (depending on the location of the field relative to the monitoring site). The monitoring results, therefore, can be directly related to the contemporaneous land use activities. Whereas, monitoring results from a groundwater supply well may represent the effects of land use activities that occurred weeks, years, or decades before (depending on the well construction, depth to groundwater, soil characteristics, and other factors). It is also technically more challenging to associate the results from a groundwater supply well with a well-defined land area, since groundwater flow patterns can be highly complex. A surface water monitoring site generally has a well-defined drainage area based on the physical features of the landscape and modifications made to direct water to specific streams, so the area of origin (and associated land use and management practices) is much clearer.

In conclusion, the proposed monitoring requirements provide the Board with the information necessary to detect exceedances of water quality objectives and unauthorized degradation of high quality waters. While this approach differs from the individualized monitoring regime advocated by the commenter, it achieves compliance with the Antidegradation Policy, while harmonizing the reasonableness requirements of the Water Code and achieving the goal of the tentative Order to protect water quality while maintaining the economic viability of agriculture.

4-15. The Proposed WDRs fail to rely on the weight of the evidence that the WDRs are consistent with Key Element 1 of the NPS Policy.

Comment summary: The implementation program does not demonstrate that nonpoint source pollution will be addressed in a manner that achieves and maintains water quality objectives and beneficial uses, and complies with antidegradation

¹⁴ The monitoring and evaluation requirements of the third-party include, but are not limited to preparing: 1) a Sediment Discharge and Erosion Assessment Report; 2) a Groundwater Quality Assessment Report; 3) a Management Practices Evaluation Report; 4) semi-annual Monitoring Reports, which will include reporting and assessing water quality data and management practices; 5) Management Plan Status Reports, which include evaluation of the degree of implementation of management practices and their effectiveness.

requirements. The board does not and will not know the specific management practices implemented anywhere in the order area as farm evaluations will not include any maps. Regional water quality monitoring will not allow correlation of implemented management practices and water quality requirements, except in portions where water quality standards are violated.

Response: The key element 1 of the NPS policy is that the purpose of the program must be stated and the program must address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements. As described in the Information Sheet, the program goals and objectives are stated in the ILRP Program Environmental Impact Report, Final and Draft. The requirements of this Order include requirements to meet applicable water quality objectives and the requirements of State Water Board Resolution 68-16 (antidegradation requirements) as discussed in the responses to the issues raised by the commenter regarding the antidegradation requirements.

The commenter also suggests that the Superior Court's decision regarding the Conditional Waiver's and the NPS Policy is directly applicable to the proposed Order. The parallel the commenter wishes to draw is inapplicable, since the Superior Court found the total absence of groundwater related provisions to be inconsistent with the NPS Policy. The Superior Court has not evaluated an Irrigated Lands Regulatory Program Order that includes groundwater provisions, as found in the proposed Order.

The comment also incorrectly states that the Farm Evaluation "...will not include any maps of the respective dischargers." The Farm Evaluation includes a requirement to prepare a farm map. The farm map must be produced by the Member upon request from the board. The commenter also incorrectly states that the board will not know what management practices are being implemented. Management practices being implemented will be reported by the grower to the third-party and then reported to the board. In addition, the board can demand that an individual grower produce their farm evaluation or require the third-party to provide management practice information identifiable to individual growers.

The comments regarding the representative monitoring have been addressed in the prior responses.

4-16. The Proposed WDRs fail to rely on the weight of the evidence that the Proposed WDRs are consistent with Key Element 2 of the NPS Policy

Comment summary: There is no evidence to suggest that the monitoring requirements can detect violations of water quality standards upstream, or evaluate the effectiveness of management practices to prevent such violations upstream of monitoring locations. There is no evidence to demonstrate the effectiveness of any management practices in the Central Valley to achieve discharges that comply with water quality standards.

Response: The commenter is referred to prior responses to the contention that the representative monitoring approach is not adequate.

The commenter incorrectly states that there is no monitoring of receiving waters adjacent to where the farms are discharging. The board staff has revised the Information Sheet to include a map with the location of the monitoring sites and surrounding land uses. The "discharge" monitoring sites (and not the "source water"

monitoring sites) are all surrounded by agricultural land and receive any surface water discharges from those lands.

The commenter is referred to the discussion in the Information Sheet regarding the NPS Policy and Key Element 2. Board staff believes the discussion in the Information Sheet demonstrates that the proposed Order is consistent with the NPS Policy and Key Element 2.

4-17. The Proposed WDRs fail to rely on the weight of the evidence that the Proposed WDRs are consistent with Key Element 4 of the NPS Policy.

Comment summary: There are no confirmed feedback mechanisms that will be used to verify that management practices are being properly implemented and are achieving program objectives, no mechanisms exist to detect or react to violations of WQO upstream of monitoring sites, or effort to determine what the existing water quality is and identify high quality waters. After eight years, the Coalition has produced no information describing the location of management practices actually in place, and the farm evaluations will remain sequestered in the third-party files.

Response: The feedback mechanisms required by the order are consistent with Key Element 4. To provide feedback on whether water quality goals are being achieved, the tentative Order requires surface water and groundwater quality monitoring, tracking of management practices, and evaluation of effectiveness of implemented practices. The feedback provided by the tentative Order's monitoring requirements and SQMP requirements are discussed extensively in response to comment 14-4 and are not reproduced here.

Since the start of the focused management plans, the Westside Coalition has assembled and provided maps showing agricultural practices in select subwatersheds. While farm evaluations submitted by Members will indeed be retained by the third-party, the tentative order does require submission of summaries of management practices information reported on farm evaluations, as well as individual data records used to prepare the summaries (in a format compatible with ArcGIS, and identified to at least the township level). In addition, the board can demand that an individual grower to produce their farm evaluation or require the third-party to provide management practice information identifiable to individual growers.

The commenter is referred to the discussion in the Information Sheet regarding the NPS Policy and Key Element 4. Board staff believes the discussion in the Information Sheet demonstrates that the proposed Order is consistent with the NPS Policy and Key Element 4.

4-18. Various Plans and Reports Identified As Subject Only to Review and Approval by the Executive Director Should Be Presented to the Regional Board for Review and Approval

Comment summary: Considerable discretion is delegated to the Executive Director [sic] to review and approve third-parties and various plans, or waive requirements to prepare management plans. Plans constitute WDRs in themselves and must be reviewed and approved by the board itself.

Response: The commenter contends that the tentative Order violates Water Code section 13223 by delegating specific tasks to the Executive Officer as opposed to

having the Board approve those future tasks itself. The challenged delegations include those giving the Executive Officer authority to (1) approve third parties to serve as grower representatives [tentative Order at section VIII.A), (2) approve Sediment and Erosion Control Plans [tentative Order at section VIII.C), (3) approve Nitrogen Management Plans [tentative Order at section VIII.D), (4) approve Management Plans [[tentative Order at section VIII.H.1], (5) determine that a management plan is not required [tentative Order at section VIII.H.3], and (6) approve time schedules within management plans [tentative Order at section XII].

Under the Water Code, the Central Valley Water Board may delegate tasks to the Executive Officer, as long as the delegation is not specifically prohibited by Water Code Section 13223. This delegation authority allows the Board to accomplish a number of important tasks necessary under the Water Code, tasks which might not be accomplished if the Board itself needed to formally approve their completion at board meetings scheduled approximately once every two months. Section 13223 does not prohibit the delegation of authority to set or implement monitoring or reporting requirements pursuant to Water Code section 13267. Nor does Section 13223 prohibit the Board from having the Executive Officer administer, enforce or implement permit requirements. Finally, Section 13223 does not prohibit the Executive Officer from establishing a method for determining compliance with the order. *Russian River Watershed Committee v. City of Santa Rosa* (9th Cir. 1998) 142 F.3d 1136; *CASA v. City of Vacaville* (2012) 208 Cal.App.4th 1438.

It is the common practice of the Executive Officer and Board staff, to periodically update the Board on progress, issues, and successes achieved in the implementation of Board approved orders, and this practice has been and will be implemented with all of the Irrigated Lands Regulatory Program orders, including the order if it is adopted. Such updates are done as part of public meetings at which interested persons can raise any issues of which they would like the board to be aware, in addition to the published Executive Officer's Report. In addition, the tentative Order includes additional information (see Attachment A, Information Sheet) regarding the ability of an interested person to seek board review regarding any plans or reports approved by the Executive Officer under this Order. The board may exercise its discretion to initiate the review of any document and decision.

Water Code section 13223 does not prohibit the Central Valley Water Board from delegating to its Executive Officer the tasks challenged by the commenter (see above numbered list). For Task 1 (approval of third party representative), the tentative Order would assign the Executive Officer the authority to determine and certify whether the eligibility criteria for third parties (set forth in the tentative Order) have been met. Because it pertains to administration of the tentative Order, assignment of this task to the Executive Officer does not violate Water Code 13223.

The commenter has mischaracterized tasks 2 and 3, as Sediment and Erosion Control Plans and Nitrogen Management Plans are not approved by the Executive Officer; instead they are prepared by the grower as required by the tentative Order. The templates to be approved by the Executive Officer will establish a particular format in which the plans are to be prepared, but do not establish the plans themselves. The plans themselves are a form or reporting required pursuant to Water Code section 13267 to document how their fertilizer use management practices meet the requirement to minimize excess nutrient application relative to crop consumption or how their sediment or erosion control complies with the Order's requirements.

Tasks 4, 5, and 6 all relate to preparation and approval of management plans and are not prohibited for delegation. Task 4 allows the Executive Officer to approve a management plan, which is triggered when sampling results indicate that growers associated with the monitoring site may be violating of the tentative Order's receiving water limitations. The management plans are reports that propose how growers in the relevant area will come into compliance with the receiving water limitations. These provisions therefore pertain to implementation and enforcement of the receiving water limitations in tentative Order.

For task 4 (approval of management plans), staff is proposing to revise the language in the tentative Order and the Information Sheet to clarify how the management plans are directly related to evaluation of compliance with and enforcement of receiving water limitations and the time schedule for compliance. If the information submitted in the management plan reports is sufficient and meets the requirements of the Order, and the Executive Officer is assured that the growers in the area are taking appropriate action to come into compliance with the receiving water limitations within the allowable time schedule for compliance, the Executive Officer will not pursue enforcement. In fact, the revised language is modeled after receiving water limitation language contained in State Water Order WQ 99-05, a precedential State Water Board Order instructing the Regional Boards how to pursue an iterative approach towards compliance in municipal storm water permits. Allowing the Executive Officer to approve management plans is therefore an authorization to approve a method of determining compliance with the receiving water limitations in the affected area in accordance with the board established Time Schedule for Compliance. This is not prohibited by Water Code section 13223. *Russian River Watershed Committee v. City of Santa Rosa* (9th Cir. 1998) 142 F.3d 1136; *CASA v. City of Vacaville* (2012) 208 Cal.App.4th 1438.

Task 5 (determination that a management plan is not required) is an outgrowth of the Task 4 compliance/enforcement task and is similarly not implicated by Water Code section 13223. Section VIII.H.3 of the tentative Order specifies the conditions on which a management plan is not required because compliance with the receiving water limitations is being achieved. Task 5 provides a formal avenue for the Executive Officer to communicate with the third party that the conditions of the Order no longer require a management plan. As mentioned in response to comment 4-13, the language for section VIII.H.3 of the tentative Order has been revised to clarify that management plans are required as long as the problem that triggered the management plan requirement has not been resolved. Nevertheless, as discussed in regards to Task 4, the compliance determinations associated with the management plan reports are not implicated by Water Code section 13223.

Finally, Task 6 (approval of time schedule) is not prohibited by Water Code section 13223 because it simply instructs the Executive Officer to implement the time schedules within the Order itself. As authorized by Water Code section 13263(c), the tentative Order would set a time schedule for compliance with the receiving water objectives. That time schedule is specified in section XII of the tentative Order as follows: "the time schedule must be as short as practicable, but may not exceed 10 years from the date the [management plan] is submitted for approval by the Executive Officer. The proposed time schedule in the [management plan] must be supported with appropriate technical or economic justification as to why the proposed schedule is as short as practicable." As described in response to comment 4-11, the time schedule

authorized by the Board is reasonable and consistent with time schedule provisions in the State Water Board's regulations. In allowing the Executive Officer to approve the proposed time schedule, the tentative Order would essentially be giving the Executive Officer narrow discretion to implement the tentative Order's requirement to attain the receiving limitations in a timeframe that is as short as practicable, but in no more than 10 years from when a water quality problem is identified.

Comment Letter 5 – Paramount Farming

5-1. Description of Western San Joaquin River Watershed Boundaries

Comment summary: The Order's watershed area boundaries are fully described and shown in Figure 1 and in attachments and appendices to the order. The commenter appreciates changes made that allow full regulatory coverage of their parcels under the Western San Joaquin River Watershed Order.

Response: Staff recognizes that it is efficient for the acreage cited in the comment letter to be covered under a single third-party.

5-2. Suspend all General Order Deadlines

Comment summary: The commenter requests the Board to suspend all General Order deadlines to allow growers, with their third parties, to plan an efficient, cost effective manner of achieving regulatory compliance after the critical recommendations from the Expert Panels are incorporated into the ILRP requirements. The commenter contends that growers cannot determine the regulatory or economic impacts of the orders due to their broad nature and high likelihood of changes and will suffer large economic, administrative, and technical burdens should the Expert Panel recommendations result in significant changes to the regulatory requirements in the order.

Response: Board staff disagrees that suspending all deliverables deadlines is needed. The recommendations of the CDFA Task Force and the State Water Board Expert Panel will address only nitrate in groundwater and therefore will not result in changes in other elements or deliverables in the order. Board staff does not believe there will be wasted and costly efforts by growers or the third-party before the Expert Panel recommendations are incorporated into ILRP requirements.

Existing regulatory requirements and deadlines in the order relating to nitrogen planning or reporting by growers do not occur until 2015. As such, growers will not be required to prepare reports or plans before potential changes are made that respond to the Task Force and Expert Panel recommendations.

Expert Panel recommendations will not affect third-party tasks or deliverables that are due prior to any potential changes that may occur. The task of the Expert Panel is to evaluate ongoing agricultural control measures that address nitrate in groundwater and propose new measures if necessary. In its assessment, the Expert Panel will consider groundwater monitoring, mandatory adoption of best management practices, tracking and reporting of nitrogen fertilizer application, estimates of nitrogen use efficiency or a similar metric, and farm-specific nutrient management plans as source control measures and regulatory tools. Elements in the Groundwater Assessment Report (GAR) outline, which is due approximately mid – May 2014, and the GAR itself should not be affected by recommendations because the purpose of the GAR is to establish

the technical basis (e.g., collect and assess available groundwater data, detailed land use information, soils information) for implementing groundwater monitoring work plans and management plans. The development of these plans would not occur until after potential changes have been made.

5-3. Data Collection, Reporting, and Management

Comment summary: The commenter recommends that the Board utilize the “down time” before Expert Panel recommendations are incorporated into the ILRP and General Orders to coordinate with growers and third party representatives to explore data collection instructions, data management processes, and data transfer methods to help ensure that groundwater data transmitted and received at various levels of reporting is consistent, reliable, verifiable, and comparable.

Response: Board staff appreciates suggestions that address concerns of data management efficiency. As stated in the response to comment #5-2, Board staff does not believe there will be wasted and costly efforts by growers or the third-party before the Expert Panel recommendations are incorporated into ILRP requirements. Therefore, staff does not propose to suspend order deadlines, nor expects there to be a “down time” in implementation of the program.

The concern about data collection, reporting and management in relation to groundwater is considered as a separate issue from potential changes in regulatory requirements. Staff disagrees that the method and management of the data have not been addressed. The Order requires growers to prepare a nitrogen summary report using a standardized template and submit it to the third-party group annually. The third-party group is required to submit a summary and analysis of reported nitrogen data (see Attachment B, section 5.B, Report Component 19) including minimum requirements, as outlined in the order. Required groundwater monitoring data collected by the third-party is submitted according to the specifications in Attachment B, section V.A. and will be readily usable for use in analytical evaluations to determine if current practices and site specific conditions are both protective of groundwater and that may contribute to discharges. An assessment of data quality is required for both nitrogen summary reporting and water quality data.

Both coalitions and agricultural commodity groups have participated in the development of templates to be used by growers, which should address some of the concerns raised by the commenter. Staff is also willing to work with the third-party groups, agricultural commodity groups, and other interested parties (including the commenter) to identify how to most effectively address the information management issues raised by the commenter.

5-4. Distinguish grower requirements for surface water and groundwater compliance

Comment summary: The commenter asserts that the order does not adequately define the data and reporting needed to achieve compliance for growers who are subject only to the groundwater requirements and the data and reporting needed to achieve compliance for growers subject to both the surface and groundwater requirements of the ILRP.

Response: The commenter does not specify what is unclear or lacking in the descriptions of grower requirements as they apply to surface water versus groundwater. Board staff believes that the tentative Waste Discharge Requirements (WDR) Order, as well as Attachments A and B, adequately define and differentiate the

growers' data and reporting requirements with regard to groundwater and surface water. These requirements are provided in Provision IV.B, section VII, and sections IX, X, XI, and XII of the WDR Order. Grower reporting requirements that are unique to groundwater compliance include Nitrogen Management Plans and Nitrogen Management Plan Summary Reports, while reporting requirement unique to surface water compliance is the Sediment and Erosion Control Plan. All other data and reporting requirements (e.g., Farm Evaluation, cover letter with certification, electronic submittal) address both surface water and groundwater compliance.

In addition, staff is currently developing an Order summary document that will be made available to all growers and will focus on the growers' obligations and reporting requirements in relation to the protection of water quality.

5-5. CEQA compliance

Comment summary

The Board's action to adopt the order is an abuse of discretion as it failed to properly comply with CEQA by improperly relying on "Findings of Fact and Statement of Overriding Considerations" which are inadequate and not supported by substantial evidence.

Response: The commenter makes a general statement regarding improper reliance on the Findings and Statement of Overriding Considerations, but only points to a purported lack of assessment of benefits of regulation versus environmental and economic impacts. CEQA does not require such an assessment, although staff point out that the Program EIR, WDR findings and Information Sheet all have a great deal of discussion regarding the need for and expected benefits of the regulations, in addition to the potential costs.

5-6. Proof of No Discharge of Waste

Comment summary: The Order treats all irrigators and dischargers of waste by requiring growers or third-parties to prove that current irrigation activity does not discharge waste.

Response: The tentative Order has no requirements to prove current irrigation activity does not discharge waste. Further the tentative Order does not treat all irrigators as dischargers of waste.

Irrigated farming operations that do not have a discharge of waste or that do not have a discharge of waste with a potential to affect the quality of the State's waters are not required to seek coverage under the tentative Order. With that said, many irrigated agricultural operations have the potential to discharge waste to surface water when situated near streams, or ditches and canals tributary to streams, or through subsurface flow from tile drained lands to surface waters. Such discharges are subject to regulation by the Board pursuant to Water Code section 13260, subdivision (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" must submit a report of waste discharge or be subject to waste discharge requirements.

Many irrigated agricultural operations discharge or have the potential to discharge to ground water through percolation of irrigation water past the root zone of the crop. Deep percolation of the excess irrigation water past the root zone carries salts and nutrients that can impact groundwater quality. Even if the waste takes a great deal of

time (on the order of decades) for a discharge of waste to reach groundwater, a discharge of waste that could affect the quality of a water of the state has occurred and is subject to regulation under Porter Cologne. In addition, wells provide another potential conduit for the discharge of waste to groundwater, if proper backflow prevention is not in place or the wellhead is not properly protected from surface water intrusion.

If a grower does not discharge in a manner that could affect water quality, then it would not be subject to the Order if adopted and would not need to enroll. If the Board staff disagreed with that assessment, it could require, pursuant to Water Code section 13267, the grower to provide a technical report supporting its conclusion that there is no discharge of waste that could affect water quality. Such an evaluation would need to be a site-specific assessment of the conditions of the field purported to not discharge to groundwater or surface water. Upon review of the report, the board may then choose to waive the requirement to obtain WDRs if it agrees with the report's conclusions, or if in disagreement seek to issue individual WDRs specific to the operation or enroll the operation under the tentative Order. This anticipated procedure does not exceed any authorities provided to the Board by the Water Code.

5-7. MPEP expense versus benefits

Comment summary: The commenter asserts that no research currently exists to quantify the amount of waste discharges of various crops under various site specific conditions. Conducting such research, even through the MPEP process, is a significant expense that does not outweigh the benefits.

Response: See General Response 1.

5-8. Cost Benefit Analysis

Comment summary: The commenter asserts that the importance of site specific conditions in determining the potential of specific irrigation activities to discharge waste that impacts beneficial uses and the cost benefit analysis of the ILRP are issues to be addressed by the Expert Panels.

Response: The assignments of the CDFA Task Force and the State Water Board's Expert Panel do not address the issues raised by the commenter. The Task Force and Expert Panel are narrowly focused on nitrogen/nitrate issues and are not addressing discharges from irrigated lands in general. As stated in the response to comment 5-2, the board intends to consider the recommendations of the Task Force and Expert Panel.

5-9. Hold Interested Persons to Same Standards

Comment summary: The commenter requests that any interested person seeking a review of vulnerability area designations should be required to submit the same level of scientific analysis to the Executive Officer as is required of the third parties in their recommendation prior to the EO accepting the request. The commenter also requests that the third party covering the area should be afforded a review and comment period on the request.

Response: The commenter incorrectly assumes that an interested party will be seeking a review by the Executive Officer. Attachment B, section IV.A states that an interested party may seek review by the Central Valley Water Board of the Executive Officer's designation of high and low vulnerability areas. This means that the

interested party must bring the request to the members of the Central Valley Regional Water Quality Control Board.

Should an interested party ask for such a review, the review could take place as part of a public meeting at which any interested party could provide comments. Staff does not believe it is appropriate to impose limitations on a request to the board for review of an Executive Officer's decision. As a general matter, it is appropriate to preserve the board's discretion in determining the merits of any such request based on the evidence presented to it.

5-10. Basin Plan Amendment Requirements

Comment summary: The commenter contends that if a third party demonstrates that portions of an area under a Basin Plan Amendment Workplan do not have the potential to discharge waste for the beneficial uses remaining after a Basin Plan Amendment, those areas are not subject to regulation under the ILRP.

Response: The commenter seems to be concerned about what the grower requirements may or may not be following successful implementation of a Basin Plan Amendment that de-designates a beneficial use that would not be met even in the absence of irrigation discharges. Staff does not propose to add language to address the outcomes of Basin Plan Amendments that have not yet been proposed or initiated. A workplan to develop a Basin Plan Amendment does not guarantee that the board will adopt an amendment or adopt an amendment with a particular set of provisions. Following the adoption of any Basin Plan Amendment that is relevant to irrigated agriculture, the board may adopt revisions to the affected order(s).

Staff does not have evidence to suggest that all applicable beneficial uses receiving discharges from irrigated lands in a given area could be de-designated, thereby, eliminating the need for regulatory coverage under this or another Water Board Order. If such an instance were to occur, the nature of any necessary regulatory coverage would need to be addressed in the Basin Plan Amendment, rather than as part of this Order.

**ATTACHMENT
RESPONSES TO COMMENT LETTER 4 EXHIBITS**

Board staff was unable to determine whether the California Sportfishing Protection Alliance (CSPA) exhibits were provided to support the contentions in CSPA's letter or whether CSPA intended for the board to consider additional comments in the exhibits that were not reflected in the CSPA letter. Therefore, the responses to the exhibits include both responses to comments made regarding the adequacy of the Order and the technical analysis. Board staff did not attempt to duplicate the summaries of or manipulation of data reflected in the exhibits.

Exhibit A – Memo from Steve Bond to Mike Lozeau

A-1. Proposed WDRs lack a representative monitoring program

Comment summary: The proposed Waste Discharge Requirements lack a representative monitoring program and as a result are not protective of the beneficial uses within the Western San Joaquin River watershed.

Response: Board staff contends that the proposed Order is, in fact, structured to include a representative monitoring program [see responses to CSPA comment 4-14]. Staff would like to point out that the written testimony from CSPA's consultant suggests that a representative monitoring program would be acceptable, although CSPA's consultant contends that such a program is not reflected in the Order. This suggestion that a representative monitoring program is acceptable is in contrast the CSPA's letter, which indicates that individual discharger monitoring is the only acceptable approach to evaluating compliance.

A-2. Some or all of the water with the watershed remains high quality if only periodically

Comment summary: Recent monitoring data indicates some or all of the water within the watershed remains of high quality if only periodically throughout the year.

Response: Board staff has included summaries in the Information Sheet and the data indicate there are monitored sites with results below water quality objectives. Board staff acknowledges that even for waters that are periodically above objectives for certain constituents, there are times those waters are below objectives for those constituents. However, such results do not indicate those waters are "high quality" for those constituents within the meaning of resolution 68-16. However, the distinction is of limited value here because the tentative Order would require the implementation of BPTC for waters that are high quality and "best efforts" for all other waters. The Order requires additional action through development and implementation of management plans, among other requirements, to address exceedances of water quality objectives.

A-3 Downstream monitoring on Orestimba Creek is not representative of upstream

Comment summary: A comparative examination of upstream and downstream monitoring data on Orestimba Creek shows that the downstream monitoring station is not representative of water quality conditions only miles upstream.

Response: Board staff responded to this general issue extensively in response to comments in CSPA's letter. (See Response to Comment 4-14). The technical analysis in the exhibit attempts to compare samples taken at two different sites in

the same creek as evidence that the Order is flawed. As indicated in the response to comments, board staff has never claimed that monitoring at one site would produce the same results as another site. However, the evidence in the board's files and the Information Sheet suggests that the existing surface water monitoring program has successfully identified the existing water quality problems in the area covered by the Order and led to action on the part of the Coalition and their Member growers to address those problems.

With the upstream/downstream analysis, the commenter has failed to point out what water quality problems are being missed by the proposed monitoring and would not be addressed under the proposed Order. The two sites in Orestimba Creek are going to continue to be monitored under the proposed Order and the Focus Management Plan for Orestimba Creek (which also includes Del Puerto Creek and Westley Wasteway) addresses identified problem constituents in the whole watershed, whether the upstream or the downstream site "triggered" the management plan. In fact, the Coalition has used any identified problem within a Focus Plan area as indicator as a potential problem throughout the area and follows up with those growers that may be causing or contributing to that problem.¹⁵

A-4. Characterization of the Western San Joaquin River Watershed region

Comment summary: The surface water flow from the upland regions helps to dilute the pollutants in the major watercourses in the lower watershed. Monitoring only the major watercourses at the downstream most position of the watershed completely disregards the protection of the beneficial uses of these smaller tributaries.

Response: The statements provided by the commenter appear to be general in nature and do not reflect the hydrology of the Western San Joaquin River watershed. The "upland regions" are generally dry, except in response to rainfall/runoff events. Therefore, dilution flows from the upper watershed will occur intermittently and will not generally complicate interpretation of results in the lower watershed. The selected monitoring sites are surrounded by agricultural land with minimal urban or other land uses (see Figure 8 in the Information Sheet). A number of the sites are periodically dry, and, therefore not sampled. This reflects the agricultural discharge dominated nature of many of the sites – if there are no agricultural return flows then there is no flow¹⁶.

The commenter is also not clear on what "smaller tributaries" are being disregarded. The monitoring sites are all located in areas surrounded by irrigated agricultural lands and management plans triggered by results from those sites are applied throughout the watershed. The commenter has failed to point out which sub-watersheds or tributaries would suffer impacts, since the management plan directs corrective actions for the whole watershed. Since the

¹⁵ See the Management Plan General Approach - http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/management_plans_reviews/coalitions/westside/westside_mp_23oct08_final.pdf and the Focus Plan applicable to Orestimba Creek- http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/management_plans_reviews/coalitions/westside/westside_2011feb7_fpii_ltr.pdf.

¹⁶ Staff analysis of data available through CEDEN indicate sites on Blewett Drain, Del Puerto Creek, Hospital Creek, Ingram Creek, Marshall Road Drain, Orestimba Creek, and Ramona Lake can be dry between 5% and 75% of the time in a given year.

corrective actions are broadly applied, no portion of the watershed represented by a monitoring site will be disregarded.

In addition, the commenter has not provided a technical justification as to how additional monitoring sites of agriculturally dominated waters would reveal any additional water quality problems or need for any other corrective actions not already identified in the management plans.

A-5. Field discharge must be monitored to evaluate the effectiveness of management practices

Comment summary: Evaluating the effectiveness of a technology or a practice requires that the change in water quality attributable to the specific practice or technology be verified. To do that a reference sample from the point of discharge and then a comparison sample taken from the same location after the technology or practice is implemented must be collected and analyzed.

Response: The proposed Order has provisions for field studies or individual monitoring, where necessary, but also allows for the evaluation of management practices using other approaches. The suggestion that taking multiple samples through discharge monitoring is the only method for evaluating whether a management practice is effective is inaccurate. Examples of other methods for evaluating the effectiveness of a management practice, include, but are not limited to:

- 1) Results from field studies or other research – field studies or research results can be used to estimate the effectiveness of a management practice. If multiple field studies have been done that demonstrate similar results for a practice under the same conditions experienced by a grower implementing that practice, it would be reasonable to assume similar effectiveness of that practice.
- 2) Application of accepted conservation standards (e.g., Natural Resource Conservation Service standards designed to address a given water quality issue) – the NRCS has conducted extensive research and has decades of experience in developing technical standards for conservation practices. Those standards provide valuable information and feedback regarding effective management practices.
- 3) Visual observation – for some practices visual observation may be sufficient – e.g., confirming a tailwater return pond pump is working and water is being returned to the head of a field; confirming that outer spray nozzles are off when spraying the outside row of an orchard with pesticides.
- 4) Evaluation of receiving water information combined with information on management practices implemented – correlations can be made between changes in the types of management practices being implemented in a watershed and the changes in water quality.
- 5) Common sense approaches – a field previously discharging tail water would not discharge tail water with the installation of a drip irrigation system. In that case, there would be no discharge to measure. If a grower no longer uses a pesticide identified as causing a water quality problem, there would be no justification to require the grower to monitor for that pesticide (for those pesticides that breakdown in the environment relatively rapidly).

The suggestion that sampling the discharge is the only method for evaluating effectiveness is flawed when the pathway for the pollutant to reach surface water is not via discharge of water from the site. For example, pesticides are at times sprayed onto crops in a manner that can lead to aerial drift. The pollutant pathway to surface water is through the air with subsequent deposition directly in the waterway or on the land (but necessarily on the discharger's land). The effectiveness of the management practices that would be employed to address drift would not be captured by measuring the discharge, and could, in fact, miss an important pollutant pathway contributing to a water quality problem.

Exhibit B – Memo from Richard McHenry to Mike Lozeau

B-1. Objectives are not being met and existing high quality waters are not being maintained.

Comment summary: Findings and information in the WDRs indicate that represented irrigated lands are not meeting objectives, existing high quality waters are not being maintained, and representative practices are not protective of water quality.

Response: Staff does not claim nor does the Order suggest that objectives are met in all instances or that practices in place are protective of water quality in all cases. The Order is structured in a manner to address those water quality problems identified by the commenter, and limit potential degradation of high quality waters in compliance with the Antidegradation Policy.

B-2. Representative monitoring is not capable of determining an exceedance or effectiveness of management practices.

Comment summary: Sample collection at 23 “representative” surface water locations is not capable of determining if any single discharge is the cause of downstream water quality standard exceedance, stream impairment, or whether agricultural management practices are effective. In order to determine if any single wastewater discharge exceeds water quality standards, it would be necessary to sample that discrete discharge.

Response: See response to comment A-5. Also, see staff's responses to related CSPA comments.

B-3. Farm discharges upstream would be diluted by other farm discharges before reaching the monitoring site.

Comment summary: The Western San Joaquin River Watershed region has approximately 530,000 acres of cropland under irrigation and 3,100 growers with waste discharges from irrigated lands. One can only conclude that farm discharges may be many miles upstream from a “representative” sampling location and that interlying farm discharges would cause significant dilution to any pollutants discharged.

Response: There is no evidence presented that would suggest downstream farm discharges are going to consistently be of higher quality than upstream farm discharges, and, therefore dilute any pollutants before reaching the sampling location. The commenter is referred to the Information Sheet, responses to

Comment 4-14, and Response to Exhibit Comment A-3, and other staff responses to CSPA's characterization of the representative monitoring approach.

B-4. Failure to analyze samples for sublethal effects precludes determination of compliance with the Basin Plan Water Quality objective for toxicity.

Comment summary: Failure to analyze samples for sublethal effects precludes determination of compliance with the Basin Plan Water Quality objective for toxicity. It is also not possible to conclude that 1105 of the 1187 samples collected were not toxic since sublethal effects were apparently not analyzed.

Response: Conducting chronic toxicity testing can provide more information regarding the condition of a water body, but staff does not agree that lack of chronic toxicity testing precludes determination of compliance with toxicity objective. The Basin Plan discusses evaluation of the toxicity objective, but does not mandate the use of chronic toxicity testing to determine compliance (pages III-8.01, III-9.00, IV-16.00 to IV-18.00). The Order includes a process for establishing trigger limits to interpret the narrative toxicity objectives consistent with the Basin Plan provisions. The table referred to by the commenter summarizes the analytical results, which were reported based on the test conducted.

B-5. High end value of pH range appears incorrect.

Comment summary: The pH range is typically considered to be between 0 and 14, although it is possible to have excursions outside of this range. It is impossible for a field measurement kit to measure any pH above 14. It is also highly unusual for field measurement kits to be capable of measuring pH to 2 significant figures. It is likely that the reported pH levels are a typographical error.

Response: Board staff appreciates the commenter pointing out the error in the reported pH value and will follow-up to make corrections in our database. The actual value was 7.77 and incorrectly put in the database as 17.77.

B-6. High end value of DO range appears incorrect.

Comment summary: Table 2 of the proposed WDR lists the dissolved oxygen (DO) as ranging from <1 to 26.34 mg/l. It is highly unusual for field measurement kits to be capable of measuring DO to 4 significant figures. It is likely that the reported DO levels are a typographical or reporting error.

Response: Board staff appreciates the commenter pointing out the error in the reported DO value and will follow-up to make any necessary corrections in our database.

B-7. Lowest observed hardness should be used for evaluation of metals.

Comment summary: Table 2 of the proposed WDR reports water quality objectives for hardness dependant (sic) metals as being "variable". For permitting situations, the State Board ruled long ago that variability in limitations for hardness dependant (sic) metals was unacceptable.

Response: Board staff believes the commenter is referring to establishing effluent limits for NPDES permits, which is not applicable to an evaluation of a specific sample result relative to the applicable criteria. The metals criteria vary

with hardness. Since hardness was analyzed from the same sample as the metals analysis, it is appropriate to evaluate the metals results for the criteria applicable to that hardness value.

B-8. Rain monitoring will miss worst case toxicity.

Comment summary: It seems fairly well documented that “first flush” stormwater event sample collection results in a better evaluation of peak pollutant concentrations. Waiting until “enough rainfall has occurred to cause the majority of the flow at a monitoring site to consist of rain runoff” is likely to miss the worst case toxicity, pesticides, and physical and chemical parameters which are washed from the agricultural areas.

Response: The comment does not refer to the proposed Order, but to a previous monitoring plan that is not currently applicable (see Attachment B, MRP Section III.C.1.). Under the proposed Order, the third-party is required to identify storm runoff monitoring criteria in their initial Monitoring Plan Update, which will occur in January 2015. The MRP states “The criteria may include, but are not limited to, precipitation amounts or intensity, visually observed or measured increases in flow at the monitoring site(s) following a rainfall event, knowledge of soils or other factors affecting when storm runoff is expected to occur at monitoring sites, or consultation with Central Valley Water Board staff.” Board staff believes the guidance for criteria development address the most appropriate time to collect a storm runoff sample from irrigated lands. However, staff will consider the suggestion of capturing “first flush” when reviewing the proposed storm runoff monitoring criteria.

B-9. Statements related to the proposed Order and degradation.

Comment summary: The proposed WDR contains no restriction on degradation of surface waters up to the point of meeting water quality standards. Individual discharges are not regulated under the proposed WDR. It would seem impossible to state that best practicable treatment and control of a discharge is being provided when water quality has, and is, significantly degraded and there is no knowledge of what “treatment or control”, if any, is being provided at any individual farm. It cannot possibly be in the interest of the people of California to have to trade the quality of their water for the interests of agriculture.

Response: The commenter’s statement regarding lack of restrictions on degradation up to meeting water quality standards is not correct (see response to comment 4-9). The commenter’s statement indicating individual discharges are not regulated is incorrect. The Order applies to each individual discharger and the discharges from their land. The commenter incorrectly implies that the proposed Order or staff is suggesting that best practicable treatment or control is currently being provided in all instances. The proposed Order requires farming operations to meet the identified farm management performance standards. Those performance standards, in addition to the other planning and implementation requirements of the other, reflect best practicable treatment or control, and the tentative Order proposes an appropriate finding that the Order will result in the implementation of BPTC as applicable. (see response to comment 4-12) . Through the Farm Evaluations, growers will be reporting on the practices they are implementing to comply with the proposed Order. Finally, the proposed Order includes requirements that will lead to improvements in water quality. It is, therefore, not accurate to suggest the proposed Order requires a

trade-off between better water quality and the “interests of agriculture”. Staff also believes that the comment suggests a stark separation of interests that does not exist, since the farmers governed by this proposed Order are included in “the people of California” and the people of California rely on farmers governed by this proposed Order to provide a reliable and safe supply of food and fiber.

B-10. Downstream sampling in Hospital Creek is not capable water quality upstream.

Comment summary: Sampling at the extreme downstream location is not capable of determining the water quality 1, 5 or ten miles upstream into the watershed. A very poor quality wastewater discharge, located 5 miles upstream, could be diluted to non-detectable concentrations by the time it flows to the downstream sampling location. When a water quality standard is exceeded at the sampling location there is no means of determining which upstream discharge location discharged the pollutant; there are no discrete or upstream sampling locations.

Response: The general comment has been addressed in other responses to comments from CSPA. The statement indicating there is no means of identifying which upstream location discharged the pollutant suggests that the only way of remedying a water quality problem is to track down and quantify each individual discharge. Staff believes that the structure of the proposed Order, which focuses on dealing broadly with many farmers concurrently to address identified water quality problems is more efficient and cost effective. The proposed Order includes such a structure, but allows for more site-specific or individual field monitoring, if the management plan process is not successful.

B-11. Data are not sufficient to show a trend.

Comment summary: Generally, the data set for each constituent is too small to conduct a valid statistical analysis; typically the minimum data set for the most basic statistical analysis is 13 points. There are very few constituent sampling results that are sufficient in number to show a statistical increasing or decreasing trend.

Response: It appears from the comments provided and the “Data Review” that the commenter was not able to successfully extract all data available in CEDEN. If requested, staff can assist the commenter in extracting all data, including the toxicity information that the commenter was not able to extract. If the commenter had been able to extract all of the data, the conclusions reached may have changed. However, staff disagrees with the comment that the “most basic statistical analysis” requires a minimum of 13 data points. Many types of statistical analysis can be performed on less than 13 data points (e.g., finding the minimum, maximum, range, average, median of a data set). In addition, it should be pointed out that the lack of ability to demonstrate a trend does not mean there are not enough data that have been collected to evaluate compliance with the proposed Order. For example, many pesticide results are “non-detect”. If a pesticide is not detected on a consistent basis conclusions can be drawn regarding compliance with the Order even if there is no trend. Finally, the commenter was reviewing historic data collected under the Conditional Waiver. In this comment, the commenter did not suggest any changes to the proposed Order or point out any deficiencies in the proposed Order regarding whether sufficient data are being collected at a particular site to conduct necessary analysis.

Exhibit C – Memo from Bill Jennings to Mike Lozeau

Staff would like to note that Exhibit C presents opinions from Bill Jennings of CSPA regarding agricultural economics. The Agricultural Economists and other consultants on the cost of agricultural management practices retained by the Board to develop the Economics Report include their credentials demonstrating their expertise in those areas. It is not clear that Mr. Jennings is an agricultural economist or has expertise related to agricultural management practices.

Comment summary: There is no information that justifies the conclusion that individual monitoring is an unreasonable financial burden. The cost of individual monitoring for large farms is \$22.72 per acre. The potential costs of management practice implementation is more than five times the cost of monitoring. The Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program is not a comprehensive benefit/cost analysis.

Response: As discussed in previous responses (see, e.g. Response to Comment 4-3, and 4-14), the board is not obligated to select the most costly monitoring program available to evaluate compliance; instead monitoring requirements should be reasonable. In response to this Exhibit and comment 4-3, the Information Sheet has been updated to include greater detail regarding the projected cost of directly regulating growers. The commenter provided an estimate of surface water monitoring costs, but ignores other costs that would increase for the grower under an individual discharge monitoring program, including, but not limited to, the cost of preparing a quality assurance project plan, costs associated with individual groundwater monitoring, costs associated with the additional board staff that would be required to administer such a program. In addition, the commenter focused on “large farming operations”, but did not indicate what monitoring, if any, would be required of “small farming operations”.

Finally, the statement that management practice implementation would be five times the monitoring costs does not account for the management practice cost being an average cost, while the proposed individual monitoring would be imposed on every grower. Those growers who are already implementing effective practices would have the same level of monitoring as those growers not implementing effective practices. The growers already implementing effective practices would have no additional management practice costs, but would have a large monitoring cost imposed.

The commenter indicates that the economic analysis is not a comprehensive benefit/cost analysis. The board had no statutory obligation, under either CEQA or the Water Code to conduct a comprehensive benefit/cost analysis.