

---

## Central Valley Regional Water Quality Control Board

**TO:** James Herink  
Senior Staff Counsel  
STATE WATER RESOURCES CONTROL BOARD

**FROM:** **ORIGINAL SIGNED BY PAMELA C. CREEDON**  
Pamela C. Creedon  
Executive Officer  
CENTRAL VALLEY REGION  
REGIONAL WATER QUALITY CONTROL BOARD

**DATE:** 10 January 2014

**SUBJECT: RESPONSE TO PETITIONS, EASTERN SAN JOAQUIN WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS**

**SWRCB/OCC FILE A-2239(a)**

ASOCIACIÓN DE GENTE UNIDA POR EL AGUA (AGUA), FAIRMEAD COMMUNITY AND FRIENDS, AND PLANADA EN ACCION

**SWRCB/OCC FILE A-2239(b)**

CALIFORNIA SPORTFISHING PROTECTION ALLIANCE AND CALIFORNIA WATER IMPACT NETWORK

**SWRCB/OCC FILE A-2239(c)**

SAN JOAQUIN COUNTY RESOURCE CONSERVATION DISTRICT ON BEHALF OF THE SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION, CALIFORNIA FARM BUREAU FEDERATION, SOUTHERN SAN JOAQUIN VALLEY WATER QUALITY COALITION, ARVIN-EDISON WATER STORAGE DISTRICT, WHEELER RIDGE-MARICOPA WATER STORAGE DISTRICT, AND SEMITROPIC WATER STORAGE DISTRICT

### INTRODUCTION

Throughout the development of the irrigated lands regulatory program and the Waste Discharge Requirements General Order for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group (the General Order or Order), the Central Valley Water Board applied three fundamental policy principles to its approach:

- 1) Constructive engagement and involvement of the agricultural community and other stakeholders will promote a long-term, solution-focused approach to addressing and preventing water quality problems.
- 2) Data to evaluate nonpoint sources come in many forms and become actionable information when considered comprehensively and within the proper context.

- 3) Regulatory requirements must be enforceable and must be structured to adapt and respond to feedback.

The Central Valley Water Board applied these principles to meet the following goals:

- 1) restore and/or maintain the highest reasonable quality of state waters considering all the demands being placed on the water;
- 2) minimize waste discharge from irrigated agricultural lands that could degrade the quality of state waters;
- 3) maintain the economic viability of agriculture in California's Central Valley; and
- 4) ensure that irrigated agricultural discharges do not impair access by Central Valley communities and residents to safe and reliable drinking water.

Goals 1, 2, and 4 are addressed through the establishment of clear, enforceable requirements within the Order and sufficient feedback mechanisms to ensure accountability. The Order minimizes the cost of compliance to address Goal 3 by allowing growers to leverage their resources through the third-party group, by targeting information collection, and by focusing requirements and collective efforts on the highest priority water quality issues. The Order includes requirements for the individual growers and their third-party representative.

In practice, the third-party representative is composed of and connected to a plethora of resources that local growers already engage with, including county agricultural commissioners, county farm bureaus, agricultural services providers, and the local Natural Resources Conservation Service and Resource Conservation District offices. The third-party and these networked resources provide a familiar and established method for growers to get information and advice on farm management practices and their effectiveness. The third-party serves to engage these existing resources in a constructive, solution-focused approach to addressing water quality problems, since these existing agricultural groups are able to approach growers from their traditional support roles.

The third-party representative promotes the principle of constructive engagement by providing a single designated representative for the regulated growers and by providing a focal point for the collection, assessment, and response to information gathered through this Order. Dialogue on solutions is greatly facilitated when the Board and other stakeholders can engage with a single or a few grower representatives.

Moreover, the quality of the data collected and the understanding of its meaning is greatly enhanced when the data are pulled together by one group and are comprehensively assessed. The third-party can collect information in a consistent manner to ensure data quality; make comparisons between growers to identify and promote best practices; and conduct assessments that go well beyond those on individual farmer's field to provide greater context and understanding to both water quality and management practice data.

This Order represents a balance between having "enough" regulatory requirements and feedback mechanisms to ensure water quality protection and confirm compliance, while not requiring "so much" that the costs to the regulated community are unnecessarily high. The Board is requiring each grower to: report on and document what the grower is doing to protect water quality; meet farm management performance standards; and take additional steps to address identified water quality problems in the grower's area, while not requiring the type of universal individual monitoring and reporting to the Board that could prove both cost prohibitive and difficult to interpret.

In striking this balance, the Board recognizes that reasonable people can disagree on where that balance point should be. The built-in flexibility of the Order mitigates that concern by allowing the Board to reduce regulatory and reporting requirements as growers demonstrate implementation of practices protective of water quality. Conversely, the requirements can be enhanced if water quality is not improving or the information collected is not sufficient.

The Order is an integrated whole whose efficacy depends on all of its interconnected pieces. Components of the Order, when viewed in isolation, may appear to be lacking to certain stakeholders in one respect or another. However, when viewed as a whole and with the understanding of the unique challenges associated with regulating nonpoint sources of pollution on a very large scale, the Order rests on a strong legal, technical, and policy foundation to protect water quality from discharges from irrigated lands in a cost-effective, reasonable, and enforceable manner. The Board, therefore, requests that the State Water Board reject the petitions and affirm the Order.

## **BACKGROUND**

### *Conditional Waivers*

The Central Valley Water Board adopted its first general waiver applicable to irrigated agriculture in 1982. The Board conditionally waived the requirement for submittal of a report of waste discharge for irrigation return flow as long as the discharge did not cause toxicity or excess sediment discharges that would violate turbidity objectives. Subsequent to the adoption of that waiver, the Board's regulation of agricultural discharges focused its limited resources on high priority water quality issues. For example, the Board adopted a conditional prohibition of discharge on several rice pesticides that resulted in over 95% reduction in loading resolving aquatic toxicity and municipal drinking water taste and odor issues in the Sacramento River watershed. In the San Joaquin River watershed, the Central Valley Water Board adopted waste discharge requirements that have resulted in an over 75% reduction of selenium loads to the river.

In response to changes to Water Code section 13269, the Central Valley Water Board re-examined its original 1982 waiver and significantly changed the Board's regulatory strategy for irrigated agriculture in 2002/2003. A more proactive approach was developed, which required surface water receiving water monitoring of numerous parameters to begin identifying where irrigated agriculture might be contributing to water quality problems. To take advantage of local knowledge and resources, as well as minimize costs, the Board allowed growers to form discharger coalitions.

The Coalition framework was a new concept in allowing non-discharger entities – the Coalitions – to take a leading role in addressing water quality issues. The waiver was given a two and a half year trial period.<sup>1</sup> In 2006, the Board issued a modified waiver (2006 Coalition Waiver) that retained the Coalition structure, but also required identification of coalition participants and submission of management plans when water quality problems were identified.<sup>2</sup> This time, the

---

<sup>1</sup> Resolution R5-2003-0105, Conditional Waiver of WDRs for Discharges from Irrigated Lands [Administrative Record, p. 1 (AR 1)].

<sup>2</sup> Resolution R5-2006-0053, Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands [AR 898].

2006 Coalition Waiver was given a full five-year term. The 2006 Coalition Waiver was renewed for two years in 2011.

### *Accomplishments under the Coalition Group Waivers*

Results from implementation of the current program were considered as staff prepared the program EIR and the General Order. Some of the key program accomplishments are outlined below:

Surface water quality monitoring - The Coalitions have conducted hundreds of thousands of water quality analyses since program monitoring began in 2004. The analytical results include field measurements, required laboratory analyses, and lab results that were part of a general analytical scan, but not required. The Board, Coalitions, and growers were able to identify problem areas and problem constituents and follow-up as described in Management Plans. The data were also useful in identifying trends and in identifying where and for what constituents water quality was good.

Management Plans submitted – When the Board adopted the General Order, it had already received Management Plans from the Coalitions that encompass hundreds of water body/parameter combinations. Several coalitions (Sacramento Valley; Delta and San Joaquin County; East-side San Joaquin; West side San Joaquin) had numerous water body/parameter combinations to address and prepared general strategies (rather than multiple individual plans). These strategies were approved in late 2008/ early 2009 and were generally prioritized to first address toxicity and pesticide issues. The Coalitions have provided annual updates on progress in implementing those strategies. The annual updates described the outreach conducted; surveys of management practices completed; evaluation of monitoring data; and other coalition-related activities. The Management Plan process resulted in increased awareness of water quality issues and the practices growers could use to improve water quality; improving trends in water quality for some constituents in some water bodies; and completion of a number of Management Plans based on evidence that the identified water quality problem had been addressed.

Management practices implemented - A key step for implementation of management plans by the Coalitions is conducting surveys of management practices being performed by members. Survey results are used to characterize baseline practices (prior to implementation of new practices), to evaluate what additional practices should be implemented, and to quantify new practices put in place by growers following Coalition education and outreach. Therefore, surveys may be conducted multiple times to obtain the necessary information. The East-side Coalition has conducted a number of general surveys, as well as one on one surveys with growers in identified problem areas.

Coalition outreach and education - The Coalitions utilize multiple strategies for their outreach efforts. Regular member meetings are held on an annual basis. Additional focused outreach meetings are held to address specific water quality problems in specific watershed areas. On-site individual meetings with growers are being conducted in some watershed areas where a persistent water quality problem exists.

The Coalitions also mail newsletters to their member growers on a semi-annual basis to keep them informed of water quality issues, useful management practices, water quality improvement funding opportunities, Central Valley Water Board actions and requirements, and grower responsibilities. Additionally, the Coalitions mail notifications to growers when a water quality

problem has been identified in a watershed area. Management Practice Manuals developed by the Coalition for Urban and Rural Environmental Stewardship (CURES) are also distributed to growers. The Coalitions also work closely with their member growers to help them obtain grants that can pay a portion of the costs associated with installing the more costly management practices.

Compliance and outreach - The Central Valley Water Board has also had an active compliance and outreach effort. Using GIS technology and information provided by the Coalitions on their participants, the Board identifies parcels that may include irrigated crop land and are not enrolled in the Coalition Group waiver.

In addition, the Central Valley Water Board has responded to a number of complaints associated with irrigated agricultural discharges. Those complaints have resulted in both formal and informal enforcement action. The Board has coordinated its response with the local county agricultural commissioner, when it is pesticide related, and has coordinated enforcement with the Department of Fish and Game.

#### *Program Environmental Impact Report*

The Central Valley Water Board understood that its regulatory approach for irrigated agriculture was incomplete in that the program only regulated discharges to surface water and did not address discharges to groundwater. When it issued the 2006 conditional waivers, the Regional Board directed staff to continue preparation of an Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA) that would comprehensively address discharges of waste from irrigated lands to waters of the State.<sup>3</sup>

Staff's effort to prepare a Program Environmental Impact Report (PEIR or Program EIR) was supported in part by \$5 million of State Water Board Clean-up and Abatement Account funds. The funds were used to conduct monitoring of surface waters receiving agricultural drainage to characterize the existing conditions of those waters and enlist contractor support to prepare the PEIR documents.

In preparing the PEIR, the Central Valley Water Board engaged interested parties in an extensive stakeholder process. The Central Valley Water Board held an initial series of CEQA scoping meetings in early 2003. In 2006, a draft Existing Conditions Report (ECR) was prepared and circulated by the Central Valley Water Board's contractor for a 60-day comment period.

In Fall 2008, staff convened a Stakeholder Advisory Workgroup to provide staff with input on the development of the long term program. The Workgroup included over 50 stakeholders representing local, State, and federal government; industry, agricultural, and environmental justice and environmental representatives throughout the Central Valley.<sup>4</sup> The Stakeholder Advisory Workgroup came to consensus on the goals and objectives of the program, with the exception of one objective, and agreed that five project alternatives represented a reasonable range of alternatives to evaluate for CEQA purposes.

---

<sup>3</sup> Resolution R5-2006-0053, at findings 23 and 37 [AR 902 and AR 907].

<sup>4</sup> A number of the petitioners were Workgroup members and participated consistently throughout the process. The California Sportfishing Protection Alliance participated in an initial organizational meeting (December 2008), but did not attend subsequent meetings.

The Draft PEIR was released in July 2010. The final Program EIR was certified by the Board at its April 2011 meeting. The Program EIR was challenged by numerous parties, but on 21 May 2013, the Sacramento County Superior Court issued a final ruling that rejected all challenges to the PEIR.<sup>5</sup> The time to appeal the Superior Court ruling has passed.

#### *Development and Adoption of the General Order*

During 2011, the Board reconvened the Stakeholder Advisory Workgroup to provide additional input in the development of the long term program. Also, during the same time, the Board worked with the Groundwater Monitoring Advisory Workgroup<sup>6</sup> to develop an approach for groundwater monitoring in the ILRP. The Workgroup worked with Board staff to make recommendations on the critical components a groundwater monitoring program. The Board also engaged in an extensive informal and formal dialogue with stakeholders. In addition to the Stakeholder Advisory Workgroup, Board staff held multiple meetings with East-side Coalition, agricultural representatives, and other interested parties during the development of the Order.

The Board issued an administrative draft Order in April 2012, a tentative Order in July 2012, and a revised tentative Order in November 2012. The Board held workshops in June 2012 and August 2012, in Rancho Cordova and Tulare, respectively and opened the hearing on the Order in Bakersfield in November 2012 prior to Board adoption in December. Board staff also presented numerous information items at regularly scheduled Board meetings related to the irrigated lands regulatory program prior to adoption of the General Order. The information items provided Board members with additional information related to the Order prior to adoption (e.g., California Department of Food and Agriculture's Fertilizer Research and Education Program [December 2012], Department of Pesticide Regulation's Groundwater Protection Program and Irrigated Lands Regulatory Program Monitoring – Surface Water and Groundwater [August 2012]).

On December 7, 2012, the Board adopted the General Order. Tables 1 and 2 provide an overview of the main requirements of the General Order, including its monitoring requirements. The General Order regulates surface water discharges from irrigated lands, and for the first time in the region, also regulates groundwater discharges. The General Order carries forward the successful program elements from the coalition group waiver's surface water program. These elements include: allowance of a third-party coalition structure to represent the growers, outreach and education requirements, representative monitoring of receiving waters as opposed to effluent monitoring, annual reporting, requirements to implement and evaluate management practices, and receiving water limitations that trigger the preparation of surface water management plans when water quality problems associated with irrigated agriculture are identified. The management plans require source identification, management plan implementation, and follow up reporting to assess whether the water quality problem has been addressed by the management plan.

The General Order also adds a number of key improvements that were based on lessons learned from the implementing the irrigated lands conditional waiver. The General Order is

---

<sup>5</sup> See Central Valley Water Board 10 January 2014 supplemental evidence request, Exhibit 3.

<sup>6</sup> See Groundwater Monitoring Advisory Workgroup (GMAW) 2011. Data Necessary to Address the Questions to be Addressed by Groundwater Monitoring in the Long-Term Irrigated Lands Regulatory Program. Draft. [AR 34136].

tailored to the Eastern San Joaquin watershed as opposed to previously applying region wide. It also prioritizes regulatory requirements based on threat levels: regulatory requirements are heightened in higher threat geographic areas (called “high vulnerability areas”), whereas lower threat geographic areas have fewer requirements. Regulatory requirements are also heightened in cases when irrigated agriculture is causing or contributing to exceedances of water quality objectives or trends of degradation that may threaten beneficial uses.

The General Order assigns the individual grower additional responsibilities in comparison to the previous program. Each grower must meet the specific performance standards in the Order consistent with federal and statewide goals for irrigated agriculture. Each grower is responsible for conducting Farm Evaluations, which must evaluate and document the grower’s management practices to ensure they are protecting groundwater and surface water. Farm evaluations must be kept onsite and must be presented to the Board upon request. Each grower is required to prepare and implement a nitrogen management plan that meets the General Order’s requirement to minimize nutrient application relative to crop need. Growers in areas susceptible to erosion must prepare and implement sediment and erosion control plans.

The General Order increases grower and coalition accountability by identifying specific criteria that must be met by the third-party in order to become and remain eligible to serve as the third-party representative. The Coalition has been assigned additional tasks to collect and evaluate data, including preparation of a Groundwater Quality Assessment Report characterizing the area and proposing the designation of high and low vulnerability groundwater areas, and preparation of a Management Practices Evaluation Program whose goal is to identify management practices protective of groundwater quality under all site conditions present in the permit area, and collecting monitoring to fill data gaps from the prior program.

The extensive permit development process employed by the Board helped ensure that the Board and staff were able to carefully consider a wide variety of issues and perspectives prior to Board adoption. It also resulted in a General Order that, despite being the first program in the Central Valley Region to regulate groundwater discharges from irrigated lands, was not petitioned by any individual growers in the region or the East San Joaquin Water Quality Coalition, the group that has served as the growers’ third-party representative in the area during implementation of the conditional waiver. . The General Order is the first of eight geographic and one commodity-specific general waste discharge requirements for irrigated lands that will be considered by the Board.

#### **RESPONSE TO PETITION A- 2239(a)**

**PETITION OF ASOCIACIÓN DE GENTE UNIDA POR EL AGUA (AGUA), FAIRMEAD COMMUNITY AND FRIENDS, AND PLANADA EN ACCION (“Environmental Justice Petitioners” or “EJ Groups”)** The Environmental Justice Petitioners make the following contentions:

- I. The General Order will allow for degradation and even pollution of groundwater quality, in violation of the State’s Antidegradation Policy and state law.
- II.a. The General Order fails to establish a baseline in violation of the antidegradation policy.
- II.b. The General Order fails to require sufficient monitoring requirements to track or detect degradation in violation of the Antidegradation Policy.

- II.d General Order fails to set appropriate Receiving Water Limitations for compliance to meet the requirements of the Antidegradation Policy.
- II.e The General Order allows for degradation without making required findings permitting it to do so.
- III. The General Order allows pollution and nuisance to groundwater in violation of the Antidegradation Policy and state law.
- IV The substantive requirements of this order are not subject to review and approval of the Board.
- V The General Order will disproportionately impact low income communities and communities of color because it does not protect groundwater from continued degradation.

Below are responses to these contentions, which are labeled as “Environmental Justice Contentions” to differentiate from the other petitions, with a special emphasis on the Environmental Justice Petitioners’ antidegradation contentions as requested by the State Water Board. For ease of review, each contention is summarized in italics in the beginning of each response.

**Response to Environmental Justice Contention I.** (page 5 of the EJ Group petition)

*The General Order will allow for degradation and even pollution of groundwater quality, in violation of the State’s Antidegradation Policy and state law.*

See responses to EJ Groups’ contentions II and III below. This contention is largely an introductory section to establish the Environmental Justice Petitioners’ position that State Water Board Resolution 68-16 (Antidegradation Policy or Resolution 68-16) applies to the discharges to high-quality waters authorized by the General Order. The Board agrees that the Antidegradation Policy applies to such discharges, although it disputes that the General Order allows for degradation or pollution of groundwater quality in violation of the Antidegradation Policy and state law. The requirements of the Antidegradation Policy are met through a combination of upfront planning and implementation at the farm level; regional monitoring and assessments to determine whether water quality exceedances or degradation trends are occurring; and regional planning and on-farm implementation when water quality exceedances or degradation trends are identified.

**Response to Environmental Justice Contention II.a.** (page 9 of the EJ Group petition)

*The General Order fails to establish a baseline in violation of the antidegradation policy.*

The Environmental Justice Petitioners claim that the Central Valley Water Board failed to establish a “baseline,” but do not explain what they mean by “baseline.” Presumably, Petitioners are claiming that the Board was required to determine the best quality of all receiving waters that receive waste from irrigated lands, characterize the concentrations in those waters that have existed since 1968, and from that information, compile an inventory of all high quality waters within the permit area for all constituents of concern. Nothing in the Antidegradation



Policy, State Water Board guidance documents and precedential orders,<sup>7</sup> or the sole published California decision indicates that the Central Valley Water Board must prepare and compile such an inventory prior to authorizing degradation of high quality waters in a General Order.

Petitioners cite *Asociacion de Gente Unide por el Agua v. Central Valley Water Board [AGUA]* (2013) 210 Cal.App.4th 1255, 1270, in support of its position that a baseline inventory is required. However, that court held no such thing, nor did it even address the issue. Instead, the court held that the Antidegradation Policy applied for nitrate based on its finding that “at least some of the water affected by the Order is high quality water.” (*Id.*, at p. 1271). This is essentially the same approach taken by the General Order. The General Order applies best practicable treatment or control (BPTC) and “best efforts” to high quality waters and already degraded waters throughout the area regulated by the General Order.

Appendix A to the PEIR and the General Order’s Information Sheet (Attachment A) describe in detail the Central Valley Water Board’s approach to compliance with the Antidegradation Policy. As mentioned in the PEIR, very little guidance has been provided by the State Water Board with respect to applying the Antidegradation Policy to a general permit where multiple water bodies are affected by various discharges, some of which may be high quality waters and some of which may have constituents at levels have exceeded water quality objectives at all times since 1968.<sup>8</sup> In the context of the General 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 Petitioners claim such a “baseline” is legally required, they do not provide any discussion, reference, or State Board or Regional Board guidance supporting their claim.

The General Order’s Information Sheet explains how data collected by the Central Valley Water Board, dischargers, educational institutions, and others demonstrate that many water bodies within the Eastern San Joaquin River Watershed are already impaired for various constituents that are or could be associated with irrigated agricultural activities. There are surface water quality management plan requirements for the following constituents and indicators: ammonia, arsenic, chlorpyrifos, copper, DDE, diazinon, diuron, dissolved oxygen, electrical conductivity, *E. coli*, lead, molybdenum, nitrate, pH, simazine, total dissolved solids, thiobencarb, algae toxicity, sediment toxicity, fathead minnow toxicity, and water flea toxicity. Those same data collection efforts also indicate that surface water bodies within the watershed meet objectives for particular agriculturally-related constituents and would be considered “high quality waters” with respect to those constituents. Similarly, as also described in the Information Sheet, available data show that currently existing quality of certain groundwater bodies is better than the water quality objectives; for example, deeper groundwaters represented by municipal supply wells are generally high quality with respect to pesticides and nitrates.

---

<sup>7</sup> The State Water Board has begun a process to provide the Regional Water Boards with “better tools” to conduct appropriate antidegradation analyses for agricultural discharges and other discharges in light of the recent *AGUA* decision. State Board Order WQO 2013-0101, *In the Matter of the Review of Conditional Waiver of Waste Discharge Requirements Order No. R3-2012-0001* at p. 69. The Central Valley Water Board supports this effort by the State Water Board.

<sup>8</sup> Final EIR, at p. 4-21. [AR 32941]

The Information Sheet also describes how the State Water Board has not distinguished between the level of treatment and control required under best practicable treatment or control (required if degradation of high quality waters is authorized) and what can be achieved through “best efforts” (required under State Water Board precedent for regulation of waters that are not high quality). This is because the State Water Board applies the same factors in determining “best efforts” as it does in interpreting BPTC (see State Water Board Order Nos. WQ 79-14 and WQ-2000-07). Accordingly, the General Order applies BPTC and “best efforts” equally to high quality waters and those that are not high quality. The request to create a comprehensive inventory of high quality waters is not feasible and would cause an unacceptable delay in program implementation, with no effect on the ultimate standards and requirements of the General Order, which applies BPTC and “best efforts” equally throughout the coverage area.

In conclusion, nothing in the Antidegradation Policy or State Water Board guidance indicates that an inventory of high quality waters is required as suggested by Petitioners. The Central Valley Water Board’s approach of assuming applicability of the Antidegradation Policy and the “best efforts” doctrine as an alternative to conducting an exhaustive and cost-prohibitive constituent-by-constituent inventory of high quality waters was a reasonable interpretation of Resolution 68-16.

**Response to Environmental Justice Contention II.b.** (page 9 of the EJ Group petition)

*The General Order fails to require sufficient monitoring requirements to track or detect degradation in violation of the Antidegradation Policy.*

In contrast to Petitioners’ assertion, the Order requires water quality monitoring and assessments to track and detect trends, including trends of degradation. The process of periodic review of SQMPs/GQMPs provides an additional mechanism for the Board to better ensure that Members are meeting the requirements of the Order.

To determine whether a surface water degradation trend is occurring, the Order requires surface water monitoring of specific monitoring sites on a rotating basis. The data gathered from the surface water monitoring effort will allow the Board to determine whether there is a trend in degradation of water quality related to discharges from irrigated agriculture. The Petitioners’ comments, however, appear to be directed towards the groundwater monitoring program and do not include any specific concerns regarding the surface water monitoring program.

For groundwater, to which Petitioners’ comments are directed, a trend monitoring program is required in both “low vulnerability” and “high vulnerability” areas.<sup>9</sup> [ The trend monitoring for the low vulnerability areas is required to help the Board determine whether any trend in degradation of groundwater quality is occurring.

Petitioners contend that the trend monitoring program is inadequate because it does not require sampling for all pesticides of concern. For pesticides in groundwater, the Board will initially rely on the information gathered through the Department of Pesticide Regulation’s (DPR) monitoring efforts to determine whether any degradation related to pesticides is occurring. The Board also

---

<sup>9</sup> The definitions for high and low vulnerability groundwater areas are found at General Order, Attachment E (Definitions), at paragraph 13, and 22. [AR

considered the input of experts on its Groundwater Monitoring Advisory Workgroup.<sup>10</sup> The Workgroup advised that "...the presence of nitrates in groundwater at elevated levels would serve as an indicator of other potential problems associated with irrigated agricultural practices."<sup>11</sup> Since nitrate should be an adequate indicator of whether practices are protective of groundwater quality and DPR already has an extensive pesticide groundwater monitoring program, the Board concluded that additional monitoring of pesticides as part of the trend monitoring program was not needed.<sup>12</sup> This determination is significant, since Water Code section 13267 requires a reasonable relationship between the burdens of reporting requirements and the need for the reports and benefits to be gained.

If the available groundwater quality data (e.g., nitrates, pesticides) in a low vulnerability area suggests that degradation is occurring that could threaten to impair beneficial uses, then the area would be re-designated as a high vulnerability area. Monitoring of those constituents of concern that trigger a "high vulnerability" designation is required as part of the Groundwater Quality Management Plan and the Management Practices Evaluation Program. In addition, the Order requires all growers, both in high and low vulnerability areas, to implement practices found protective of groundwater quality through the Management Practices Evaluation Program. The Management Practices Evaluation Program, therefore, provides the information needed to establish BPTC for both high and low vulnerability areas.

The third-party is required to prepare a Groundwater Quality Assessment Report (GAR) and update the vulnerability designations identified in that report every five years.<sup>13</sup> The GAR will include an identification of high vulnerability and low vulnerability areas, including identification of constituents that could cause degradation. The initial submittal of the GAR will include a compilation of water quality data, which the Board and third-party will use to evaluate trends. The periodic updates to the vulnerability designations in the GAR will require the consideration of data collected by the third-party, as well as other organizations, and will also allow the Board and third-party to evaluate trends. A comprehensive update every five years is reasonable, since the effort to gather information from multiple organizations is significant and large variations in vulnerability would not be expected on a more frequent basis due to the generally longer time scales for changes in groundwater quality to occur.

The GAR will provide a reporting vehicle for the Board to periodically evaluate water quality trends to determine whether degradation is occurring. In addition, the annual monitoring report requires the third-party to evaluate "...potential trends and patterns in surface and groundwater quality..."<sup>14</sup> If the degradation triggers the requirement for a Groundwater Quality Management Plan,<sup>15</sup> then the area in which the GQMP is required would be considered "high vulnerability" and all of the requirements associated with a high vulnerability area would apply to those Members.

---

<sup>10</sup> Information Sheet, at p. 14. [AR 7764]. The Workgroup included representatives from state agencies, the United States Environmental Protection Agency, the United States Geological Survey, academia, and private consultants.

<sup>11</sup> *Id.*, at p. 15. [AR 7765].

<sup>12</sup> *Id.*, at p. 17. [AR 7767]. See also, response to comments, at Master Response 17. [AR 7304-7306].

<sup>13</sup> Order, MRP (Attachment B), at Section IV.A. [AR 7810-7812].

<sup>14</sup> Order, MRP (Attachment B), at Section V.C [AR 7820].

<sup>15</sup> See Order, section VIII.H.2. [AR 7744-7745].

Petitioners also take issue with the Order's nitrogen reporting requirements. With respect to nitrogen application reporting, the Petitioners have failed to account for the comprehensive reporting and evaluation required under the Order and the limitations of reporting nitrogen application. Nitrogen application reporting alone does not provide an indicator of the potential loss of nitrogen to groundwater, since it does not account for how much is consumed by the crop or how much nitrogen is available for uptake (e.g., how much resides in the soil or is available in irrigation water). In contrast, the Board is requiring, at a minimum, the reporting of the ratio of the total amount of nitrogen available to the crop uptake of nitrogen, which should provide an indication of how much nitrogen is potentially "lost" and might be discharged to groundwater.<sup>16</sup>

In addition, the Management Practices Evaluation Program (MPEP) will require the development of "...[a] mass balance and conceptual model of the transport, storage, and degradation/chemical transformation mechanisms for the constituents of concern..." and identification of "...whether existing site-specific and/or commodity-specific management practices are protective of groundwater quality within high vulnerability groundwater areas."<sup>17</sup> Once identified through the MPEP, all growers, in both high and low vulnerability areas, "...shall implement the applicable management practices, or equivalent practices, identified as protective of groundwater in the Management Practices Evaluation Report."<sup>18</sup> When considered together, these requirements will demonstrate the key processes that result in groundwater quality problems, identification of which practices are protective of groundwater quality (including application nitrogen ratios), and a requirement that all growers, in both high and low vulnerability areas, implement those practices identified as protective of groundwater quality.

Although growers in low vulnerability areas are not required to provide a nitrogen management plan summary report to the third-party, those growers are still required to prepare and maintain a nitrogen management plan. The nitrogen management plan is available for inspection by Board staff and would contain the information needed to determine whether those growers are meeting the farm management performance standards that constitute BPTC.

Finally, Petitioners contend that the groundwater reporting requirements are inadequate because they rely upon township-level reporting. The Petitioners incompletely describe the reporting requirements. The third-party provides township-level reporting for nitrogen reporting and management practice reporting. The township-level reporting should allow for meaningful analysis and comparisons, since "[t]he third-party's assessment of Nitrogen Management Plan information must include, at a minimum, comparisons of farms with the same crops, similar soil conditions, and similar practices (e.g., irrigation management)."<sup>19</sup> Township reporting should ensure that there is an adequate sample size (i.e., number of farms) to make such comparisons. Although the monitoring report includes such summaries at a township level, the Members report to the third-party on a parcel or field-specific basis. These parcel or field-specific reports

---

<sup>16</sup> See Order, MRP (Attachment B), at section VI.B; and section V.C. (Report Component 17) [AR 7822-7823; AR 7821]. Note the Petitioners do not point to any purported deficiency in the Order to support their claim that the information will not be kept in a usable format, or support their contention that a five-year recordkeeping requirement limits the utility of the information given the annual reporting requirements.

<sup>17</sup> MRP, section IV.B.1. [AR 7813].

<sup>18</sup> Order, at section IV.B.21. [AR 7732].

<sup>19</sup> MRP, section V.C. (Report Component 17). [AR 7821].

are available to the Board during an inspection or upon request.<sup>20</sup> The summary reporting will provide the Board with information on how growers are doing relative to those who are similarly situated, which will provide a basis for follow-up by the third-party and/or Board staff.

**Response to Environmental Justice Contention II.d.** (page 13 of the EJ Group petition)

*General Order fails to set appropriate Receiving Water Limitations for compliance to meet the requirements of the Antidegradation Policy.*

Under heading II.d, Petitioners make two separate arguments. First, they argue that the Central Valley Water Board's receiving water limitations fail to comply with the Antidegradation Policy or the Basin Plans, and do not support the Board's finding that the General Order authorizes "limited degradation of high quality waters."<sup>21</sup> Instead, Petitioners argue that the General Order "permits the highest possible levels of degradation without an antidegradation analysis." Petitioners' second argument is that the compliance schedules authorized by the General Order, including the deadline for the preparation of the Management Practices Evaluation Report, are not consistent with the Antidegradation policy or the Porter-Cologne Water Quality Control Act.

With respect to the first argument, the Board disagrees with the assertion that the General Order, through its receiving water limitations, fails to comply with the Antidegradation Policy or the Basin Plans, and do not support the findings of the Order. The General Order's receiving water limitations require that waste discharged from a Member's operations not cause or contribute to an exceedance of an applicable water quality objective, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance.<sup>22</sup>

Petitioners assert the General Order's receiving water limitations, authorizes the highest possible levels of degradation without an antidegradation analysis. With respect to the alleged lack of an antidegradation analysis, the General Order's Information Sheet includes a clearly labeled antidegradation analysis that spans several pages.<sup>23</sup> Next, the Central Valley Water Board disagrees that the General Order authorizes the "highest possible" amount of degradation of high quality waters. In fact, the General Order, when viewed in its entirety, limits degradation of high quality waters. Petitioners claim that as a corollary to the General Order's prohibition against discharges that cause or contribute to exceedances of water quality objectives, the Order must therefore authorize all discharges that do not cause or contribute to exceedances. That assertion misreads the General Order by focusing on the Receiving Water Limitations in isolation to the exclusion of all other waste discharge requirements contained in the General Order.

To the contrary, and as described below, the General Order, when viewed as a whole, establishes requirements that will limit degradation of high quality waters 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 to

---

<sup>20</sup> *Ibid.* See also Order, at section X. [AR 7747-7748].

<sup>21</sup> See General Order, finding 36. [AR 7723].

<sup>22</sup> See General Order, at Section III.

<sup>23</sup> See Information Sheet, at pp. 30 through 42.

provide a regulatory ceiling that prohibits all discharges from causing or contributing to exceedances of water quality objectives, while its many other requirements assure that discharges will meet the Receiving Water Limitations.

While the receiving water limitations establish a ceiling for degradation, the General Order's farm management performance standards, management practice implementation requirements, and monitoring requirements will limit and reduce the waste discharges that may result in the degradation of high quality waters.<sup>24</sup> Farm management performance standards (listed on pages 36-38 of the Information Sheet) and other requirements of the General Order provide additional requirements that will further limit degradation. For example, the performance standards require all Dischargers to implement practices to minimize waste discharge to surface water even where a discharge is currently meeting water quality objectives.<sup>25</sup> In other words, there is no exemption from this performance standard for Dischargers that are in compliance with the General 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.<sup>26</sup> Therefore, where underlying groundwater is of high quality for nutrients, the General Order requires minimization of nutrient application relative to crop consumption, which will minimize waste discharge to groundwater and any associated potential degradation through the implementation of best practicable treatment or control. This minimization requirement is in stark contrast with Petitioners' assertion that the General Order authorizes the highest possible 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.<sup>27</sup>

In light of these limits on degradation, the Board's decision not to quantify the amount of degradation authorized by a General Order regulating thousands of dischargers was reasonable and does not violate the Antidegradation Policy. As discussed earlier in response to Environmental Justice contention II.a, it was infeasible for the Central Valley Water Board to conduct an inventory of all high quality waters prior to adoption of the General Order. It was likewise infeasible to quantify the amount of degradation of high quality waters other than by reference to the performance standards and other requirements of the Order. Nor is such quantification required by the Antidegradation Policy or any related State Water Board guidance documents.<sup>28</sup>

At any rate, the Antidegradation Policy allows the Board to authorize the full use of assimilative

---

<sup>24</sup> Collectively, the requirements in the Order constitute the best practicable treatment or control (BPTC) for all constituents of concern. For a more detailed discussion of BPTC, see response to contention II.e.

<sup>25</sup> General Order, at Section IV.B.20. [AR 7732].

<sup>26</sup> General Order, at Section IV.B.8. [AR 7731].

<sup>27</sup> General Order, at Section IV.B.7, and IV.B.10. [AR 7731]. See also General Order, at Section II.3 and II.4. [AR 7729].

<sup>28</sup> Even though a quantification of degradation prior to adoption of the General Order was not required, the Order requires that this type of information be generated during the permit term, as the third-party must develop an estimate of the discharges of constituents of concern on groundwater quality in high vulnerability areas. The estimate must be developed using a mass balance and conceptual model of the transport, storage, and degradation/chemical transformation mechanisms for the constituents of concern, or equivalent method approved by the Executive Officer. Order, MRP (Attachment B), at section IV.B.1. [AR 7813].

capacity, as long as the Board first undertakes the appropriate analysis. Since the Board conducted an antidegradation analysis in consideration of all relevant factors, the Board properly authorized degradation up to water quality objectives in cases where attaining a higher water quality would require more than best practicable treatment or control. (See Response to Environmental Justice Contention II.e, below.)

Petitioners also argue that the General Order's time schedules violate the Antidegradation Policy. Petitioners are correct that the General Order's time schedule provisions may allow up to 10 years for full compliance with receiving water limitations once a violation is detected. However, the 10-year timeframe is a maximum and does not default to 10 years. Instead, the General Order would require the discharger to propose a schedule that is as short as practicable with appropriate technical and economic justification.<sup>29</sup> The Executive Officer may then approve the proposed time schedule or require modifications, such as a reduced timeframe. In addition, the Management Practices Evaluation Report is due not later than six years after implementation of each phase of the Management Effectiveness Evaluation Plan.<sup>30</sup>

Antidegradation requirements do not require immediate compliance or otherwise provide time limitations on achieving policy objectives, e.g., to ensure that best practicable treatment or control is in place and that discharges are not causing or contributing to exceedances of applicable water quality objectives. The Water Code, however, clearly provides the Board with the discretion to prescribe time schedules within waste discharge requirements. (Wat. Code § 13263, subd. (c).) Further, the State Water Board's regulations encourage time schedules in situations like these where it appears that not all growers covered by the General Order can immediately meet the Order's receiving water limitations.<sup>31</sup> Using time schedules to implement antidegradation requirements was explicitly upheld by the California Court of Appeal, which 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*, *supra*, 210 Cal.App.4th at p. 1277.)

The time schedule provisions in the General Order will bring a Discharger into compliance with receiving water limitations as quickly as possible once violations are detected. This process, along with the performance standards and other requirements of the General Order, will ensure that all Dischargers reduce their waste discharges in the short-term (see further discussion in the Information Sheet), while fully complying with objectives in the long-term. 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 time schedules provide the time necessary 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). 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.

---

<sup>29</sup> Order, at Section XII. [AR 7748].

<sup>30</sup> Order, Attachment B, at section IV.B.4. [AR 7814].

<sup>31</sup> See Cal.Code.Reg., tit. 23, § 2231, subd.(a).

Nowhere does the General Order establish requirements that will allow discharges to cause or contribute to exceedances of an applicable water quality objective, or a condition of pollution or nuisance, outside of the temporary time schedules authorized by the General Order. Likewise, nothing in the General Order exempts Dischargers from the performance standards and other management practice implementation requirements during the pendency of the time schedule. Consistent with the State Water Board's regulations on time schedules,<sup>32</sup> the Order's time schedule provisions will not permit unnecessary time lag, will assure the most rapid compliance, and in no case will exceed ten years from the date violations are detected.

The Board concurs with Petitioners that it is important to achieve water quality goals as quickly as possible. This is why time schedule provisions for violations of receiving water limitations do not default to ten years, but must be as short as practicable. The Board is confident that the Order's requirements will lead to reductions in waste discharges, implementation of best practicable treatment or control, and compliance with receiving water limitations as soon as is practicable.

In allowing six years to complete the Management Practices Evaluation Report (MPER), the Board took into consideration the unique aspects of evaluating the effects of management practices on groundwater quality and the need to have enough information to evaluate those effects. There is a time lag between when a practice is changed on the land surface and when the effect of that change would be observed in the first encountered groundwater. Even under optimal conditions for conducting the studies, the time lag may be on the order of months to a few years. Enough data will need to be collected over a number of years to be able to discern effects of practices from any variation in groundwater quality conditions. The time allowed to prepare the MPER is meant to ensure the information gathered is sufficient to draw reasonable conclusions and is not meant to provide for an unreasonable delay. In fact, results from the MPEP must be provided every year as part of a status report: "Within each report, the third-party shall evaluate the data and make a determination whether groundwater is being impacted by activities at farms being monitored by the MPEP."<sup>33</sup> Such annual reporting will allow the Board to take action if specific practices under specific conditions are impacting groundwater quality even before the MPER is submitted.

**Response to Environmental Justice Contention II.e.** (page 14 of the EJ Group petition)

*The General Order allows for degradation without making required findings permitting it to do so.*

In this section, Petitioners supplement their earlier arguments with a general assault on all of the Central Valley Water Board's antidegradation findings. The Board's findings on this issue are found in findings 35 and 36 of the General Order, and in the Information Sheet, under the section entitled "Statement of policy with respect to maintaining high quality waters in California (State Water Board Resolution 68-16)."<sup>34</sup> Petitioners disagreement centers around three core findings made by the Board: (1) that the Order will result in the implementation of BPTC (Petition, p. 19), (2) that degradation of high quality waters authorized by the General Order is consistent with the maximum benefit to the people of the State (petition, p. 16), and (3) that the

---

<sup>32</sup> Cal.Code.Reg., tit. 23, § 2231.

<sup>33</sup> MRP, at section IV.B.3. (page 15 of MRP). [AR 7813].

<sup>34</sup> See Order, Information Sheet, at pp. 30-40. [AR 7780-7790].



General Order will not unreasonably affect present or probable future beneficial uses of water (Petition, p. 19). The Board's findings are appropriate and are supported by substantial evidence in the record. Petitioners have not shown otherwise.

A. *The Board properly found that the General Order Will Result in the Implementation of BPTC*

Petitioners assert that the General Order will not result in the implementation of BPTC where the discharge is to a high quality water. As summarized below, the Information Sheet (under the heading "Consistency with BPTC and the 'Best Efforts' Approach," goes into great detail explaining how the General Order will result in the implementation of BPTC where applicable.<sup>35</sup>

Resolution 68-16 prohibits degradation of high quality waters unless, among other things, the discharge "will be required to meet waste discharge requirements which will result in the best practicable treatment or control".<sup>36</sup> 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 discharger or similarly situated dischargers." The costs of the treatment or control "should also be considered."<sup>37</sup> Promulgated requirements such as federal best available technology economically achievable (BAT) or other promulgated technologies" may also be appropriately considered for surface water and ground water discharges.<sup>38</sup> As is clear from the language in the guidance, the Boards are not required to consider every factor in order to determine BPTC.<sup>39</sup> Nevertheless, as described below, the Board considered each factor to the extent applicable in determining that the Order will result in the implementation of BPTC.

In the Information Sheet, the Central Valley Water Board explained the multi-step approach it took in determining that the 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.<sup>40</sup> The Board described the rationale for imposing performance standards as opposed to specifying practices. It did so because of the prohibition found in section 13360 of the Water Code, and because it could not identify a universal set of technologies or practices covering the varying crops and geological conditions in the Eastern San Joaquin River Watershed.<sup>41</sup> In establishing the performance standards, the

---

<sup>35</sup> Order, Information Sheet (Attachment A), at pp. 35-40. [AR 7785-7790].

<sup>36</sup> State Water Board Resolution 68-16, at paragraph 2.

<sup>37</sup> *Questions and Answers, Resolution 68-16*, Answer 7 [AR 36034].

<sup>38</sup> *Questions and Answers, Resolution 68-16*, Answer 7 [AR 36033].

<sup>39</sup> The use of the phrase "and/or" in the first listing of factor signifies that the Board is not required to all of those factors in every case, and that consideration of a subset of these factors may be appropriate.

<sup>40</sup> See Order, Information Sheet (Attachment A), at p. 36-38 (describing performance standards found in the Order at sections III, IV.B.7, IV.B.8, and IV.B.20.) [AR 7786-7788].

<sup>41</sup> Order, Information Sheet (Attachment A), at p. 35, citing, *inter alia*, a review of management practices that could be implemented by growers. (California Regional Water Quality Control Board, Central Valley Region, and Jones and Stokes. 2008. *Irrigated Lands Regulatory Program Existing Conditions Report*, at Chapter 5.) [AR 7785].

Board considered State Water Board guidance and found the performance standards to be consistent with published federal and state management measures for irrigated agriculture. The comparison with the state and federal management measures reflects the Board's 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 the Central Valley Water Board's BPTC analysis considered the General Order's iterative requirements for implementation, planning, studies, and reporting.<sup>42</sup> This iterative aspect of the Order results in additional planning, reporting 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.<sup>43</sup> 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.<sup>44</sup> Under these plans, additional practices will be implemented in an iterative manner, following the results of the studies and investigations required for management plans. As another example, the Information Sheet describes how the Order requires all growers to prepare nitrogen management plans that will document how their fertilizer use management practices minimize excess nutrient application relative to crop need.<sup>45</sup> These nitrogen management plans are similar to those deemed by the *AGUA* court to constitute BPTC for the control of dairy wastes applied to cropland under the terms of the Board's General Order for Dairies.<sup>46</sup> These planning, reporting, and implementation mechanisms further support the Board's finding that BPTC will be implemented, as these requirements will facilitate the collection of information necessary to demonstrate how well the practices are working. In other words, the management plans will facilitate the "evaluation of performance data" as suggested by State Water Board guidance in the determination of BPTC, and will result in the implementation of new or more effective management practices based on the evaluation of such data.

The Management Practices Evaluation Program (MPEP)<sup>47</sup> required by the General Order in groundwater areas defined as "high vulnerability"<sup>48</sup> requires a similar set of additional

---

<sup>42</sup> See Order, Information Sheet (Attachment A), at pp. 38-40. [AR 7788-7790].

<sup>43</sup> Order, at section VIII.H.2. [AR 7744-7745].

<sup>44</sup> Order, Appendix MRP-1, at section I. [AR 7829-7834].

<sup>45</sup> Order, Information Sheet (Attachment A), at p. 40. [AR 7790].

<sup>46</sup> See *AGUA*, *supra*, 210 Cal.App.4th at p. 1284.

<sup>47</sup> See Order, Section VIII.D.2. [AR 7742].

<sup>48</sup> "High vulnerability areas" are defined separately for groundwater and surface water. The definition of high vulnerability for groundwater is "Areas identified in the approved Groundwater Quality Assessment Report "...where known groundwater quality impacts exist for which irrigated agricultural operations are a potential contributor or where conditions make groundwater more vulnerable to impacts from irrigated agricultural activities." (see section IV.A.3 of the MRP) or areas that meet any of the following requirements for the preparation of a Groundwater Quality Management Plan (see section VIII.H of the Order): (1) there is a confirmed exceedance (considering applicable averaging periods) of a water quality objective or applicable water quality trigger limit (trigger limits are described in section VIII of the MRP) in a groundwater well and irrigated agriculture may cause or contribute to the exceedance; (2) the Basin Plan requires development of a groundwater quality management plan for a constituent or constituents  
(footnote continued on next page)

requirements that will be implemented based on the evaluation of performance data. As described in the Information Sheet,<sup>49</sup> the MPEP will include evaluation studies of management practices to determine whether those practices are protective of groundwater quality for identified constituents of concern under a variety of site conditions.<sup>50</sup> If the management practices are not protective, new practices must be developed, implemented, and evaluated.<sup>51</sup> Any management practices identified in a MPEP report as being protective of water quality, or those that are equally effective, must be implemented by all growers who farm under similar conditions (including those in low vulnerability areas, which may include high quality groundwater).<sup>52</sup> Thus, under the Order's MPEP requirement, growers that discharge to high quality waters will need to implement additional management practices based on the evaluation of performance data. Basing these additional requirements on the "evaluation of performance data" as suggested by State Board guidance provides further evidence that the Central Valley Water Board properly determined that the Order will result in the implementation of BPTC.

Finally, the Central Valley Water Board carefully considered the Order's overall costs and its impacts to the agricultural economy and other affected stakeholders prior to its adoption. Consideration of costs is one of the factors listed in State Water Board guidance for determination of BPTC. The Board estimated that the cost of complying with the Order would be \$118.55 per acre annually, which is a \$4.10 per acre incremental increase when compared to continuation of the existing surface water only program.<sup>53</sup> The Board apportioned within that figure an estimate of \$113.34 per acre, or over 95 percent, attributable to the implementation of management practices, which is the "treatment or control" that comprises BPTC. It also considered the total estimated cost of compliance within the entire Eastern San Joaquin Watershed.<sup>54</sup> Consideration of costs did not stop there. The Information Sheet reveals that the Board considered the cost-effectiveness of the requirements for management plans<sup>55</sup>, which are triggered in specific areas by the identification of water quality problems. As required by CEQA, the Board also studied the potential economic impacts of the increased costs of the General Order on agriculture resources, including the potential loss of farmland.<sup>56</sup> In conjunction with

---

*(footnote continued from previous page)*

discharged by irrigated agriculture; or (3) the Executive Officer determines that irrigated agriculture may be causing or contributing to a trend of degradation of groundwater that may threaten applicable Basin Plan beneficial uses." See General Order, Attachment E (Definitions), at paragraph 13. [AR 7888].

<sup>49</sup> See Order, Information Sheet (Attachment A), pp. 39-40, under heading entitled "Management Practices Evaluation Program (MPEP) and Other Reporting and Planning Requirements. [AR 7789-7790].

<sup>50</sup> Order, MRP (Attachment B), Section IV.B.4. [AR 7814].

<sup>51</sup> *Ibid.*

<sup>52</sup> Order, at Section IV.B.21 (referring to the Management Practices Evaluation Report, which is due not later than six years after implementation of each phase of the Management Effectiveness Evaluation Plan). [AR 7732].

<sup>53</sup> Order, at Finding 37. [AR 7723]. See also Order, Information Sheet (Attachment A), at pp. 42-44. [AR 7792-7794].

<sup>54</sup> *Ibid.*

<sup>55</sup> See Order, Information Sheet (Attachment A), at p. 14 ("the burden of the SQMP, including costs, is reasonable."); p. 19 ("The burden of the GQMP, including costs is reasonable."), and p. 39 (describing the cost implications of requiring management plans in areas where there is no evidence of degradation of high quality waters). [AR 7764, 7789].

<sup>56</sup> See Order, Attachment D, at p. 15 (estimating the incremental loss of farmland resulting from the Order to be 4,100 acres beyond the 56,000 acres of expected loss associated with continuation of the surface water only Conditional Waiver) [AR 7867]; and Order, Information Sheet (Attachment A), at p. 45 [AR 7795]. See also Draft EIR, Section 5.10. [AR 31299-31313].

the formulation of the Program EIR upon which the Order's CEQA analysis relies, the Board was also presented with an extensive economic analysis to estimate the costs and broader economic impact on irrigated agricultural operations associated with the Board's Long Term Irrigated Lands Regulatory Program.<sup>57</sup> This economic analysis was summarized in the Board's Information Sheet.<sup>58</sup> The Board's consideration of costs and economics – as suggested by State Board guidance - was integrated throughout its analysis of the Order, and further supported the Board's determination that the practices and actions required by the Order constitute BPTC.

Despite the extensive analysis of BPTC described above, Petitioners take issue with the Board's BPTC conclusion. In support of their BPTC assertions, Petitioners provide mostly general complaints with one specific example. In their argument, they noticeably do not provide any specific practice or technology that the Central Valley Water Board failed to analyze. The general complaints are that the Order "by definition" does not achieve BPTC because it will not prevent unreasonable effects to beneficial uses, and will not be consistent to the maximum benefit to the people. Because those general assertions are made elsewhere in the petition, the Board does not respond to them here, and instead contends that the analysis of BPTC found in the Information Sheet and summarized above fully implements the requirements of Resolution 68-16. With respect to the specific complaint regarding the periodic review of Surface Water Management Plans and Groundwater Management Plans to determine whether progress is being made to address degradation trends or impairment, Petitioners simply repeat their complaint from Contention II.a. that the Order does not establish a baseline inventory of high quality waters, and does not quantify the amount of degradation authorized by the Order. In response, the determination of BPTC does not require the Board to establish an inventory of high quality waters, nor quantify the amount of degradation being authorized.<sup>59</sup> Furthermore, the monitoring required by the Order enables the Board to determine whether adequate progress is being made to address the degradation trend or impairment.<sup>60</sup>

In summary, the Central Valley Water Board's finding that the General Order will result in the implementation of BPTC is appropriate and supported by substantial evidence in the administrative record. Petitioners' general assertions and complaints do not undermine or negate the comprehensive analysis performed. Petitioners' contention is without merit.

*B. The Board properly found that degradation of high quality waters is consistent with the maximum benefit to the people of the State*

Petitioners contend that because General Order will allow further degradation of high quality waters, the Central Valley Water Board should have analyzed whether further degradation is consistent with maximum benefit to the people of California. The Board completed and documented its analysis of this factor. As documented in the Information Sheet, the Board determined that the potential degradation of high quality waters authorized by the General Order is consistent with the maximum benefit to the people of California. The analysis is qualitative.

---

<sup>57</sup> *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program* (Economics Report). [AR 31796].

<sup>58</sup> Order, Information Sheet (Attachment A), p. 45, under heading "(d) Economic Considerations." [AR 7795].

<sup>59</sup> See Response to Environmental Justice Contentions II.a, and II.d., *ante*.

<sup>60</sup> See Response to Environmental Justice Petitioners Contention II.b., *ante*.

As described below, the finding was made in consideration of factors listed in State Water Board guidance documents for determination of maximum benefit.

As a preliminary matter, it is important to note why the Board's analysis is qualitative, not quantitative. Because of the widespread and varied nature of irrigated agriculture and the numerous water bodies potentially affected, it was infeasible for the Board to quantitatively review each potential waste discharge and receiving water scenario (tens of thousands) throughout the Central Valley, quantify the potential degradation of high quality waters, and determine whether that quantified degradation is consistent with the maximum benefit to the people of California.<sup>61</sup> Instead, the Board conservatively assumed that there are high quality waters receiving irrigated agricultural wastes that may be degraded by continued discharge. Operating under this assumption, the General Order applies requirements to limit degradation not just for those operations discharging to a high quality water, but all operations, implement BPTC or "best efforts", and ensure that waste discharge is not above applicable water quality objectives.

Despite these quantitative limitations inherent to general orders, the Board made its "maximum benefit" determination after considering factors listed in State Water Board guidance documents. "Maximum benefit to the people of the State" is not defined in Resolution 68-16. However, the State Water Board has provided guidance as to its meaning in its 1995 Question and Answers document.<sup>62</sup> That guidance document includes a nonexclusive list of factors for the Boards to consider in determining "maximum benefit to the people of the State," but stresses that the determination is made on a case-by-case basis and is based on considerations of reasonableness.<sup>63</sup> The considerations described in the guidance include: "(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. With reference to economic costs, both costs to the discharger and the affected public must be considered."

The Board's determination of maximum benefit was based on consideration of the factors listed in State Board guidance and was reasonable based on the circumstances presented by the General Order. The Board's finding of maximum benefit is in Finding 36, and further explained and summarized in the Information Sheet. The Information Sheet states:

This Order allows limited degradation of existing high quality waters. This limited degradation is consistent with maximum benefit to the people of the State for the following reasons:

- At a minimum, this Order requires that irrigated agriculture achieve and maintain compliance with water quality objectives and beneficial uses;
- The requirements implementing the Order will result in use of BPTC where irrigated agricultural waste discharges may cause degradation of high

---

<sup>61</sup> Order, Information Sheet (Attachment A), at p. 34 ("There is no comprehensive, waste constituent-specific information available for all surface waters and groundwater aquifers accepting irrigated agricultural wastes that would allow site-specific assessment of current conditions. Likewise, there is no comprehensive historic data."). [AR 7784].

<sup>62</sup> State Water Resources Control Board. 1995. *Questions and Answers, Resolution 68-16*. [AR 36029].

<sup>63</sup> *Id.*, at page 4, answer 6. [AR 36032-36033].

quality waters; where waters are already degraded, the requirements will result in the pollution controls that reflect the “best efforts” approach. Because BPTC will be implemented, any lowering of water quality will be accompanied by implementation of the most appropriate treatment or control technology;

- Central Valley communities depend on irrigated agriculture for employment (PEIR, Appendix A);
- The state and nation depend on Central Valley agriculture for food (PEIR, Appendix A);
- Consistent with the Order’s and PEIR’s stated goal of ensuring that irrigated agricultural discharges do not impair access to safe and reliable drinking water, the Order protects high quality waters relied on by local communities from degradation of their water supplies by current practices on irrigated lands. The Order is designed to prevent irrigated lands discharges from causing or contributing to exceedances of water quality objectives, which include maximum contaminant levels for drinking water. The Order also is designed to detect and address exceedances of water quality objectives, if they occur, in accordance with the compliance time schedules provided therein. Therefore, local communities should not incur any additional treatment costs associated with the limited degradation authorized by this Order; and
- The Order includes performance standards that would work to prevent further degradation of surface and groundwater quality.<sup>64</sup>

With respect to consideration of beneficial uses, the first bullet of the summary explains how beneficial uses were considered and will be protected by the General Order. Further explanation is found in the Order itself, where the Board found that the Order implements the Basin Plan and the water quality objectives formulated to protect those beneficial uses.<sup>65</sup> Special attention was paid to the drinking water beneficial use.<sup>66</sup> The Order’s receiving water limitations and monitoring requirements are key mechanisms for implementing the Basin Plan and protecting beneficial uses.<sup>67</sup>

In addition to considering beneficial uses, the Central Valley Water Board considered the second factor listed in the guidance: the economic and social costs of the discharge compared to the benefits. As explained above in the Board’s response to Petitioners’ BPTC contention, considerations of compliance costs, and their economic impacts were integrated throughout the General Order and in the administrative record. Social costs of the discharges were also considered. One of the Order’s stated goals is ensuring that irrigated agricultural discharges do

---

<sup>64</sup> Order, Information Sheet (Attachment A), at pp. 41-42. [AR 7791-7792].

<sup>65</sup> Order, at findings 24 and 25 (stating “This Order implements the Basin Plan by requiring the implementation of management practices to achieve compliance with applicable water quality objectives and requiring the prevention of nuisance. The Order requires implementation of a monitoring and reporting program to determine the effects of discharges of water quality and the effectiveness of management practices designed to comply with water quality objectives.”) [AR 7720]. See also, Order, Information Sheet (Attachment A), page 44, section (a) *Past, present, and probable future beneficial uses of water*. [AR 7794].

<sup>66</sup> See, e.g., Order, Information Sheet (Attachment A), page 3, *Goals and Objectives of the Irrigated Lands Regulatory Program*. [AR 7753].

<sup>67</sup> See e.g., Order, section III. and MRP. [AR 7729-7730, AR 7799-7827].

not impair access to safe and reliable drinking water.<sup>68</sup> Specifically, the Board explained that the Order is designed to address all exceedances of water quality objectives in accordance with time schedules, and that “local communities should not incur any additional costs to treat their water to drinking water standards due to degradation of high quality waters authorized by the Order or could possibly have their existing water treatment costs reduced.”<sup>69</sup> The lack of expected social costs (i.e. treatment costs) was compared with the benefits of the discharge, namely the gainful employment provided by irrigated agriculture,<sup>70</sup> the food produced by the activity producing the discharge,<sup>71</sup> and the stated goal of the irrigated lands regulatory program to maintain the economic viability of agriculture in the Central Valley.<sup>72</sup> Similarly, the Board also compared the compliance costs and economic effects associated with the Order with the benefits of attaining water quality objectives and limiting degradation.<sup>73</sup>

Finally, in making its maximum benefit findings, the Central Valley Water Board also considered the environmental aspects of the proposed discharge, and the implementation of feasible alternative treatment or control methods, which are the third and fourth consideration factors listed in the State Board’s guidance. In terms of environmental aspects, the waste discharge requirements implement the Basin Plan, which is designed to protect the receiving waters from unreasonable effects of waste discharges. The Board also included in Attachment D its various findings required by CEQA analyzing the potentially significant adverse environmental effects of the Order.<sup>74</sup> These findings relied upon the Irrigated Lands Regulatory Program’s Program Environmental Impact Report, a nearly ten-year long effort which culminated in the Board’s certification of the PEIR in April 2011.<sup>75</sup> With respect to alternative treatment or control, the Board’s Attachment D reflects the Board’s consideration of alternative regulatory approaches, along with justification for why that particular alternative was not chosen.<sup>76</sup> Further, the Board found that the General Order would result in the implementation of the best practical treatment or control.<sup>77</sup> After consideration all the factors that go in to the determination of best practicable treatment or control (see discussion *ante*), the Board determined that there were no feasible alternatives to the treatments or controls required by the Order.<sup>78</sup>

---

<sup>68</sup> Order, Information Sheet (Attachment A), at p. 3 [AR 7753]. See also Draft PEIR, at p. 1-2 [AR 30981]

<sup>69</sup> Order, Information Sheet (Attachment A), pp. 41-42, at bullet 5 [AR 7791-7792]; see also Order, Attachment D, page 32, *Economic Benefits*. [AR 7884]. Even if treatment costs result from degradation of high quality waters authorized by the Order do occur in isolated instances, those costs are impossible to avoid due to the infeasibility of any faster compliance. In addition, the Board’s other programs are working to assist disadvantaged communities with access to safe drinking water. See Response to Environmental Justice Contention V, below.

<sup>70</sup> Order, Information Sheet (Attachment A), p. 42, at bullet 2 (citing PEIR, Appendix A). [AR 7792].

<sup>71</sup> *Id.*, at bullet 4 (citing PEIR, Appendix A).

<sup>72</sup> See Order, Information Sheet (Attachment A), p. 3, bullet 2. [AR 7753].

<sup>73</sup> Order, Attachment D, *Statement of Overriding Considerations Supporting Approval of the Waste Discharge Requirements General Order for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third Party Group*, at pp. 32-33. [AR 7884-7885].

<sup>74</sup> Order, Attachment D, at pp. 4-19. [AR 7856-7871].

<sup>75</sup> PEIR. [AR 32233].

<sup>76</sup> Order, Attachment D, at pp. 25-31. [AR 7877-7833].

<sup>77</sup> Order, at Finding 36. [AR 7722].

<sup>78</sup> The Board’s 68-16 Questions and Answers document’s discussion of BPTC recognizes that the determination of BPTC and maximum benefit is overlapping especially with respect to practical treatment or control. *Questions and Answers, Resolution 68-16*, page 6, answer 7 (stating “the costs of treatment or control” would be considered in determining both BPTC and maximum benefit to the people of the State.) [AR 36034].

Petitioners take issue with the Board's determination. Petitioners provide mostly general and conclusory complaints, stating "the Board in this WDR engaged in no such analysis, much less demonstrated that any change in water quality will be consistent with the maximum benefit to the people of the State." The Board disagrees, as it performed an extensive analysis that demonstrated that the potential degradation of high quality waters authorized by the General Order was in the maximum benefit to the people.

In summary, the General Order achieves the central objective of the irrigated lands regulatory program, which is to "encourage implementation of management practices that improve water quality in keeping with [the objective that all state waters meet applicable water quality objectives], without jeopardizing the economic viability for all sizes of irrigated agricultural operations in the Central Valley or placing an undue burden on rural communities to provide safe drinking water."<sup>79</sup> The reasonable balance reflected in the Order is a result of the considerations mentioned above and clearly reflects a regulatory regime that ensures that any degradation of high quality waters is "in the maximum benefit to the people of the State."

*C. The Board properly found that the Order will not unreasonably affect present or probable future beneficial uses of water*

The Central Valley Water Board properly concluded that present and probable future beneficial uses of water will be protected by the General Order. Specifically, the Board found that the Order implements the Basin Plan and the water quality objectives established to protect those beneficial uses.<sup>80</sup> The Board's Information Sheet includes sections entitled "Past, present, and probable future beneficial uses of water" and "Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area," each of which provides additional explanation describing the basis for these findings.<sup>81</sup> The Board was justified in concluding that the General Order will not unreasonably affect present or probable future beneficial uses of water.

**Response to Environmental Justice Contention III** (page 21 of the EJ Group petition)

*The General Order allows pollution and nuisance to groundwater in violation of the Antidegradation Policy and state law*

Water quality objectives are established to protect beneficial uses. Therefore, discharges that meet water quality objectives would not be considered "pollution" per the definition in the Water Code (section 13050(l)(1)). The General Order's Receiving Water Limitations prohibit discharges that cause or contribute to exceedances of water quality objectives, and its many other requirements assure that discharges will meet the Receiving Water Limitations. The Order

---

<sup>79</sup> See Order, Attachment A (Information Sheet), page 3, second bullet. [AR 7753].

<sup>80</sup> Order, at findings 24 and 25 (stating "This Order implements the Basin Plan by requiring the implementation of management practices to achieve compliance with applicable water quality objectives and requiring the prevention of nuisance). The Order requires implementation of a monitoring and reporting program to determine the effects of discharges of water quality and the effectiveness of management practices designed to comply with water quality objectives.") [AR 7720]. See also, Order, Information Sheet (Attachment A), page 44, section (a) *Past, present, and probable future beneficial uses of water*. [AR 7794].

<sup>81</sup> See Order, Information Sheet (Attachment A), at pp. 44-45. [AR 7794-7795].



also includes a time schedule to achieve water quality objectives, which as mentioned previously, is reasonable and authorized by Water Code section 13263, subdivision (c).<sup>82</sup>

**Response to Environmental Justice Contention IV.** (page 22 of the EJ Group petition)

*The substantive requirements of this order are not subject to review and approval of the Board*

Petitioners contend that the Central Valley Water Board violated Water Code section 13223 by delegating specific tasks to its Executive Officer as opposed to approving those future tasks itself. The challenged delegations include those giving the Executive Officer authority to (1) approve the Groundwater Quality Assessment Report, including the proposed identification of high and low vulnerability areas therein, (2) approve the Trend Monitoring Workplan, (3) approve the Management Practices Evaluation Workplan, and (4) reduce the frequency of updates and submission of Farm Evaluations and Nitrogen Management Plan Summary Reports. As described below, the Board disagrees with these contentions, as the Order contains prescriptive requirements on how each of these approvals are to be implemented and enforced.

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. 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.<sup>83</sup>

It is the practice of the Central Valley Water Board's 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 will be implemented with all of the Irrigated Lands Regulatory Program orders, including the General Order. Such updates are done as part of public meetings at which interested persons can speak to the Board about any concerns. In addition, the General Order was revised on 3 October 2013<sup>84</sup> to include additional provisions allowing an interested person to seek Board review regarding any plans or reports approved by the Executive Officer under this Order, including the Executive Officer's decision whether not to approve the high and low vulnerability areas identified by the third-party in its Groundwater Assessment Report.<sup>85</sup>

Water Code section 13223 does not prohibit the Central Valley Water Board from delegating to

---

<sup>82</sup> By definition, compliance schedules can provide a period of time to come into compliance with permit requirements, including those that implement water quality objectives. Wat. Code § 13263, subd. (c). This authorization does not violate Water Code section 13263, subdivision a.

<sup>83</sup> *California Ass'n of Sanitation Agencies v. State Water Resources Control Bd.* (2012) 208 Cal.App.4th 1438, 1468, citing *Russian River Watershed Committee v. City of Santa Rosa* (9th Cir. 1998) 142 F.3d 1136.

<sup>84</sup> Central Valley Water Board 10 January 2014 supplemental evidence request (Attachment A of the Petition Response), Exhibit 1

<sup>85</sup> *Id.*, Exhibit 2, page 25, under heading "Reports and Plans." See also, *id.*, Exhibit 2, Attachment B (MRP), at Section IV.A.5 ("An interested person may seek review by the Central Valley Water Board of the Executive Officer's decision on the designation of high and low vulnerability areas associated with approval of the Groundwater Quality Assessment Report.").

its Executive Officer the tasks challenged by Petitioners (see above numbered list). Tasks 2, 3 and 4 (Approval of trend monitoring plan, approval of management practices evaluation workplan, and reducing the frequency of monitoring) all relate to monitoring requirements which may be set, modified, or rescinded pursuant to Water Code section 13267. Water Code section 13223 does not prohibit the Board from delegating the issuance of section 13267 requirements to its Executive Officer. Moreover, the Board in delegating these monitoring and reporting implementation tasks to the Executive Officer, has confined the Executive Officer's discretion by specifically prescribing the manner in which the tasks must be implemented. For example, the Order allows the Executive Officer to approve a reduction of the frequency of Farm Evaluation submissions, but only if "year to year changes in Farm Evaluation updates are minimal and the Executive Officer concurs that the practices identified in the Farm Evaluations are consistent with practices that, when properly implemented, will achieve receiving water limitations or best practicable treatment or control, where applicable."<sup>86</sup> Similarly, while the Board has tasked the Executive Officer with approving the Trend Monitoring Workplan and the Management Practice Evaluation Workplan (collectively, the workplans), the General Order sets forth detailed minimum criteria that must be met by the Trend Monitoring Program and Management Practice Evaluation Program before they can be approved.<sup>87</sup> In short, the approval processes for Tasks 2, 3 and 4 are essentially check points the Board added to the General Order to ensure that the Executive Officer determines that the third-party complies with the Order's monitoring and reporting requirements.

Task 1 is similar to tasks 2, 3, and 4, except that the results from the Groundwater Quality Assessment Report (GAR) and its approval will delineate the high vulnerability and low vulnerability areas within the permit area. The identified high and low vulnerability areas, in turn, are linked to permit requirements described below. The similarities to the other three tasks are that the GAR, and the proposed high and low vulnerability areas therein, relate the review of monitoring and reporting information required pursuant to Water Code section 13267. Like for the other tasks, the General Order sets forth the minimum criteria that must be met before a GAR can be approved.<sup>88</sup> The Order also includes the definition of high and low vulnerability groundwater areas, and requires the third-party to prepare the GAR to specifically delineate where these predefined areas are located.<sup>89</sup> The Order also prescribes minimum data components that the third-party must be collect to inform its proposed delineation of high and low vulnerability areas.<sup>90</sup> The Executive Officer will review the GAR to determine whether the third-party has complied with the General Order's requirements. By setting clear definitions of high and low vulnerability areas, prescribing the minimum data components to inform the analysis, and specifying how the analysis is to be conducted, the Board confined the Executive Officer's discretion to approve the GAR by prescribing the manner in which the approval may be granted. Rather than delegating a task to the Executive Officer, the Board once again set up a

---

<sup>86</sup> Order, at Section VII.B.2 [AR 7736].

<sup>87</sup> See Order, MRP (Attachment B), section IV.C. (Trend Monitoring Program), and Section IV.B (Management Practice Evaluation Program). [AR 7814, 7812]. See also *Id.*, at section IV.E. (establishing the Trend Monitoring Workplan approval process and criteria and including a prescriptive list of parameters that must be sampled, along with the frequency of sampling) [AR 7816]; and *Id.*, at section IV.D. (establishing the Management Practice Evaluation Workplan approval process and criteria and including a minimum list of parameters that must be sampled if groundwater monitoring is proposed.) [AR 7815].

<sup>88</sup> Order, MRP (Attachment B), at IV.A.2 through IV.A.4. [AR 7811-7812].

<sup>89</sup> *Id.*, at section IV.A.4., and Order, Attachment E (Definitions), at paragraphs 13 and 22. [AR 7812, 7888, 7890].

<sup>90</sup> Order, MRP (Attachment B), section IV.A.2. [AR 7811].

check point that ensures the third-party is complying with the Order rather than allowing the Executive Officer to establish new requirements. The Executive Officer's discretion to approve the GAR within those limits is analogous to establishing a final method of determining compliance with the Monitoring and Reporting Requirements, as authorized by the Water Code.

In any event, with its recent amendment on 3 October, 2013,<sup>91</sup> the General Order now clarifies how any interested person may request Board review of any Executive Officer decision, including any decision to approve the high and low vulnerability areas identified by the third-party in its GAR.<sup>92</sup> The Board also directed staff to post plans and reports after Executive Officer approval to ensure interested parties are aware of Executive Officer decisions in a timely manner.<sup>93</sup> For over a decade, Board staff has provided the Board with extensive updates on the ILRP, including Executive Officer decisions, in the Executive Officer's report.

Finally, staff routinely engages stakeholders in informal dialogue. For example, staff will continue to hold stakeholder meetings to discuss the outline for the Groundwater Quality Assessment Report and the templates developed by the agricultural community. Through this informal dialogue, staff and stakeholders will generally be aware of potential areas of dispute in advance of any final approval and have an opportunity to address any issues or concerns raised.

**Response to Environmental Justice Contention V.** (page 26 of the EJ Group petition)

*The General Order will disproportionately impact low income communities and communities of color because it does not protect groundwater from continued degradation.*

The Board understands that low income communities and communities of color are vulnerable to having nitrate impacted wells and may not have the resources to correct this problem. Consistent with the General Order's and PEIR's stated goal of ensuring that irrigated agricultural discharges do not impair access to safe and reliable drinking water, the Order protects high quality waters relied on by local communities from degradation of their water supplies by current practices on irrigated lands. The Order is designed to prevent irrigated lands discharges from causing or contributing to exceedances of water quality objectives, which include maximum contaminant levels for drinking water. In evaluating the irrigated lands regulatory approach and its potential environmental effects, the Board specifically considered the nitrate pollution in the Central Valley affecting small communities and others (See PEIR, Appendix A, Sections IX-XI), and has prioritized action in "high vulnerability areas," which are defined in the Order to include areas where known groundwater and surface water impacts exist for which irrigated agricultural operations are a potential cause or contributor.<sup>94</sup> Many low income communities and communities of color are likely to be located in these areas.

---

<sup>91</sup> See Central Valley Water Board 10 January 2014 supplemental evidence request (Attachment A of the Petition Response), Exhibit 1.

<sup>92</sup> *Id.*, Exhibit 2, at Attachment A (Information Sheet), p. 27. See also, *id.*, Attachment B (MRP), at Section IV.A.5 ("An interested person may seek review by the Central Valley Water Board of the Executive Officer's decision on the designation of high and low vulnerability areas associated with approval of the Groundwater Quality Assessment Report.").

<sup>93</sup> Order, Information Sheet (Attachment A), at p. 25. [AR 7775].

<sup>94</sup> Order, Attachment E, at paragraphs 13 and 14. [AR 7888].

The General Order does not violate California Government Code, sections 11135, 65008, or 12900, et seq., laws which generally prohibit discrimination. Government Code section 11135, subdivision (a), states: "No person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, genetic information, or disability, be unlawfully subjected to discrimination..." The Order applies protections across the board based on water quality considerations, and the need to implement the Basin Plan and protect the beneficial uses therein, including drinking water beneficial uses. There has been no denial of water quality protection on the basis of race, national origin or ethnicity. In fact, the Order was designed with the stated goal of ensuring that irrigated agricultural discharges do not impair access to safe and reliable drinking water.<sup>95</sup>

The Board also has programs, including CV-SALTS,<sup>96</sup> in addition to the General Order working towards the goal of providing access to safe and reliable drinking water to areas impacted by nitrates, including areas affected by the General Order. The General Order will control potential agricultural sources of drinking water impairments to prevent or reduce future impairments, while CV-SALTS is aimed towards addressing legacy nitrate and salt impairment issues. The General Order addresses discharges at the source to protect groundwater for the future and prevent the types of legacy issues that CV-SALTS is currently addressing. The Board has also developed a Groundwater Quality Protection Strategy that describes how the boards various groundwater quality protection programs are being prioritized to protect drinking water and other uses.<sup>97</sup> The Order was crafted with CV-SALTS in mind, and its implementation will be coordinated with CV-SALTS.<sup>98</sup> This coordination and integration further reflects how the General Order works towards the goal of providing safe and reliable drinking water to affected areas within the permit area.

Finally, Petitioners have not established the necessary evidence to demonstrate entitlement to relief under Government Code section 11135.<sup>99</sup>

The other cited statutes are either not applicable to state agencies (Government Code section 65008), or are limited to discrimination in housing decisions (Government Code section 12900 et. seq.).

**RESPONSE TO PETITION A- 2239(b)**  
**CALIFORNIA SPORTFISHING PROTECTION ALLIANCE AND CALIFORNIA WATER**  
**IMPACT NETWORK ("Environmental Group Petitioners" or "Environmental Groups")**

The Environmental Group Petitioners make the following contentions:

- A. The General Order fails to comply with Resolution 68-16, the State Board's Antidegradation Policy.

---

<sup>95</sup> Order, Information Sheet (Attachment A), at p. 41, bullet 5. [AR 7791].

<sup>96</sup> The CV-SALTS process is a stakeholder driven effort that will result in policy changes through basin plan amendments to address nitrate and salinity problems in the Central Valley ([http://www.waterboards.ca.gov/centralvalley/water\\_issues/salinity/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/salinity/index.shtml)).

<sup>97</sup> See <[http://www.waterboards.ca.gov/centralvalley/water\\_issues/groundwater\\_quality/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/groundwater_quality/index.shtml)>.

<sup>98</sup> Order, at Finding 40. [AR 7724].

<sup>99</sup> See, e.g., *Darensburg v. Metropolitan Transportation Commission*, (N.D. Cal. 2009) 611 F.Supp.2d 994.

- B. The General Order fails to comply with California's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program.
- C. The General Order fails to comply with Water Code Sections 13263 and 13241.
- D. The General Order fails to comply with the California Environmental Quality Act.

Below are responses to these contentions, which are labeled as "Environmental Group Contentions" to differentiate from the other petitions. For ease of review, each contention is summarized in italics in the beginning of each response.

**Response to Environmental Group Contention A.** (p. 3 of the Environmental Group petition)

*The General Order fails to comply with Resolution 68-16, the State Board's Antidegradation Policy.*

Petitioners' criticism of the Order's efficacy boils down to two themes: that representative monitoring of surface water discharges<sup>100</sup> is per se ineffective because it cannot provide information about water quality conditions far upstream from the monitoring locations, and that representative monitoring cannot provide information about what individual dischargers are doing to implement management practices without water quality monitoring sites at the edge of every field. Petitioners provide an incomplete picture of the vast amount of information that will be gathered by and available to the Board under this Order.

*1. The Order's Surface Water Monitoring Requirements Can Detect Whether Members are Causing or Contributing to Water Quality Problems*

The fundamental basis for Petitioners' complaints is its assertion that watershed scale monitoring of surface water discharges cannot measure or detect degradation or water quality exceedances that may have occurred upstream and dissipated by the time the affected waters commingle with other waters and flow past the downstream monitoring location.<sup>101</sup> As a result, Petitioners argue that the Regional Board cannot tell whether the implemented management practices are effective.<sup>102</sup> In support of this position, Petitioners point to their consultant's opinion that the concept of regional monitoring just cannot work to determine water quality conditions in the areas being regulated.<sup>103</sup> This position is not supported by evidence in the record; in fact, substantial evidence in record establishes the efficacy of the representative monitoring program.

Petitioners and their consultant ignore two crucial points. First, the State Water Board already has concluded in its Non Point Source Policy (NPS Policy) that regional monitoring can be an appropriate feedback tool in implementing a nonpoint source control program such as the

---

<sup>100</sup> Note that the contention challenges the "regional monitoring" in its entirety, yet the Petitioners present no argument or discussion related to the requirements of the groundwater program. Therefore, the Board's response focuses only on the surface water monitoring program, and does not include a discussion of the groundwater monitoring program. The groundwater monitoring program as it relates to the Antidegradation Policy is discussed in response to Environmental Justice Petitioners' contention II.b., *ante*.

<sup>101</sup> Environmental Groups Petition, at p. 5.

<sup>102</sup> *Ibid.*

<sup>103</sup> *Ibid.*

Order. The NPS Policy recommends that the Boards choose the most appropriate type of monitoring “depending on the water quality problem, the cause, the beneficial uses at risk and the purpose for which the monitoring will be used.”<sup>104</sup> The NPS Policy acknowledges that “some programs may involve collecting and reporting ambient water quality monitoring data.”<sup>105</sup> Watershed-based monitoring is called out specifically as an acceptable method of monitoring for waivers of waste discharge requirements, which are also subject to the requirements of Resolution 68-16.<sup>106</sup> If Petitioners are correct that all watershed-based monitoring programs violate the Antidegradation Policy, then such programs could not be used for categorical waivers as envisioned by the Water Code and the NPS Policy.

Second, the Petitioners’ assertion that the waiver’s monitoring program cannot detect water quality problems miles upstream is speculative and not supported by the record. (Petition, at p. 5). Instead, the record demonstrates that the General Order requires monitoring of representative locations throughout the permit area that are sufficient in type and number to give an accurate picture of water quality throughout the permit area, including upstream. Evidence in the record supports the design, efficacy, and cost-effectiveness of the specific watershed-based monitoring at issue here. Considering the costs of monitoring and the large acreages involved with irrigated agriculture, the Board determined that watershed-based surface water monitoring is appropriate for the Order.

The monitoring program is a representative one, as 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. The Board uses 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 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, remedial activities are required at all upstream areas represented by the downstream monitoring site due to the assumption that the downstream monitoring sites are representative of water quality conditions in the upstream watershed.<sup>107</sup>

The Board has successfully used representative monitoring in its irrigated lands regulatory for several years. As discussed in the Information Sheet,<sup>108</sup> 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 valid conclusions to be reached from monitoring results. Under the conditional waiver, the Coalition Group was required to provide technical justification and identify representative sites in an MRP Plan that was to be approved by the Executive Officer.<sup>109</sup> The plan was required to show

<sup>104</sup> NPS Policy, at p. 14. [AR 36153].

<sup>105</sup> *Ibid.*

<sup>106</sup> *Id.*, at p. 5. [AR 36144]. The reference to watershed-based monitoring comes from Water Code section 13269(a)(2), which requires that conditional waivers that pose a significant threat to water quality to including requirements for individual, group, or watershed-based monitoring.

<sup>107</sup> Order, Attachment B (MRP), Section III.A.2. [AR 7801-7802].

<sup>108</sup> Order, Information Sheet (Attachment A), at pp. 9-10. [AR 7759-7760].

<sup>109</sup> MRP Order R5-2008-0005, at p. 7. [AR 1943].

representativeness by choosing monitoring locations with similar hydrology, crop types, pesticide use, and other attributes to the upstream areas which they represent.<sup>110</sup> This specific plan was approved by the Executive Officer as complying with all the requirements of that Monitoring and Reporting Order, which required the representative monitoring program to be “sufficiently representative to characterize water quality for all surface waters of the State that may be affected by irrigated agriculture within Coalition boundaries.”<sup>111</sup> The representativeness of the selected sites was confirmed by the Coalition in October 2010.<sup>112</sup> Neither the Petitioners nor any other party has challenged the MRP Order under which the Coalition is currently operating or any previous determinations of representativeness made by the Executive Officer or the Coalition.

In developing the structure of surface water monitoring program in the Order, board staff reviewed the monitoring efforts under the Conditional Waiver. In contrast to the depiction of the Petitioners, the monitoring effort has been extensive and has included multiple sites (43), ten of which were “upstream” sites.<sup>113</sup> As can be seen from the record, the monitoring sites were a mix of stream types and included creeks, sloughs, canals, and drains<sup>114</sup>. Sites were intentionally selected to be representative of streams that could be impacted by irrigated agricultural runoff and, generally, did not include sites that had much upstream dilution flow. A recent Annual Monitoring Report from the Coalition demonstrates how many sites had significant periods of time (of at least monitoring in one quarter) in which no sample could be taken because the stream channel was dry.<sup>115</sup> These dry periods are evidence of the limited amount of irrigated agriculture runoff in these areas and the lack of upstream “dilution” flows, which is in sharp contrast to the portrayal of the Petitioners of discharges being diluted by higher quality upstream flows.

Finally, the Petitioners do not point to any sites that should have been monitored but have not been or any parameters that have not been monitored, but should be. In other words, they have not pointed to any specific upstream monitoring results indicating water quality problems that were not detected by the representative monitoring program. In this sense, the Petitioners’ complaint is speculative, and is refuted by the extensive monitoring conducted under the Conditional Waiver. That monitoring has provided a comprehensive picture of the water quality problems in the Order’s area and provided a basis for making reasonable adjustments to the surface water monitoring program. A well-documented technical analysis under the Conditional Waiver was used to identify monitoring zones that have conditions that were expected to be

---

<sup>110</sup> *Ibid.*

<sup>111</sup> *Id.*, at p. 5 [AR 1941]; 25 August 2008 Monitoring and Reporting Plan submitted by the East San Joaquin Water Quality Coalition [AR 13398 et seq.]; 15 September 2008 letter from Pamela Creedon to Parry Klassen [AR 13694 et seq.]. The Executive Officer subsequently approved a number of changes to the MRP Plan as conditions changed. For example, sites were found to be no longer representative of irrigated agricultural discharges or more representative sites were identified. See, e.g. 7 February 2012 approval of request to replace Yori Grove monitoring site with more representative Levee Drain monitoring site. [AR 22196]; 26 April 2012 approval of request to suspend monitoring Duck Slough at Highway 99 during highway 99 expansion activities. [AR 25189].

<sup>112</sup> 20 October 2010 East San Joaquin Coalition Monitoring and Reporting Program Plan, at p. 11 [AR 18980].

<sup>113</sup> AR 22349, 22350

<sup>114</sup> *Ibid.*

<sup>115</sup> *Ibid.*

similar and the monitoring results support that analysis, since similar issues/problems throughout the Order area.<sup>116</sup>

The Order as adopted by the Board continues to explicitly require the representative monitoring program to give adequate information about water quality throughout the Coalition area. The Order specifies the locations of the 12 core monitoring sites in the six zones previously identified in the 2008 MRP Plan.<sup>117</sup> It also specifies the 30 site locations that are considered to be represented by the 12 core monitoring locations.<sup>118</sup> MRP Section III.A. specifies the relationship between core sites and represented sites as follows: “When a water quality objective or trigger limit is exceeded at a Core site, the third-party must evaluate the potential for similar risks or threats to water quality associated with that parameter at the sites represented by the Core site (Represented sites). The evaluation must be included in the Monitoring Report (see section V below).” That section also specifies that “Any watershed area that does not contain a monitoring site due to issues of access or location downstream of urban influence must be represented by the Core sites in that zone.”<sup>119</sup> In this way, the representative monitoring program is able to provide information about water quality throughout the area, without having to go to the expense of putting a monitor at the edge of every field. In addition, surface water monitoring will continue to take place at sites and for parameters under a Management Plan approved under the conditional waiver.<sup>120</sup>

Evidence in the record supports the efficacy of the surface water monitoring requirements proposed by the tentative Order. As mentioned above, the representative monitoring program required by the previous conditional waiver was carried forward to apply to the East San Joaquin Order. That representative monitoring program has already triggered requirements to develop water quality management plans to address exceedances of water quality objectives for 546 water body-constituent combinations in the region,<sup>121</sup> including 206 in the East San Joaquin watershed.<sup>122</sup> There have also been changes in management practices that appear to generally correspond with the improvement in water quality.<sup>123</sup> If the monitoring requirements were defective as Petitioners assert, they would be expected to cite specific examples of these deficiencies as opposed to making general allegations. In contrast, hundreds of water quality problems have been detected by the representative monitoring program, triggering hundreds of management plans region wide, including over 200 in the East San Joaquin watershed. 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

---

<sup>116</sup> 20 October 2010 East San Joaquin Coalition Monitoring and Reporting Program Plan, at p. 11 [AR 18963 et seq.].

<sup>117</sup> Order, Attachment B (MRP), at Section III.B. [AR 7802].

<sup>118</sup> *Ibid.*

<sup>119</sup> Order, MRP (Attachment B), at Section III.A. [AR 7801].

<sup>120</sup> Order, at Section VIII.H.1. [7744]

<sup>121</sup> PEIR, at p. 3.3-161. [AR 32577].

<sup>122</sup> Order, Information Sheet (Attachment A), at p. 13 (Table 2). [AR 7763].

<sup>123</sup> See, e.g., 1 April 2011 Management Plan Update Report, at p. 111 (identifying a decrease in chlorpyrifos exceedances as directly related to implementation of new management practices). [AR 21503]; 1 April 2012 Management Plan Update Report, at p.129-133 (relating counts of chlorpyrifos, diazinon, diuron and copper exceedances, and water and sediment toxicity). [AR 24663-24667]; and 1 March 2012 Annual Monitoring Report, at p. 137-145, and Appendix VII (detailing the outreach and education) [AR 22458-22466, and AR 23975-24026].



the individual monitoring approach proposed by the commenter is unlikely to reveal any new issues that have not already been identified.

In addition, two projects have already demonstrated the effectiveness of that technique in determining applicable water quality conditions. In the Rice Pesticide Program, which is an irrigated lands regulatory program, "water quality monitoring is conducted on a regional scale at locations downstream from tens to hundreds of thousands of acres of rice fields (e.g., Colusa Basin Drain, Butte Slough, and Sacramento Slough). Outreach efforts by the rice industry and county agricultural commissioners are conducted annually and inspections by the commissioners are conducted to ensure compliance with pesticide permit conditions. However, neither individual field monitoring nor development of individual farm plans is required. Pesticide loads have been reduced by over 90% and only infrequent exceedances of performance goals have occurred."<sup>124</sup> Another program, the Grasslands Bypass Project, which is regulated under WDRs, primarily relies on representative monitoring and planning (no individual farm plans or farm monitoring are required). That effort has resulted in an over 60% reduction in selenium loading to the San Joaquin River and compliance with all selenium objectives, except in limited reaches that have little to no dilution flow."<sup>125</sup>

Petitioners suggest that the Board will not know which particular farms are responsible for the water quality problem. For the technical reasons stated above, the Board disagrees. The Board also disagrees with Petitioners' suggestion 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. 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).) As described below, the Board's representative harmonizes the applicable requirements.

The reasonableness and cost-effectiveness of the individualized monitoring approach was extensively studied when developing the Program EIR, and the Board ultimately concluded that the better and more cost-effective approach was to require the collection of representative receiving water data. Page 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 above in the PEIR, monitoring only discharges from fields would not provide the needed information to determine the effects on receiving water bodies, due in part to the variability in the composition of end-of-field discharges. Information about the quality of the receiving waters is more useful than information about effluent quality when determining whether and to what extent degradation is occurring or water quality objectives are being

---

<sup>124</sup> PEIR, at p. 3.3-177. [AR 32593].

<sup>125</sup> *Ibid.*, see also PEIR, at p. 3.3-178. [AR 32594].

exceeded. To address this, an individual 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 type of individual monitoring program as one of the long-term ILRP alternatives – PEIR Alternative 5.

In evaluating Alternative 5, the Board considered how 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.<sup>126</sup> This is significant in light of the Water Code's requirement that any monitoring required be reasonable and cost-effective. 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.<sup>127</sup>

The Order will enable the Board to ensure, 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. All of this will be done at a significantly lower cost than the individual approach advocated by Petitioners. This is a more reasonable approach because it focuses resources on changing practices that are contributing to the problem; tracking the implementation of those improved practices; evaluating the effectiveness of those practices; and tracking changes in water quality to determine whether the problem is being addressed. This approach harmonizes antidegradation requirements with the reasonableness requirements of Water Code section 13267.

As described above, the Order ensures that representative monitoring will detect water quality problems as they occur, but detecting problems is only the first step. The Order also requires the third-party to determine the cause of water quality problems and requires Members to correct the problem. The third-party must develop a surface water quality management plan that 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, conduct monitoring, and report on progress in addressing the water quality problem.

As stated in the Order, if inadequate progress is being made through the third-party led management plan effort, then the Executive Officer must take additional action.<sup>128</sup> 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.<sup>129</sup> The approach outlined in the Order is reasonable, since it starts with an approach that can

---

<sup>126</sup> See July 2010 Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program, at p. 2-22 (increased staffing estimates) and p. 2-26 (tables comparing costs of individual monitoring of Alternative 5 versus regional monitoring of Alternative 4). [AR 31831, 31835].

<sup>127</sup> PEIR, Appendix A, pages 127-129. [AR 31495-31497].

<sup>128</sup> Order, Attachment B (MRP), Appendix MRP-1, Section II.b. [AR 7799 et seq., AR 7834].

<sup>129</sup> *Ibid.*

address the identified problem at a lower cost, but still includes a process for a more stringent regulatory regime if needed.

The Petitioners also draw inappropriate parallels between the *AGUA* court's conclusions regarding the adequacy of the groundwater monitoring program under the Dairy General Order and the surface water monitoring described in the Order. The court in *AGUA* made factual findings based on uncontroverted evidence in the record before it, that monitoring of domestic and agricultural supply wells alone was not an accurate or timely way of determining whether degradation was occurring, in a case where the board assumed that no degradation would occur without conducting an antidegradation analysis. (See *AGUA, supra*, 210 Cal.App.4th at p. 1275). That program is unlike the representative monitoring required by the Order. There is substantial evidence in the record demonstrating that the Order requires monitoring from representative sites to provide a complete assessment of the conditions of waters of the State within the permit area. Surface water quality monitoring is not analogous to monitoring groundwater supply wells. The waste discharges to surface waters monitored in the 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) [citation?], whereas, monitoring results from a groundwater supply well may represent the effects of land use activities that occurred weeks, years, or decades before.

In summary, the Order's watershed-based monitoring system is consistent with the NPS Policy and supported by the actual real-world experience of decades-long implementation of the Board's agricultural programs. The 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 monitoring regime Petitioners would prefer, it achieves compliance with the Antidegradation Policy, while harmonizing the reasonableness requirements of the Water Code and achieving the Board's stated goal to protect water quality while maintaining the economic viability of agriculture.

*2. The Monitoring and reporting program provides further assurance that BPTC will be implemented*

Petitioners also contend that the Board's Monitoring and Reporting system precluded it from finding that the Order will result in the implementation of BPTC where applicable. In response to Environmental Justice Contention II.e, the Board explained how the substantive provisions of the Order require the implementation of BPTC.

In addition to these substantive requirements, the robust monitoring and reporting requirements of the Order and the Board's enforcement authorities provide further assurance that BPTC will be implemented by growers. In addition to representative surface water monitoring, the 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).<sup>130</sup> The third-party will produce evaluations of management practices and conduct additional monitoring or studies as part of the management plan process.<sup>131</sup> The third-party will

---

<sup>130</sup> Order, at sections VII.B, VII.C., and VII.D. [AR 7736-7738].

<sup>131</sup> Order, at VIII.D.2, and VIII.H. [AR 7742, 7744].

also assess areas vulnerable to sediment discharge and erosion.<sup>132</sup> 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 Order will result in the implementation of BPTC where applicable.

In summary, representative monitoring combined with requirements to prepare individual farm evaluations and other site-specific reports obviates the need in most cases for discharger-specific effluent monitoring to ensure implementation of BPTC. Petitioners present no evidence that monitoring the efficacy of the individual management practices of every discharger is the only way to implement BPTC requirements for surface water discharges. As explained by the Board, "Requirements for individual farm evaluations, nitrogen management plans, sediment and erosion control plans, management practices tracking, and water quality monitoring and reporting are designed to ensure that degradation is minimized and that management practices are protective of water quality. These requirements are aimed to ensure that all irrigated lands are implementing management practices that minimize degradation, the effectiveness of such practices is evaluated, and feedback monitoring is conducted to ensure that degradation is limited."<sup>133</sup>

**Response to Environmental Group Contention B.** (p. 8 of the Environmental Group petition)

*The General Order fails to comply with California's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program.*

Petitioners contend that the Order does not comply with Key Elements 1, 2, and 4 of the NPS Policy. The Order, in Attachment A, describes the five key elements required by the NPS Policy and provides justification that the requirements of this Order meet the requirements of the NPS Policy, including the Key Elements identified by Petitioners. Excerpts of that discussion are provided below.

*Key Element 1*

The purpose of the long-term irrigated lands regulatory program, of which this Order is an implementing mechanism, is stated above under the section titled "Goals and Objectives of the Irrigated Lands Regulatory Program."<sup>134</sup> The program goals and objectives include meeting water quality objectives. 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). Further discussion of this Order's implementation of antidegradation requirements is given below under the section titled "State Water Board Resolution 68-16."

---

<sup>132</sup> Order, at section VIII.E. [AR 7743].

<sup>133</sup> Order, Information Sheet (Attachment A), at p. 41. [AR 7791].

<sup>134</sup> The goals and objectives were developed as part of the ILRP Program Environmental Impact Report, ICF International. 2011. *Irrigated Lands Regulatory Program - Program Environmental Impact Report*. Final and Draft. March. (ICF 05508.05.) Sacramento, CA. Prepared for Central Valley Regional Water Quality Control Board, Sacramento, CA. [AR 30975 et seq., AR 32233 et seq.].

### *Key Element 2*

The board is prevented by Water Code section 13360 from prescribing specific management practices to be implemented. However, it may set forth performance standards and require dischargers to report on what practices they have or will implement to meet those standards. Examples of the types of practices that irrigated agricultural operations may implement to meet program goals and objectives have been described in the Economics Report<sup>18</sup> and evaluated in the Program Environmental Impact Report (PEIR)<sup>19</sup> for the long-term ILRP. This Order requires each individual operation to develop a farm evaluation that will describe their management practices in place to protect surface water and groundwater quality. This Order also requires the development of surface/groundwater quality management plans (SQMPs/GQMPs) in areas where there are exceedances of water quality objectives. The requirements for SQMPs and GQMPs include that the third-party identify management practices and develop a process for evaluating the effectiveness of such practices. The requirements of this Order are consistent with Key Element 2.

### *Key Element 4*

To provide feedback on whether program goals are being achieved, this Order requires surface and groundwater quality monitoring, tracking of management practices, and evaluation of effectiveness of implemented practices. This feedback will allow iterative implementation of practices to ensure that program goals are achieved. This feedback mechanisms required by this Order are consistent with Key Element 4.

A detailed discussion of the Order's monitoring and reporting requirements, with a specific emphasis on the surface water issues raised by Petitioners in its contention, are provided in response to Environmental Group Contention A. That discussion is not repeated here, but it provides further support for the Board's finding that the feedback mechanisms required by the Order are consistent with Key Element 4.

### **Response to Environmental Group Contention C.** (p. 13 of the Environmental Group petition)

*The General Order fails to comply with Water Code Sections 13263 and 13241.*

Petitioners claim that the Central Valley Water Board violated Water Code Sections 13263 and 13241 because it failed to take into account "economic considerations" within the meaning of Water Code section 13241. The Board disagrees, as the Board's Order and attachments demonstrate how economic issues were exhaustively considered by the Board prior to adoption of the Order

Water Code section 13263 states that Regional Boards shall consider "the provisions of Water Code section 13241" prior to the adoptions of waste discharge requirements. Water Code section 13241, in turn, requires the Board to take into account "economic considerations" among other factors.<sup>135</sup> The California Supreme Court, in *Burbank v. State Water Resources Control Board* (2005) 35 Cal.4th 613, 627, explains that such considerations include costs to

---

<sup>135</sup> Water Code section 13241(d).

comply with permit requirements. Other than that statement, there is no other legal authority prescribing the manner in which the Board must take into account economic considerations in the permitting context.<sup>136</sup> As such, the Board exercises considerable discretion in considering economic factors. As described below, the Board considered compliance costs and other economic factors prior to adopting the Order, in full compliance with Water Code section 13263. Petitioners fail to show that the Board abused its discretion.

As described in response to Environmental Justice contention II.e., the Board carefully considered the Order's overall costs and impacts to the agricultural economy prior to its adoption. The Board estimated that the cost of complying with the Order would be \$118.55 per acre annually, which is a \$4.10 per acre incremental increase when compared to continuation of the existing surface water only program.<sup>137</sup> In the Information Sheet, the Board explained how it used the PEIR's Economics Report<sup>138</sup> to arrive at these numbers.<sup>139</sup> Table 4 of the Attachment A provides a listing of the regulatory elements contained in the Order, and points to the location in the Economics Report where these costs were estimated. The Board also studied the potential economic impacts of the increased costs of Order on agriculture resources, including the potential loss of farmland, prior to adoption.<sup>140</sup> As these economic impacts are included within a Final Program EIR that has withstood legal challenges (see response to Environmental Group Contention D, below), the Board reasonably relied on these analyses in considering economics. These detailed economic considerations, combined with additional economic considerations made in its antidegradation analysis, met and exceeded the minimum requirements of Water Code section 13263.

In support of their assertions, Petitioners point to their general critique of the PEIR's Economics Report made during the formal comment period on the Draft EIR, a critique that was attached to the Petitioners' comment letter on the tentative Order.<sup>141</sup> As described in the Board's response to comments on the tentative Order, it was neither reasonable nor legally required for the Board to provide a written response to a general critique that did not speak to the specific economic considerations proposed in the tentative Order and its attachments.<sup>142</sup> For the same reason, Petitioners' reliance on that document in this petition is misplaced. The critique provides no explanation of how the economic considerations made by the Board were legally deficient, why the economic analysis needed to consider a specific baseline, why a cost/benefit analysis would

---

<sup>136</sup> Cases addressing section 13241 in the basin planning defer to the Water Boards' determinations of how best to consider economics. (See, *City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156, 177-178; *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1415; *California Ass'n of Sanitation Agencies v. State Water Resources Control Bd.*, *supra*, 208 Cal.App.4th at 1465-1466.)

<sup>137</sup> Order, at Finding 37. [AR 7723]. See also, Order, Information Sheet (Attachment A), at pp. 42-44. [AR 7792-7794].

<sup>138</sup> See ICF International. 2010. *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program*. [AR 31796].

<sup>139</sup> Order, Information Sheet (Attachment A), pp. 42-44. [AR 7792-7794].

<sup>140</sup> See Order, Attachment D, at p. 15 (estimating the incremental loss of farmland resulting from the Order to be 4,100 acres beyond the 56,000 acres of expected loss associated with continuation of the surface water only Conditional Waiver) [AR 7867]; and Order, Information Sheet (Attachment A), at p. 45 [AR 7795]. See also Draft EIR, Section 5.10. [AR 31299-31313].

<sup>141</sup> See Petition page 14 (referring to Attachment E of Petitioners' comment letter on the tentative Order). [AR 6816 et seq.]. Attachment E is a preliminary analysis by ECONorthwest that CSPA submitted to the Board during the comment period on the Draft PEIR. Attachment E criticizes the PEIR's Economics Report.

<sup>142</sup> See Response to Comments, pp. 2, 55 (response to comment 13-2). [AR 7278, 7331].

have been required, or what specific economic considerations the Board should have taken into account that it did not. In conducting an analysis that considered compliance costs, economic impacts, and other considerations, the Board met its legal obligation to consider economics.

**Response to Environmental Group Contention D.** (p. 15 of the Environmental Group petition)

*The General Order fails to comply with the California Environmental Quality Act (CEQA).*

Petitioners' CEQA contentions are without merit. Many of Petitioners' preliminary contentions allege reasons why the Central Valley Water Board's certified PEIR was legally deficient. Challenges to the PEIR are not timely. The Sacramento County Superior Court, on 21 May 2013, issued a final ruling that rejected all challenges, including many made by Petitioners, to the Board's PEIR.<sup>143</sup> The time to appeal the Superior Court's ruling has passed. The Board was authorized to, and may continue to, rely upon the PEIR.<sup>144</sup>

Next, Petitioners argue that a supplemental EIR was required for the Order because the PEIR did not describe the Eastside Coalition area adequately, and did not allow for the consideration of cumulative impacts of the Order. The Board's finding and explanation of why the Order is within the scope of the project covered by the PEIR was proper.<sup>145</sup> Accordingly, CEQA Guidelines section 15168(c)(2) authorized the Board to rely on the PEIR for CEQA compliance absent a finding that the conditions requiring preparation of a subsequent EIR have been triggered. Such conditions triggering a subsequent EIR include the identification of new or substantially more severe adverse environmental impacts due to substantial changes to the project or its surrounding circumstances, or substantial new information revealing new or newly feasible mitigation measures.<sup>146</sup> The Board properly found that none of the conditions requiring preparation of a subsequent EIR existed.<sup>147</sup> Petitioners have not pointed to any evidence in the record about changes to the project or substantial new information that would invalidate those findings.

Finally, citing Public Resources Code section 21002.1, subdivision (c), Petitioners contend that the Central Valley Water Board violated CEQA in adopting the Order based on their allegation that the Order violates the Antidegradation Policy and the Nonpoint Source Policy. The trial court already rejected this argument in the case cited above, holding that this section does not create a cause of action under CEQA based on an alleged violation of the Antidegradation Policy, the Nonpoint Source Policy, or any other non-CEQA law. The phrase "if the project is otherwise permissible under applicable laws and regulations" in section 21002.1, subdivision (c), is obviously intended to avoid any implication that a statement of overriding considerations can obviate the need to comply with statutes other than CEQA.

---

<sup>143</sup> See Central Valley Water Board 10 January 2014 supplemental evidence request (Attachment A of the Petition Response), at Exhibit 3.

<sup>144</sup> *Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.

<sup>145</sup> Order, Attachment D, at pp. 3-4. [AR 7855-7856]. See also Information Sheet, p. 43, Table 4. [AR 7793].

<sup>146</sup> See CEQA Guidelines, section 15162, subd. (a).

<sup>147</sup> Order, Attachment D, at p. 3. [AR 7855].

**RESPONSE TO PETITION A- 2239(c)  
 SAN JOAQUIN COUNTY RESOURCE CONSERVATION DISTRICT ON BEHALF OF THE  
 SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION, CALIFORNIA FARM  
 BUREAU FEDERATION, SOUTHERN SAN JOAQUIN VALLEY WATER QUALITY  
 COALITION, ARVIN-EDISON WATER STORAGE DISTRICT, WHEELER RIDGE-MARICOPA  
 WATER STORAGE DISTRICT, AND SEMITROPIC WATER STORAGE DISTRICT  
 (“Agricultural Petitioners” or “Ag Group”)**

The Agricultural Petitioners make the following contentions:

- A. The Regional Board violated CEQA by failing to analyze the environmental effects of the Order prior to adoption with a Supplemental or Addendum EIR.
- B – H. The PEIR is legally deficient for various reasons
- I. The Order is legally deficient due to inadequate CEQA Findings.
- J. The Regional Board failed to prepare an adequate economic analysis
- K. Regulation of non-waste and non-discharges exceeds the Regional Board's jurisdiction.

Below are responses to these contentions, which are labeled as “Agricultural Petitioners’ Contentions” to differentiate from the other petitions. For ease of review, each contention is summarized in italics in the beginning of each response.

**Response to Ag Group Contention A.** (page 16 of the Ag Group petition)

*The Regional Board violated CEQA by failing to analyze the environmental effects of the Order prior to adoption with a Supplemental or Addendum EIR.*

The Ag Group Petitioners argue that a supplemental EIR is required for the Order because the Order differs substantially from the alternatives analyzed in the PEIR and will have different environmental impacts. For reasons similar to those described in response to Environmental Group Contention D., *supra*, the Board disagrees. The Board found and explained why the Order is within the scope of the project covered by the PEIR, and how none of the conditions requiring preparation of a subsequent EIR existed.<sup>148</sup> Petitioners have not pointed to any evidence in the record about changes to the project or substantial new information that would invalidate those findings or otherwise require preparation of a subsequent EIR pursuant to CEQA Guidelines section 15162.

**Response to Ag Group Contentions A-H.** (pp. 16-21 of the Ag Group petition)

*The PEIR is legally deficient for various reasons.*

The Ag Group petitioners allege that PEIR that the Board relied upon for CEQA compliance was legally deficient for reasons including: improper project description, failure to properly identify the baseline, and in its identification and analysis of project alternatives. Challenges to the PEIR

---

<sup>148</sup> Order, Attachment D, at pp. 3-4. [AR 7855-7856]. See also Information Sheet, p. 43, Table 4. [AR 7793].



are not timely. The Sacramento County Superior Court, on 21 May 2013, issued a final ruling that rejected all challenges to the Board's PEIR, including many made by Petitioners.<sup>149</sup> The time to appeal the Superior Court's ruling has passed. The Board was authorized to rely upon the PEIR, and may continue to do so. *Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.

**Response to Agricultural Petitioners Contention I.** (page 21 of the Ag Group petition)

*The Order is legally deficient due to inadequate CEQA Findings.*

The Ag Group petitioners claim that the Central Valley Water Board violated CEQA by failing to make findings supported by substantial evidence in the record, and by failing to make findings required by CEQA Guidelines section 15091. The Board disagrees, as the Order, at attachment D, *Findings of Fact and Statement of Overriding Considerations*, made all of the findings required by CEQA Guidelines section 15091.

CEQA Guidelines section 15091 prohibits public agencies from approving discretionary projects for which an EIR has been certified which identifies one or more significant environmental effects unless the public agency makes one of three findings for each significant environmental effect, accompanied by a brief explanation of the rationale for each finding.<sup>150</sup> The PEIR that the Board relied upon for CEQA compliance identified 24 such significant environmental impacts.<sup>151</sup> For each impact applicable to the Order, the Order makes one of the required three findings, accompanied by a brief explanation. Petitioners have not identified which, if any, of the 24 findings which were inadequate. All of these findings are supported by substantial evidence in the record, namely the PEIR which was certified by the Board. The Board was authorized to rely upon the PEIR and may continue to do so. (*Kriebel v. City Council* (1980) 112 Cal.App.3d 693, 702.) Regarding the contention that the Board failed to identify the location and custodian of the record of proceedings, the Board's notice of determination, submitted to the Office of Planning and Research on December 10, 2012, includes the requisite information.<sup>152</sup>

**Response to Agricultural Petitioners Contention J.** (page 21 of the Ag Group petition)

*The Regional Board failed to prepare an adequate economic analysis.*

Petitioners claim that the Central Valley Water Board violated Water Code section 13141 when it adopted the Order. It contends that the Board should have added to its Basin Plan an estimate of the costs of the Order, along with potential sources of funding for the Order.

---

<sup>149</sup> See Central Valley Water Board 10 January 2014 supplemental evidence request (Attachment A of the Petition Response), at Exhibit 3.

<sup>150</sup> CEQA Guideline, section 15091(a).

<sup>151</sup> The substantial environmental impacts were labeled as follows: CUL-1, CUL-2, NOI-1, NOI-2, AQ-1, AQ-2, AQ-3, BIO-1, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, FISH-2, FISH-3, FISH-4, FISH-6, FISH-7, AG-1, Cumulative Cultural Resource Impacts, Cumulative Climate Change Impacts, Cumulative Vegetation and Wildlife Impacts, Cumulative Fish Impacts, and Cumulative Agriculture Resources Impacts. See Order, Attachment D, at pp. 4-19. [AR 7856-7871].

<sup>152</sup> Central Valley Water Board 10 December 2012 Notice of Determination (listing the address of the Board and providing Assistant Executive Officer Ken Landau as the Board's Contact). [AR 7896].

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.”<sup>153</sup> Since the challenged agricultural water quality control plan was adopted within waste discharge requirements as opposed to the Board’s Basin Plan, the Board could not have violated 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 Order, the Board used the same study used to develop the Basin Plan amendments and supplemented the study based on the Order’s requirements. Finally, the Board confirmed that the estimated costs of the Order fall within the range included in the Basin Plan estimate.<sup>154</sup> Adoption of the Order did not violate Water Code section 13141.

**Response to Agricultural Petitioners Contention K.** (page 22 of the Ag Group petition)

*Regulation of non-waste and non-discharges exceeds the Regional Board’s jurisdiction.*

Petitioners assert that the Order exceeds the jurisdiction provided to the Board by the Water Code because the Order assumes that all crop irrigation discharges waste to groundwater. The Order does not assume that all irrigation discharges waste to waters of the state. In addition, the Order does not compel all irrigated lands dischargers to enroll under the Order, but provides dischargers a cost effective option for obtaining required regulatory coverage by working with a third-party group.

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 this Order.<sup>155</sup> 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.<sup>156</sup> 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 and/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, due to improper backflow prevention, or inadequate wellhead protection. Deep percolation of the excess irrigation water past the root zone carries salts and nutrients that can impact groundwater

---

<sup>153</sup> 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

<sup>154</sup> Order, at Finding 37. [AR 7723].

<sup>155</sup> Order, at Finding 1. (“This Order serves as general waste discharge requirements for waste discharges from irrigated lands that could affect ground and/or surface waters of the state.”) [AR 7714]. See also, Order, at Finding 18 (“The Central Valley Water Board’s authority to regulate waste discharges that could affect the quality of the waters of the state, which includes both surface water and groundwater, is found in the Porter-Cologne Water Quality Control Act (California Water Code Division 7). [AR 7718].

<sup>156</sup> PEIR, at p. 2-21. [AR 32273].

quality.<sup>157</sup> As described in the Information Sheet, there is evidence that pesticides and nitrates have reached groundwater from irrigated agricultural operations, clearly indicating there is the potential for irrigated agricultural operations to affect groundwater quality.<sup>158</sup> In addition, the Department of Pesticide Regulation and State Water Resources Control Board have identified large areas in the Eastern San Joaquin River Watershed with aquifers that are vulnerable.<sup>159</sup> 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.

If a grower does not discharge in a manner that could affect water quality, then it would not be subject to the Order 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. If the Board agrees with the report's conclusions, the grower would not have to obtain WDRs; if the Board disagrees, it could seek to issue individual WDRs specific to the operation or enroll the operation under the Order. This anticipated procedure does not exceed any jurisdictional boundaries within the Water Code.

## CONCLUSION

The General Order achieves the central objective of the Central Valley Water Board's irrigated lands regulatory program, which is to "encourage implementation of management practices that improve water quality in keeping with [the objective that all state waters meet applicable water quality objectives], without jeopardizing the economic viability for all sizes of irrigated agricultural operations in the Central Valley or placing an undue burden on rural communities to provide safe drinking water." The reasonable balance reflected in the General Order is a result of the deliberate process reflected in the administrative record and reflects a regulatory regime that ensures that any degradation of high quality waters is "in the maximum benefit to the people of the State" and otherwise complies with the Antidegradation Policy and applicable law. Despite claims to the contrary, the Order rests on a strong legal, technical, and policy foundation to protect water quality from discharges from irrigated lands in a cost-effective, reasonable, and enforceable manner. The Central Valley Water Board requests that the State Water Board reject the petitions and affirm the Order.

---

<sup>157</sup> *Ibid.*

<sup>158</sup> Order, Information Sheet (Attachment A), at pp. 16-19. [AR 7766-7769].

<sup>159</sup> *Id.*, at p. 47. [AR 7797].

**Table 1.** Member requirements and brief description. Section numbers refer to General Order.

Requirements		Section
<b>Comply with Prohibitions</b>	Prohibition against discharging hazardous waste, wastes into groundwater via backflow through water supply well, wastes down a groundwater well casing	II.1-4
<b>Comply with Receiving Water Limitations</b>	Member shall not cause or contribute to an exceedance of applicable water quality objectives in surface water or groundwater, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance.	III.A-B
<b>Meet the farm management performance standards</b>	<ul style="list-style-type: none"> <li>● Minimize waste discharge offsite in surface water,</li> <li>● Minimize percolation of waste to groundwater,</li> <li>● Protect wellheads from surface water intrusion.</li> </ul>	IV.B.20
<b>Implement water quality management practices</b>	<p>As necessary to:</p> <ul style="list-style-type: none"> <li>● protect water quality and to achieve compliance with applicable water quality objectives.</li> <li>● in accordance with approved water quality management plans. be equivalent to practices identified as protective of groundwater in the Management Practices Evaluation Report.</li> <li>● minimize excess nutrient application relative to crop need</li> <li>● minimize or eliminate the discharge of sediment above background levels</li> </ul>	IV.A.3, IV.B.6-8, IV.B.21
	Construct, maintain, and operate settling ponds, basins, and tailwater recovery systems to prevent groundwater degradation, erosion, slope failure; and minimize the discharge of sediment	IV.B.16
	Follow applicable standards with respect to water wells and groundwater quality when constructing new wells, modifying existing wells, or destroying wells	IV.B.17
<b>Mitigate adverse environmental impacts</b>	Mitigate impacts associated with installation of groundwater monitoring wells or implementation of management practices to meet the conditions of the Order.	IV.A.4
<b>Participate in third-party outreach events</b>	If in a high vulnerability area/under SQMP or GQMP. The Member must review outreach materials to become informed of any water quality problems to address and the management practices that are available to address those issues	IV.B.4

**Table 2.** Description of reports and plans required: frequency and purpose of the requirements, and reference to the Order. Page numbers refer to Information Sheet discussion of the requirements, unless noted otherwise.

<b>Third-Party Requirements</b>			
One-time	<b>Sediment Discharge and Erosion Assessment Report</b> (General Order § VIII.E; Att B § VII)	<ul style="list-style-type: none"> <li>Identify areas subject to erosion and sediment discharge.</li> <li>Basis for determining which Members must prepare Sediment and Erosion Control Plans to meet Performance Standards <b>b</b>, <b>e</b>, and <b>f</b>.</li> </ul>	23-24,30,36,37,40,41
	<b>Groundwater Quality Assessment Report (GAR)</b> (General Order § VIII.D.1; Att B § IV.A)	<ul style="list-style-type: none"> <li>Identify groundwater vulnerability areas and constituents of concern for high vulnerability areas - provides foundation for management plan, MPEP and trend monitoring.</li> <li>Identify areas in which to meet Performance Standards <b>c</b>, <b>e</b>, <b>f</b>, and potentially <b>d</b>; Members may need to take additional action.</li> </ul>	9,14-15,19,40
	<b>Comprehensive Management Plan (Surface/Groundwater Quality)</b> (General Order § VIII.H; Appendix MRP-1)	<ul style="list-style-type: none"> <li>Develop regional plans to collectively address identified water quality problems or degradation trends (based on monitoring results/GAR).</li> <li>Develop strategy with schedule and milestones to encourage and track implementation of management practices necessary to meet Performance Standards and describe feedback monitoring.</li> </ul>	12-14,19-20,38-41,45
Annually	<b>Annual Report</b> (General Order § VIII.G; Att B § V.C.)	<ul style="list-style-type: none"> <li>Summarize and assess monitoring results and management practice implementation status/effectiveness.</li> <li>Provide feedback on whether monitoring, management plans, or management practice implementation needs to be adjusted.</li> </ul>	24-25
	<b>Trend Groundwater Quality Monitoring</b> (General Order § VIII.D.3; Att B § IV.C)	<ul style="list-style-type: none"> <li>Assess groundwater quality and track spatial/temporal trends.</li> <li>Based on vulnerability designations in GAR.</li> <li>Provide feedback on regional scale as to whether management practices are improving water quality.</li> </ul>	14-16
	<b>Membership List</b> (General Order § VIII.B)	<ul style="list-style-type: none"> <li>Identify Members and growers whose membership has been revoked or is pending revocation.</li> <li>Track growers with coverage under the Order and those that may need coverage under an individual Order.</li> </ul>	8-9
Variable	<b>Surface Water Monitoring</b> (Att B § III)	<ul style="list-style-type: none"> <li>Assess surface water quality and track spatial/temporal trends, feedback on progress towards meeting goals</li> <li>Results inform management plan implementation.</li> <li>Provide feedback at sites representative of irrigated lands discharges as to whether management practices are improving water quality.</li> </ul>	9-12
	<b>Surface Water Exceedance Reports</b> (General Order § VIII.F; Att B § V.D)	<ul style="list-style-type: none"> <li>Identify surface water quality problems as soon as results are available.</li> <li>Identify immediate follow-up actions and whether a Management Plan is required.</li> </ul>	N/A

	<b>Management Practices Evaluation Program (MPEP)</b> (General Order § VIII.D.2; Att B § IV.B)	<ul style="list-style-type: none"> <li>Identify existing management practices protective of groundwater quality and assess effectiveness of new management practices.</li> <li>Provide information needed to identify which practices meet Performance Standards <b>c</b>, <b>e</b>, and <b>f</b>.</li> <li>Based on identification of constituents of concern for high vulnerability areas in GAR.</li> </ul>	15-16,39-40
<b>Member Requirements</b>			
One-time	<b>Sediment Discharge and Erosion Control Plan</b> (General Order § VII.C)	<ul style="list-style-type: none"> <li>Identify site-specific practices the Member is implementing to meet Performance Standard <b>b</b> in high vulnerability areas.</li> <li>Only Members in high vulnerability areas, as identified in the Sediment Discharge and Erosion Assessment Report, need to develop the Plan (updated as needed).</li> </ul>	23,30,36,37,41
Annually	<b>Nitrogen Management Plan/Summary Report</b> (General Order § VII.D)	<ul style="list-style-type: none"> <li>Reduce nitrogen discharges to groundwater to meet nitrate standards.</li> <li>Describe if/how Performance Standard <b>d</b> is met.*</li> <li>Provide information needed to determine whether Member is causing or contributing to nitrate problem (Nitrogen Management Summary Report).</li> <li>Only Members in high vulnerability areas, as identified in Groundwater Quality Assessment Report, need to prepare Summary Reports.</li> </ul>	21-22,30,36,37
	<b>Farm Evaluation</b> (General Order § VII.B)	<ul style="list-style-type: none"> <li>Provide information on management practices implemented by the Member to meet Performance Standards <b>a-g</b>.*</li> <li>Reporting every five (5) years in low vulnerability areas.</li> </ul>	20-22,30
	<b>Mitigation Monitoring</b> (General Order § VII.E; Att B § IV.C)	<ul style="list-style-type: none"> <li>Provide information on mitigation measures implemented to address adverse environmental impacts of responding to the Order, if applicable.</li> </ul>	29

Farm Management Performance Standards constitute best practicable treatment or control (BPTC)/best efforts (Attachment A, page 36):

- a. Minimize waste discharge offsite in surface water (General Order § IV.B.20)
- b. Minimize or eliminate the discharge of sediment above background levels (General Order § IV.B.7)
- c. Minimize percolation of waste to groundwater (General Order § IV.B.20)
- d. Minimize excess nutrient application relative to crop need (General Order § IV.B.8)
- e. Prevent pollution and nuisance (General Order § III.A.1, § III.B.1, § IV.A.3)
- f. Achieve and maintain water quality objectives and beneficial uses (General Order § III.A.1, § III.B.1, § IV.A.3. )
- g. Protect wellheads from surface water intrusion (General Order § IV.B.20)

\* Members may need to take additional action (i.e., improve practices), if Performance Standard is not met.

cc: Laurel Firestone, Esq.,  
Community Water Center  
519 12<sup>th</sup> Street  
Sacramento, CA 95815  
laurel.firestone@communitywatercenter.org  
**[via email and U.S. mail]**

Jennifer L. Spaletta, Esq.  
Spaletta Law PC  
P.O. Box 2660  
Lodi, CA 95241  
**[via email and U.S. mail]**

Mr. Bill Jennings  
California Sportfishing Protection Alliance  
3536 Rainier Avenue  
Stockton, CA 95204  
**[via email only]**

Phoebe Seaton, Esq., California Rural  
Legal Assistance, Inc. **[via email only]**

Therese A. Dunham, Esq., Somach  
Simmons & Dunn **[via email only]**

Ms. Susana De Anda  
Asociación de Gente Unida por el Agua  
311 W. Murray Avenue  
Visalia, CA 93291  
**[via U.S. Mail only]**

Mr. Parry Klassen  
East San Joaquin Water Quality Coalition  
1201 L Street  
Modesto, CA 95354  
**[via U.S. Mail only]**

Fairmead Community and Friends  
1225 Gill Avenue  
Madera, CA 93637  
**[via U.S. Mail only]**

Michael R. Lozeau, Esq., Lozeau Drury LLP  
Lozeau Drury LLP **[via email only]**

Mr. Silverio Damian  
Planada en Accion  
462 Gwinn Street  
P.O. Box 618  
Planada, CA 95365  
**[via U.S. Mail only]**

Ernest A. Conant, Esq., Law Offices of  
Young Wooldridge, LLP **[via email only]**

Mike Jackson, Esq.  
Law Office of Mike Jackson **[via email only]**

Mr. David Orth, Southern San Joaquin  
Valley Water Quality Coalition **[via email only]**

Ms. Carolee Krieger, California Water  
Impact Network **[via email only]**

Nancy M. McDonough, Esq.,  
Kari E. Fisher, Esq., California Farm Bureau  
Federation **[via email only]**

William J. Thomas, Esq.  
Wendy Y. Wang, Esq., Best Best & Krieger  
LLP **[via email only]**

Mr. John Brodie, San Joaquin County  
Resource Conservation District on behalf of  
the San Joaquin County and Delta Water  
Quality Coalition **[via email only]**

bc: Joe Karkoski **[via email only]**  
Clay Rodgers **[via email only]**  
Ken Landau **[via email only]**  
Lori Okun **[via email only]**  
Kiran Lanfranchi-Rizzardi **[via email only]**