CENTRAL COAST WATER BOARD

WRITTEN RESPONSE TO PETITIONS

SWRCB/OCC FILES A-2209(a)-(e)

October 31, 2012

The State Water Resources Control Board (State Water Board) received the following five petitions for review of the Central Coast Regional Water Quality Control Board's (Central Coast Water Board) Order No. R3-2012-0011, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (2012 Order), and Monitoring and Reporting Program (MRP) Order Nos. R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03.

- SWRCB/OCC File A-2209(a) Monterey Coastkeeper, Santa Barbara Channelkeeper, San Luis Obispo Coastkeeper;
- SWRCB/OCC File A-2209(b) California Farm Bureau Federation, Monterey County Farm Bureau, San Benito County Farm Bureau, San Luis Obispo County Farm Bureau, San Mateo County Farm Bureau, Santa Barbara County Farm Bureau, Santa Clara County Farm Bureau, Santa Cruz County Farm Bureau;
- SWRCB/OCC File A-2209(c) Ocean Mist Farms and RC Farms;
- SWRCB/OCC File A-2209(d) Grower-Shipper Association of Central California, Grower-Shipper Association of Santa Barbara And San Luis Obispo Counties, and Western Growers;
- SWRCB/OCC File A-2209(e) Jensen Family Farms, Inc. and William Elliott

In a letter dated September 17, 2012, the State Water Board requested that the Central Coast Water Board submit the record in this matter within 30 days and also provided an opportunity to submit responses to the petitions. The Central Coast Water Board submitted the administrative record on October 12, 2012, and provided additional items for the record on October 17, 2012. The State Water Board provided the Central Coast Water Board and others until October 31, 2012 to submit responses to the petitions.

As invited by the State Water Board in its opportunity to respond to the above referenced Petitions, the Central Coast Water Board hereby submits its response organized into the following sections:

I. Summary Response
II. Background
III. List of Applicable Policies and Regulations
IV. Response to Contentions Raised by Petitions
V. Conclusions

I. SUMMARY RESPONSE

The Central Coast Water Board requests that the State Water Board deny the Petitioners' requests to vacate the 2012 Order and to revise specific Provisions. In response to the Petitioners' contentions, the Central Coast Water Board recommends retaining all the Provisions in the 2012 Order and associated MRPs. In addition, the Central Coast Water Board requests that the State Water Board consider specific clarifications and recommendations for edits discussed in the sections below for the following provisions:

- Provision 33 (containment structures)
- Provision 44(g) (effectiveness)
- Provision 68, Tier 2 and Tier 3 MRPs, Part 2 Section C (nitrate loading risk factor determination)
- Definition 63 and Provisions 70 – 71, Tier 2 and Tier 3 MRPs, Part 2 Section C (total nitrogen applied reporting or alternative).

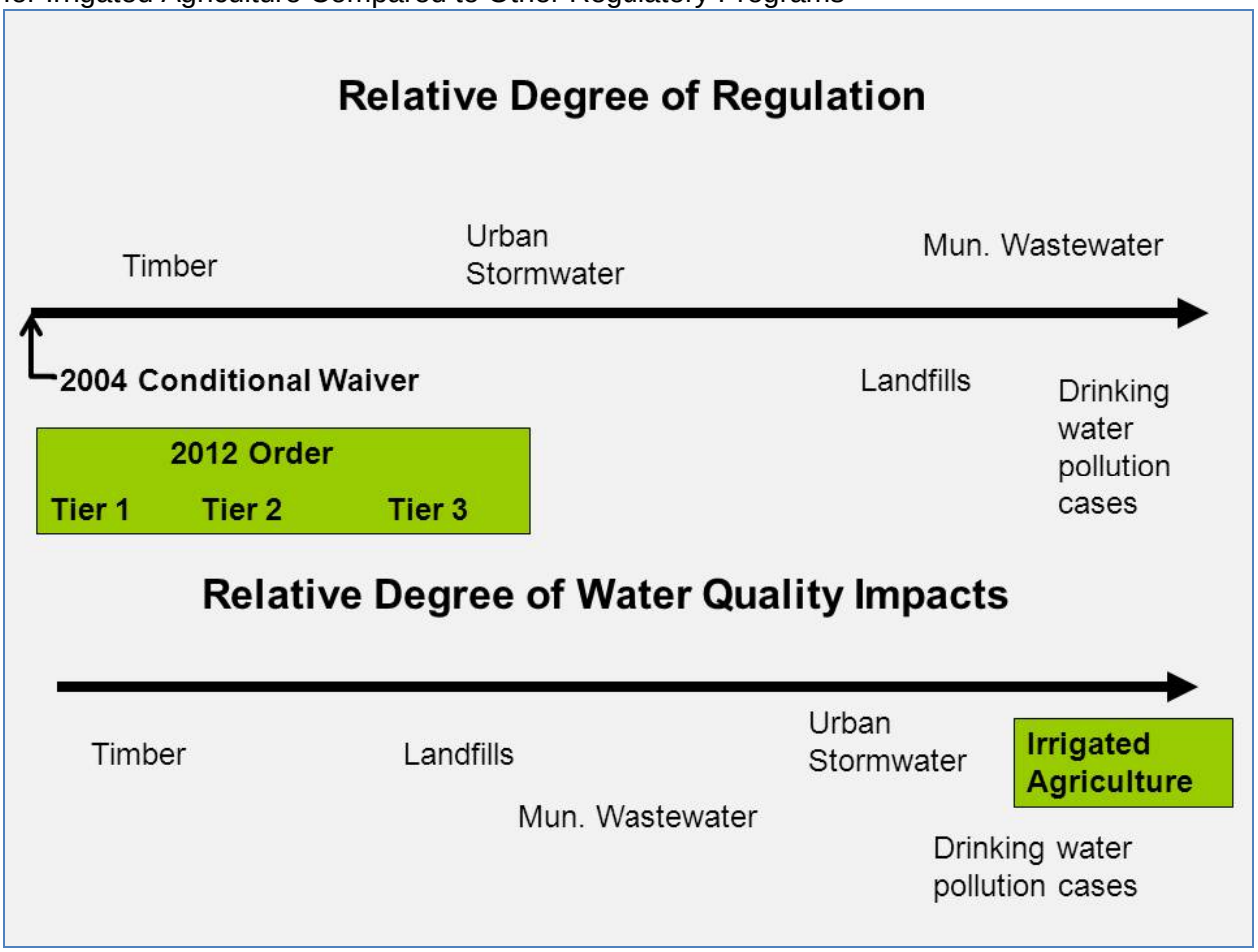
The agricultural petitioners make many legal and technical contentions challenging the 2012 Order. As explained in this response to those petitions, the Central Coast Water Board disagrees with those contentions. The Water Board has complied with all applicable laws, regulations, and policies in adopting the 2012 Order. Contrary to the assertions of the agricultural petitioners, the process leading to adoption of the 2012 Order exceeded all due process and regulatory requirements, including the requirements of the California Environmental Quality Act. The Central Coast Water Board carefully considered many hundreds of pages of written comments and proposals and many hours of oral comments prior to adoption of the 2012 Order. Pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) persons who discharge waste that could affect the waters of the state are required to comply with the Water Code by either obtaining waste discharge requirements or a conditional waiver of waste discharge requirements. The 2012 Order conditionally waives waste discharge requirements for those dischargers who enroll. It requires compliance with conditions required by Water Code section 13269, including consistency with the applicable water quality objectives and implementation programs in the Central Coast Water Board's Water Quality Control Plan (Basin Plan) to restore and protect the beneficial uses; compliance with applicable State Water Board policy, such as the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 2004) (NPS Policy); and implementation of monitoring and reporting programs.

Agricultural discharges in the Central Coast Region have severely impacted water quality and beneficial uses, including drinking water. The 2012 Order requires growers to implement management practices and conduct monitoring and reporting to minimize the discharge of waste from irrigated lands and ensure that discharges of waste from farms are not polluting surface water or groundwater. The 2012 Order protects beneficial uses and prioritizes drinking water, and is reasonable given the severity of the impacts resulting from agricultural discharges. In fact, many of the provisions in the 2012 Order reflect standard management practices routinely recommended by farm advisors, technical assistance providers, and conservation specialists. The Central Coast Water Board has clear authority to regulate discharges of waste from irrigated lands and to require monitoring and reporting under Water Code sections 13260, 13263, 13267 and 13269, and the 2012 Order describes the severity of the water quality impairments and resulting impacts to beneficial uses in significant detail. The Provisions of the

2012 Order are scaled based on risk to water quality and allow growers time to make improvements and report progress. In addition, the 2012 Order does not prescribe methods of compliance and provides for many alternatives.

In response to the severity of the water quality conditions related to irrigated agriculture, the 2012 Order brings the level of regulation closer in line with other regulated types of discharges. Figure 1 illustrates the degree of water quality impacts and the Central Coast Water Board's degree of regulation for irrigated agriculture in comparison to other regulatory programs.

Figure 1. Relative Degree of Water Quality Impacts and Central Coast Water Board Regulation for Irrigated Agriculture Compared to Other Regulatory Programs



A challenge in any general order, e.g., waiver or waste discharge requirements, is that the Water Board must consider the characteristics of various types of discharges and the relative risk to water quality from these various types of discharges, and must include a range of reasonable and effective requirements applicable to the relative risk. A full spectrum of water quality issues must be addressed and there are always outliers at both ends of the spectrum. Thus, general orders cannot attempt to address every unique situation. The 2012 Order considers the broad range of water quality issues from the variety of irrigated farming operations

in the Central Coast Region, appropriately scales requirements, and provides reasonable alternatives for compliance. In such cases where a discharge is particularly unique and the requirements of the general order do not fit well, the discharger may apply for individual waste discharge requirements or waiver.

The Central Coast Water Board also recognizes that the flexibility in the 2012 Order approach is a double-edged sword. Many growers want flexibility in how they implement practices and evaluate the results, and the 2012 Order provides this flexibility. The flexibility requires growers to evaluate how they will comply with the 2012 Order based on their specific farm characteristics and situation, which can take more time than a prescribed method. However, the flexibility of the 2012 Order can invite extreme interpretations about what is required and the associated costs to comply. These extreme interpretations are not applicable because they ignore the Order's clarifying language, which deals specifically with the reasonableness of requirements.

It is critical that the Water Board require growers to do their part, especially in areas with the most severe pollution and greatest impact on beneficial uses. Central Coast growers are highly adaptive and innovative. The industry is constantly improving and reinventing itself as markets and technologies change. Experts agree that proven solutions are available and significant water quality improvement is possible. Some growers are already using effective solutions and should be commended. The Central Coast Water Board is confident that improvements in agricultural practices implemented by growers in compliance with the 2012 Order will result in improvements in water quality conditions in the Central Coast Region.

II. BACKGROUND

The Central Coast Water Board's statutory responsibility is to protect water quality within the Central Coast Region. With more than 4000 square miles of groundwater basins (providing more than 80% of the drinking water for hundreds of thousands of people) and more than 17,000 linear miles of streams and rivers, the Central Coast Region has an abundance of critical and highly valued water resources. The Region also includes the Monterey Bay National Marine Sanctuary, the largest marine sanctuary in the United States, and Elkhorn Slough, one of the largest tidal wetlands in the United States. These resources provide habitat for many important species, including the endangered Southern Sea otter (Enhydra lutris nereis), the endangered steelhead (Oncorhynchus mykiss), the endangered Coho salmon (Oncorhynchus kisutch), the threatened California red-legged frog (Rana draytonii), the endangered Marsh Sandwort (Arenaria paludicola), and the endangered Gambel's watercress (Rorippa gambellii).

The Central Coast Region also has approximately 435,000 acres of irrigated land and produces many high value specialty crops including lettuce, strawberries, raspberries, artichokes, asparagus, broccoli, carrots, cauliflower, celery, fresh herbs, mushrooms, onions, peas, spinach, wine grapes, tree fruit, and nuts. The 2012 Order is a renewal of the previous Order No. R3-2004-0117, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands adopted by the Central Coast Water Board in 2004 (2004 Order) and sets forth conditions consistent with Water Code section 13269, including the Water Quality Control Plan for the Central Coast Region (Basin Plan), applicable State Water Board plans and policies, water quality objectives and criteria to protect the beneficial uses of waters of the state, and the

State Water Board's NPS Policy, that apply to discharges of waste from irrigated lands, where water is applied for producing commercial crops.

As detailed in the 2012 Order (Findings 5-8; Attachment A – Additional Findings 1, 27, 33-133), and the March 17, 2011 Staff Report to the Board (see Staff Report and Appendix G – Report on Water Quality Conditions), discharges of waste associated with irrigated agriculture (e.g., pesticides, sediment, nutrients) are a major cause of documented impacts to beneficial uses and impairments of water quality in the Central Coast Region. The water quality impairments are well documented, severe, and widespread. Nearly all beneficial uses of water are affected, and many agricultural waste discharges continue to contribute to already significantly impaired water quality and impose certain risks and significant costs to public health, drinking water supplies, aquatic life, and valued water resources.

Discharges from irrigated lands regulated by the 2012 Order include discharges of waste to surface water and groundwater. The 2012 Order classifies farms/ranches into one of three Tiers. The requirements for each Tier vary based on level of discharge and risk to water quality, and there are options and alternatives to comply based on the specific characteristics of an individual farm. For many farms (Tier 1 and Tier 2) and more than 60% of the acreage of irrigated agriculture in the Central Coast Region, the 2012 Order requirements are similar or less stringent than the previous 2004 Order. Farms in Tier 3 present a relatively higher level of risk to water quality and therefore have more stringent requirements. As of August 2012, approximately 4129 farms/ranches, representing approximately 399,494 irrigated acres are enrolled in the 2012 Order. Of these, approximately 3680 (89% of the total farms/ranches enrolled) representing approximately 366,231 irrigated acres (91% of the total acres enrolled) have a completed electronic-Notice of Intent (eNOI) in the Water Board's GeoTracker data management system that can be used for Tier assignment[1]. The remaining farms/ranches have not complied with the requirement to submit an updated eNOI or have not submitted sufficient information for Tier assignment. Table 1 below includes the approximate number of farms and acreage in each Tier based on completed eNOI data in GeoTracker. Table 2 below provides a summary of the Provisions for each Tier.

The process to renew the 2012 Order began in August 2008, and has been the most extensive public process in the history of the Central Coast Water Board. In a period of three and a half years, the Central Coast Water Board issued five draft Orders and associated staff reports, held six public comment periods, held six public workshops and hearings before the Board, convened or participated in more than 60 outreach events, and participated in hundreds of discussions with stakeholders. During the process, the Central Coast Water Board received approximately 2000 comment letters and heard oral testimony from hundreds of organizations and individuals, including agricultural industry organizations and representatives, technical assistance providers, rural residents in agricultural areas, environmental justice organizations, environmental organizations, State and local agencies, elected officials and the general public. During the process, the Central Coast Water Board also evaluated alternative proposals submitted by agricultural and environmental groups. Throughout the process, the Central Coast Water Board made hundreds of changes to its draft Orders, the vast majority of which were changes in response to comments from agricultural representatives.

[1] Enrollment information in the Water Board's GeoTracker data management system as of Aug. 1, 2012.

The Central Coast Water Board held a two-day hearing to consider the 2012 Order. At that hearing, the Board included more than 20 additional revisions to the draft Order in response to comments from agricultural representatives[2]. The Central Coast Water Board adopted the 2012 Order on March 15, 2012[3].

Table 1. Estimated number of farms and acreage in Tier 1, Tier 2, and Tier 3 based on eNOI data in GeoTracker as of August 2012.

	TIER 1	**TIER 2**	**TIER 3**	**Total**
Number of Farms/Ranches	2024	1546	110	3680
Number of Acres	142,010	183,632	40,588	366,231

Table 2. Summary of 2012 Order Provisions for each Tier. *Provision applies to a subset of farms/ranches in the Tier that meet specific conditions.

2012 ORDER		
TIER 1	**TIER 2**	**TIER 3**
Tier 2 <u>Minus:</u> Annual Compliance Form	File/Update Notice of Intent Farm Plan / BMP Implementation - Irrigation Management - Nutrient Management - Pesticide Management - Sediment Management/ Erosion Control - Salinity Management - Aquatic Habitat Protection Backflow Prevention and Proper Well Abandonment Surface Receiving Water Monitoring and Reporting Groundwater Monitoring and Reporting Annual Compliance Form - Total Nitrogen Applied Reporting* - Photo Monitoring*	Tier 2 *<u>Plus:</u>* Individual Surface Discharge Monitoring and Reporting* Irrigation and Nutrient Management Plan* Report progress towards Nutrient Balance Ratio Targets* Water Quality Buffer Plan*

[2] Administrative Record File Nos. 341, 342, 369

[3] Administrative Record File Nos. 374, 375, 376, 377

III. LIST OF STATE WATER BOARD AND REGIONAL BOARD POLICIES AND REGULATIONS APPLICABLE TO THE DISCHARGE OF WASTE FROM IRRIGATED LANDS

The 2012 Order addresses the highest water quality priorities of the Central Coast Water Board and is consistent with the applicable plans and policies adopted by the State Water Board and Central Coast Water Board. A list of the policies and regulations applicable to the discharge of waste from irrigated lands is provided below and copies of individual documents are included in the Administrative Record.

Water Quality Control Plan

The *Water Quality Control Plan for the Central Coast Region* (Basin Plan) was adopted by the Central Coast Water Board in 1975 and is periodically revised.

Other Relevant Plans, Policies, and Regulations

State Water Resources Control Board, Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California,* October 1968.

State Water Resources Control Board, *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of Ca.* June 1972.

State Water Resources Control Board, Resolution No. 74-43, *Water Quality Control Policy for the Enclosed Bays and Estuaries of California*, May 1974.

State Water Resources Control Board, Resolution No. 88-63, *Sources of Drinking Water Policy*, May 1988. Amended February 1, 2006.

State Water Resources Control Board, *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program,* May 2004.

State Water Resources Control Board, Resolution No. 2004-0063, *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List,* December 13, 2004.

State Water Resources Control Board, *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)*, February 2005

State Water Resources Control Board, Resolution No. 2008-0070, *Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality,* August 25, 2009.

State Water Resources Control Board, *Water Quality Control Plan for Ocean Waters of California (CA Ocean Plan),* September 2009.

State Water Resources Control Board, Resolution No. 2009-0011, *Recycled Water Policy*, May 20, 2010.

State Water Resources Control Board, *Water Quality Enforcement Policy,* May 20, 2010.

US EPA, *National Toxics Rule*, 40 CFR 131.36, 57 FR 60848, December 1992.

US EPA, *California Toxics Rule*, 40 CFR 131.38, 65 FR 31682, May 2000.

IV. RESPONSE TO CONTENTIONS RAISED BY PETITIONS

The Petitioners [SWRCB/OCC File A-2209(a)-(e)] raised a number of contentions that are technical, and legal and/or procedural in nature. The Central Coast Water Board prepared responses to the contentions, organized by petition, and grouped as technical and legal/procedural contentions. Many contentions are common to multiple petitions; therefore, the Central Coast Water Board referred to a previous response for repetitive contentions. In addition, the Central Coast Water Board also made specific reference to files and references included in the Administrative Record (see footnotes for Administrative Record Files and Administrative Record References).

SWRCB/OCC FILE NO. 2209(d)

PETITION FROM GROWER-SHIPPER ASSOCIATIONS AND WESTERN GROWERS

A. TECHNICAL CONTENTIONS

A1. Contention: [page 4, line 20, page 36, line 11] Tiering criteria in Part A are not associated with risk to water quality, and thus are arbitrary.

Response: The Central Coast Water Board disagrees that the 2012 Order Tiering structure is arbitrary and recommends retaining the Tiering structure because it is rational, reasonable, and necessary to implement scaled requirements to protect surface water and groundwater quality.

The 2012 Order defines three Tiers based on the relative risk of water quality impacts and level of waste discharge from farms/ranches using specific criteria. The Tiering criteria are not arbitrary because they are based directly on relative risk to water quality. The relative risk to water quality is based on types of pollutants, pollutant loading, and proximity of the discharge to impaired waterbodies and public drinking water supply wells. The middle Tier, Tier 2, forms the bases for the Provisions in the 2012 Order. Tier 2 includes a majority of the acreage of irrigated agricultural lands in the Central Coast Region and represents a moderate relative risk to water quality. Tier 1 farms/ranches have the lowest relative risk and Tier 3 farms/ranches have the highest relative risk. The Tiering structure is reasonable in that it poses lesser requirements on the lowest risk Tier 1 farms and increased requirements on the higher risk Tier 3 farms. The 2012 Order is also reasonable in that it includes methods to streamline requirements to make them directly applicable to the farms likely to cause specific impairments – and removes those requirements for farms that do not present increased risk. The 2012 Order (Finding 11 and Provision 18) also provides that growers can submit documentation regarding their discharge characteristics or participation in a third-party group and request to be in a lower Tier. Finally, the 2012 Order provides for the Central Coast Water Board to update the Tiering criteria as necessary (Provision 12).

The Tiers apply to individual farm(s)/ranch(es) and the Tiering criteria is described on pages 16 -18 of the 2012 Order. The Tiering critieria considers the following information to determine which Tier is appropriate for a given farm/ranch:

1. Certification in a sustainable agriculture program approved by the Executive Officer that requires and verifies effective implementation of management practices to protect water quality (e.g. Sustainable in Practice vineyards);

2. Use of pesticides known to cause toxicity in surface waters in the Central Coast Region, specifically chlorpyrifos and diazinon;

3. Distance (greater than or less than 1000 feet) to a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies;

4. Production of crop types with high potential to discharge nitrogen to groundwater, *and*
    a. Farm/ranch total irrigated acreage;

    b. Distance (greater than or less than 1000 feet) to a public water system that has an exceedance of the drinking water standard for nitrate, nitrite, or nitrate+nitrite.

5. Use of pesticides known to cause toxicity in surface waters in the Central Coast Region, specifically chlorpyrifos and diazinon, *and* discharge of irrigation or stormwater runoff to a surface water body specifically impaired for toxicity or pesticides.

The use of Tiers is in direct response to comments from the agricultural stakeholders to develop requirements that are not "one-size fits all" and to prioritize those farms/ranches in impaired areas (and lessen requirements in unimpaired areas). Finding #25 of the 2012 Order states that the Central Coast Water Board recognizes that due to different types of operations and/or locations, discharges of waste from irrigated lands may have the potential for different levels of impacts. Thus, the 2012 Order establishes three Tiers to take into account the variation, including different regulatory conditions for each of the three Tiers.

Appendix D of the March 2011 Staff Report described several regulatory options that the Central Coast Water Board considered to address relative risk from different types of farms/ranches and Appendix E described the response to comments related to Tiering criteria[4]. The March 2011 Staff Report, May 2011 Staff Report, and associated Board Meeting staff presentations, describe in detail the justification of the Tiers and revisions made in response to specific comments from stakeholders and Central Coast Water Board Members[5]. In addition, numerous Findings in Attachment A of the 2012 Order document the information and associated impairments justifying the use of specific Tiering criteria.

As a specific example of the rational basis for Tiering, the 2012 Order Tiering criteria includes acreage for farms/ranches that produce crop types with high potential to discharge nitrogen to groundwater. As discussed and presented at the May 2011 Central Coast Water Board Meeting, the Central Coast Water Board evaluated individual farm acreage relative to nitrate loading risk and concluded that farm size is a meaningful tiering criterion[6]. The list of crop types identified as having high potential to discharge nitrogen to groundwater is directly from the list identified by the University of California – Center for Water Resources in their development of the Nitrate Groundwater Pollution Hazard Index which considers characteristics intrinsic to the crop type such as rooting system depth, nitrogen recommendation, nitrogen removed during harvest and available for subsequent crops, and denitrification inherent to the crop type. In an evaluation of the enrollment data for the approximately 1372 farms (~189,000 acres) that produce these types of crops, the Central Coast Water Board determined that the average farm size is 50 acres. The Central Coast Water Board then conducted a conceptual evaluation of

[4] Administrative Record File Nos. 232 and 233

[5] Administrative Record File Nos. 228, 241, 259, 260.

[6] Administrative Record File No. 260

potential loading risk of nitrate to groundwater from various farm sizes. Several studies document the application of nitrogen fertilizer in excess of crop needs.[7] Based on a 10-year dataset from over 100 lettuce fields, University of California Cooperative Extension (UCCE) research found that the average seasonal nitrogen application for lettuce is 215 lb/acre, and that the crop need is approximately 140 lb/acre – thus, resulting in an average 75 lb/acre excess nitrogen application per season. Using 50 acres as the average farm/ranch size and estimated 75 lb/acre excess nitrogen application per season, the Central Coast Water Board estimated that a 500 acre farm/ranch may apply 37,500 lbs of excess nitrogen (or 10X) compared to a 50 acre farm/ranch and a 1000 acre farm/ranch may apply 75,000 lb/acre excess nitrogen (or 20X) compared to a 50 acre farm/ranch. This data and evaluation is the basis for the use of crop type and acreage as tiering criteria. The Central Coast Water Board recognizes that ultimately risk is determined by site specific characteristics such as irrigation type, soil type, and implementation of management practices. To address these characteristics, the 2012 Order also includes methods to further streamline requirements to make them directly applicable to the farms/ranches which have the greatest risk to cause specific impairments (e.g. nitrate loading risk factor) – and removes those requirements for farms that do not present increased risk.

In another example, the 2012 Order Tiering criteria includes use of chlorpyrifos and diazinon for Tier 2, and for Tier 3, the use of chlorpyrifos and diazinon *and* discharges to a waterbody listed as impaired for pesticides or toxicity. The Central Coast Water Board concluded that growers who apply chlorpyrifos or diazinon (Tier 2), and especially those that apply these chemicals *and* discharge irrigation and/or stormwater runoff to streams already impaired for toxicity or pesticides (Tier 3), pose a relatively greater risk to water quality than those growers who do not apply these chemicals. This was based on water quality data that demonstrates that chlorpyrifos and diazinon are known sources of toxicity in several surface water bodies in the Region[8]. The State Water Board's 2010 *State Report on Toxicity in California Waters* identified the Central Coast Region as having the highest percentage of toxic and highly toxic sites in the State[9]. On the Central Coast, there are currently forty-five Clean Water Act 303(d) impaired waterbody listings for toxicity; twenty-six of these listings for chlorpyrifos and thirteen listings are for diazinon. Some surface waters show significant toxicity every time they are sampled. In addition, as described in the March 2011 Staff Report, Appendix G. Water Quality Conditions[10], Pages 9-11, 20 and Findings 7, 58, 68-78 in the 2012 Order, a number of published scientific studies document that chlorpyrifos and diazinon are major causes of severe toxicity in surface waters in agricultural areas of the Central Coast. The Central Coast Water Board revised the draft Order to add "farm/ranch discharges" to the Tiering criteria in the 2012 Order to make this criterion reflect the highest risk instead of just including the use of chlorpyrifos or diazinon to indicate the highest priority. This was responsive to comments that a farm may use the chemicals but not actually discharge so use alone is not necessarily the highest risk.

The 2012 Order includes the above Tiering structure because it provides scaled, reasonable levels of conditions and reporting appropriate to risk to water quality, while prioritizing impaired areas of the Central Coast Region. In the development of the 2012 Order, the Central Coast

[7] Administrate Record Reference No. 35, 47, 132, 133, 134, 137, 226, 227, 228

[8] Administrative Record Reference No. 72, 74, 75, 145, 146, 147, 148, 149, 165, 258

[9] Administrative Record Reference No. 149

[10] Administrative Record File No. 197

Water Board also considered the complexity of the proposed Tiering criteria with the goal of selecting criteria that enabled the Central Coast Water Board and growers to quickly identify the appropriate Tier without the need to collect additional, more costly data and information. Throughout the process to develop the 2012 Order, agricultural representatives have provided a wide range of comments about approaches to tiering and scaling requirements. Agricultural representatives have commented both that low risk farms should not have the same requirements as higher risk farms, and that requirements should be less stringent in unimpaired areas and more stringent in impaired areas. Comments from the Monterey Bay National Marine Sanctuary dated January 3, 2011[11], California Avocado Commission dated December 21, 2010[12], and other stakeholders acknowledge that the tiered approach for defining risk categories and scaling requirements is responsive to comments that requirements should be prioritized according to risk to water quality. Environmental representatives commented that Tier 3 is too narrow and should include more farms and acreage.

In summary, the Central Coast Water Board recommends retaining the Tiering structure in the 2012 Order as necessary to implement reasonable and scaled requirements to protect surface water and groundwater quality and address the severe impairments in the Central Coast Region.

A2. Contention: [page 5, page 44 line 1 – page 50 line 6] Nutrient-Related Requirements for Tier 2 and Tier 3 Farms/Ranches are Inappropriate – Nitrate Loading Risk Factor Determinations are arbitrary; INMP elements and the reporting thereof are improper; Certification of INMPs is impractical and an unnecessary expense; Nitrogen Balance Ratios are improper regulatory compliance standards;

Response: The Central Coast Water Board disagrees, and strongly recommends retaining all Provisions related to nutrient management, as they are among the most important Provisions in the 2012 Order. These requirements include implementing nutrient management practices for all farms as documented in a Farm Plan, submitting an Annual Compliance Form, evaluating nitrate loading risk for all Tier 2 and Tier 3 farms, reporting of total nitrogen applied for the subset of Tier 2 and Tier 3 farms that have high nitrate loading risk, and effectively implementing a certified irrigation and nutrient management plan for the subset of Tier 3 farms with high nitrate loading risk. These requirements are critical to reduce nitrate loading to groundwater, protect drinking water sources, and address the severe nitrate pollution in agricultural areas of the Central Coast Region. The 2012 Order's Provisions are scaled based on threat to water quality, with increasing requirements for increased increasing risk. The provisions also allow growers time to make improvements and report progress, provide for alternatives, and are reasonable given the severity of the loading of nitrate to groundwater, the risk to drinking water sources and human health, and the significant cost to society for dealing with this pollution.

Consistent with the declaration in Assembly Bill 685[13] that every human being has the right to safe, clean, affordable and accessible water, protecting drinking water sources by controlling

[11] Administrative Record File No. 203

[12] Administrative Record File No. 202

[13] Approved by the Governor on September 25, 2012 and to be codified at Water Code section 106.3.

nitrate loading to groundwater is among the highest priorities for the Central Coast Water Board. Nitrate pollution of drinking water supplies is a critical problem throughout the Central Coast Region. There is substantial evidence that fertilizer from irrigated agriculture is the largest primary source of nitrate pollution in drinking water wells.[14] Further, nitrate loading in the Central Coast Region can be extreme on a short-term, seasonal, crop rotation basis, continually adding to already existing impairments. Existing and potential water quality impairment takes on added significance and urgency given the impacts on public health, limited sources of drinking water supplies in the region, and high cost to treat nitrate contaminated water. In direct response to these issues, the 2012 Order includes specific Provisions critical to control nitrate loading to groundwater and protect drinking water sources.

The Central Coast Water Board spent many months working with objective experts (UCCE specialists, researchers, technical assistance providers, and Certified Crop Advisors) regarding requirements related to nitrate loading to determine the methodology and parameters to use, and considered a wide range of options based on expert recommendations[15]. During this time, the Central Coast Water Board considered the range of solutions and information available to growers, existing efforts by growers to reduce nitrate loading to groundwater, agronomic concerns, and different methods to evaluate progress towards water quality improvement. The Central Coast Water Board also consulted with staff from the Central Valley Regional Water Quality Control Board regarding their efforts to control nitrate loading to groundwater in their Dairy and Irrigated Lands Regulatory Programs[16]. After consideration of the information from experts, growers, local and state agencies such as the California Department of Public Health (CDPH)[17], and the public, the Central Coast Water Board chose the methodology and requirements contained in the 2012 Order[18].

Evaluating and documenting progress to reduce nitrate loading to groundwater is an extremely important element of the 2012 Order. In general, there are three ways to do this: 1) Measure inputs (i.e., amount of nitrogen applied), 2) Measure outputs (i.e., the amount of nitrogen discharged to groundwater, and 3) Track management practices implemented and associated effectiveness to control nitrate loading. Each has varying benefits, challenges, and costs depending on individual farm characteristics. Objective experts strongly recommended that total nitrogen applied be reported to the Central Coast Water Board, as an effective and less costly option.

Additionally, the Central Coast Water Board agrees with the State Water Board's Stay Order statement that the methodologies for calculation of nitrate loading risk factors must provide meaningful and reliable information. Thus, to the extent available, the Central Coast Water Board leveraged existing and readily available information, tools and other resources for incorporation into the 2012 Order. The following section below describes the various Provisions of the 2012 Order specifically included to address nutrient management and nitrate loading in response to the specific contentions raised by Petitioners.

[14] Administrative Record File Nos.197, 300

[15] Administrative Record File Nos.177, 178

[16] Administrative Record File No. 179

[17] Administrative Record File No. 405

[18] Administrative Record File Nos.195, 374, 375, 376, 377

Provision 44: Farm Water Quality Management Plan (Farm Plan)

Provision 44 applies to Tier 1, Tier 2, and Tier 3 farms/ranches. Similar to the previous 2004 Order, the 2012 Order requires all growers to develop and implement a Farm Plan that is specific to the discharge and water quality issues relevant to their individual farm/ranch – including but not limited to documenting nutrient management practices. Similar to the previous 2004 Order, Farm Plans are kept on the farm and must be made available to the Central Coast Water Board, upon request. Templates are available to assist growers in developing the Farm Plan[19]. The Central Coast Water Board retained and built upon the previous 2004 Order's requirements related to the Farm Plan in response to comments from agricultural representatives. As part of the Farm Plan requirement in the 2004 Order, growers were also required to submit a Management Practice Checklist "to demonstrate that the grower was implementing the Farm Plan and that the grower has made and is implementing appropriate changes to the Farm Plan". The 2012 Order replaces the management practice checklist from the 20o4 Order with an improved Annual Compliance Form for Tier 2 and Tier 3 farms (Provision 67). For the majority of farming operations that have lower relative risk (Tier 1), the Farm Plan requirement is the primary tool for growers to document implementation of management practices and progress towards water quality improvement. For higher risk operations (some Tier 2 and Tier 3 farms), additional requirements beyond the Farm Plan are necessary to document progress and verify pollutant load reductions.

Provision 44 also requires growers to describe the methods they use to verify practice effectiveness and their results in the Farm Plan. Evaluating practice effectiveness and compliance determination is an essential component of improving water quality management practices in the iterative manner described in the 2012 Order. Provision 44 does not dictate how a grower must evaluate practice effectiveness and the Central Coast Water Board anticipates that standard farming practices (such as evaluating irrigation efficiency to determine water use and nutrient budgeting to determine fertilizer applications), combined with visual inspection and record keeping, will be sufficient to evaluate practice effectiveness. Furthermore, the Provision does not require growers to demonstrate a specific level of effectiveness, but rather only to report the methods and results. Petitioners indicate that Provision 44 implies the need to accurately measure the potential pollutant load before and after the implementation of a practice and as a result dictates the costly development of a study design and statistical analysis of the results. The Central Coast Water Board has clarified that this is not the case, and as further discussed below, we are recommending clarifying language to address these issues and reduce confusion among growers.

The University of California Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), and UC Agriculture and Natural Resources (UCANR) have assisted growers for decades with tools to identify, implement and evaluate management practices. The Central Coast Agricultural Water Quality Coalition developed an updated Farm Water Quality Planning template, which includes assessment and evaluation practices to "check the success" of management practice implementation, such as the following examples: record-keeping, photo-monitoring, observing presence or absence of runoff, water analyses, plant tissue and soil analyses, recording fertilizer use, and utilizing crop budgets. The Central Coast Water Board

[19] Administrative Record File No. 224

includes these types of methods in the Annual Compliance Form as examples of the types of practices that can choose to implement and that growers with Tier 2 and Tier 3 farms can report to evaluate practice effectiveness.

As discussed in the March 2012 Staff Report[20] and in response to concerns from the agricultural community regarding the protection of proprietary information in the Farm Plan, the Central Coast Water Board added language in the 2012 Order and MRPs clarifying that certain information is exempt from public disclosure (e.g. trade secrets, secret processes, and the precise location of groundwater wells) and explained a process for submitting such information.

The Central Coast Water Board recommends retaining Provision 44. In addition, we recommend that the State Water Board consider revisions to Provision 44(g) to clearly state that Provision 44.g. does not dictate how a discharger must evaluate practice effectiveness and that standard farming practices (such as evaluating irrigation efficiency to determine water use and nutrient budgeting to determine fertilizer applications), combined with visual inspection and record keeping are among several methods that can be used to evaluate practice effectiveness.

Provision 67, Tier 2 and Tier 3 MRP Section C of Part 2, Part 3 (Annual Compliance Form)

The Annual Compliance Form is only required for Tier 2 and Tier 3 farms, which are generally located in close proximity to the most impaired areas of the region, producing crop types with a relatively higher risk of loading nitrate to groundwater, using chemicals known to be the source of specific toxicity in the Central Coast Region, and/or in some cases discharging pollutants directly to an impaired waterbody. For nearly all growers, this is the only form of reporting about water quality improvement actions that is submitted to the Central Coast Water Board. The information in the Annual Compliance Form is essential to evaluate: (1) general compliance with the Order; (2) the effectiveness of management practices, treatment or control measures; and, (3) any changes in farming practices to make progress towards protecting water quality. The Annual Compliance Form information allows growers to report out on beneficial actions and positive progress towards water quality improvement. In addition, the Annual Compliance Form information allows growers and the Central Coast Water Board to identify areas and conduct follow-up where additional progress is necessary. The Central Coast Water Board has clear statutory authority to require such information under Water Code sections 13267 and 13269. Similar to other monitoring and reporting Provisions of the 2012 Order, this Provision provides information consistent with the NPS Policy's requirement to include "sufficient feedback mechanisms so that the Regional Water Quality Control Board, the dischargers and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs [management practices] or other actions are required."

Provision 67 of the 2012 Order replaces the requirement in the previous 2004 Order to submit a farm water quality management practices checklist. To comply with Provision 67, Tier 2 and Tier 3 growers submit the Annual Compliance Form by answering a series of questions about their farm, using dropdown selections, and submitting the form electronically. Growers would need to invest little money, effort or time to complete the necessary dropdown menus and checklists in the Annual Compliance Form. Growers can also update specific information in real-time whenever necessary without resubmitting entire documents. The Agricultural Alternative

[20] Administrative Record File No. 337

Proposal (Agricultural Proposal) submitted by the California Farm Bureau Federation in December 2010[21] included a similar requirement to complete an annual Farm Water Quality Survey. While some comments from agricultural stakeholders objected to reporting some specific items in the Annual Compliance Form (e.g. Nitrate Loading Risk factors, Total Nitrogen Applied), the Central Coast Water Board did not receive significant objection to the general use of an Annual Compliance Form.

An important benefit of this provision is that it is critical to managing the Central Coast Water Board's Irrigated Lands program. The annual compliance form is a simple, straightforward mechanism that provides the Water Board staff the ability to manage the overall program. It is physically impossible to provide regulatory oversight for 4000 farming operations on an individual basis, as is the case with many other Water Board programs. The Water Boards increasingly use reporting mechanisms like the annual compliance form to effectively manage large numbers of dischargers (CIWQS, GeoTracker, GAMA, SWAMP, etc.) efficiently and effectively. Without Provisions to require growers to submit the Annual Compliance Form there are no means for growers to report progress towards water quality improvement to the Water Board. Similarly, there would be no efficient means for the Water Board to distinguish and prioritize farms based on discharge characteristics, level of threat to water quality, or status of management practice implementation and other efforts to protect water quality. Water Board staff would have to rely primarily on complaints and inspections to evaluate potential problems. Given that the Central Coast Water Board regulates nearly 4000 farms and approximately 435,000 acres, relying on complaints and inspections would not be efficient or effective given the staff resources allocated. In addition, it would not be reasonable or rational given the severity and scale of water quality problems in agricultural areas. The Water Board must prioritize and maximize available resources toward the highest priorities. The Annual Compliance Form is a significant improvement in implementing the regulatory program and a critical Water Board tool for efficient and effective prioritization and follow-up to maximize water quality protection and improvement.

<u>Provision 68, Tier 2 and Tier 3 MRPs, Part 2 Section C: Nitrate Loading Risk Factor Determination</u>

Provision 68 applies only to Tier 2 and Tier 3 farms/ranches, and requires growers to determine nitrate loading risk factor(s) for an individual farm/ranch or risk unit using one of two methods. Method 1 was developed by the Central Coast Water Board for the 2012 Order and Method 2 is the Groundwater Pollution Hazard Index method[22] developed by the UCANR in the late 1990s and later managed by the University of California Water Resources Center (UCWRC) for the purposes of providing information for growers to prioritize management practice implementation that will yield the greatest level of reduced nitrogen loading to groundwater by identifying the fields of highest risk.

[21] Administrative Record File No. 213. Note that representatives of certain agricultural interests submitted various proposals throughout the process, including in December 2010, March and May 2011, and March 2012 ("New Part E" was presented in oral comments at the March 2012 hearing) that augmented the December 2010 proposal. Those proposals are generally referred to in this petition response as the "Agricultural Proposal". The Central Coast Water Board's consideration of the Agricultural Proposal is discussed in various sections of this petition response.

[22] Administrative Record File No. 407

Method 1 developed by the Central Coast Water Board for the 2012 Order was based upon the UCANR's Groundwater Pollution Hazard Index. Similar to the UCANR method, it includes factors related to crop type, irrigation type, and nitrate concentration of irrigation water to calculate a nitrate loading risk level (low, medium, or high). The Central Coast Water Board did not include soil type in the method in response to comments that soil type may be unknown and can also vary across an individual farm/ranch or field, and thus identifying soil type can be complex and costly to determine. In exchange, the Central Coast Water Board included nitrate concentration of irrigation water, since the water is applied to the farm/ranch and an increased nitrate concentration may result in an increased risk in nitrate loading, compared to farms/ranches with low nitrate concentrations. In addition, farms/ranches with high nitrate concentrations in groundwater are generally a higher priority for minimizing additional nitrate loading and implementing nutrient management.

Method 2, the Nitrate Groundwater Pollution Hazard Index method developed by UCANR, has been in use for more than 15 years by growers, technical assistance providers, and consultants in California, Arizona, and Nevada to evaluate nitrogen contamination potential to groundwater by identifying the fields of highest intrinsic vulnerability or risk. Similar to Method 1, the Nitrate Groundwater Pollution Hazard Index includes factors related to crop type and irrigation type, and also uses soil type to calculate the nitrate loading risk level. The UCWRC manages the Nitrate Groundwater Pollution Hazard Index as an Internet-based tool available to the public. The tool contains four dropdown selections and is easily accessible to growers and routinely used by the agricultural community to evaluate nitrate loading risk. During the development of the 2012 Order, the Central Coast Water Board contacted the UCWRC to inform them of the use of the Nitrate Groundwater Pollution Hazard Index and confirmed that UCWRC intended to maintain the index and associated Internet-based tool in the long term to ensure that it would continue to be widely available to growers in the Central Coast Region.

As described in the March 2011 Staff Report, Appendix D[23] - Options Considered and Appendix E - Response to Comments[24], agricultural representatives specifically commented that the 2012 Order should employ existing tools to evaluate risk, such as the Nitrate Groundwater Pollution Hazard Index. In addition, the Agricultural Proposal[25] submitted by the California Farm Bureau Federation in December 2010 includes both the Nitrate Groundwater Pollution Hazard Index and Method 1 developed by the Central Coast Water Board to evaluate nitrate loading risk to groundwater.

Growers also have the option of evaluating risk by individual farm/ranch or by identifying specific units on the individual farm/ranch. Identifying specific units enables growers to specifically identify the particular unit or area of the farm/ranch that may have increased nitrate loading risk (thereby isolating the costs associated with additional Provisions related to the higher risk to a particular unit). These simpler loading risk methods were selected deliberately to avoid the potentially high costs of using more complex site assessments to determine loading risk or actual loading.

[23] Administrative Record File No. 232

[24] Administrative Record File No. 233

[25] Administrative Record File No. 213

It is important to note that the identification of an individual farm/ranch as having a high nitrate loading risk is not a measure of compliance and will not by itself result in an increased possibility of enforcement. The purpose of determining nitrate loading risk is for the Water Board to scale requirements, and reasonably apply increased monitoring and reporting requirements to the subset of farms/ranches that have an increased nitrate loading risk.

The calculation of the nitrate loading risk factor is not difficult or costly for growers to implement, and is necessary and reasonable given the severity of water quality conditions and urgent need to protect groundwater, especially drinking water sources. In particular, the UCANR Groundwater Nitrate Pollution Hazard Index is an existing tool widely available to growers developed by experts for the purposes of assigning risk. It is a well-documented and proven methodology that provides meaningful and reliable information.

The Central Coast Water Board recommends retaining Provision 68 to identify farms with increased risk of nitrate loading to groundwater, and to advance efforts to reduce nitrate loading to groundwater and protect drinking water sources. The Central Coast Water Board also agrees that providing meaningful and reliable information is a high priority for the 2012 Order. Pending the State Water Board's evaluation of the various methodologies to identify farms/units that have increased risk of nitrate loading to groundwater, the Central Coast Water Board does not object to the selection of a single method to be used for this purpose. While limiting alternatives provides for less flexibility for individual growers, it also provides for increased consistency overall.

Provisions 70 – 71; Tier 2 and Tier 3 MRPs, Part 2 Section C: Total Nitrogen Applied Reporting or Alternative

Provisions 70 and 71, and Part 2 Section C of the Tier 2 and Tier 3 MRPs only apply to the subset of Tier 2 and Tier 3 farms/ranches with a high nitrate loading risk. Provision 70 requires these growers to report total nitrogen applied (input, as described above) in the Annual Compliance Form. As an alternative to reporting total nitrogen applied, Provision 71 provides that growers can propose an individual discharge groundwater monitoring and reporting program (GMRP) plan to evaluate nitrate discharge to groundwater (output, as described above) from each ranch/farm or nitrate loading risk unit with a high nitrate loading risk.

The Central Coast Water Board consulted Certified Crop Advisors (CCAs) and UCCE technical experts who consistently recommended that "documenting the reduction of nitrogen input to the production system and improved irrigation efficiency should be the focus"[26]. The practice to record and budget nitrogen fertilizer application is a long-standing, standard industry practice widely recommended by agronomists and crop specialists such as the UCCE, NRCS, and agricultural industry groups such as the International Plan Nutrition Institute (IPNI) and Western Plant Health Association (WPHA) to optimize nutrient efficiency and minimize losses. The UCANR recommends recording and budgeting fertilizer inputs as a specific "Management Goal "and identifies it as "a best economically achievable technology or process for limiting the movement of nutrients to surface water and groundwater". In addition, fertilizer nitrogen record keeping has lower economic costs compared to alternative monitoring and reporting related to outputs (discharge monitoring and loading evaluations).

[26] Administrative Record File Nos 177, 178, and 195.

Many growers implemented practices to optimize fertilizer application and minimize losses to comply with the previous 2004 Order. For example, the 2006 Management Practice Checklist Summary Report [27] indicates that: 67% of the surveyed growers know crop nutrient requirements and use and record nutrient budgets; 50% test nitrogen in irrigation water and incorporate that into nutrient budgets; 62% use plant tissue analysis of nitrogen to aid in fertilizer decisions; 58% test soil for residual nitrogen; 46% train their field personnel in nutrient management. In addition, Agriculture's Alternative Proposal submitted by the CFBF in December 2010[28] included similar nutrient management practices – specifically analysis of nitrogen in soil, well water, and plant tissue.

Provision 70 does not specify how to maintain fertilizer application data. Growers may choose to record information on paper, or into a spreadsheet or using specific software developed by a technical service provider or the private industry depending on their specific need. Many growers already report similar nitrogen application to the Central Coast Water Board[29], and staff is working with Certified Crop Advisors and technical assistance providers to identify and develop tools to assist growers in managing this type of information ahead of the monitoring and reporting requirements in the 2012 Order. In response to comments from some growers who objected to reporting nitrogen application data, Provision 71 of the 2012 Order also provides an alternative option to propose an individual discharge groundwater monitoring and reporting program to shift the focus from reporting inputs to reporting outputs.

The reporting of nitrogen application information, or the alternative to evaluate discharge of nitrate to groundwater, is reasonable for the subset of Tier 2 and Tier 3 farms that present an increased risk to water quality, given the severity of water quality conditions and urgent need to protect groundwater, especially drinking water sources. It is an essential reporting element of the 2012 Order that provides information consistent with Water Code section 13269(a)(2) (monitoring to verify the adequacy and effectiveness of the waiver's conditions) and the NPS Policy's requirement to include "sufficient feedback mechanisms so that the Regional Water Quality Control Board, the dischargers and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs [management practices] or other actions are required." In this case, reporting total nitrogen applied specifically provides a feedback mechanism to indicate reduction in loading or improved management practice in terms of nitrogen source control to protect groundwater used for drinking water from nitrate contamination.

Petitioners contend that Provision 70 will require the reporting of hundreds of thousands of fertilizer applications, and also will require the reporting of thousands of soil nitrogen tests prior to each planting. This is incorrect. The Central Coast Water Board intended for total nitrogen applied to be reported annually at the farm/ranch level - not for every acre farmed. For example, if a grower produces 300 acres of lettuce and 200 lbs/acre nitrogen is applied to the 300 acres, the grower reports 200 lbs/acre in the Annual Compliance Form for that farm.

[27] Administrative Record File No 23

[28] Administrative Record File No.213

[29] Administrative Record File No 329

The Central Coast Water Board recommends that the State Water Board consider the following revisions to clarify the definition of total nitrogen applied and soil nitrogen on page 92 (Definition No. 63) as well as other relevant sections of the 2012 Order and Tier 2 and Tier 3 MRPs:

> "63. Total Nitrogen Applied. Total nitrogen applied includes nitrogen in any product, form or concentration) including, but not limited to, organic and inorganic fertilizers,slow release products, compost, compost teas, manure, extracts, ~~nitrogen present in the soil,~~ and nitrate in irrigation water; Reported in ~~units of~~ lbs/acre nitrogen per crop, ~~per acre~~ for each farm/ranch or nitrate loading risk unit on an annual basis; Total nitrogen present in the soil must be measured for each farm/ranch or nitrate loading risk unit prior to the first application of fertilizer to the first crop in rotation."

The Central Coast Water Board strongly recommends retaining Provisions 70 and 71, and Part 2 Section C of the Tier 2 and Tier 3 MRPs, with the edits proposed above, to advance efforts to reduce nitrate loading to groundwater and protect drinking water sources.

Provision 74; Tier 3 MRP Part 6: Typical Crop Nitrogen Uptake

The 2012 Order requires growers with Tier 3 farms with high nitrate loading risk farms to determine the typical crop nitrogen uptake for each crop type produced and report the basis for the determination (e.g., developed by commodity or industry group, published agronomic literature, research trials, site-specific analysis of dry biomass of crop for the nitrogen concentration). The crop nitrogen uptake is an essential part of nutrient budgeting and making fertilizer decisions, and included as an element in the irrigation and nutrient management plan (INMP) discussed below. As described earlier, the 2006 Management Practice Checklist Summary Report [30] indicates that 67% of the surveyed growers know crop nutrient requirements and use and record nutrient budgets. While the 2012 Order provides growers the flexibility to use various methods to determine the typical crop nitrogen uptake, agronomic information regarding crop nitrogen uptake is published for most crop types with significant acreage in the Central Coast Region. As an example, a commonly referenced UCANR Publication provides typical nitrogen applications and crop uptakes for cool-season vegetables grown in the Central Coast Region.[31] In many cases, the State Water Board, Central Coast Water Board, and the California Department of Food and Agriculture's (CDFA) Fertilizer Research and Education Program (FREP) have provided grant funding that supported the research to obtain this type of information.

The Central Coast Water Board strongly recommends retaining Provisions 74 and Part 6 of the Tier 3 MRP to advance efforts to reduce nitrate loading to groundwater and protect drinking water sources.

Provisions 75 – 77; Tier 3 MRP Part 6: Certified Irrigation and Nutrient Management Plan (INMP)

The 2012 Order requires a subset of Tier 3 Farms that have a high nitrate loading risk to groundwater to develop and implement a certified irrigation and nutrient management plan

[30] Administrative Record File No 23

[31] Administrative Record Reference No. 226

(INMP). The purpose of the INMP is to budget and manage the nutrients applied considering all sources of nutrients, crop requirements, soil types, climate, and local conditions in order to minimize nitrate loading to surface water and groundwater. The number of farms estimated to be affected by these requirements is currently less than 3% (less than ~100 individual farms out of ~3600).

This requirement builds upon the Farm Plan requirement (Provision 44) which applies to all farms and the requirement (Provision 70) to report total nitrogen applied for the subset of Tier 2 and Tier 3 farms with high nitrate loading risk. In addition, this requirement is similar to the certified INMP requirements in the Central Valley Regional Water Quality Control Board's (Central Valley Water Board) Dairy Order[32].

Irrigation and Nutrient Management Plans are a standard industry tool[33] used to budget and manage the nutrients applied to the farm to minimize nitrate loading to surface water and groundwater. The increased efficiency from fine-tuning application rates, timing and placement of the right type of fertilizer to match plant growth can result in a significant reduction in nutrient losses, reductions in nitrate loading to groundwater, and can also result in significant economic savings. The 2012 Order describes the minimum elements that growers must include in the INMP but growers have the flexibility to develop the plan considering the unique characteristics of their farm. Growers have time to develop the plan and do not have to submit the INMP to the Central Coast Water Board, but must report specific INMP elements in the Annual Compliance Form.

Similar to the Central Valley Water Board's Dairy Order, to ensure the adequacy and effectiveness of the INMP, the INMP must be certified by a CCA or similarly qualified professional. The Central Coast Water Board received comments from Western Plant Health Association (WPHA) in April 2010 supporting this aspect of the 2012 Order recognizing that CCAs and similar third-party professionals are a way to minimize costs to growers, while assuring the Central Coast Water Board that the INMPs are effective, agronomically sound and environmentally sensitive.

As described above, a large percentage of growers already implement irrigation and nutrient management practices, and many already have an INMP. For example, one grower in the Central Coast Region developed and implemented an INMP and then reported that as a result of the plan he reduced his fertilizer use by 50%, which resulted in a significant cost savings to the grower. Comments received from the California Strawberry Commission dated January 3, 2011 stated that they do not oppose requirements for irrigation and nutrient management plans and pointed out that the Agricultural Proposal submitted by the California Farm Bureau Federation in December 2010 included similar requirements to be part of the Farm Plan. However, additional comments from the California Strawberry Commission and other agricultural stakeholders do object to the submittal and potential public disclosure of proprietary information in the INMP. As described for the Farm Plan, the 2012 Order clearly protects trade secrets and secret processes submitted to the Water Board from public disclosure.

[32] Administrative Record File No 179

[33] Administrative Record Reference Nos 21, 35, 134, 137, 164, 212, 226, 227, 228, 301

Similar to Provision 70, the 2012 Order also provides an alternative to the development and implementation of an INMP. Growers with Tier 3 farms with a high nitrate loading risk may propose an individual discharge groundwater monitoring and reporting program (GMRP) plan to evaluate the discharge of waste to groundwater (Provision 76)

The Central Coast Water Board strongly recommends retaining Provisions 75 -77, and Part 6 of the Tier 3 MRP to advance efforts to reduce nitrate loading to groundwater and protect drinking water sources.

Provision 78; Tier 3 MRP Part 6: Nitrogen Balance Ratios

The 2012 Order also requires the subset of Tier 3 Farms that have a high nitrate loading risk to report progress towards specific nitrogen balance ratio targets. Nitrogen balance ratio targets compare the total amount of nitrogen applied to the total amount of nitrogen needed to produce a crop. Similar targets are also included in the Central Valley Regional Board's Dairy Order[34] that dischargers must achieve to comply with the Order. As described above, the Central Coast Water Board developed this and related Provisions in coordination with UCCE, CCAs, and other qualified professionals who recommended the specific targets. Initially, similar to the Central Valley Water Board, the 2011 draft Order defined the nitrogen balance ratio targets as limits that must be met to comply with the Order (as identified on page 30, and in Tables 3 and 4 on pages 38-41 of the redline-strikeout version of the draft Order)[35] . In response to comments from agricultural stakeholders, the Central Coast Water Board adopted revisions to the 2011 draft Order at the March 15, 2012 hearing to define the nitrogen balance ratio targets as "milestones" for the purpose of measuring progress, rather than as limits that must be achieved to comply with the 2012 Order.

In the case of a single crop rotation (e.g., strawberries), the 2012 Order identifies a nitrogen balance ratio target of 1.2. The 1.2 target is equivalent to applying 120% of crop needs. The nitrogen balance ratio target of 1.2 is not fully protective of groundwater and still results in discharge to groundwater, but in many cases represents a significant reduction of applied nitrogen thereby reducing nitrate loading to groundwater. The Strawberry Commission has indicated that the "average rate of nitrogen fertilizer applied to strawberries is currently below the 1.2 ratio, and is approximately .78." This and other evidence suggests that the target is measurable and achievable. In the case of crops in multiple rotation over a year (e.g., multiple crop cycles), the 2012 Order identifies a nitrogen balance ratio target of 1.0, equivalent to applying 100% of crop needs. As discussed during the workshop at the May 2011 Central Coast Water Board meeting, the reason why the nitrogen balance ratio target for annual crops is 1.2 compared to 1.0 for crops in multiple rotation, is because over the course of a year, farms that have multiple crops in rotation have more opportunities to optimize their nutrient budgets and adjust fertilizer applications to try to achieve the targets.

To reiterate, the nitrogen balance ratio targets *do not* require 100% crop efficiency related to fertilizer applications. The nitrogen balance ratio target of 1.0 is not fully protective of groundwater and still results in discharge to groundwater, but represents a significant reduction of applied nitrogen. Less stringent than the Central Valley Water Board's Dairy Order, the 2012

[34] Administrative Record File No 179

[35] Administrative Record File No. 372

Order nitrogen balance ratio targets do not take into account residual nitrogen from previous crops. Since vegetable crops leave nutrients in the soil after harvest, available for the next crop, the target allows growers to apply 100% of the crop needs over the year, even though there are leftover nutrients in the soil from the previous crop. Grant funded lettuce trials also demonstrate that some growers are already meeting this target, while others apply excessive nitrogen.[36] The 2012 Order includes these nitrogen balance ratio targets to ensure that growers with higher risk farms are working toward reducing nitrate loading to groundwater.

Despite some statements by agricultural stakeholders that many growers were already meeting nitrogen balance ratio targets, many growers commented that they objected to the use of these specific nitrogen balance ratio targets. However, the Central Coast Water Board did not receive any comments proposing alternative targets or proposing alternative methods to evaluate nitrogen load reductions. However, similar to other Provisions, the 2012 Order provides flexibility so that growers can implement an alternative method to demonstrate an equivalent nitrogen load reduction, if they choose not to use the identified nitrogen balance ratio targets.

The Central Coast Water Board strongly recommends retaining Provisions 78 and Part 6 of the Tier 3 MRP to ensure that growers with the highest risk farms are making measurable progress to reduce nitrate loading to groundwater and protect drinking water sources.

Provision 79; Tier 3 MRP Part 6: Effectiveness of Certified INMP

The 2012 Order requires growers with Tier 3 farms that have a high nitrate loading risk to evaluate and report on the overall effectiveness of the INMP towards protecting, preserving, and restoring groundwater quality in the upper-most aquifer, including reductions in loading based on the implementation of irrigation and nutrient management practices. The INMP Effectiveness Report must be prepared by a state registered professional engineer, professional geologist, Certified Crop Advisor, or similarly qualified professional.

The 2012 Order does not specify the methods that a grower must use to evaluate the effectiveness of an INMP. In addition, the 2012 Order provides that growers in the same groundwater basin or subbasin may choose to comply with this requirement as a group by submitting a single report that evaluates the overall effectiveness of the broad scale implementation of irrigation and nutrient management practices identified in INMPs to protect groundwater and achieve water quality standards for nitrate.

The INMP is a critical part of the 2012 Order and evaluating the effectiveness of management practices is an essential component of improving water quality and protecting groundwater resources, especially sources of drinking water. The Central Coast Water Board strongly recommends retaining Provision 79 and Part 6 of the Tier 3 MRP to ensure that growers with the highest risk farms are implementing practices effectively over time and making measurable progress to reduce nitrate loading to groundwater and protect drinking water sources.

[36] Administrative Record File Nos. 410 and 411.

B. LEGAL/PROCEDURAL CONTENTIONS

B.1 Contention: Petitioners contend that the Central Coast Water Board failed to provide petitioners adequate due process in violation of the California Administrative Adjudication Bill of Rights, i.e., the Administrative Procedures Act (Gov. Code § 11425.10 et seq.) because petitioners did not have an opportunity to comment on significant, new provisions that were presented after the close of the public hearing and because at least one of the provisions were the result of ex parte communications.

Response: The Central Coast Water Board agrees with petitioners that the adoption of the 2012 Order was a quasi-adjudicative action. The Central Coast Water Board did not violate petitioners' due process rights. The Central Coast Water Board fully complied with the Administrative Procedures Act (APA) and the applicable State Water Board regulations regarding adjudicatory proceedings. Petitioners had more than adequate opportunity over three and one-half years to be heard, and had multiple opportunities to present and rebut evidence before the Central Coast Water Board. As discussed further below, petitioners were involved throughout the development of the 2012 Order and were provided with full due process. While petitioners argue that new conditions were incorporated into the 2012 Order at the last minute and without providing petitioners an opportunity to comment on the changes, the petition focuses solely on the "Johnston Proposal" as a violation of the petitioners' due process rights. Therefore, it is unclear, other than the "Johnston Proposal," what other changes to the 2012 Order are alleged to violate the petitioners' due process rights. At the hearing, Water Board staff did recommend to the Board that it consider several additional revisions to the 2012 draft Order; however those revisions were made in response to comments and suggested revisions primarily made by petitioners and other agricultural representatives. The petitioners do not object to those revisions even though they were based on proposals by petitioners made during the hearing and that were not subject to comment by others.

The petitioners argue that the "Johnston Proposal" is a significant revision made after the close of public hearing. The petitioners mischaracterize the revision proposed by Board Member Michael Johnston and approved by the Board. The revision is a fairly minor revision that does not change the substance of the 2012 Order. The purpose of the new Finding 11 and the associated Provision 11 is to encourage dischargers to coordinate water quality improvement efforts and cooperative monitoring and reporting efforts with other dischargers. Dischargers that did participate in a third party group and implemented Executive Officer approved alternative cooperative monitoring or water quality improvement practices or programs may be moved to a lower Tier and/or may be provided alternative project-specific times and milestones. During the process for approving alternative project proposals, a Technical Advisory Committee (TAC) will evaluate the project proposals and make recommendations to the Executive Officer. The revision did not alter the monitoring and reporting program at all, except to add an additional optional process for dischargers. The "Johnston Proposal" did not create any new mandatory requirements, and if dischargers take advantage of the condition, Finding 11 and the associated Provision 11 potentially decrease requirements for dischargers who form a third party group and implement alternatives practices or programs and are moved into a lower tier. As discussed further below, the "Johnston Proposal" did not deprive the Petitioners of due process since the Central Coast Water Board fully considered the Agricultural Proposal. The "Johnston Proposal" does not conflict with the "New Part E" proposed by the petitioners, since it does not preclude

dischargers from forming third party groups, engaging in self-auditing, or any of the other conditions proposed in petitioners' "New Part E".

The petitioners also mischaracterize the process leading to the "Johnston Proposal". The revision was in direct response to the petitioners' similar proposal presented to the Water Board. The use of a TAC was not a new idea on March 15, 2012. Petitioners presented a proposal including a TAC and a Public Advisory Committee (PAC) in the hearing the day before, and had presented a similar proposal including a TAC in earlier written comments and oral presentations to the Water Board meetings[37]. Furthermore, one of the agricultural parties' experts, Dr. Los Huertos, also proposed a TAC[38]. Board Member Johnston proposed his revision as a result of the prior Agricultural Proposals in order to implement their ideas. While there are differences between the "Johnston Proposal" and the TAC or PAC proposed by the agricultural representatives, the "Johnston Proposal" is the logical outgrowth of the Agricultural Proposal.

Furthermore, there was no improper ex parte communications. During the process for adoption of any permit, waiver, or general order, the Central Coast Water Board staff frequently meets with the dischargers and other interested persons. The staff at the Central Coast Water Board met hundreds of times with agricultural representatives, and made modifications to draft Orders as a result those communications. Similarly, staff met with Mr. Shimek regarding issues and potential modifications to draft Orders. All of these communications complied with the APA. (See Gov. Code § 11430.30; *Porter County Chap., Izaak Walton League v. Nuclear Regulatory Comm.* (1979) 606 F.2d 1363, 1371.) Neither the meetings with Mr. Shimek or the agricultural parties were improper attempts to influence the process.

Board Member Johnston requested that Executive Officer Briggs develop language to include a TAC to review group monitoring and water quality improvement actions. Board Member Johnston never spoke with anyone other than Executive Officer Briggs, attorney Frances McChesney, and Central Coast Water Board staff. Such communications are allowed under the APA. See Govt Code § 11430.30, subd. (b)(2). As he stated at the hearing, Board Member Johnston had no knowledge that any of the language proposed in the revision was language suggested by Mr. Shimek.[39] Board Member Johnston relied on Executive Office Briggs to provide the language. Executive Officer Briggs was not acting as a conduit to relay Mr. Shimek's proposal to Board Member Johnston and therefore unduly influence Board Member Johnston. He was acting as the Executive Officer and providing Board Member Johnston with the best language he knew to implement Board Member Johnston's idea. The fact that some of the language Executive Officer Briggs used was from Mr. Shimek does not make it an indirect ex parte communication because it was a logical outgrowth of the proceeding regarding TACs. While the Central Coast Water Board does not agree that improper ex parte communications occurred, if the State Water Board does find that there was an improper ex parte communication, the proper remedy is not to invalidate the entire 2012 Order. Petitioner cites *Dept. of Alcoholic Beverage Control v. Quintanar* (2006) 40 Cal. 1, for the proposition that the entire 2012 Order must be invalidated or reversed. However, the California Supreme Court did not make a blanket statement that ex parte communications must lead to the reversal of the

[37] Administrative Record File Nos 278 and 264.

[38] Administrative Record File No. 311

[39] Administrative Record File No. 352

entire order. Instead, in *Quintanar*, the Court said that from the record they could not determine that the ex parte communication was harmless. *(Id.* at 17.) In that case, the ex parte communications were so central to the agency's decision that they could not be separated. In this case, any indirect ex parte communication was harmless, as the "Johnston Proposal" did not amend the 2012 Order in any significant way and simply provided an optional process for dischargers to use alternative compliance measures to meet the requirements of the 2012 Order. As well, the "Johnston Proposal" is a minor modification that is not central to the 2012 Order. The State Water Board could remove the "Johnston Proposal" and cure the ex parte communication without prejudice to any party or depriving any party of a fair hearing and due process.

B2. Contention: [Section III.B, page 30] The petitioners contend that the Central Coast Water Board failed to properly consider the Agricultural Proposal when it unlawfully adopted the conditional waiver with improper amendments. The petitioners assert that the Agricultural Proposal was incorrectly portrayed as not meeting legal standards and that it was not properly considered because the Central Coast Water Board's consideration of the "Johnston Proposal" kept the Board from properly considering the Agricultural Proposal.

Response: The petitioners mischaracterize the actions of the Central Coast Water Board and the effect of the inclusion of the "Johnston Proposal." The Central Coast Water Board complied with all applicable laws and the record demonstrates that the Board in fact gave careful consideration to the Agricultural Proposal, including the "New Part E" presented at the March 2012 hearing. The "Johnston Proposal" did not keep the Board from considering the Agricultural Proposal. See also Response to Contention B.1, above, regarding the "Johnston Proposal."

The 2012 Order is a renewal of a conditional waiver of waste discharge requirements adopted pursuant to California Water Code section 13269. Section 13269 requires that prior to renewing an existing waiver of waste discharge requirements, the Board must review the terms of the waiver at a public hearing. See Cal.Wat.Code § 13269 subd. (f). The Water Board did not simply review the terms of the conditional waiver at a public hearing; it engaged in a lengthy and robust process. There was not just a single hearing, but several multi-day workshops and hearings. The Board provided significantly greater opportunity for public input then required by law. As described in the Staff Report for the March 14, 2012 hearing, Central Coast Water Board staff issued five draft Orders and associated staff reports, held six public comment periods, held six public workshops and hearings before the Board, convened or participated in over 60 outreach events, had hundreds of discussions with stakeholders, and made hundreds of changes to the original draft Order. Water Board staff made the vast majority of changes to its initial draft Order in response to comments from agricultural stakeholder comments. In addition, the Board provided significant additional opportunities for the agricultural community to provide input to the Board. For example, the California Farm Bureau Federation, represented by Kari Fisher, submitted an alternative to the 2010 draft Order on December 3, 2010. Subsequently, a group of agricultural interests, referred to here as the Ag Group[40] submitted additional

[40] The "Ag Group" is not clearly defined, but for purposes of this Response, it is the Water Board's understanding that it is the group of entities that submitted the Agricultural Proposal updates in March and May 2011, which appears to include Grower-Shipper Association of Central California, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties, Monterey, San Benito, Santa Cruz, Santa Clara, and San Luis Obispo County Farm Bureaus, Western Growers and the California Strawberry Commission. Individuals presenting the Agricultural Proposal also

documents after the close of the comment period for the 2010 draft Order. These documents were intended to augment the December 2010 submittals. The Board included in the record these additional documents submitted on March 17, 2011, after the close of the comment period: (1) a redline/strikeout version of the staff's 2011 draft Order (essentially inserted the substance of the December 2010 alternative into the staff's 2011 draft Order with additional proposed revisions; (2) Draft Third Party MRP (draft monitoring program for discharges that join a coalition); and (3) Draft Attachment B (Revised Coalition Provisions). On May 3, 2011, Theresa Dunham, on behalf of the Ag Group, requested that the Central Coast Water Board accept two additional documents into the record: (1) Redline Coalition Revisions to Attachment B (proposed redline/strikeout changes to the March 17 Coalition Provisions); and (2) Groundwater Monitoring Part 2, V5 (proposed groundwater monitoring provisions).[41] Those were also accepted into the record.

The Agricultural Proposal included many edits to the findings and order portion of the staff's 2011 draft Order and adds an alternative set of provisions for dischargers who elect to participate in a third party group.

The Central Coast Water Board staff prepared at least five public drafts of a proposed conditional waiver. Each draft was subject to either written comments only or written and oral comments at a public hearing or workshop. After each draft, the Water Board staff proposed revisions to the draft in direct response to comments from agricultural interests and others, including consideration of the additional materials submitted by the Ag Group in 2010 and 2011. In fact, the Central Coast Water Board allowed those documents into the record after the close of the written comment period and allowed an opportunity for additional written public comments on those documents. The Staff Report for the September 1, 2011 Central Coast Water Board meeting evaluates in detail the Ag Group's 2010 and 2011 submittals.[42] The Water Board did not have a quorum for more than six months, and when there was a quorum held an additional workshop to allow the new Water Board members an opportunity to become familiar with the record and to hear from the parties, including a presentation by the Ag Group on its Agricultural Proposal.

At the final multi-day hearing at which the Central Coast Water Board adopted the 2012 Order, the petitioners' representative, also on behalf of Farmers for Water Quality, which includes the petitioners, proposed during its extensive oral comments, numerous changes to the 2012 draft Order that the petitioners referred to as the "New Part E"[43] and the staff responded by proposing at least 15 additional changes to the 2012 draft order. The Central Coast Water Board incorporated those changes in the adopted 2012 Order. The changes included providing the option for cooperative groundwater monitoring and extra time to develop the cooperative

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referred to their group as the Farmers for Water Quality. However, the Farmers for Water Quality is not clearly defined and in some cases, agricultural representatives indicated that they were not represented by Farmers for Water Quality. For example, on February 27, 2012, the Central Coast Water Board received an email from the Santa Barbara County Farm Bureau indicating that they were not represented by Farmers for Water Quality (See Administrative Record File No. 327)

[41] Throughout this Petition Response, the petitioners' alternative is referred to as the "Agricultural Proposal".

[42] Administrative Record File No. 283

[43] The "New Part E" was presented at the March 2012 hearing as part of a powerpoint presentation by Theresa Dunham, representing the Grower-Shippers petitioners. See Administrative Record File No. 344

groundwater monitoring program; extending the due date for several monitoring and reporting requirements by a year; and changing the Provision to meet a specified nutrient balance ratio value to a milestone to make progress towards a specified nutrient balance ratio value. These and other changes are shown on the March 15, 2012 Water Board Meeting Supplemental Sheet 2- Proposed Revisions.[44] The so-called "Johnston Proposal" did not affect the Board's consideration of the Agricultural Proposal, including the "New Part E"; the Board considered the comments and agreed to substantial changes in response to those comments. It is clear from the record that the Central Coast Water Board considered the Agricultural Proposal and made those changes that were consistent with the law and its authority and responsibility to protect water quality.[45]

The Central Coast Water Board incorporated some aspects of the Agricultural Proposal, including the "New Part E" into the 2012 Order, and decided not to include other aspects of the Agricultural Proposal mainly due to accountability and enforceability issues. The Central Coast Water Board did not accept those aspects of the Agricultural Proposal that would mask individual responsibility, prevent meaningful enforcement, or rely on monitoring and reporting of only indirect indicators of water quality or such vague variables as "growers in good standing" or "the results of audits." It also did not include those aspects of the Agricultural Proposal that the dischargers could do on their own and did not need Water Board approval to carry out, such as the process for forming and the structure of third-party groups or the third party group agreement to be subject to independent audits.

Contrary to the petitioner's assertions, the Central Coast Water Board did not conclude that the entire Agricultural Proposal was illegal. The Staff Report noted some legal concerns with the Agricultural Proposal primarily in two areas – compliance with water quality standards and reporting monitoring results.

California Water Code section 13269(a) provides that the Central Coast Water Board may waive the requirements to submit a Report of Waste Discharge (ROWD) and to obtain waste discharge requirements for a specific discharge or specific type of discharge, if the Central Coast Water Board determines that the waiver is consistent with any applicable water quality control plan and such waiver is in the public interest, provided that any such waiver is conditional, includes monitoring requirements unless waived, does not exceed five years in duration, and may be terminated at any time by the Central Coast Water Board.

California Water Code section 13269(a)(2) also requires that the Provisions of a waiver include the performance of individual, group, or watershed-based monitoring. Monitoring requirements must be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. In addition, monitoring results must be made available to the public. Water Code section 13269 also requires that monitoring results be made available to the public.[46] Water Code section 13267 also authorizes the Water Board to require the submittal of technical reports, which may

[44] Administrative Record File No. 342

[45] Administrative Record File Nos. 342, 350, 352

[46] Note that the 2012 Order makes clear that the precise location of groundwater wells would not be disclosed to the public and that, consistent with Water Code section 13267 that portions of reports that might disclose trade secrets or secret processes will not be made available to the public.

include monitoring reports, farm plans, and other reports necessary to evaluate impacts to water quality.

Irrigated agricultural activities result in the discharges of waste that affect the quality of the waters of the state, and, therefore, persons who conduct such activities are required to comply with the Water Code by either obtaining waste discharge requirements or a waiver of waste discharge requirements.

The Central Coast Water Board's adopted Basin Plan identifies beneficial uses of waters of the state, includes water quality objectives to protect the beneficial uses, and includes implementation programs to achieve compliance with the water quality objectives. Waste discharge requirements must "implement" the Basin Plan and waivers of waste discharge requirements must be "consistent with" the Basin Plan. It is unclear what legal difference there is between "implementing" the Basin Plan and being "consistent with" the Basin Plan; however, failure to require protection of beneficial uses and failure to require compliance with applicable water quality objectives or implementation programs of the Basin Plan would not be consistent with the Basin Plan.

Waste discharges are typically characterized as either "point source" discharges or "non-point source discharges". Point source discharges are subject to the federal Clean Water Act and persons who discharge waste from point sources must obtain an NPDES permit prior to such discharges. Some discharges from agricultural lands, specifically irrigation return flows, are specifically exempt from the definition of "point sources" under the Clean Water Act. Those discharges are not required to obtain NPDES permits, but are considered "non-point sources" subject to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (Water Code Division 7). The State Water Board's NPS Policy sets forth State Water Board policy that applies to non-point sources. The 2012 Order is consistent with the NPS Policy. The NPS Policy contains a number of "Key Elements" that are required to be addressed by the Regional Water Boards, in particular requiring compliance with water quality objectives and "feedback" mechanisms.[47]

Petitioners proposed to delete or modify language in the draft 2012 Order to remove what they perceived as requirements for "immediate" compliance with water quality standards and potential liability for dischargers. The Central Coast Water Board did not agree with these changes because the language in the 2012 Order does not require immediate compliance with water quality standards, is standard language in similar Orders in the State, and appropriately implements the law.

The 2012 Order does not include the word "immediate" prior to the Provisions requiring compliance with water quality standards and does not require immediate compliance with water quality standards. For example, the March 2012 Staff Report[48] states on page 32 that "there are

[47] KEY ELEMENT 1: An NPS control implementation program's ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

KEY ELEMENT 4**:** An NPS control implementation program shall include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required.

[48] Administrative Record File No. 337

no defined requirements to specifically meet water quality standards or objectives in runoff or discharges." The September 2011 Staff Report[49] also discusses this on pages 19, 22-23, and 27. The March 2011 Staff Report, Appendix E. Responses to Comments[50], responds to this issue in comment numbers 173, 416, 386, 488, 286, 494, 445, and 393. Several provisions in the 2012 Order clarify the Central Coast Water Board's expectation of compliance with water quality standards (see paragraph below).

The Central Coast Water Board included language in the 2012 Order[51] regarding compliance with water quality standards that is consistent with the NPS Policy, required by the Water Code and routinely included in Conditional Waivers of Waste Discharge Requirements, including specifically, the 2004 Order, and the Conditional Waivers for Discharges from Irrigated Lands for the Central Valley Region and the Los Angeles Region. Provision 12 on page 15 in the 2012 Order says "dischargers who are subject to this Order shall implement management practices, as necessary, to improve and protect water quality and to achieve compliance with applicable water quality standards." Several Provisions and Conditions in Part B, starting on page 18, direct how and when to implement management practices to comply with water quality standards. Part G. Time Schedule, Provision 82, page 31, presents time schedules for compliance with Provisions, identifies milestones and defines them as indicators of progress, and lists types of information that will be considered to evaluate compliance, including effectiveness of management practices and results of monitoring in surface receiving waters. This Provision does not say compliance depends on surface receiving water quality meeting applicable water quality standards. The Central Coast Water Board included milestones specifically to indicate some reasonable indicators of progress towards achieving water quality standards.

The Central Coast Water Board did not intend to require immediate compliance with the water quality standards in the 2012 Order. It is true that the Water Code requires compliance with water quality standards, but Water Code section 13263(c) allows the use of time schedules to achieve compliance. In addition, the NPS Policy contemplates that dischargers will comply with water quality standards through an iterative process of implementing management practices and improving them over time based on effectiveness monitoring (i.e., the feedback mechanism). The Central Coast Water Board adopted language in the 2012 Order that includes time schedules for complying with certain specific tasks and milestones that are not enforceable dates. The 2012 Order, similar to the 2004 Order and orders regulating agricultural discharges issued by other Regional Water Quality Control Boards, makes it clear that dischargers comply by implementing and improving management practices to meet water quality standards. Water Code section 13269 requires that the conditions of a waiver be enforceable, but in this case there is no Provision that requires immediate compliance with water quality standards. The Central Coast Water Board could have required immediate compliance with water quality standards under Water Code section 13263, but specifically chose not to do so.

[49] Administrative Record File No. 283

[50] Administrative Record File No. 233

[51] Administrative Record File No. 374

As written, the Agricultural Proposal would be similar in many ways to the 2012 Order in that it would provide for dischargers to form "third-party groups",[52] conduct monitoring, etc. For those dischargers who elect to join a third-party group, however, the Agricultural Proposal would change some of the Provisions in ways inconsistent with the Water Code, the Basin Plan, and the NPS Policy. For example, the Agricultural Proposal would not require submittal of monitoring results to the Water Board and would delete Provisions with respect to vegetated strips. The 2010 and 2011 versions of the Agricultural Proposal would delete the Provision to require compliance with applicable water quality control plans and policies and instead establish a different standard for those dischargers who join a third party group compared to those who do not. Persons who join a third-party group would be required to "work towards compliance" with water quality standards, rather than comply with water quality standards. At the March 2012 hearing, the agricultural representatives proposed to revise their language regarding water quality standards and instead proposed to require compliance only with water quality objectives contained in the Basin Plan, rather than also including applicable water quality criteria adopted by USEPA. The USEPA water quality criteria apply to the surface waters in the Central Coast Region. The 2012 Order requires compliance with water quality standards that include both water quality objectives in the Basin Plan and applicable water quality criteria. The 2012 Order is the method to achieve compliance with water quality standards for impaired water bodies listed under Clean Water Act section 303(d). Therefore, the agricultural representatives' language contained in "New Part E" was not included in the 2012 Order.

Water Code section 13269 requires that any waiver of waste discharge requirements be consistent with the Basin Plan, which includes the water quality objectives and implementation policies, and the NPS Policy requires that the waivers must include provisions to achieve and maintain water quality objectives and beneficial uses and makes clear that improvement and implementation of management practices is not a substitute for "actual compliance with water quality requirements."[53] Requirements regarding vegetative strips are necessary to implement the Basin Plan, which includes a nonpoint source implementation policy requiring control measures to minimize erosion and sedimentation and filter strips of appropriate width between land disturbance areas and water bodies.[54] Compliance with water quality standards is a necessary component of a conditional waiver.

Additionally, the proposed "New Part E" includes monitoring, reporting and milestones that will not allow the Central Coast Water Board to fulfill its legal obligation under the Water Code Section 13269 to verify the adequacy and effectiveness of the waiver's provisions.

Petitioner's proposed to delete requirements to submit monitoring and reporting information that the Central Coast Water Board needs to evaluate effectiveness of management practices at controlling waste discharges, water quality improvement, compliance with the provisions of the

[52] Note that the Petitioner asserts that Water Board staff "incorrectly characterized the agricultural alternative as inappropriately allowing third party groups." That is not the case, the 2004 Order and the 2012 Order allow third-party groups; the issue is, as explained herein, that the agricultural proposal contains some conditions that are not consistent with the Water Code, Basin Plan, and NPS Policy. The 2012 does not preclude dischargers from forming third party groups. There already exists a third party group that conducts surface water monitoring on behalf of the dischargers that are part of that group.

[53] See NPS Policy, May 20, 2004, at page 7.

[54] See Basin Plan, Section V.G. at page V-13.

waiver, and the adequacy and effectiveness of the provisions of the waiver, consistent with Water Code Section 13269 and the NPS Policy.

The agricultural representatives proposed edits and "New Part E" presented at the March 2012 hearing would replace the draft 2012 Order's reporting requirements that include submittal of farm-level indicators of management practice effectiveness and pollution reduction (e.g. total nitrogen applied and photo monitoring by individual dischargers). The "New Part E" requires submittal of summary reports from a third-party. The farm-level reporting requirements, particularly for farms posing highest risk to water quality, were deliberately included in the 2012 Order to improve the Central Coast Water Board's ability to regulate irrigated agricultural discharges given the severity of the water quality conditions from these discharges, many years of receiving only surveys and summaries of management practices under the 2004 Order, and in response to comments from Central Coast Water Board members and several other members of the public during the workshops and hearings conducted for the development of the 2012 Order[55].

The March 2012 Staff Report[56], page 30, included the following:

> *Regarding what data will be aggregated, Water Board staff has determined, and proposed in the Draft 2012 Agricultural Order, the type and scale of data and information needed for the Water Board to implement Section 13269 of the Water Code that requires that monitoring be sufficient to verify the adequacy and effectiveness of the waiver's provisions. Furthermore, the type and scale of data and information proposed to be monitored and reported in the Draft 2012 Agricultural Order indicates whether implementation efforts are effectively controlling waste discharges and whether pollution loading is decreasing within the five-year term of the waiver. This is important to include since receiving water monitoring provides longer-term trends but not short-term improvements or information on sources or amounts of pollution loading. Staff has been unable to "find" conditions of the existing conditional waiver (2004 Agricultural Order) effective with the reported data and information, which include only farm surveys of management practice categories, and cooperative receiving water monitoring. Therefore, a generic request to submit "aggregate data" of general management practice types would be inadequate to verify the adequacy and effectiveness of management practices and other conditions of the Order. To comply with Section 13269 of the Water Code, staff has determined that individual farm information regarding management practice effectiveness, pollution reduction, and characteristics of individual discharges, for the highest risk farms, are all necessary and appropriate to insure the Water Board can determine whether the conditions of the waiver are effective. In some cases, it may be entirely appropriate to collect or report data that is "aggregated" and not based on individual discharges from operations. The Draft 2012 Agricultural Order currently provides for this for appropriate circumstances, such as measuring the effectiveness of local or regional wetland treatment systems involving multiple farms. In such a case, the Water Board would be interested in data from sampling points throughout the treatments system, and the overall effectiveness of the system at some point downstream, rather than discharge data from individual operations. However, the farmers who are*

[55] Administrative Record File No. 337

[56] Administrative Record File No. 374

collaborating on such an effort would likely want to know their individual sources and amounts of pollutant loading to establish a fair and effective management approach. The Draft 2012 Agricultural Order allows dischargers to propose an alternative monitoring or reporting approach, with justification, to the Executive Officer for approval.

The March 2011 Staff Report[57], page 28, justified the draft monitoring and reporting requirements with the following:

To address drinking water protection as the highest priority for the 2011 Draft Agricultural Order, staff included basic groundwater sampling and reporting for nitrate in domestic drinking water wells and primary irrigation well at all agricultural operations. In addition, staff included basic annual reporting for moderate threat operations (Tier 2) to document status and effectiveness of waste discharge control and pollution reduction at operations and due to changes or management practices. For higher risk operations still within Tier 2 (high nitrate loading risk or operations containing or adjacent to 303(d) Listed Waterbodies impaired for sediment, turbidity, or temperature) staff included additional reporting of total nitrogen applied annually and photo monitoring, respectively.

For a limited number of the highest risk operations (Tier 3), staff included more stringent monitoring and reporting requirements related to the effective implementation of irrigation and nutrient management and water quality buffer plans, and individual discharge monitoring to evaluate waste discharge control, effects on receiving water, and progress towards milestones and compliance with the 2011 Draft Agricultural Order.

Staff finds that the recommended monitoring and reporting requirements, are commensurate with the level of waste discharge and threat to water quality with desired focus on the highest water priorities, and are reasonable and appropriate given the severity and magnitude of water quality problems in the agricultural areas of the Central Coast region. Additionally, these types of monitoring and reporting requirements are necessary for compliance and consistency with the Water Code and State Nonpoint Source Policy requirements to include monitoring that demonstrates effectiveness of the Order, protects water quality and makes this type of information available to the public.

"New Part E" proposed submittal of the following information to the Central Coast Water Board[58]:

- A certification that at least 20% of participating farms have been subject to an independent audit that year;
- A Summary of Independent Auditor Reports that must include the following: number of growers and farms participating in the audit, number of growers and farms that failed the audit, and summary of corrective action(s) taken by growers who failed the audit and then subsequently passed;

[57] Administrative Record File No. 228

[58] Administrative Record File No. 344

- A Risk Self-Assessment Summary that summarizes data to the Central Coast Water Board that documents the number of farms and types of risk captured by the third-party program
- Farm Water Quality Plan Summaries, which would be a summary of electronically submitted farm plans in a matrix format that links risk with practices used to protect water quality;
- A list of Dischargers who are in "good standing"; and,
- A list of Dischargers who are not in "good standing."
- Practice Effectiveness Evaluation Summaries, which is a summary of grower practices necessary to reduce risk to water quality and to ensure compliance with water quality standards.

The Central Coast Water Board disagrees that the so-called "Johnston Proposal" deflected proper consideration of the Agricultural Proposal. As noted above, the Central Coast Water Board held a lengthy process providing many opportunities for oral and written comments on drafts, and after each iteration, made changes in the subsequent draft in response to comments. Prior to the final hearing, the Water Board staff prepared detailed written responses to comments received and explained in the response to comments or in the Staff Report why staff was recommending or not recommending changes in response to the comments. The Central Coast Water Board staff also provided similar oral responses to comments at the final hearing. The Central Coast Water Board was presented with the Staff Report, the written comments, the response to comments, and the rest of the record for this matter, and heard oral comments at the numerous workshops and hearings on the matter. At the final hearing, the Water Board staff proposed many changes to the 2012 Order as a result of oral comments made by petitioner and its representatives that were adopted by the Board. The so-called Johnston Proposal was only one of many changes made to the draft Order after the close of the written and oral comment period. See Response to Grower-Shipper Petition Legal Contention B.1 regarding the Johnston Proposal.

B3. Contention: [Section C.1, page 35]. The petitioners contend that in several ways, the findings in the 2012 Order do not support requirements. They contend that the Tiering criteria in Part A are not associated with risk to water quality, and thus are arbitrary.

Response: The Central Coast Water Board disagrees with the contention that the findings contained in the Order and Attachment A to the Order do not support the requirements. Attachment A contains detailed findings regarding the authority and jurisdiction of the Water Board to issue the Order (Paragraphs 1-3, 10-22, 22-32); the environmental setting (Paragraphs 4-9); the water quality conditions leading to the need for the Order (33-116); and issues associated with implementation (Paragraphs 117-140). These findings and the dozens of technical support documents support the need for the Order.

The Central Coast Water Board disagrees with the contention that the Tiering criteria in Part A are not associated with risk to water quality. See Response to Grower-Shippers Petition Technical Contention A1 (see page 7).

B4. Contention: [C.2, page 38] The petitioners contend that Provisions 22 and 23 of the 2012 Order require immediate compliance with water quality standards and leaves dischargers vulnerable to enforcement by the Central Coast Water Board and to citizen suits.

Response: The petitioners misstate the terms of the 2012 Order, by asserting that it requires "immediate" compliance. The 2012 Order does not include the word "immediate" prior to the provisions requiring compliance with water quality standards, as has been stated repeatedly by the Central Coast Water Board and does not require immediate compliance with water quality standards. For example, the March 2012 Staff Report[59] states on page 32 that "there are no defined requirements to specifically meet water quality standards or objectives in runoff or discharges." The September 2011 Staff Report[60] also discusses this on pages 19, 22-23, and 27. The March 2011 Staff Report, Appendix E. Responses to Comments[61], responds to this issue in comment numbers 173, 416, 386, 488, 286, 494, 445, and 393. Several provisions in the 2012 Order clarify the Board's expectation of compliance with water quality standards (see paragraph below).

It is not the intent of the 2012 Order to expect immediate compliance with the water quality standards. It is true that the Water Code requires compliance with water quality standards and the Water Board could have required immediate compliance, but Water Code section 13263(c) allows the use of time schedules to achieve compliance. In addition, the NPS Policy contemplates that dischargers will comply with water quality standards through an iterative process of implementing management practices and improving them over time based on effectiveness monitoring (i.e., the feedback mechanism). The 2012 Order includes time schedules for complying with certain specific tasks and milestones that are not enforceable dates. The 2012 Order, similar to the 2004 Order and orders regulating agricultural discharges issued by other Regional Water Quality Control Boards including specifically, the 2004 Order, and the Conditional Waivers for Discharges from Irrigated Lands for the Central Valley and Los Angeles Water Boards. The makes it clear that dischargers comply by implementing and improving management practices to meet water quality standards. Water Code section 13269 requires that the provisions of a waiver be enforceable, but in this case there is no provision that requires immediate compliance with water quality standards.

Provision 12 on page 15 in the 2-12 Order says "dischargers who are subject to this Order shall implement management practices, as necessary, to improve and protect water quality and to achieve compliance with applicable water quality standards." Several Provisions and Conditions in Part B, starting on page 18, direct how and when to implement management practices to comply with water quality standards. Part G. Time Schedule, Provision 82, page 31, presents time schedules for compliance with provisions, identifies milestones and defines them as indicators of progress, and lists types of information that will be considered to evaluate compliance, including effectiveness of management practices and results of monitoring in surface receiving waters. This Provision does not say compliance depends on surface receiving water quality meeting applicable water quality standards. The milestones were included

[59] Administrative Record File No. 337

[60] Administrative Record File No. 283

[61] Administrative Record File No. 233

specifically to indicate some reasonable indicators of progress towards achieving water quality standards.

Petitioners further contend that immediate compliance is required by asserting the individual surface water discharger and groundwater monitoring requirements were adopted for the purpose of determining compliance with the 2012 Order. This is incorrect because monitoring data alone cannot indicate a grower is in violation of any Provision of the 2012 Order as the Order does not include effluent or receiving water limitations that must be met by any time frame. For example, Provision 51 says monitoring is conducted "...so that the Central Coast Water Board can evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for waste discharge and nitrogen loading and exceedance of drinking water standards, and identify priority areas for nutrient management." It does not say the purpose is to evaluate immediate compliance. The 2012 Order is designed to improve water quality through milestones and management practices that are intended to ultimately result in attaining water quality standards in the receiving waters, but it does not require immediate compliance with water quality standards.

Petitioners cite to *Natural Resources Defense Council v. County of Los Angeles* 2011 WL 2712963 (9th Cir.2011), to support their contention that the 2012 Order requires immediate compliance. The decision is not applicable to the 2012 Order. It involved a citizen suit under the federal Clean Water Act to enforce a provision of an NPDES stormwater permit. The 2012 Order applies to discharges that are not subject to the Clean Water Act. Discharges that are not subject to the Clean Water Act are not subject to citizen suits because the Water Code does not provide for such suits. In addition, the 2012 Order makes clear in several locations, that the Central Coast Water Board expects dischargers to engage in an iterative process to improve management practices where there are exceedances of water quality standards or to undertake additional evaluation to determine the source of exceedances. The provision that was the subject of the NRDC citizen suit , contained no such limitation.

B5. Contention: [C.3, page 41]. The petitioners contend that the 2012 Order includes a number of Provisions that constitute specifying the manner of compliance contrary to Water Code section 13360 including Provisions regarding back flow prevention devices and buffers. The Petition specifically refers to Provision 31, p. 19, Backflow prevention device; Provision 39, p. 20, Maintain existing, naturally occurring, riparian vegetative cover; Provision 40, p. 21, Avoid, minimize and mitigate erosion and discharge of waste where disturbance of aquatic habitat is necessary for water quality improvement; and Provision 80-81, p. 30-31 and Tier 3 MRP, Part 7, p. 20-21. Water Quality Buffer Plan

Response:. The Central Coast Water Board disagrees. These Provisions in the 2012 Order do not improperly specify the manner of compliance. They do not specify a single method, type of technology, piece of equipment or action that must be used to achieve the terms of the Order. Additionally, many of these Provisions specifically state that alternative approaches can be implemented or provide choices of approaches for meeting the conditions.

The State Water Board's Nonpoint Source Program Strategy and Implementation Plan, 1998-2013, states that the Central Coast Water Board has "discretion in deciding what BMPs to encourage through conditional waivers of WDRs." (Nonpoint Source Program Strategy and Implementation Plan, 1998-2013, p. 57.) The State Water Board later reaffirmed a regional

board's right to specific management practices necessary to qualify for a conditional waiver. (*In the Matter of the Petition of California Forestry Association*, Water Quality Order No. 2004-0001, p. 13.) Therefore, the Central Coast Water Board may require specific management practices, such as installing backflow prevention devices or minimizing the presence of bare soil and implementing erosion control and sediment and stormwater management practices, without specifying the manner of compliance in violation of Water Code section 13360. The Central Coast Water Board still provides dischargers with the ability to choose the specific management practice to comply with the Order. Additionally, the State Water Board has also stated that where an alternative to the management practice is allowed, there is no violation of Water Code section 13360. (*Tahoe-Sierra Preservation Council v. State Water Resources Control Board* (1989) 210 Cal.App.3d 1421, 1438; State Board Order WQ 80-19 (In the Matter of the Petitions of Las Virgenes Municipal Water District, et al.); State Board Order WQ 2002-0015 (City of Vacaville 2002 WL 31519380 (Cal.St.Wat.Res.Bd.). Many of these provisions specifically state that alternative approaches can be implemented or provide choices of approaches for meeting the conditions.

Furthermore, where the lack of available alternatives is a constraint imposed by the laws of nature, there is no violation of Water Code section 13360. (*Tahoe-Sierra Preservation Council v. State Water Resources Control Board* (1989) 210 Cal.App.3d 1421, 1438.) While the Central Coast Water Board is not specifying the specific management practices, the Central Coast Water Board does require management practices that are constrained by the laws of nature. For example, in Provision 39, the Central Coast Water Board requires dischargers to maintain riparian areas. While not specifying how dischargers should maintain the riparian areas, the requirement is necessary to protect streambank stabilization and erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support, and wildlife support. Maintaining riparian areas is the only method that will accomplish all of those water quality goals. Dischargers still have the discretion to decide how to maintain riparian areas.

Provision 31 requires the installation of backflow prevention devices but does not specify the type of backflow device. Backflow prevention devices are employed to prevent fertilizers and pesticides applied through an irrigation system from flowing directly back down a groundwater well or to surface water, causing pollution. The Central Coast Water Board expects dischargers to select devices which are appropriate to their irrigation systems and requires compliance consistent with any existing local ordinance and Department of Pesticide Regulation requirements. The use of backflow prevention devices is a standard industry practice recommended by the University of California Division of Agriculture and Natural Resources (UCANR) as a specific "Management Goal " identified as "the best economically achievable technology or process for limiting the movement of nutrients, particularly nitrogen and phosphorus, into ground or surface waters". The Central Coast Water Board received many comments from stakeholders supporting the requirement to install backflow prevention devices, and no comments in objection. For example, see response to Comment No. 137 on page 81 of the March 2011 Staff Report Appendix E - Response to Comments.

Provision 37 requires dischargers to minimize the presence of bare soil and to implement erosion control and sediment and stormwater management practices. This can be accomplished through a variety of methods such as gravel on unpaved roads, vegetative cover, structures to slow or dissipate concentrated water. The dischargers must evaluate their site conditions and

select the most applicable and effective methods to meet the performance standard to prevent erosion and sediment discharges.

Provision 39 requires growers to maintain existing riparian vegetation, and does not dictate how that must be done. The protection of riparian areas is a standard NRCS management practice that helps to protect beneficial uses. The NRCS provides guidance documents to help growers understand the many benefits of riparian areas and standard management practices and conservation methods to protect them. Maintaining existing vegetation does not incur any costs because compliance with this Provision simply requires avoiding actions that encroach on existing, natural riparian areas and remove or impact the vegetation or streambanks. This Provision does not require installation of any equipment, changing the area farmed, technical delineation or characterization of riparian or streambank conditions. This Provision does not prohibit maintenance of riparian areas for flood control or other purposes, and does not preclude other permitted activities. This Provision does not conflict with the Leafy Green Marketing Agreement, which acknowledges that growers must comply with agency requirements to protect riparian habitat.

Provision 40 requires dischargers to "implement appropriate and practicable measures to avoid, minimize, and mitigate erosion and discharges of waste, including impacts to aquatic habitat." This Provision requires "appropriate and practicable measures" but does not state any one particular method. This Provision can be met by avoiding or minimizing current activities that encroach on habitat (e.g., driving along edge of streambanks, clearing vegetation), changing methods of clearing vegetation to less damaging methods (e.g. mechanical versus chemical), establishing set-backs between farming activities and habitat areas, planting vegetation or using other erosion and runoff management features between farming activities and habitat areas. The dischargers must evaluate their site conditions and select the most appropriate and effective methods to meet the performance standard or condition described in the Provision. This is not dictating the manner of compliance. The Central Coast Water Board coordinated with the California Department of Fish and Game (CDFG) to ensure that Provisions 39 and 40 are consistent with CDFG policies to protect fish, wildlife and their habitats (e.g., Fish and Game Code Section 1600-1616, 1800-1802). In addition, the Provisions are also consistent with State Water Board's implementation of the Clean Water Act, Section 401 Certification regulating discharges to and filling of wetlands and the State's Wetland and Riparian Area Protection Policy.

Provision 78 requires growers to report progress towards meeting a Nitrogen Balance ratio (a numeric milestone), as an indicator of reduced nitrogen loading. The ratio is the total number of nitrogen applied to the crop relative to the typical nitrogen uptake value of the crop. Growers have the flexibility to determine the nitrogen uptake based on characteristics of their crop and farm conditions and operations. This enables growers to justify their nitrogen use and/or the level of reduction (or lack of reduction) of nitrogen applied. Petitioners incorrectly claim that Provision 78 dictates the amount of nitrogen a grower can apply to a crop. The condition encourages reduction of nitrogen loading from excess applications of nitrate through required reporting and setting a milestone or measure that serves as a goal to indicate effective nitrate control to improve protection of water quality. See Response to Grower-Shippers Petition Technical Contention A2.

Provision 80 requires development of a "plan" to protect aquatic habitat for dischargers farming directly along a creek already impaired for sediment, turbidity or temperature (a subset of Tier 3 dischargers). The Provision includes conditions to meet, including following the Basin Plan, which says, "A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, shall be maintained, wherever possible, between significant land disturbance activities and watercourses…" The option to determine what the "appropriate width is" or to use "its equivalent" provides a condition to meet and does not specify a manner of compliance. Additionally, Provision 80.b. says, "As an alternative to the Water Quality Buffer Plan…" which provides flexibility to the discharger to demonstrate that existing conditions or methods other than a filter strip as described in the Basin Plan are equivalent or adequately protective. The petitioner only quoted Provision 80.a. in claiming that the Board improperly specified the manner of compliance. Similar to the explanation above for Provision 39 and 40, the discharger must evaluate their site conditions and select the most appropriate and effective methods to meet the performance standard or condition described in the Provision. Petitioners also list Part 7 in the Monitoring and Reporting Program for Tier 3 Dischargers, which describes reporting elements for the Water Quality Buffer Plan, as improperly specifying the manner of compliance. Part 7 also says "…include the following or the functional equivalent, to address discharges of waste…" but does not specify a specific method of compliance. Finally, the 2012 Order provides several years for growers to develop the plan; the plans must be submitted in October 2016.

In addition, the protection of riparian areas is a standard NRCS management practice. The NRCS also provides guidance documents to help growers understand the benefits of riparian areas and standard management practices and conservation methods to protect them. The NRCS lists the multiple benefits of riparian areas, including:

- Riparian areas help control nonpoint source pollution by holding and using nutrients and reducing sediment.
- Riparian areas are often important for the recreation and scenic values. However, because riparian areas are relatively small and occur in conjunction with watercourses, they are vulnerable to severe alteration and damages caused by people.
- Riparian areas supply food, cover, and water for a large diversity of animals and serve as migration routes and stopping points between habitats for a variety of wildlife.
- Trees and grasses in riparian areas stabilize streambanks and reduce floodwater velocity, resulting in reduced downstream flood peaks.

This Provision is reasonable based on its application only to a limited number of farms with the highest risk to water quality (Tier 3 and adjacent to creeks impaired for sediment, turbidity or temperature), flexibility for growers to determine how to comply and several years to develop and submit the plan.

B.6 Contention: The petitioners assert that the water quality buffer plan provision constitutes a regulatory taking contrary to the federal and state Constitutions.

Response: The Central Coast Water Board disagrees that any provision of the 2012 Order would result in a regulatory taking. Water Code section 13269 requires that a waiver of waste discharge requirements be conditional and be consistent with the Basin Plan. The Central

Coast Water Board's Basin Plan contains several implementation plans regarding protection caused by land disturbance activities. In the record for the 2012 Order, the Central Coast Water Board identified the significant impacts on beneficial uses and surface waters due to irrigated agricultural activities and recognized the numerous water bodies listed as impaired in the Clean Water Act section 303(d) list due to pesticides, sediment, and other discharges associated with irrigated agriculture. See March 2011 Staff Report Appendix G.[62] The 2012 Order requires compliance with the Basin Plan provisions to address the impacts associated with irrigated agriculture. A subset of Tier 3 dischargers are subject to a requirement to prepare a "Water Quality Buffer Plan" or alternatives to the Plan [2012 Order Part F, Condition 80-81.]. These conditions are supported in the record and appropriate to protect water quality.

The United States Supreme Court recognized in *Penn Central Transportation Co. v. City of New York* (1978) 438 U.S. 104 that some governmental regulations could create an unconstitutional taking. Petitioners argue that the buffer provision is a taking because the requirement will interfere with the investment-backed expectations of the landowners who operate under the assumption that the buffers and riparian corridors would be put to productive agricultural use. Petitioners also argue that the buffer requirement will deprive landowners of all economically beneficial use of land designated as a riparian area or buffer.

Under *Penn Central*, the Court found that there is no "set formula" for evaluating regulatory takings claims, but that there are several significant factors that have particular significance. (*Penn Central Transportation Co. v. City of New York* (1978) 438 U.S. 104, 124).The first factor includes the economic impact of the regulation on the claimant, and particularly, the extent to which the regulation has interfered with distinct investment-backed expectations. (*Ibid.*) The Court noted that the government may execute laws or regulations that adversely affect recognized economic values. (*Ibid.*) In the zoning context, the Court has upheld land-use regulations that destroyed or adversely affected recognized real property interests where the regulations promote the "health, safety, morals, or general welfare." (*Id.* at 125 (citing *Nectow v. Cambridge* (1928) 277 U.S. 183, 188).) Where the land use regulations promote the general welfare, a diminution in property value, standing alone, is not enough to establish a taking. (*Id.* at 131 (citing *Euclid v. Ambler Realty Co.* (1926) 272 U.S. 365).) The second factor is the character of the governmental action. (*Id.* at 124.) A court will more readily find a taking where the interference with property can be characterized as a physical invasion by the government than when the interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good. (*Ibid.*)

The buffer provision does not create a taking under the Fifth Amendment. Under the first factor, a court will review the economic impact of the regulation. To determine whether the buffer provision denies a landowner the economically viable use of his property, the analysis must review the impact of the requirement on the property as whole. (*MacLeod v. Santa Clara Co.* (1984) 749 F.2d 541, 546 (citing *Penn Central*, *supra*, 438 U.S. 104, 130).) While it is true that the provision may impact investment-backed expectations, the Supreme Court in *Penn Central* noted that the leading cases finding a takings claim and involving investment-backed expectations dealt with statutes or regulations that resulted in the complete destruction of the rights of a person or business. (*Penn Central*, *supra*, 438 U.S. 104, 127-28 (citing *Pennsylvania Coal Co. v. Mahon* (1992) 260 U.S. 393).)The provision does not completely destroy a

[62] Administrative Record File No. 234

landowner's rights or economic viable use of his or her property. The Provisions only applies to a small subset of farms: the Tier 3 farms that are adjacent to or containing a waterbody identified on the 2010 List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment, and only to a small portion of those farms. The majority of agricultural landowners will not be impacted by the buffer provision at all. For the farms that do fall under the buffer provision, the buffer provision will not completely destroy the economic beneficial uses of all of a landowner's property, and in fact will impact only a small portion of a landowner's property. In addition, the 2012 Order allows the dischargers to use alternative means to comply, which may not require a buffer area at all. Therefore, while the provision may have an economic impact to the landowner in limiting the agricultural production on that small portion of the property, it will not eliminate the economic beneficial uses of the entire property.[63]

Furthermore, the character of the buffer provision does not involve a physical invasion by the government and is a public program adjusting the benefits and burdens of economic life to promote the common good. As stated above, the United States Supreme Court expressly stated that land use regulations that promote the public good may severely diminish the property's value and not be considered a taking. (*Penn Central*, *supra*, 438 U.S. 104, 131.) The Court noted that previous cases upheld land use regulations even when they diminished the property values by 75% or greater. (*Ibid.*) In this case, the buffer provision will not significantly diminish property values, as only a small portion of a landowners' property is subject to the buffer provision. Furthermore, the buffer provision promotes the general welfare and public good by improving water quality for impaired water bodies by decreasing the amount of pollutants in runoff from agricultural lands. Because these water bodies are already impaired for temperature, turbidity, or sediment; reducing pollutants in runoff from agricultural lands is a necessary component for improving water quality and removing the water bodies from the Clean Water Act section 303(d) list. As well, Condition 39 of Part B of the 2012 Order also promotes the public good by requiring landowners to maintain existing riparian cover consistent with the Basin Plan. Riparian cover minimizes the discharge of waste and provides effective streambank stabilization and erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support and wildlife support.

Under the factors of *Penn Central*, the buffer provisions and provisions relating to riparian and aquatic habitat protection are not takings under the Fifth Amendment.

B7. Contention: [C.5, page 50] The petitioners contend that monitoring and technical reports exceed the Central Coast Water Board's authority. The Board does not have authority to require the submission of confidential, proprietary information. The Board must explain the evidence that supports the need for the reports and that the burden, including costs, is reasonable.

Response: The Central Coast Water Board disagrees with this contention. The Water Board properly supported the need for reports and identified the legal basis and process to protect confidential information from disclosure. California Water Code section 13269 requires the

[63] The Negative Declaration for the 2004 Order discussed options for implementation of vegetated buffers and noted that in some cases, growers could use those areas for agricultural purposes and that such buffers often provide benefits to farming, not just to the water bodies.

conditions of a waiver of waste discharge requirements to "include, but need not be limited to, the performance of individual, group, or watershed-based monitoring."[64] Further, the Water Code states:

> Monitoring requirements are required to be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. In establishing monitoring requirements, the Regional Board may consider the volume, duration, frequency, and constituents of the discharge; the extent and type of existing monitoring activities, including, but not limited to, existing watershed-based, compliance, and effectiveness monitoring efforts; the size of the project area, and other relevant factors. Monitoring results shall be made available to the public." (Cal. Wat. Code § 13269, subd. (a)(2).)

In addition, California Water Code section 13267 authorizes the Water Board to require dischargers to submit technical or monitoring reports.

The petitioner states that the Water Board does not have authority to require the submission of confidential, proprietary information. The petitioner misstates the law. California Water Code section 13267(b)(2) specifically states that the person furnishing technical and monitoring reports may request that the report or portions of the report that "might disclose trade secrets or secret processes" not be disclosed to the public. However, those "portions of a report shall be made available for use by the state or any state agency in judicial review or enforcement proceedings . . ." Thus, the Central Coast Water Board may require submittal of the information, but must not disclose those portions of a report that might disclose trade secrets or secret processes. The 2012 Order clearly sets forth the process for the discharger to identify reports of portions of reports that might disclose trade secrets or secret processes. The Water Board then keeps those portions confidential.

The technical and monitoring and reporting required by the 2012 Order comply with the Water Code. The purpose of the 2012 Order is to achieve compliance with water quality standards and protection of beneficial uses. The Central Coast Water Board considered Water Code Section 13269 and the NPS Policy, and their monitoring and reporting requirements, within the following context:

- Beneficial uses and water quality criteria and objectives in the Central Coast Basin Plan.
- The significant pollutant loading to groundwater and surface water in irrigated agricultural areas.
- The severe water quality degradation and threat to human health in irrigated agriculture areas.
- The fundamental necessity to show compliance with the 2012 Order, the Basin Plan, and adopted TMDLs.
- The significant range of threat to water quality from the diverse farm operations in the Region.

[64] The Water Board may waive monitoring for discharges that it determines do not pose a significant threat to water quality. Cal. Wat. Code § 13269, subd. (a)(3). The Water Board found that the discharges from agricultural pose a significant threat to water quality, and, therefore, included monitoring.

- Reasonableness and flexibility.

Within this context, the type of monitoring and reporting was a major issue during the Order renewal process. The 2012 Order includes monitoring and reporting Provisions and management practice effectiveness evaluations in farm water quality plans that will indicate whether pollutant loads are decreasing and whether water quality standards are being achieved over time, and does so in a reasonable manner based on threat to water quality.

For many years the State Water Board, the Central Coast Water Board, and various entities, including agricultural dischargers, have been monitoring surface water in the Central Coast Region. This monitoring has provided significant information about the overall severity of water quality degradation the Central Coast Region. However, agricultural dischargers have not been required, as are most other dischargers, to monitor individual discharges to ascertain the quality of the discharge and the impact on water quality. Now, 12 years after significant amendments to Water Code section 13269, the 2012 Order requires very limited individual monitoring of discharges from the highest risk farms to the most impaired water bodies in the Region. The Central Coast Water Board found that several years of measuring indirect indicators did not provide sufficient information to determine compliance with applicable plans, and could not verify the adequacy and effectiveness of the waiver's conditions, as required by Water Code Section 13269. The 2012 Order monitoring and reporting Provisions and management practice effectiveness evaluations in farm water quality plans include similar indirect indicators as in the 2004 Order and add more direct indicators.

The NPS Policy directs Water Boards to issue waste discharge requirements or conditional waivers that hold individual growers responsible for implementing and adapting management practices that effectively control nonpoint sources of pollution, such as fertilizers, pesticides and sediment in irrigated agricultural runoff. The policy specifically requires that any nonpoint source control program include "sufficient feedback mechanisms so that the Regional Water Quality Control Board, the dischargers and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs [management practices] or other actions are required." The 2012 Order monitoring and reporting provisions and management practice effectiveness evaluations in farm water quality plans provide the "feedback mechanisms" for purposes stated in the NPS Policy[65].

The 2012 Order is consistent with the NPS Policy, which makes clear that individual dischargers are responsible for compliance. The conditions regarding monitoring assist the Central Coast Water Board in determining the sources of discharges of waste, which in turn provides a mechanism to directly address the source. See, e.g:

> NPS Policy, page 15: "However, although the direction and efforts of a particular third-party program are being undertaken as a group effort, with group designated or accepted leadership, if the group or third-party fails to follow through on their commitments, any RWQCB enforcement action taken will be against individual dischargers, not the third-party."
>
> NPS Policy, page 15, RWQCB Compliance Assurance:

[65] Administrative Record File Nos. 337, 374 and Administrative Record Reference No. 5

> "Typically, the RWQCBs have regulated individual dischargers, rather than groups of dischargers who are represented by or coordinated through third parties. Individual dischargers, including both landowners and operators, continue to bear ultimate responsibility for complying with a RWQCB's water quality requirements and orders. Generally, under the Porter-Cologne Act, the RWQCBs cannot take enforcement actions directly against non-discharger third parties. As part of the fifth element described above, the RWQCBs will need to explain how significant non-compliance can be addressed in Third-Party Programs. This explanation should include information as to the criteria for measuring program success, what constitutes failure, and the actions that may be taken in response to failure. Individual dischargers need to be informed as to what individual discharger actions or inactions will lead to individual enforcement. This explanation is necessary so that participating dischargers understand the ramifications of non-compliance, even if that non-compliance is by a third party they have selected as their representative. Options short of individual enforcement actions could include RWQCB actions such as changing a program to remove some autonomy, or developing sequential enforcement phases related to triggering events built into the program. Ultimately, the ineffectiveness of a group through which a discharger participates in NPS control efforts cannot be used as an excuse for lack of individual discharger compliance."

These types of Provisions are also necessary to comply with the State Water Board's Environmental Justice Goal, which is to "Integrate Environmental Justice considerations into the development, adoption, implementation and enforcement of Board decisions, regulations and policies." The monitoring and reporting Provisions are based on threat to water quality, especially threat to human health, which is severe in irrigated agricultural areas. In the high risk areas, direct water quality measures and public reporting of the information is reasonable and necessary relative to the increasing costs being transferred to the public to deal with the degradation of beneficial uses, especially drinking water, and the generally greater monitoring requirements in most other Central Coast Water Board programs.

Monitoring and reporting information and farm water quality plans required by the 2012 Order are necessary because the water quality conditions are severe and the data available to the Water Board indicates that in certain areas, water quality is getting worse.

Since the issuance of the initial 2004 Order, the Central Coast Water Board compiled substantial additional empirical data demonstrating severe groundwater and surface water pollution caused by irrigated agricultural practices[66], including the following:

- Large-scale degradation of drinking water aquifers due to nitrate from fertilizer use, and a corresponding increasing risk to public health in areas with intensive irrigated agriculture. The Central Coast Water Board record includes data that shows shallow groundwater is contaminated with nitrate at concentrations up to 15 times the drinking water standard in some areas, and there are domestic wells in the area. The health threat to domestic well owners is severe.

[66] Administrative Record File No. 197

- Widespread surface water and sediment toxicity due to pesticides.
- Widespread degradation and loss of riparian and wetland habitat.
- Widespread degradation of surface waters due to nutrients.

The data show that these problems are severe and getting worse, especially with respect to degradation of drinking water aquifers and the resulting threat to public health in rural areas. The Central Coast Water Board adopted the 2012 Order to require measurable pollutant load reductions to surface water and groundwater, while allowing growers the necessary flexibility to achieve compliance and resolve the severe water quality problems in the agricultural areas of the Central Coast Region.[67,]

Monitoring and reporting information and farm water quality plans required by the 2012Order are also necessary to indicate pollution reduction or improvements in waste discharge control.

The 2012 Order built on and improved the requirements in the 2004 Order (in direct response to input from the public and Central Coast Water Board members at public workshops) to better protect water quality by adding reasonable monitoring and reporting of specific indicators of pollution load reduction or improved waste discharge controls. With the monitoring and reporting and farm water quality plan Provisions, the Central Coast Water Board, the public and the growers will be able to track implementation effectiveness and improvement at a site level and shorter time-frames within the five-year life of the 2012 Order (e.g. annually).[68,]

Throughout the Central Coast Water Board's Order renewal process, the Central Coast Water Board considered the various options for monitoring and reporting, the burden on smaller versus larger farm operations, relative threat to water quality, and the appropriateness of indirect indicators versus direct measures. The Central Coast Water Board considered the type of monitoring and reporting, ranging from the use of indirect indicators of pollutant loading to direct sampling and reporting of water quality and pollutant loading. Examples of the types of monitoring considered are shown in Table 3 below:

Table 3. Types of Indicators and Measures

Types of *Indirect* Indicators	Types of *Direct* Measures
Enrolling in the Order	Monitoring individual surface water discharge
Listing management practices	Monitoring local receiving water monitoring
Paying fees	Reporting chemicals and amounts used
Conducting ambient receiving water monitoring	Monitoring groundwater monitoring
	Conducting soil sampling
	Reporting Annual Total Nitrogen Applied
	Photo-monitoring riparian areas

[67] Administrative Record File Nos. 190, 197, and 337

[68] Administrative Record File Nos. 228 and 337

The Central Coast Water Board determined that they needed more direct measures in the 2012 Order to indicate whether pollutant loads are decreasing over time, whether dischargers are controlling waste discharges and whether water quality objectives are being achieved over time.

The Central Coast Water Board also needs the monitoring and reporting and farm water quality plan requirements because they compel improved waste discharge control. First, they improve the ability and efficiency of the Central Coast Water Board to prioritize farms, geographic areas, water quality problems, and the appropriate Central Coast Water Board follow up actions (e.g., provide technical assistance, require additional monitoring, conduct inspections, review management practices, etc.). This is especially critical in areas where discharges affect drinking water sources and threaten public health. Targeted follow up activities will result in implementation of more effective management practices or waste discharge control, thereby reducing pollution loading and fulfilling obligation under the California Water Code to verify the adequacy and effectiveness of the 2012 Order. Additionally, these Provisions allow increased transparency because the Central Coast Water Board can evaluate the level of compliance or implementation of management practices to control waste discharges or indicators of pollution reduction and report that information to the public.

Secondly, these Provisions compel improved waste discharge control by providing feedback and indicators of effectiveness to the growers who are required to monitor, report and implement management practices. By adding Provisions for monitoring and reporting of the highest priority pollutants and to evaluate effectiveness of management practices in farm water quality plans, growers can better adapt and improve their management practices to reduce pollution loading, especially for nitrate discharges to drinking water supplies and pesticides discharges to impaired surface waters. The Central Coast Water Board specifically included effectiveness evaluation in the farm water quality plan (Provision 44g) for this purpose and because it is promoted by the Natural Resource Conservation Service, US Department of Agriculture Evaluating as a standard farm water quality planning and management practice.

Burden to Provide Information

The burden to provide the 2012 Order monitoring and reporting Provisions and management practice effectiveness evaluations in farm water quality plans is reasonable relative to the documented water quality degradation and the need for the information.

These Provisions are necessary to directly address the following:

- Degradation of drinking water and threats to public health
- Intensive fertilizer applications that load nitrate to groundwater and surface water
- Intensive pesticide applications that cause toxicity in surface waters
- Erosion and sediment discharges caused by on-farm soil exposure and destabilization of streambanks in riparian areas.

They are also necessary to determine the effects of discharges of waste from irrigated lands on water quality, verify the adequacy and effectiveness of the Order's terms and conditions, and to evaluate individual Discharger's compliance with the 2012 Order. The burden for requiring this

information is justified because agricultural discharges of waste have significantly and severely affected water quality and beneficial uses in surface waters and groundwater in the Central Coast Region where the wastes are discharged, and the increasing cost of this pollution is being transferred to the public in terms of water treatment and unknown health effects.

The burden to provide information is reasonable because the Central Coast Water Board scaled the requirements to provide monitoring and reporting information and farm water quality plans based on risk to water quality, and provided flexibility in how to comply with the requirements.

The requirements in the 2012 Order are scaled based on threat to water quality, as with all other Central Coast Water Board programs. For farm operations that present a relatively low threat to water quality (those in Tier 1), the 2012 Order requires primarily indirect indicators (as discussed above), with the exception of the more direct measures of groundwater monitoring (p51) and the standard practice of evaluating and recording effectiveness of management measures in farm water quality plans (Provision 44g). The majority of farm operations in the Central Coast Region are in Tier 1.

For Tier 2 growers (medium threat to water quality) the 2012 Order also requires primarily indirect measures, and a few additional direct measures: groundwater monitoring (Provision 51), photographing riparian areas (Provision 69), and nitrogen applied (Provisions 70-71). The greatest amount of acreage is in Tier 2 which has similar requirements as the 2004 Order plus a few additional requirements for a subset of growers. For Tier 3 growers (highest threat to water quality) the 2012 Order requires some indirect measures and additional, more direct monitoring and reporting measures compared to Tier 2: individual surface water discharge monitoring (Provisions 72-73).

Also, for flexibility, growers have the option of submitting available information or developing their own alternative monitoring proposals based on their site-specific situation in lieu of the 2012 Order requirements. Growers also have the flexibility to choose the most appropriate, site-specific methods and documentation for including effectiveness evaluations of their management practices in their farm water quality plans.

Also, during the Order renewal process, many small, low risk farmers in the Region emphasized that they did not want to be held responsible for the pollution problems caused by high risk operations in areas with severe pollution problems (such as the lower Salinas Valley and lower Santa Maria Valley). The lower risk farmers did not want to be subject to the same level of requirements as higher risk farms, and did not want the cost of the severe pollution problems to be spread out among all farmers. The Central Coast Water Board considered this issue, and ultimately adopted the Tiering structure which scaled requirements based on risk to water quality to be reasonable.

<u>Specific Provisions</u>

<u>Provision 51, MRP Orders: Sections A and B of Part 2, Tier 3 MRP Section B of Part 2, (Groundwater Monitoring and Reporting Requirements)</u>

The Central Coast Water Board strongly recommends retaining this Provision. With respect to groundwater monitoring, the 2012 Order makes clear the purpose of the monitoring, which are

consistent with both Water Code section 13269 and 13267. The benefits of the reports and the costs were specifically evaluated by the Water Board. The 2012 Order requires monitoring of only certain existing wells and for very limited constituents and frequencies. The monitoring provides information about existing conditions, and the Board can use that information to support the implementation of the waiver and its effectiveness.

The Central Coast Water Board provided the following reasons for the groundwater monitoring information: "the Central Coast Water Board can evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for waste discharge and nitrogen loading and exceedances of drinking water standards, and identify priority areas for nutrient management." The Central Coast Water Board's statement that this data will be used to "identify" and "prioritize" means that it will contribute to filling data gaps and improve understanding of shallow groundwater quality conditions throughout the Region. This data will indicate vulnerable areas for increased pollution, opportunities to notify the public where they rely on drinking water with high nitrate levels, and areas where the Central Coast Water Board may consider further evaluation of nutrient management practices at farms in these areas. Without this information, the Central Coast Water Board cannot fulfill its responsibilities to protect water quality by regulating discharges of wastes that are impacting groundwater in the region.

The Central Coast Water Board reported that the burden of providing the information is reasonable as compared to the need for the information. First, the burden of providing the information is minimal: For Tier 1 and 2 growers (all but about 110 out of about 4000 farms) the requirements are to collect two samples from drinking water wells and the primary irrigation well, to be analyzed by a lab that will electronically upload the results to the State Water Board's GeoTracker database, for a cost significantly less than the estimated $1000 for most growers.[69] Sampling groundwater wells for nitrate is not costly and is a standard industry practice recommended by the UCANR as a specific "Management Goal "identified as a "best economically achievable technology or process" for use in nutrient management[70] and ensuring protection of drinking water beneficial uses. Similarly, in a September 2011 presentation to the Central Coast Water Board, UC Davis researcher Dr. Thomas Harter, described groundwater quality data as critical to addressing nitrate in drinking water.

Additionally, the Monitoring and Reporting Program allow a discharger to submit existing nitrate data if the data is less than five years old or there are existing reports on shallow groundwater conditions; this information can be submitted in lieu of collecting new samples if they have this information.[71] For Tier 3 growers, the requirements are to collect two samples in the first year as described above, and annually thereafter.[72] The 2012 Order also allows growers to elect cooperative monitoring and prepare a cooperative monitoring program proposal by March 2013, in lieu of individual well monitoring.

Second, the burden of providing this monitoring information is well justified by the high levels of nitrate in groundwater in agricultural areas, the extensive evidence that agricultural waste

[69] Administrative Record File No. 196

[70] Administrative Record Reference Nos. 31, 216, 227, 228

[71] Administrative Record File No. 375 and 376

[72] Administrative Record File No. 377

discharges from fertilizers are the primary source of nitrate in groundwater, and the need for this information to fill data gaps about shallow groundwater and drinking water in vulnerable areas which was not required by the 2004 Order. Additionally, the requirement for annual reporting by Tier 3 dischargers is reasonable and justified since these growers pose the greatest risk of loading nitrate to groundwater and are already operating where groundwater has been impacted by nitrate loading from these farms, in many cases impairing drinking water significantly.

The Agricultural Proposal submitted by the California Farm Bureau Federation in December 2010 included similar groundwater monitoring with annual sampling of one well on each farm (more than the 2012 Order), but without reporting to the Water Board. The Central Coast Water Board received comments from agricultural stakeholders that were both in support of and in objection to groundwater monitoring. In addition, as discussed in the March 2011 Staff Report Appendix E - Response to Comments and at the March 2012 Board Hearing, the Central Coast Water Board reduced the groundwater monitoring requirements to make the monitoring less costly.

Provision 72 and 73, Tier 3 MRP Part 5 (Individual Surface Water Discharge Monitoring)

With respect to individual surface water monitoring, the record clearly documents the need for the reports and the costs. The Central Coast Water Board is requiring only very few dischargers, those with the most significant threat to water quality, to do individual surface water discharge monitoring. The Provision is consistent with Water Code section 13269(a)(2), which requires the conditions of a waiver include monitoring designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions and with Water Code section 13267(b)(1) regarding the need for the reports and the benefits to be obtained.

Furthermore, the Central Coast Water Board determined that some individual surface discharge monitoring, along with other information on individual farms, is necessary to verify the adequacy and effectiveness of the Order's conditions given the 2004 Order did not include conditions that allowed the Central Coast Water Board to determine individual compliance with conditions of the Order or if and what level of effectiveness was achieved by actions taken to protect water quality. The monitoring will help the Central Coast Water Board evaluate implementation progress, compliance with the 2012 Order conditions, and prioritize areas in need of follow up (e.g., inspections). The monitoring will be one indicator of the effectiveness of management practices, along with nitrogen budgets and pesticide applications, which create a clearer picture of the water quality, the discharger's compliance, and the success of the management practices. The Central Coast Water Board found that the monitoring and reporting requirements will improve the Central Coast Water Board's ability to evaluate implementation progress, compliance with the Order conditions, and prioritize areas in need of follow up (e.g., inspections), and are necessary to reduce the harm to the public from on-going waste discharges from irrigated agriculture.

Like the monitoring program in the State Water Board Order WQ 2001-09 (In the Matter of Pacific Lumber Company), the cost to dischargers to comply with the 2012 Order is outweighed by the benefits that the monitoring provides to the public and the Central Coast Water Board. In addition, the Provision to conduct monitoring is a usual provision for any discharger; agricultural dischargers have generally been subject to very limited monitoring requirements.

The burden of the individual discharge monitoring rests only on the highest risk surface water discharges which represent a fraction of approximately 110 Tier 3 farms discharging to surface waters, many already impaired by nutrients, toxicity, pesticides and sediment from irrigated agricultural runoff. This Provision only applies to a subset of the highest risk growers in Tier 3. The highest risk growers use fertilizers and pesticides most widely or intensively, are near impaired surface water or groundwater and have irrigation and stormwater runoff. The subset of these dischargers who must implement this Provision includes those discharging surface water runoff to waters of the State. While the number of farms in Tier 3 is low relative to the total number enrolled (about 4000), the Tier 3 farms collectively represent about 40,588 irrigated agriculture acres in the Central Coast Region..

The cost estimates for this monitoring range up to several thousands of dollars per year, with the highest costs applying to those with the greatest volume of discharge and the highest risk of discharging toxic chemicals directly into already impaired creeks or estuaries.[73] Similar to the benefits of the groundwater monitoring, this Provision will benefit the environment and the regulatory program because the information will allow the Central Coast Water Board and growers to prioritize and implement actions where they are most needed.

The petitioners also claim that individual surface water discharge monitoring does not bear a reasonable burden to the need for the information based on statements by Dr. Los Huertos. Dr. Los Huertos stated that the on-farm monitoring required in the 2012 Order cannot adequately describe changes in water quality caused by management practices (cause and effect), and does not describe any kind of trend analysis.

The Central Coast Water Board agrees with Dr. Los Huertos' statement, but does not agree with petitioners' resulting conclusion. Regarding Dr. Los Huertos' comment, the 2012 Order does not require a cause-and-effect monitoring program to determine changes in water quality based on changes in management practices, although growers can pursue that type of monitoring effort in lieu of this requirement if they wish. The main reason that the 2012 Order does not require this type of cause and effect analysis is cost. As Dr. Los Huertos noted, the type of cause and effect monitoring he refers to would cost tens to hundreds of thousands of dollars per grower. Instead, the 2012 Order Tier 3 monitoring requirement is to determine presence and absence for critical water quality parameters such as toxicity, pesticides, and nitrate on the highest risk farms so that the Central Coast Water Board and growers can prioritize and follow up on the greatest threats to public health and the environment.

Similarly, the petitioners also state that requiring Tier 2 and Tier 3 dischargers to determine the nitrate loading risk factors for each farm will not provide any benefits as both methodologies are highly simplistic and unlikely to accurately determine nitrate loading risk factors. The Central Coast Water Board recommends retaining the requirement to determine nitrate loading risk factors so that additional provisions in the Order for management practices/pollution reduction measures will only apply to those likely or actually discharging the greatest amounts of nitrate to groundwater and not to all Tier 2 and 3 growers. The nitrate loading risk factors were designed to be used as a screening tool to determine which farms require more intensive and accurate loading management, evaluations and reporting. The Central Coast Water Board found it

[73] Administrative Record File No. 234

reasonable to require this short term investment to assess risk so that additional provisions for management practices/pollution reduction measures would only apply to those likely to or actually discharging greatest amounts of nitrate to groundwater and not to all Tier 2 and 3 growers. See Response to Grower-Shippers Petition Technical Contention A2.

Reference to Documents in the Administrative Record

The following paragraphs describe the documents where the above points were presented in the Administrative Record for the 2012 Order and summarize the evidence contained in these documents about the need and benefits of this information, and the relative burden to provide the information.

Order No. R3-2012-0011[74] and Draft Order No. R3-2011-0006,[75] circulated for public comment, document the purpose of, need for, and benefits of monitoring and technical reports required in several Findings and Provisions. The following list includes the Findings and Provisions that articulate this information and the page and underlined section where these Findings and Provisions appear in the 2012 Order.

Order No. R3-2012-0011:
Page 4, Finding 10
Page 6, Finding 15
Page 6, Finding 16
Page 13, Provision 5
Page 23, Provision 51
Page 28, Provision 69
Attachment A. Additional Findings, Page 41, Finding 2

Legal and Regulatory Considerations
Page 43, Finding 13
Page 44, Finding 17
Page 44, Finding 19

Rationale for this Order
Page 46. Finding 25

Impacts to Water Quality from Agricultural Discharges
Page 48, Finding 34
Page 48, Finding 35
Page 48, Finding 36
Page 54, Finding 58
Page 65, Finding 104
Page 66, Finding 112
Page 68, Finding 121
Page 68, Finding 123

[74] Administrative Record File No. 374

[75] Administrative Record File No. 229

Agricultural Regulatory Program Implementation
Page 71, Finding 139

Part C. Definitions
Page 89, 35

The March 2011 Staff Report[76] justifies the monitoring and reporting requirements on Pages 20, 21, 28, 29. On page 28. This staff report states that the general reasons for requiring the monitoring and reporting are 1) to address drinking water protection through groundwater sampling and reporting for nitrate, 2) to document status and effectiveness of waste discharge control and pollution reduction at operations, 3) to address farms with a high nitrate loading risk or operations containing or adjacent to 303(d) Listed Waterbodies impaired for sediment, turbidity, or temperature, 4) to report on effective implementation of irrigation and nutrient management and water quality buffer plans, and 5) to evaluate waste discharge control, effects on receiving water, and progress towards milestones and compliance. Page 28 also explains the burden of these requirements are reasonable because they are commensurate with the level of waste discharge and threat to water quality, and because the discharges reach waters that already have severe and widespread water quality problems. Finally, Page 28 explains these monitoring and reporting requirements are necessary for compliance and consistency with the Water Code and the NPS Policy- include monitoring that demonstrates effectiveness of the Order, protects water quality and makes this type of information available to the public.

The Introduction to this Staff Report also says, "with respect to protecting human health, staff considers this our top priority. The threat to rural homeowners from nitrates in domestic wells is the most important and challenging issue the Water Board and stakeholders are facing…The 2011 Draft Agricultural Order reflects this priority by including groundwater monitoring and data submittal for all dischargers."[77]

The Staff Report also discusses the burden to provide the information in these requirements. The burden is appropriate because it is scaled to the threat to water quality, ranging from relatively minor monitoring and reporting for low risk operations, to marginally increased monitoring and reporting for higher risk operations. The highest level of monitoring and reporting in Tier 3 is reasonable considering the significant pollution loading to waters of the state, the degradation of beneficial uses, increasing threat to human health, and the extraordinary costs being transferred to the public to deal with this pollution. No other regulated industry causes a similar degradation of beneficial uses, or has such minimal monitoring and reporting requirements.

The March 2011 Staff Report, Appendix D. Options Considered[78] further justifies the monitoring and reporting Provisions. Page 22 and 23 state that the type of ambient, cooperative monitoring associated with the 2004 Order, by itself, cannot be used to characterize sources of impairment at the level of individual discharger, cannot be used to evaluate compliance with the Order by an individual, does not collect information regarding groundwater quality and only collects limited

[76] Administrative Record File No. 228.

[77] Ibid.

[78] Administrative Record File No.194

information regarding terrestrial riparian condition. The 2012 Order addresses these issues. Pages 23 through 29 explain the reasons for and benefits of the different types of monitoring required in the 2012 Order. Page 31 summarizes advantages and disadvantages (including criteria that indicate need, benefit and burden) of the various monitoring options considered. For example, need/benefit is expressed with these criteria: determines receiving water condition, can be used to determine overall effectiveness of the Order, assesses individual compliance with Provisions of the Order, assesses groundwater quality, etc. The burden to provide the information in these requirements is expressed with these criteria: monitoring costs are reflective of operation threat to water quality, tiered structure places individual monitoring costs where risk to water quality is highest.

The March 2011 Staff Report, Appendix G. Water Quality Conditions[79] provides evidence for the water quality conditions. And the March 2011 Staff Report, Appendix F. Cost Considerations[80] provides evidence for the costs estimates.

[79] Administrative Record File No.197

[80] Administrative Record File No.196

SWRCB/OCC FILE NO. 2209(b)

PETITION FROM THE CALIFORNIA FARM BUREAU FEDERATION

AND COUNTY FARM BUREAUS

A. TECHNICAL CONTENTIONS

A1. Contention: [by reference to the Grower-Shippers Petition] Tiering criteria in Part A are not associated with risk to water quality, and thus are arbitrary.

Response: See response to Technical Contention A1 in Grower-Shippers Petition.

A2. Contention: [by reference to the Grower-Shippers Petition] Nutrient-Related Requirements for Tier 2 and Tier 3 Farms/Ranches are inappropriate – Nitrate Loading Risk Factor Determinations are arbitrary; INMP elements and the reporting thereof are improper; Certification of INMPs is impractical and an unnecessary expense; Nitrogen Balance Ratios are improper regulatory compliance standards;

Response: See response to Technical Contention A2 in Grower-Shippers Petition.

B. LEGAL/PROCEDURAL CONTENTIONS

B1. Contention: [A.1., page 14] The petitioners contend that the petitioners' due process rights have been hampered by Central Coast Water Board delays. They stated that since the Water Code allows only 30 days to file a petition, the Central Coast Water Board's release of the final order 12 days after the hearing, the release of the certified CEQA documents on April 10, 2010 [sic, meant 2012], and the release of the transcript on April 13, 2012, prejudiced the petitioners.

Response: The petitioners' due process rights have not been prejudiced. Government Code section 11425.10, subdivision (a)(1), requires that an administrative agency provide "the person to which the agency action is directed notice and an opportunity to be heard, including the opportunity to present and rebut evidence." The Central Coast Water Board provided the petitioners with notice and the opportunity to be heard. See Petition Response Part II, Background. The Central Coast Water Board acted on March 15, 2012 by adopting the 2012 draft Order and associated monitoring and reporting programs, including some changes to those orders, and certified the Subsequent Environmental Impact Statement and associated documents. To the extent there were changes in the Order, nearly all revisions made to the Order at the hearing were in response to comments by the petitioners and other agricultural interests at the March 14, 2012 hearing. The final California Environmental Quality Act documents were not revised at the hearing and were available for several months prior to the hearing in March 2012.

The Central Coast Water Board does not have control over the timing or process for the submittal of petitions to the State Water Board, which is established by law and State Water Board regulations. The Central Coast Water Board, however, provided the final signed orders consistent with normal process.

B2. Contention: The petitioners contend that process flaws regarding the addition of Provisions recommended by Board Member Michael Johnston have substantially prejudiced agricultural stakeholders.

Response: See Response to Grower-Shippers petition Legal/Procedural Contention B1 and B2,

B3. Contention: The petitioners contend that the Final Subsequent Environmental Impact Report (Final SEIR) fails to satisfy the requirements of the California Environmental Quality Act (CEQA), based on numerous arguments, including that the Final SEIR's reliance on the 2004 Order's Negative Declaration was improper; that the project description in the Final SEIR was flawed; that the 2012 Order constitutes a "new project" requiring a full EIR rather than an SEIR; that the Addendum to the SEIR was improper and should have been recirculated; that the Final SEIR's analysis of impacts was inadequate; and that the Final SEIR failed to adequately consider social and economic impacts and cumulative effects.

Response: The Central Coast Water Board disagrees with the contentions. The petitioners greatly mischaracterize the action of the Water Board and the CEQA documents. The Central Coast Water Board provided detailed responses to comments on the Draft SEIR, that are included in the Final SEIR and many of those comments are the same as those made in the petitions.[81] This Response augments the response to comments contained in the Final SEIR.

It is important to note that the purpose of the 2012 Order is to conditionally authorize discharges of waste to waters of the state. The Central Coast Water Board has identified in its record for adoption of the 2012 Order, extremely adverse impacts on water quality due to discharges of waste from irrigated agriculture. The 2004 Order and the 2012 Order impose conditions that, if complied with, will reduce the impact of those discharges on water quality. The petitioners have only identified potential economic impacts of complying with the Water Code as the basis for their CEQA contentions and have not identified any adverse impacts on the environment. The 2004 Order already required dischargers to comply with the Water Code and the Basin Plan; the 2012 Order continues to require dischargers to comply with the Water Code and the Basin Plan.

The Central Coast Water Board is the lead agency under CEQA with respect to adoption of the 2012 Order. In 2004, the Central Coast Water Board adopted the 2004 Order and a Negative Declaration under CEQA. The Negative Declaration included a detailed project description, including the environmental setting, the types of discharges addressed by the 2004 Order, and the conditions of the 2004 Order. It also included an environmental checklist with detailed explanations regarding the potential for environmental impacts. In the Negative Declaration, the Water Board noted the significant ground and surface water quality impacts associated with

[81] See Administrative Record File No. 401 at pages 35-89.

discharges of waste from irrigated lands. A Negative Declaration was adopted because compliance with the conditions of the 2004 Order would result in improvements to the environment, rather than impacts on the environment as dischargers were required to implement management practices to reduce discharges to waters.[82]

As described in the 2004 Negative Declaration, those enrolled in the 2004 Order must meet the following conditions:

1. The Discharger shall not cause or contribute to conditions of pollution or nuisance as defined in CWC Section 13050.
2. The Discharger must comply with all requirements of applicable water quality control plans.
3. The Discharger shall not cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard.
4. Wastewaters percolated into groundwater shall be of such quality at the point where they enter the ground so as to assure the protection of all actual or designated beneficial uses of all groundwaters of the basin.
5. Wastes discharged to groundwater shall be free of toxic substances in excess of maximum contaminant levels (MCLs) for primary and secondary drinking water standards established by the United States Environmental Protection Agency or California Department of Health Services, whichever is more stringent; taste, odor, or color producing substances; and nitrogenous compounds in quantities which could result in a groundwater nitrate concentration (as NO3) above 45 mg/l.
6. The Discharger shall comply with each applicable Total Maximum Daily Load (TMDL), including any plan of implementation for the TMDL, commencing with the effective date or other date for compliance stated in the TMDL. If an applicable TMDL does not contain an effective date or compliance date, the Discharger shall commence compliance with the TMDL's implementation plan no later than twelve months after USEPA approves the TMDL.
7. The Discharger shall allow Regional Board staff reasonable access onto the subject property (the source of runoff and percolating water) whenever requested by Regional Board staff for the purpose of performing inspections and conducting monitoring, including sample collection, measuring, and photographing to determine compliance with conditions of the waiver.
8. The Discharger shall comply with applicable time schedules.
9. This Conditional Waiver does not authorize the discharge of any waste not specifically regulated under this Order. Waste specifically regulated under this Order includes: earthen materials, including soil, silt, sand, clay, rock; inorganic materials including metals, salts, boron, selenium, potassium, nitrogen, phosphorus, etc.; and organic materials such as pesticides that enter or threaten to enter into waters of the state. Examples of waste not specifically regulated under this Order include hazardous materials, and human wastes.
10. Objectionable odors due to the storage of wastewater and/or stormwater shall not be perceivable beyond the limits of the property owned or operated by the Discharger. [83]

[82] Administrative Record File No. 401 at pages 101-138.

[83] Administrative Record File No. 401 at page 116-117.

In accordance with Water Code section 13269(a)(2), a waiver of waste discharge requirements may not exceed five years but may be renewed. In anticipation of renewing the 2004 Order, Water Board staff conducted significant public participation activities, including activities to comply with CEQA. In December 2008, staff organized the agricultural advisory group, and met with that group through fall of 2009, utilizing a facilitator for most of the joint meetings. Beginning in November 2009, Central Coast Water Board staff engaged in sessions with interested persons, including representatives of agriculture, environmental groups, and community groups. On May 12, 2010 and July 8, 2010, the Central Coast Water Board held public workshops to provide information and an opportunity to comment on renewal of the 2004 Order. In February 2010, Central Coast Water Board staff released a preliminary staff draft order (2010 Preliminary Draft Order) and provided an opportunity for comment. Following release of the February 2010 Preliminary Draft Order many interested persons submitted proposed alternatives and comments. From November 2009 to February 2011, the Central Coast Water Board staff participated in more than 37 public and private meetings with interested persons and public agencies to discuss and receive information about renewal of the 2004 Order. On November 19, 2010, the Water Board staff noticed for comments the November 2010 draft Order that was a revision of the February 2010 Preliminary Draft Order.

To comply with CEQA, the Water Board staff considered whether it could continue to rely on the Negative Declaration or must prepare some additional documentation under CEQA. Water Board staff consulted with responsible and trustee agencies and held a CEQA scoping meeting on August 16, 2010 to get input on whether the preliminary proposed changes to the 2004 Order would require additional CEQA documentation. The Water Board staff then prepared a draft order, called the 2011 draft Order. The conditions of the 2011 Draft Agricultural Order were compared to the 2004 Order for purposes of evaluating potential environmental impacts. The 2011 draft Order would continue similar conditions to the 2004 Order. Like the 2004 Order, the 2011 draft Order would require all dischargers to comply with water quality control plans, not cause or contribute to exceedances of water quality standards, protect groundwater for its beneficial uses, not cause groundwater to exceed drinking water standards, protect riparian areas, comply with TMDLs, and submit reports. The 2011 draft Order also included the requirement to complete an education program, prepare and implement a Farm Plan describing management practices to control discharges of waste, and perform individual water quality monitoring or participate in a cooperative monitoring program. The 2011 draft Order included some more specific requirements to protect groundwater, additional monitoring requirements and included a different tiering structure to focus on the discharges that posed higher risk to waters.

The CEQA Guidelines set forth regulations that are considered in determining whether a subsequent environmental impact report must be prepared. See Cal. Code Regs, tit. 14, §15162, subd. (a)(1). The Water Board staff reviewed the 2004 Negative Declaration and prepared a new environmental checklist to evaluate whether an SEIR was required under the CEQA Guidelines. Water Board staff determined, based on the proposed changes and the comments received during the scoping phase, that the proposed revisions to the 2004 Order could result in an increase in the severity of certain previously identified environmental effects. Members of the public suggested that implementation of some of the proposed new conditions could result in removing land from agricultural use either to install riparian buffer strips or due to financial impacts that make farming not economical. Some public agencies suggested that implementation of some of the proposed new conditions could result in reduced flows in surface

water that could impact aquatic habitat. These environmental effects were previously evaluated in the Negative Declaration for the 2004 Order and were found at that time not to be significant. However, to provide full information, the Water Board concluded that to support adoption of a renewed Order, a subsequent environmental impact report was appropriate as set forth in the CEQA Guidelines (Cal. Code Regs., tit 14, § 15162(a)(1)) to evaluate potentially significant environmental effects that could result from revisions to the 2004 Order.

The Water Board staff issued a notice of preparation to the Office of Planning and Research and to each responsible and trustee agency in compliance with the CEQA Guidelines (Cal. Code Regs., tit.14 § 15082(a)(1). Concurrently with the public notice of the November 2010 draft Order, the Central Coast Water Board provided notice and an opportunity to comment on the Draft SEIR.

On February 3, 2011, the Central Coast Water Board held a workshop to allow for public comment on the November 2010 draft Order[84]. The Water Board reopened the written comment period to allow agricultural representatives to submit additional documents and provided for additional written responses to these new documents. In response to these additional documents, the Water Board staff proposed additional revisions in the September 2011 Draft Order. On date, the Central Coast Water Board staff considered whether revisions of the September 2011 Draft Order made in response to comments required recirculation of the Draft SEIR pursuant to the CEQA Guidelines and concluded that it did not since such changes would not result in new potentially significant environmental effects not already considered.[85] The Water Board prepared an Addendum to the SEIR with the minor changes.[86] On March 15, 2012, the Central Coast Water Board certified the Final SEIR.

B4. Contention: The petitioners contend that the Final SEIR's reliance on the 2004 Negative Declaration and initial study was improper because the 2012 Order was a new, separate project and that only a "fair argument" must be made to require preparation of an EIR.

Response: The petitioners are incorrect. The adoption of the 2012 Order is not a new or separate project from the 2004 Order. As described in the Final SEIR, the 2012 Order is a renewal of the 2004 Order in compliance with Water Code section 13269. It applies to the same geographic area, the same discharges and dischargers, and includes essentially the same conditions as the 2004 Order. Dischargers must continue to comply with the Water Code, including complying with water quality standards, complying with the Basin Plan (including protecting riparian areas), protect groundwater and surface water, develop and implement management practices to protect water quality, and prepare reports and conduct monitoring.

[84] Administrative Record File Nos. 214 and 215.

[85] Administrative Record File No. 402 at pages 24-26.

[86] Note that the CEQA Guidelines provided for an "Addendum" to a previously certified EIR if some changes are needed but a subsequent EIR is not required by section 15162. (14 Cal. Code Regs. §15164.) The Water Board agrees with the petitioners that the revision to the Draft SEIR was not actually an "Addendum" as that term is used in section 15164. The real question is whether the Water Board was required to recirculate this revision to the Draft SEIR. According to the CEQA Guidelines, the Water Board was not required to recirculate the "Addendum" because the new information did not identify substantial adverse environmental effects of the project. See tit. 14 Cal. Code Regs. §15088.5(a). The revised draft 2011 Order reduced the number of acres/farms that would be affected by provisions regarding buffers, which would reduce adverse environmental impacts, if any, related to economics.

The most significant revisions are that the 2012 Order include new conditions that all dischargers must conduct some groundwater monitoring, all dischargers must install backflow prevention devices as specified, and subsets of Tier 3 dischargers must prepare and implement a water quality buffer plan or alternative, prepare and implement an irrigation and nutrient management plan, or conduct additional monitoring, including individual surface water monitoring, photo monitoring, and nitrate monitoring depending on their individual circumstances. The differences between the 2004 Order and the 2012 Order do not constitute an entirely new project.

The Central Coast Water Board did exactly what CEQA contemplates. The Water Board reviewed the previous CEQA document, considered the changes proposed to be included in the 2012 Order and evaluated whether those changes required a subsequent EIR. CEQA discourages the preparation of additional CEQA documentation for related projects. The CEQA Guidelines specify that when an EIR or negative declaration has been prepared, no additional EIR shall be prepared except in these circumstances: (1) if subsequent changes are proposed which will require important revisions of the previous EIR or negative declaration due to the involvement of new significant environmental impacts not considered in the previous EIR or negative declaration, (2) if substantial changes occur with respect to the circumstances under which the project is undertaken which will require important revisions of the previous EIR or negative declaration due to the involvement of new significant environmental impacts not covered in the previous EIR or negative declaration, or (3) if new information of substantial importance to the project becomes available. (Cal. Code Regs., tit. 14, § 15162, subd. (a).)

Whether the Central Coast Water Board was required to prepare a subsequent EIR is subject to a "substantial evidence" test, not a "fair argument" test.[87] There are a number of court decisions that address whether a subsequent EIR is required.[88] Where the modified project has the same or similar impact as the existing project, no new environmental review is required.

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[87] See *Bowman v. City of Petaluma*, 185 Cal.App.1065. (The fair argument test does not apply to determining whether a subsequent EIR is required.) See also *Fund for Environmental Defense v. County of Orange*, 204 Cal.App.3d 1538. See also *Save Our Neighborhood v. Lishman*, 140 Cal.App.4th 1288, 1296 (2006 case) (time for challenging the sufficiency of the original document has expired, have circumstances changes justifying repeating the process? Citing *Fund for Environmental Defense*. The standard of review is "whether the record as a whole contains substantial evidence to support a determination that the changes in the project [or its circumstances were not so 'substantial' as to require 'major' modifications to the EIR."] *Bowman* at pg. 1075 quoted in *Fund* at p. 1545

[88] See *Mani Brothers Real Estate Group v. City of Los Angeles* (2007) 153 Cal. App.4th 1384**. ("**The focus of CEQA, both procedurally and substantively, is "solely ... the potential environmental impacts of a project." (*Maintain Our Desert Environment v. Town of Apple Valley, supra, 124 Cal.App.4th at p. 445.*) Labeling a project a "new" project, as distinguished from a "modified" project, and finding such a label determinative, as the court did in *Save Our Neighborhood*, imposes a new analytical factor beyond the framework of CEQA. Particularly here where there is a previously certified EIR, changes in the size, ownership, nature, character, etc., of a project are of no consequence in and of themselves. Such factors are meaningful *only* to the extent they affect the environmental impacts of a project. Thus, in the present case, we must hark back to *section 21166* and the mandate in the Guidelines that an SEIR need not be prepared unless "[s]ubstantial changes are proposed in the project which will require major revisions of the previous EIR ... *due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects*." (*tit. 14 Cal. Code Regs. §15162, subd. (a)(1)*, italics added.)

The Central Coast Water Board is only required to evaluate the environmental ramifications of a substantial change in the project not considered in the original document.[89]

The petitioners contend based on the "fair argument" test, that the commenters have demonstrated that the preparation of an entirely new EIR is required. That is not the case. The cases cited by the petitioners generally address whether an EIR was required at all, not whether an agency is required to prepare a subsequent EIR.[90] In this case, the Central Coast Water Board considered revisions to the 2004 Order, for which it had prepared a Negative Declaration. The Central Coast Water Board determined that subsequent changes were proposed to revise the 2004 Order that may require revisions of the CEQA document due to the involvement of new significant environmental impacts not considered in the 2004 Negative Declaration. The Central Coast Water Board, based on comments and preparation of a revised checklist/initial study, determined that the potential conversion of prime farmland due to buffer provisions and potential impacts of reduced flows on aquatic habitat required further evaluation. A subsequent EIR may be limited in scope to the environmental impacts that are different than under the previous action, in this case the 2004 Order.[91] The Central Coast Water Board prepared an SEIR to address those areas.[92]

Prime Farmland: The CEQA Guidelines provide a sample checklist (Appendix G) that public agencies may use to prepare an initial study. Until May 1997, the former Appendix G (checklist) identified kinds of impacts that were "normally considered significant." The former Appendix G was interpreted to create a rebuttable presumption that the impact was significant.[93] In October 1998, the Resources Agency repealed former Appendix G, which had consisted of a list of "Significant Effects." The current Appendix G is a sample initial study checklist. The current checklist does not function like the pre-1997 checklist. The checklist cannot require an agency to find that a loss of prime agricultural land will normally be a significant effect on the environment, as was the case under the old Appendix G prior to May 1997 (see former Appendix G, subd. (y)).[94]

The Central Coast Water Board addressed the issue of conversion of prime farmland in the Negative Declaration for the 2004 Order. With respect to the Williamson Act, the 2004 Order included the following response.

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[89] See, ibid, *Fund for Environmental Defense* at p. 1544.

[90] Even if the "fair argument" standard applied, the Petitioners have not met that standard. The Water Board analyzed the potential impacts identified by the petitioners. The existence of a "public controversy" is not sufficient to trigger an EIR. See *Citizens Association for Sensible Development of Bishop Area v. County of Inyo (1985) 172 Cal.App.3d 151, 173*,

[91] "Even a substantial increase in the severity of an environmental impact does not require … the preparation of a [subsequent EIR] if mitigation measure are adopted which reduce the impact to a level of insignificance." *River* Valley , 37 Cal.App. 4th 154, 168, *Gentry v. City of Murrieta* (4th Dist. 1995) 36 Cal. App. 4th 1539, 1376 – 1382 [initial study need not always refer to evidence to support each and every findings concerning impacts], see page 1379

[92] Administrative Record File No. 401.

[93] *Quail Botanical Gardens Foundations, Inc. v. City of Encinitas* (4th Dist. 1994) 29 Cal.app.4th 1597, 1604.

[94] See also *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water District* (2004) 116 Cal. App. 4th 396.401 (Appendix G . . . *recommends* that the lead agency consider certain questions)(italics added).

> *CEQA only addresses conversion to non-agricultural use of farmland that is prime, unique or of statewide significance. These terms are defined by the Williamson Act, California Government Code Section 51200 et seq. The Regional Board does not disagree with the Farm Bureau's statistics on the acreage within the Region that fits within these definitions or that California has experienced a loss of farmland. However, BMPs do not constitute a non-agricultural use. Rather, these terms contemplate development of farmland. Discharges that violate water quality objectives are illegal under existing law. Regulation through waste discharge requirements would result in far greater costs than the waiver. Also, as explained below, the proposed waiver does not require sedimentation basins or other measures that eliminate all runoff in a 25-year storm event.*[95]

The 2011 draft Order included a condition that would require Tier 3 discharges with farms adjacent to a waterbody identified on the 2010 list of impaired waterbodies as impaired for temperature, turbidity, or sediment to submit a water quality buffer plan or an alternative showing that water quality is being protected. See 2011 Draft Order (Sept. 11, 2011), Provision 80. The Central Coast Water Board considered the comments and evidence, including analysis of likely methods of compliance with that provision to conclude that if all dischargers established a vegetated buffer (assuming that a vegetated buffer in fact converts prime farmland as suggested), approximately 82 to 233 acres or 0.002 to 0.004% of the 540,000 acres of agricultural lands within the Region, would be taken out of production. The 2011 draft Order was revised in response to comments to change the criteria regarding tiers, but the number of acres that would be in Tier 3 remained similar. Thus, the number of acres subject to the buffer requirement remained about the same and there was no need to revisit the SEIR's conclusions.[96] The small percentage of total acres was considered to be less than significant, particularly given that the establishment of a vegetated buffer would actually result in a beneficial, rather than an adverse, impact on the environment.

The petitioners point to comments suggesting that the use of buffers would have significant economic impacts and result in conversion to development. Based on the location and the nature of the areas where vegetated buffers would be appropriate, the Central Coast Water Board concluded that conversion to development seems unlikely and speculative, particularly when considering the many other decisions and approvals that would need to occur for such a scenario to take place. The CEQA Guidelines specify that economic and social effects of a project shall not be treated as significant effects on the environment. (14 Cal. Code Regs, § 15131, subd. (a).) There needs to be a cause and effect from a decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The 2004 Order required dischargers to implement management practices to protect water quality, including protection of riparian areas. Comments on the 2004 Negative Declaration also suggested that the Order would result in adverse economic or social changes. Such changes have not occurred. The 2012 Order requires compliance with the same requirements – implement management practices to meet water quality standards, including protection of riparian areas. The difference is that the 2012 Order is more specific for the small subset of Tier 3 farms with respect to buffers. The SEIR

[95] Administrative Record File No. 401.

[96] Administrative Record File No. 402 at pages 25-26

concluded that given the very small percentage of land that could be affected by the change between the 2004 Order and the 2012 Order, the change would not result in new significant environmental effects.

The Final SEIR, even though it concluded that the requirements regarding vegetative buffers would not result in significant adverse impacts on the environment, the FEIR identified possible mitigation measures that could be implemented to reduce impacts caused by the creation of vegetated buffer.

Reduced Irrigation Water Discharges. The Central Coast Water Board considered whether the conditions of the 2004 Order would result in reduced flows in surface water and whether that would create a potentially significant adverse environmental impact. The Negative Declaration for the 2004 Order states:

> *Many of the waterways in the Central Coast Region that are dominated by agricultural tail water have very little riparian vegetation. Even in undisturbed creeks, riparian vegetation can routinely survive periods of intermittent or no surface flow because of underflow and shallow groundwater in channel. In areas where underflow or surface flow is diverted for irrigation purposes, management practices which reduce irrigation runoff usually reduce water use as well, retaining more natural flow in-stream or in shallow creek underflow areas. Irrigation tail water is known to carry high levels of chemicals, including pesticides, herbicides and salts, to creeks and rivers in our Region. At high concentrations, even nutrients can be toxic to some species. None of these chemicals are beneficial to riparian corridors or the aquatic and terrestrial life they support. Unless tail water is free of these chemicals, it is unlikely that benefits gained from quantity of discharge outweigh impacts resulting from chemicals carried by the discharge. Staff does not agree that reduction in quantity of tail water is a potentially significant impact, and in fact regards it as one of the key management practices for achieving water quality improvement. Because specific management practices are not being mandated by this program, it is not possible to predict what hydrologic effects might take place. Any specific project that causes significant hydrologic impacts must address those impacts as part of project CEQA compliance.*[97]

In conducting the initial study for the 2012 Order, the Central Coast Water Board concluded based on comments from state and federal environmental agencies that new conditions could have a potentially significant impact on the environment due to the potential for reduced flows and prepared a subsequent EIR. The Central Coast Water Board, therefore, prepared a subsequent EIR to evaluate those impacts.

B5. Contention: The petitioners contend that since the 2012 Order includes "new regulatory concepts," "increases the scope of regulatory coverage," was expanded to "cover all irrigated lands growing commercial crops, requires new monitoring and reporting requirements and encompasses regulation of all discharges to surface waters and groundwater, including tile drains and storm water" it is a "new project." In addition, the petitioners state that the 2004 Order did not require maintenance of riparian areas, contain structures to avoid percolation,

[97] Administrative Record File No. 401.

groundwater monitoring, nitrogen reporting, individual surface water monitoring, photo monitoring, nutrient management, nitrate balance ratio, buffer plans, or riparian buffers/filter strips."

Response: The petitioners mischaracterize the 2004 Order and the changes to the 2012 Order. The 2004 Order did in fact have tiers, applied to all irrigated lands growing commercial crops, required monitoring, applied to discharges to groundwater and surface water, regulated discharges from tile drains and storm water, required that containment structures must be operated to prevent percolation that violated water quality standards, required surface water monitoring, and required protection of riparian areas. The Water Board agrees that the 2012 Order requires new groundwater monitoring for all dischargers and additional conditions for a subset of those in Tier 3, including individual surface water monitoring, photo monitoring, irrigation and nutrient management plans, nitrogen balance ratio milestones, and water quality buffer plans. Tier 2 and 3 dischargers must submit an annual compliance form, which is quite similar to the 2004 Order's requirements. These new or revised conditions do not constitute a new project as described above. They augment the 2004 and the changes have been evaluated under CEQA.

B6. Contention: The petitioners contend that the Final SEIR contains an inadequate project description and that changes made to the 2011 Draft Agricultural Order after the public comment period required recirculation of the SEIR.

Response: The Central Coast Water Board disagrees. Both the 2004 Negative Declaration and the 2012 Final SEIR contain a detailed description of the project.[98] The petitioners mischaracterize the 2012 Order and identify many of the conditions of the 2012 Order as new when they are essentially the same as the 2004 Order. As described in the Final SEIR, the 2012 Order is a renewal of the 2004 Order in compliance with Water Code section 13269. It does not increase the scope of regulatory coverage; it applies to the same geographic area, the same discharges and dischargers, and includes essentially the same conditions as the 2004 Order. Dischargers must continue to comply with the Water Code and achieve water quality standards by developing and implementing management practices and must comply with the Basin Plan (including protecting riparian areas), must protect groundwater and surface water, develop and implement management practices to protect water quality, and prepare reports and conduct monitoring. Like the 2004 Order, dischargers must manage containment structures to prevent or avoid percolation to groundwater that violates water quality standards.

It appears from the comment that the petitioners may not have realized that they 2004 Order required protection of groundwater and management practices to control discharges from tile drains and stormwater or that it required compliance with the Basin Plan, including protection of riparian areas. The most significant revisions are that the 2012 Order includes new more specific conditions. To comply with the 2004 Order many dischargers already implement many of these conditions. For example, many dischargers already conduct groundwater monitoring, already have installed backflow prevention devices, already protect riparian areas to minimize discharges to surface water, implement nutrient and irrigation management and monitor for nitrate. The 2012 Order requires that all discharges must conduct some groundwater

[98] Administrative Record File No. 401.

monitoring, all discharges must install backflow prevention devices as specified, and different subsets Tier 3 dischargers must prepare and implement a water quality buffer plan or effective alternative, prepare and implement an irrigation and nutrient management plan, and conduct additional monitoring, including individual surface water monitoring, photo monitoring, and/or nitrate monitoring.

The petitioners have not identified any potentially significant new environmental impacts that might occur as a result of revisions made to the 2011 draft Order after the public comment period. The changes did not constitute a brand new alternative as described by petitioners nor dramatically change the project. The revisions to the 2011 draft Order were made in response to comments, many by the petitioners, and generally resulted in less stringent provisions than the original 2011 draft Order. None of the changes identified by the petitioners will result in new potentially significant environmental effects requiring revisions and recirculation of the SEIR. Change in criteria for distinguishing the three tiers, including definition changes and acreage, did not create new potential adverse environmental impacts. If the petitioners are suggesting that the changes would result in different economic impacts, they are incorrect. Approximately the same number of farms would be in each tier[99] and the dischargers must still implement management practices and comply with the conditions that were already analyzed under CEQA. The 2012 Order will result in improved water quality and increased protection of the environment.

Contrary to the petitioners' assertions, the petitioners were provided extensive and "meaningful" opportunities for public comment leading to the adoption of the 2012 Order. See Response to B3 above and Response to Grower-Shippers Petition Legal/Procedural Contentions B1 and B2.

B7. Contention: The petitioners contend that the Central Coast Water Board failed to evaluate potentially significant environment effects. Specifically, they content that the 2012 Order would result in the lost off agricultural lands due to the cost of compliance, buffer requirements, restrictions on the use of tile drains that would make the land unusable.

Response: The Central Coast Water Board disagrees. The Water Board complied with the CEQA Guidelines by preparing an SEIR for certain impacts based on comments and information that the proposed revisions to the 2004 Order might result in adverse economic and social impacts. The petitioners point to comments regarding cost of compliance, riparian areas, buffers, conflicts with leafy green and food safety requirements, use of tile drains, and enforcement as having potential impacts. The SEIR identified the requirements associated with buffers as having the potential to result in economic impacts, but concluded that the impact would be insignificant because the amount of acres of the total acres potentially subject to the condition (small subset of Tier 3 dischargers) was very small and that to the extent dischargers implemented riparian buffers, the environmental impact would be beneficial, not adverse. The commenters suggested that the impacts would be significant but provided no evidence, other than speculation that the impacts would be significant. The 2012 Order does not conflict with Leafy Greens Marketing Act (LGMA) and food safety requirements[100]. The possibility of enforcement under the Water Code is not an environmental impact. The 2012 Order does not

[99] Administrative Record File No. 402, pages 25-26.

[100] Administrative Record File No. 286, pages 5-8.

place limits on the use of tile drains. Dischargers are required by the Water Code to protect water quality.

B8. Contention: The petitioners contend that the Central Coast Water Board failed to comply with timelines to file a notice of determination and that interferes with interested stakeholder's right to judicial review.

Response: The Central Coast Water Board agrees that it filed the notice of determination (NOD) more than 5 working days after the certification of the FEIR and the adoption of the 2012 Order. As stated in the CEQA Guidelines, the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA. See tit. 14, Cal. Code Regs. § 15094, subd. (g). In this case, the failure to file the NOD within 5 working days of the approval of the project for which the subsequent FEIR was prepared did not interfere with interested stakeholder's right to judicial review. Water Code section 13330(c) states:

> "The time for filing an action or proceeding subject to Section 21167 of the Public Resources Code for a person who seeks review of the regional board's decision or order under Section 13320, or who seeks reconsideration under a state board regulation authorizing a petition for reconsideration, shall commence upon the state board's completion of that review or reconsideration.

Thus, even though the NOD was filed a few days late, it does not affect the petitioner's right to judicial review under CEQA as the Water Code provides for judicial review following the State Water Board's review of the petition.[101]

B9. Contention: [part C.1. page 53] The Central Coast Water Board applied an arbitrary and capricious standard in drafting the 2012 Order. The Board stated as a purpose of the Order that it focused on the "highest water quality priorities and maximize water quality protection," contrary to Water Code section 13000, 13241, 13260.

Response: The petitioners mischaracterize the actions of the Central Coast Water Board. The quoted finding was merely stating that the Central Coast Region considers addressing discharges from agriculture to be a high priority due to the significant water quality impacts associated with such discharges. The purpose was not to create a new standard for regulating such discharges. The 2012 Order was issued pursuant to Water Code section 13269 and is consistent, as required by law, with applicable plans and policies of the State Water Board and

[101] Even if the CEQA statute of limitations applied it would not affect the petitioner's rights. See *Royalty Carpet Mills, Inc. v. City of Irvine*, 125 Cal.App.4th 1110 (2005) ("here, the City filed a notice, albeit more than five working days after the Project was approved. A leading treatise in this area of the law argues that in such a case, the 30–day limitations period runs from the date the notice is posted. (2 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont.Ed.Bar 2003) § 23.21, pp. 937–938.) Here, the notice was posted one day late. Therefore, the time for filing the petition should have been extended one day, with service still required 10 business days after the filing. This extension does not affect our analysis." Id. fn 8.)

the Central Coast Water Board. The 2012 Order does not impose any conditions that are more stringent than authorized by the Water Code.[102]

The 2012 Order requires dischargers to implement management practices to control discharges such that water quality standards are met in the receiving water. If a discharge does not impact water quality, the discharger is not required to implement any management practices to address that discharge.

B10. Contention: [Part D, page 55] The petitioners contend that the Central Coast Water Board failed to consider economics in compliance with Water Code sections 13141 and 13241.

Response: The Central Coast Water Board disagrees with the contentions. Water Code section 13141 is not applicable to the adoption of a waiver of waste discharge requirements for discharges of waste from irrigated lands. The first sentence of section 13141 does nothing more than provide an effective date for various plans and policies to become part of the California Water Plan. The requirement to indicate the costs and financing sources of an "agricultural water quality control program" in a basin plan before "implementation" of the program is simply an exception to the general Provisions of the first sentence. Statutory requirements must be read in context. (*Voices of the Wetlands v. State Water Resources Control Bd.* (2011) 52 Cal.4th 499, 128 Cal.Rptr.3d 658, 672-673.) Nothing in section 13141 supersedes the requirement that all waste dischargers must obtain waste discharge requirements or waivers. Nor does section 13141 supersede the enforcement remedies available for unpermitted discharges. (See, e.g., Wat. Code §§ 13264, subd. (b); 13265.)

Section 13141 does not define "agricultural water quality control program." However, the issuance of a waiver or waste discharge requirements does not constitute the adoption of a "regulatory program"; rather it provides authorization to discharge waste in compliance with conditions. Section 13141 is part of Chapter 3 of the Porter-Cologne Act, which authorizes the State Water Board to formulate state policy for water quality control and establishes related powers and duties of the State Water Board. The relevant powers and duties of the regional water boards, are in Chapters 4, articles 1-2 (general powers and duties), article 3 (basin plan requirements) and article 4 (waste discharge requirements and waivers). A regional water board's issuance of a general waiver, one or more general WDRs, or site-specific WDRs for all dischargers is not the "implementation" of an "agricultural water quality control program" within the meaning of section 13141.

The Porter-Cologne Act requires waste dischargers to submit reports of waste discharge and obtain waste discharge requirements or waivers. (Wat. Code, §§ 13260, 13263, 13269.) The 1999 amendments to section 13269 (Senate Bill 390) require waivers to be conditional and imposes specific requirements for agriculture waivers. S.B. 390 evidenced a clear legislative

[102] Water Code section 13000 does not impose an affirmative duty on the Board to consider the statements of legislative intent found in section 13000. See *City of Arcadia v. State Water Resources Control Board* (2011) 191 Cal.App.4th 156, 176.) A statute containing "a general statement of legislative intent…does not impose any affirmative duty that would be enforceable…." (*Shamsian v. Department of Conservation* (2006) 136 Cal.App.4th 621, 640-641; see also *Common Cause v. Board of Supervisors* (1989) 49 Cal.3d 432, 444 ["the precatory declaration of intent expressed in the statute must be read in context" and "cannot be viewed as independently creating substantive duties…in addition to those imposed by the regulation"].)

intent that the Water Boards must impose substantive requirements on discharges from irrigated lands.

Water Code section 13241 also does not apply to the adoption of waivers of waste discharge requirements. Water Code section 13269 authorizes the Board to waive the requirements of subdivision (a) of section 13263, which includes the reference to section 13241. The 2012 Order waives the requirement to comply with subdivision (a) of section 13263.

Water Code section 13269 does not address economics, however, the Central Coast Water Board did, in fact, consider economics consistent with Water Code sections 13141 and 13241. Appendix F to the March 2011 Staff Report to the Board includes a detailed analysis of the types of management measures that dischargers might use to comply with the 2012 Order and the associated costs of such measures.[103] That Appendix is not intended to suggest that dischargers must use all those methods, but rather, merely to provide an estimate of costs for the various likely measures growers might use. The Staff Report also includes information about potential sources of funding. In addition, the Central Coast Water Board has adopted several Basin Plan amendments that set forth an estimate of costs and sources of funding for implementation programs associated with the establishment of Total Maximum Daily Loads.

The Central Coast Water Board greatly exceeded any statutory requirement for consideration of economics in addition to evaluating costs in Appendix F. The Board also adjusted various provisions of the Order in response to comments regarding costs, including with respect to the scope of monitoring programs (e.g., groundwater, photo and surface water monitoring), methods of submitting information through electronic reporting, use of electronic templates with drop down menus to simplify reporting. See Response to Grower Shipper Petition Legal/Procedural Contention B7 regarding costs of monitoring and reporting.

B11. Contention: [Part E, page 56] The petitioners contend that the 2012 Order violates Water Code section 13360(a) by improperly specifying the manner of compliance with the Order.

Response: The Central Coast Water Board disagrees with the contention. See Response to Grower-Shipper Petition Legal/Procedural Contention B5.

B12. Contention: [Part F, page 59] The petitioners contend that the 2012 Order is inconsistent with the Basin Plan by, for example, Provision 39 regarding riparian vegetation.

Response: The Central Coast Water Board disagrees with the contention. The Basin Plan contains numerous provisions addressing protection of aquatic areas, including Chapter IV, Sections VIII.C., VIII.E. and Chapter V, Sections III.G. and V.G. The 2012 Order requires compliance with the Basin Plan, including protection of riparian vegetation. It also requires a subset of Tier 3 to develop a water quality buffer plan or to demonstrate in the alternative that the discharger is protecting water quality. Those provisions allow flexibility for the discharger to

[103] Administrative Record File No. 196 and 234.

determine how best to comply with the Water Code and the Basin Plan to protect the beneficial uses of the waters of the state.

B13. Contention: [Part G, page 60] The petitioners contend that the monitoring and reporting program exceeds the Water Board's authority.

Response: See Response to Grower-Shipper Petition Legal/Procedural Contention B7.

B14. Contention: [Part H, page 60] The petitioners contend that the 2012 Order improperly requires immediate compliance with water quality standards.

Response: See Response to Grower-Shipper Petition Legal/Procedural Contention B4.

B15. Contention: [Part I, page 63] The petitioners contend that the analysis of the Agricultural Proposal was improper and biased.

Response: See Response to Grower-Shipper Petition Legal/Procedural Contention B2. The Central Coast Water Board disagrees with this contention. The contention mischaracterizes the lengthy and robust process that led to the adoption of the 2012 Order, the numerous opportunities for the agricultural representatives to address the Board and present both written and oral comments, the detailed responses provided by staff and the discussions by the Board in public workshops and hearings regarding the Agricultural Proposal , and the many revisions to the drafts of the Order, including revisions made at the adoption hearing on March 14-15, 2012 in response to agricultural representatives' comments.

The petitioners state that the Agricultural Proposal was based on the Central Valley Water Board's "Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands." While the Central Coast Water Board agrees that the Agricultural Proposal borrows concepts and provisions from the Central Valley Water Board's waiver, the Agricultural Proposal makes significant changes that are not consistent with the Central Valley Water Board's waiver. For example, in the Central Valley Region, discharges in a coalition or outside a coalition are subject to the same legal standards, including compliance with water quality standards, and submission of information to the Board. As explained in the September 2011 Staff Report, the Agricultural Proposal would, for example, establish some different standards and would not require reporting of monitoring results.

Petitioners claim that the Central Coast Water Board staff characterized the Agricultural Proposal as inappropriately allowing third-party groups.

The Central Coast Water Board did not characterize the Agricultural Proposal as inappropriately allowing third party groups, nor claim that third party groups are inappropriate or not allowed. The Central Coast Water Board identified concerns with the Agricultural Proposal's description of the third party group's roles and responsibilities, the information that the third party group would report, and confusing language that indicated the group and not the individual dischargers would be responsible for compliance.

The draft and adopted 2012 Orders contain Provisions that plainly state that third party groups are allowed. The Central Coast Water Board staff pointed out to the Water Board that the Agricultural Proposal's third party group ***reporting*** would be inadequate because the reports would not be submitted to the Water Board, which would prevent the Water Board from fulfilling its obligation under section 13269 of the Water Code and from consistency with the NPS Policy, as discussed above. These statements do not suggest that use of third-party groups in general are illegal or disallowed.

The 2012 Order includes Provision 10 which says, "Dischargers may comply with this Order by participating in third-party groups…"

The Agricultural Proposal, including the proposed "New Part E" was written with language suggesting that the third party group could shield the individual from complying with the law as long as the third party group complied when the Water Code requires the individual to comply with the law. Therefore, the Central Coast Water Board adopted the language in the 2012 Order that plainly states that third-party groups may assist individual dischargers but responsibility for compliance rests with the individual dischargers.

The Central Coast Water Board's conclusion that language in the Agricultural Proposal, including New Part E suggest that the third party group could shield the individual from complying with the law is explained in the March 2012 Staff Report on page 15[104] as follows:

> T*he Agricultural Proposal appears to establish a different, less stringent standard for those dischargers who join a third-party group compared to those who do not. The Agricultural Proposal does not require compliance with water quality standards for those who choose to participate in a third-party group. Persons who join a third-party group would be required to "work towards compliance" with water quality standards, rather than comply with water quality standards as required by the Water Code and the State Water Resources Control Board's "Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program" (NPS Policy). That language is not clearly enforceable, as required by Water Code section 13269, and would limit the Board's authority and discretion to enforce when the Board finds or measures discharges of wastes or exceedances of water quality standards.*

This issue is further addressed in the September 2011 Staff Report, on page 6 and 7,[105] as follows:

> *Water Code section 13269 authorizes the Water Board to waive waste discharge requirements for individual dischargers who comply with the conditions; requires compliance with the Water Quality Control Plan (Basin Plan), including water quality standards and applicable implementation programs; requires protection of beneficial uses; and requires compliance with other applicable policies. Many of the proposed changes in the Agricultural Proposal are legally supportable and consistent with applicable law and policy, but many would not be consistent with the Water Code, the Basin Plan, or the NPS Policy. For example, the Agricultural Proposal would allow the*

[104] Administrative Record File No. 337

[105] Administrative Record File No. 283

"third-party group" to be responsible for compliance, rather than individual dischargers. Individual dischargers have the responsibility to comply with the Water Code, not a group that is undefined and may or may not be a discharger. Individuals may join a group to assist and coordinate in compliance, including cooperative monitoring and management practices, however the individual is responsible for compliance even if a third-party group carries out the tasks.

The Agricultural Proposal also would establish a separate and less stringent compliance standard for those dischargers who join a third party group than those who do not. The Agricultural Proposal would require those who join a third party group to "work toward compliance" with water quality standards, which is vague and open-ended. The Water Code and the NPS Policy require that nonpoint source discharges are controlled to achieve and maintain water quality standards and protect beneficial uses. The current 2004 Ag Order requires dischargers to implement management practices to achieve water quality standards and the Draft Agricultural Order would continue to include the same standard. The Agricultural Proposal would require third-party groups to "work toward compliance" and appears to allow dischargers to stop complying with any water quality standard pending formation of third party groups. The Agricultural Proposal is not clearly enforceable since many of the conditions are recommended, or up to the discretion of the group, and since most information would not be provided to the Water Board, the Water Board could not readily determine compliance or effectiveness of the conditions of the Order. The Proposal would limit the Water Board's authority and discretion to enforce water quality standards and other conditions of the Order by defining compliance with the "waiver" as implementation of farm water quality practices, rather than compliance with water quality standards as required by the Water Code and the NPS Policy. The NPS Policy, for examples, states that the ineffectiveness of a third party group through which a discharger participates in nonpoint source control efforts cannot be used as an excuse for lack of individual discharger compliance; individual dischargers bear responsibility for compliance with orders to control waste discharges. Some of the language and conditions in the Agricultural Proposal for dischargers who elect to participate in third party groups are unclear and/or inconsistent with this Policy.

In summary, the Agricultural Proposal's approach to the use of third-party groups is generally not consistent with the Water Code and creates an unfair distinction between individuals because those who join a group would not be directly accountable to the Board or the public for complying with the Water Code. The staff's Draft Agricultural Order includes the option for third party groups, or coalitions, to provide assistance to individual growers in achieving compliance with the Order (Provision 10), but does not provide an alternative set of provisions for those electing to participate in a third party group.

B16. Contention: [Part J, page 67] The petitioners contend that the Tiering structure in the 2012 Order is arbitrary.

Response: See Response to Petition from Grower-Shippers Technical Contention A1.

SWRCB/OCC FILE NO. A-2209(e)

PETITION FROM JENSEN FAMILY FARMS, INC. AND WILLIAM ELLIOT

A. TECHNICAL CONTENTIONS

The petitioner's contentions are primarily legal/procedural in nature, with some aspects related to technical questions. Thus, the responses to the petitioner's contentions, including aspects related to technical questions, are provided in the section below.

B. LEGAL/PROCEDURAL CONTENTIONS

B1. Contention: [Part V,B,1 page 6-12] Illegal and unauthorized ex parte communications were made by Board Member Michael Johnston with the Regional Board's Executive Director and other members of the Regional Board's staff.

Response: See Response to Petition from Grower-Shippers Legal/Procedural Contentions B1 and B2.

B2. Contention: [Part V. B.2, page 12-17]. The petitioner contends that the 2012 Order is illegal because the Central Coast Water Board failed to consider the requirements of Water Code section 13241, including economics.

Response: The Central Coast Water Board disagrees with the contention. See Response to Farm Bureau Petition Legal/Procedural Contention B10 and Response to Grower-Shippers Petition Legal/Procedural Contention B7.

B3. Contention: [Part V.B.3, 5 page 17] The petitioner contends that the 3-Tier system does not factor into its parameters a release of sediment and is arbitrary, unreasonable, and capricious and violates due process rights. The 3-Tier system does not take into account geology.

Response: The Central Coast Water Board does not agree that the 3-Tier system is arbitrary, unreasonable, and capricious, nor does it violate due process rights. The 2012 Order establishes Tiers based on specific considerations. See Response to Grower-Shipper Petition Technical Contention A1. In addition, if a discharger is not discharging sediment, that discharger is not required to implement any management practices to control sediment. If based on geology or other considerations, the discharges from the land are not impacting ground or surface water, the discharger is not required to implement management practices. Dischargers implement management practices to fit the discharger's specific circumstances. If the discharger demonstrates that it should be moved to a different Tier, it may provide that information to the Central Coast Water Board for reconsideration.

B4. Contention: [Part V. B. 4, page 18] The petitioner contends that the 2012 Order provides unrestricted authority with the Executive Officer to move growers into different Tiers without criteria or standards.

Response: The petitioner mischaracterizes the 2012 Order. The 2012 Order does, in fact, specify criteria for the different Tiers. The Executive Officer may review the information provided by the discharger and determine based on the criteria set forth in the 2012 Order in which Tier a particular discharger fits. See Response to Contention B3. Provision 19 indicates that the Executive Officer may elevate a Tier 1 or Tier 2 farm/ranch to a higher tier if the farm/ranch poses a higher threat to water quality, or if evidence becomes available to indicate that the farm/ranch meets the criteria for a higher tier. In any case, Provision 18 indicates that the grower can provide information demonstrating that the farm/ranch is a lower threat to water quality and request that the Executive Officer approve transfer to a lower tier.

B5. Contention: [Part V, B. 6, page 20]. The petitioner contends that the 3-Tier approach is based on an illegal expansion of the Central Coast Water Board's authority, particularly regarding groundwater.

Response: The Central Coast Water Board disagrees with the contention. The Porter-Cologne Act places the responsibility with the regional water boards to protect water quality associated with discharges of waste to waters of the state. The term "waters of the state" is defined in Water Code section 13050(e) to mean "any surface water or groundwater, including saline waters, within the boundaries of the state." The Central Coast Water Board has documented that discharges of waste from irrigated lands have caused serious pollution of groundwater within the Central Coast Region. See March 2011 Staff Report Appendix G. Under Water Code section 13260, "any person discharging waste, or proposing to discharge waste, within any region that *could affect the quality of the waters of the state*" (emphasis added) must submit a report of waste discharge, unless that requirement is waived by the Board. Discharges of waste from irrigated agriculture as documented by the Central Coast Water Board could affect the quality of the waters of the state. Any person may file an individual report of waste discharge and seek individual waste discharge requirements or an individual waiver if needed to address more site-specific conditions. Also, the 2012 Order does not specify the management practices to be implemented; each grower chooses the practices that best fit their site-specific circumstances.

B6. Contention: [Part V, B, 7,8 , 9 page 22]The petitioner contends that the 2012 Order's requirement that owner/operators create 30-foot buffer zone adjacent to impaired bodies of water results in a regulatory taking of real property in violation of the United States Constitution.

Response: See Response to Grower-Shipper Petition's Legal/Procedural Contention B6. Petitioner argues that the 2012 Order will deprive property owners of the "highest and best use" of all of the property. As stated previously, the buffer requirement will not affect the majority of a landowner's property. In *MacLeod v. Santa Clara County*, the Ninth Circuit Court of Appeals found that the "highest and best use" argument is simply another way of claiming that a

landowner has suffered a diminution in the value of the owner's property rather than the complete destruction of its economically viable use. (*MacLeod v. Santa Clara Co*. (1984) 749 F.2d 541, 548.) The Ninth Circuit repeated the United States Supreme Court's determination that diminution in value alone is not sufficient to establish a taking. (Ibid. (citing *Penn Central Transportation Co. v. City of New York* (1978) 438 U.S. 104, 131.) Although the buffer requirement may cause some diminution of value in a small part of a landowner's property, the Petitioner has not demonstrated that the buffer requirement is a takings.

B7. Contention: [Part V, B, 10, page 28 – 39] The petitioner contends that the Central Coast Water Board violated CEQA, by among other contentions failed to consider use of reverse osmosis to comply with the Order.

Response: The Central Coast Water Board disagrees with the contentions. The Central Coast Water Board did, in fact, prepare a subsequent environmental impact report. See Administrative Record File Nos. 389 through 404. See also Response to Farm Bureau Petition Legal/Procedural Contentions B1 and B3. The Central Coast Water Board did not evaluate the impact of the use of reverse osmosis, because nothing in the Order would require such use. See Response to Comments on Subsequent EIR[106].

[106] Administrative Record File No. 401.

SWRCB/OCC FILE NO. A-2209(c)

PETITION FROM OCEAN MIST AND RC FARMS

A. Technical Contentions

A1. Contention: [page 24, line 2] The Three Tier Regulatory System is Complex and Difficult to Administer and not Linked to Actual Water Quality Risk.

Response: See Response to Technical Contention A1 in Grower-Shipper petition.

A2. Contention: [page 15, line 15] The 2012 order advances extreme and unreasonable requirements for Nutrient management and the Central Coast Water Board exceeds its authority in proposing to control a farmer's use of fertilizer.

Response: See Response to Technical Contention A2 in Grower-Shipper petition.

A3. Contention: [page 22, line 5] Tile Drains Are Inappropriately Targeted by the 2012 Order.

Response: The Central Coast Water Board disagrees that the 2012 Order inappropriately targets tile drains, and recommends retaining Provision 44 which requires the implementation of management practices to protect water quality as it relates to tile drain discharges, and the monitoring and reporting Provisions in the 2012 Order to adequately characterize tile drain discharges to surface water as necessary to protect water quality.

The 2012 Order does not restrict the use of tile drains, but does begin to address the pollution loading that can occur from tile drains. Nitrate concentrations in water leaving subsurface tile drain systems often exceeds drinking water standards and contributes to nitrate loading in groundwater, nutrient impairments in surface water, and can contribute to low-oxygen in marine environments. As described in the March 2012 Staff Report, there are several ways waste constituents from agricultural operations get to surface water and groundwater. Tile drains are one of them. The primary requirement related to tile drains that applies to all growers enrolled in the Order states that the growers' Farm Plan must describe tile drain discharges and the management practices that the grower has implemented or will implement to minimize impacts to water quality (Provision 44h). In addition, surface receiving water monitoring (implemented primarily by the Cooperative Monitoring Program) must include sampling sites to evaluate impacts to receiving water quality from agricultural discharges, including areas receiving tile drain discharges (Tier 1, 2, and 3 MRP Part 1.A.9). In addition, Tier 3 farms/ranches must include any tile drain discharges in their individual surface water discharge monitoring and reporting (Tier 3 MRP Part 5.). The Central Coast Water Board has clear statutory authority to require monitoring and reporting related to tile drain discharges and potential impacts to water quality under Water Code sections 13267 and 13269.

In the March 2011 Staff Report Appendix E Response to Comments[107] and again in the March 2012 Staff Report[108] , the Central Coast Water Board further clarified its intent to address irrigation runoff in the short term with immediate conditions compared to tile drains in the long term. For example, Additional Finding 2 of the 2012 Order states that the focus of the 2012 Order is non-tile drain discharges, although Tier 3 tile drain discharges on individual farms/ranches must be monitored; and further described that the Executive Officer will evaluate any proposed longer timeframes to address tile drain discharges. Similarly Finding 12 of the 2012 Order encourages growers to coordinate the implementation of management practices with other growers discharging to common tile drains, including efforts to develop regional salt and nutrient management plans; and further states that the Executive Officer may require additional monitoring and reporting in the future for discharges to tile drains as necessary to evaluate compliance with this Order.

In summary, the Central Coast Water Board recommends retaining Provision 44 which requires the implementation of management practices to protect water quality as it relates to tile drain discharges, and the monitoring and reporting Provisions in the 2012 Order to adequately characterize tile drain discharges to surface water as necessary to protect water quality.

A4. Contention: [page 25, line 18] The 2012 Order imposes unreasonable restrictions on retention ponds

Response: The Central Coast Water Board disagrees. The Central Coast Water Board recommends retaining Provision 33, with additional clarifying language described below, as necessary to protect surface water and groundwater quality.

The 2012 Order sets forth conditions intended to protect the beneficial uses of groundwater and surface water affected by the discharge of nitrate, pesticides, and other wastes that are present in water stored in containment structures. The discharge of wastes from containment structures can result in pollutant loading to groundwater and impact drinking water supplies. Provision 33 requires growers who utilize containment structures to manage, construct, or maintain such containment structures to avoid percolation of waste that causes or contributes to exceedances of water quality standards, and to minimize surface water overflows that have the potential to impair water quality. Provision 33 only affects those growers who have containment structures.

The maintenance of containment structures to prevent percolation of waste to groundwater and minimize surface water is a standard management practice and the Natural Resource Conservation Service (NRCS) and Resource Conservation Districts (RCDs) provide information and assistance to growers on standard industry practices to construct and maintain agricultural containment structures. These methods and practices include, but are not limited to the following:

- implementing chemical treatment (e.g., enzymes);
- implementing biological treatment (e.g., wood chips);
- recycling or reusing contained water to minimize infiltration or discharge of waste;

[107] Administrative Record File No. 233

[108] Administrative Record File No. 337

- minimizing volume of water in the containment structure to minimize percolation of waste;
- minimizing percolation of waste via a liner or low permeability soil floor;

The 2012 Order does not require specific actions or full implementation of improved maintenance by a specific date. Nor does this Provision require documentation that containment structures fully prevent percolation of waste to groundwater or minimization of surface water overflows by a specified date. The Central Coast Water Board expects growers who have containment structures to continue to implement management practices and improve them if necessary to control their discharges of waste and eventually achieve water quality standards. As part of their Farm Plan and evaluation of management practices, growers should be evaluating the degree to which any waste will discharge to groundwater or surface water, considering factors such as depth to groundwater, chemicals present in the containment structure water, estimated volume of water present in the structure and when it is present, proximity to any drinking water wells, and proximity to surface water.

The requirement to manage containment structures appropriately and protect groundwater is not new. The 2004 Order required growers to implement management practices to protect groundwater quality and comply with water quality standards. Growers who complied with the 2004 Order would not need to do anything new to maintain their containment structures per the 2012 Order. Among other things, the 2004 Order included the following required provisions with respect to groundwater:

> "Wastewaters percolated into groundwater shall be of such quality at the point where they enter the ground so as to assure the protection of all actual or designated beneficial uses of all groundwaters of the basin.
>
> Wastes discharged to groundwater shall be free of toxic substances in excess of maximum contaminant levels (MCLs) for primary and secondary drinking water standards established by the United States Environmental Protection Agency or California Department of Health Services, whichever is more stringent; taste, odor, or color producing substances; and nitrogenous compounds in quantities which could result in a groundwater nitrate concentration (as NO3) above 45 mg/l."

In the March 2011 Staff Report Appendix E Response to Comments and again in the March 2012 Staff Report and numerous other occasions, the Central Coast Water Board explicitly clarified to growers and other stakeholders that the 2012 Order does not require growers to line any ponds.

To further clarify this issue, the Central Coast Water Board recommends that the State Water Board consider adding the following or similar language in <u>underline</u> to Provision 33:

> 33. Dischargers who utilize containment structures (such as retention ponds or reservoirs) to achieve treatment or control of the discharge of wastes must manage, construct, or maintain such containment structures to avoid percolation of waste to groundwater that causes or contributes to exceedances of water quality standards, and to minimize surface water

overflows that have the potential to impair water quality. Dischargers may choose the method of compliance appropriate for the individual farm, which may include, but are not limited to:

- implementing chemical treatment (e.g., enzymes);
- implementing biological treatment (e.g., wood chips);
- recycling or reusing contained water to minimize infiltration or discharge of waste;
- minimizing volume of water in the containment structure to minimize percolation of waste;
- minimizing percolation of waste via a liner or low permeability soil floor;

In summary, the Central Coast Water Board recommends retaining Provision 33, with additional language described above, as necessary to protect surface water and groundwater quality.

A5. Contention: [page 8, line 4] The Central Coast Water Board should adopt a holistic approach to regulating groundwater.

Response: As described in the above sections, the Central Coast Water Board's highest priority is protecting groundwater that serves as a source of drinking water. For decades, the Water Boards have required most major types of dischargers except irrigated agriculture to monitor groundwater, evaluate discharge characteristics and loading, implement specific actions to reduce loading, protect water quality, report progress, and ultimately achieve water quality objectives and standards. For irrigated agriculture, the Water Boards used a non-regulatory, voluntary incentive type approach, which resulted in increasingly severe degradation of water quality on a large scale, substantial impacts to drinking water sources and threats to human health, and the transfer of significant costs to the public.

We agree that a holistic approach is valuable; achieving groundwater quality standards will require a diverse and creative approach. However, any legitimate approach must include tangible measures of pollutant load reductions and water quality improvement, reasonable schedules to achieve compliance, accountability, and enforceability. The 2012 Order includes these types of requirements, and includes the flexibility for alternative, collaborative, creative approaches, as the Central Coast Water Board has emphasized many times. The 2012 Order is a reasonable, iterative, step in bringing requirements for irrigated agriculture more in line with the severity of groundwater degradation that is occurring.

The Central Coast Water Board considered many options to address discharges of waste to groundwater. For example, to be reasonable and reduce costs to growers, the 2012 Order focuses primarily on requiring the reduction of nitrate loading to groundwater rather than more aggressive steps to cleanup existing polluted groundwater. Similarly, the 2012 Order requires growers to conduct limited groundwater sampling of existing wells, rather than the more expensive alternative to drill new groundwater monitoring wells or implement groundwater basin-scale monitoring. As an alternative, the 2012 Order also allows growers the alternative of submitting existing data or participating in a cooperative groundwater monitoring. Furthermore, public comments from environmental justice organizations and environmental organizations

have indicated that the groundwater monitoring requirements in the 2012 Order are insufficient and too infrequent.

The Central Coast Water Board encourages growers to participate in more comprehensive regional or local groundwater monitoring efforts conducted as part of existing or anticipated groundwater monitoring programs, including efforts related to regional and local salt and nutrient management plans, integrated regional water management (IRWM) plans, and the State Water Board's statewide Groundwater Ambient Monitoring and Assessment (GAMA) Program. In all these cases, the intent is for groundwater data to be managed in the statewide GeoTracker data management system.

The groundwater requirements in the 2012 Order are critical, and they were reduced through the Central Coast Water Board's process to renew the Order to the absolute minimum defensible given the groundwater quality degradation, threat to human health, and costs to the public. The Central Coast Water Board strongly recommends retaining all groundwater requirements in the 2012 Order.

A6. Contention: [II.C.5., Line 1, Page 26] Petitioner's allege that the 2012 Order inappropriately targets Chlorpyrifos and Diazinon, and that 1) these pesticides are "important tools that farmers use to manage their operations," 2) the Central Coast Water Board is attempting to eliminate their use rather than identifying problematic uses of these pesticides that directly impact water quality, and 3) farmers will shift use to other products that have equal or different toxic results.

Response: See Response to Technical Contention A1 in Grower-Shipper Petition.

The Central Coast Water Board acknowledges that chlorpyrifos and diazinon are important in farming operations, and disagrees that there is an attempt to eliminate the use of these pesticides. There is no requirement to eliminate the use of chlorpyrifos and diazinon in the 2012 Order. The 2012 Order acknowledges and documents the toxicity problems caused by these pesticides and requires management practices, monitoring and reporting to minimize their impact to water quality.

Petitioners also state that farmers will shift to other pesticides that have equal or different toxic results compared to chlorpyrifos and diazinon.

The Central Coast Water Board agrees that this could happen. However, the Central Coast Water Board and the Executive Officer have ample authority to take additional action if necessary to address this possibility. The Central Coast Basin Plan prohibits the discharge of toxicity, regardless of the specific chemical causing the toxicity. Additionally, other Provisions in the 2012 Order address the possibility that other pesticides may cause water quality problems.

The March 2011 Staff Report, Appendix E. Response to Comments[109] explains the Central Coast Water Board's decision to focus on chlorpyrifos and diazinon in the response to Comment No. 233 on page 14 and the response to Comment No. 478 on page 15-16. These responses

[109] Administrative Record File No. 233

also explained that the Central Coast Water Board will be able to determine if other pesticides are increasing in use or are causing toxicity problems from the results of other pesticide monitoring requirements for surface receiving waters included in the current Cooperative Monitoring Program (March 2011 Monitoring and Reporting Program, Order No. RB-2012-0011-01, -02 and -03)[110] and Central Coast Ambient Monitoring Program. Additionally, the 2012 Order specifically delegates to the Executive Officer the authority to add additional pesticide or toxicity monitoring as necessary. The Central Coast Water Board will also be able to evaluate the results of monitoring along with the reported chemical use required for updating enrollment information (as per 2012 Order[111], Finding 5, 7, Provisions 55.d. and 56) to indicate increased use or water quality problems from other chemicals. Therefore, while the Tiering criteria and individual surface water discharge monitoring requirements in the 2012 Order only include chlorpyrifos and diazinon, the Central Coast Water Board, the public and stakeholders can still rely on receiving water monitoring results to broaden the focus to other pesticides if necessary.

A7. Contention: [Section II.C.6., line 1, page 27] Petitioners contend that the Central Coast Water Board overreached by imposing regulations based simply on proximity to an impaired waterbody. Petitioners contend that the regulations should be restricted to lands that are both adjacent to an impaired waterbody AND capable of draining to the waterbody. Petitioners specifically mention Provisions 69, 80, and 81, which deal with photo-monitoring of riparian areas and submittal of a riparian buffer protection plan.

Response: The Central Coast Water Board disagrees that they overreached in using proximity to impaired waterbodies as a basis for establishing Provisions 69, 80, and 81.[112] Provision 69 requires farmers in Tiers 2 and 3 to conduct photo monitoring for riparian areas. Provisions 80 and 81 require a small subset of growers in Tier 3 to develop a water quality buffer protection plan if the farm is located adjacent to a waterbody impaired for temperature, turbidity and sediment. The 2012 Order provides dischargers the option to submit an alternative to the Water Quality Buffer Plan where the discharger provides evidence that discharges are adequately treated or controlled to protect water quality. Proximity to impaired waterbodies is one of several criteria the Central Coast Water Board used to categorize farms based on risk to water quality. This is a reasonable approach for evaluating risk to water quality and for determining appropriate provisions to minimize this risk, common among Central Coast Water Board's programs, including timber harvesting, stormwater, 401 Certifications, TMDLs, etc.

More specifically, petitioners state that a farm adjacent to an impaired waterbody may not discharge to that water body, and if so, Provisions 69, 80, and 81 should not apply.

The Central Coast Water Board agrees that a farm located adjacent to an impaired waterbody may not discharge directly to that waterbody. However, the Central Coast Water Board disagrees that these particular Provisions (69, 80, and 81) should not apply in that case. Other Provisions, such as those that require sampling of the discharge (Tier 3), would not apply if

[110] Administrative Record File No. 192

[111] Administrative Record File No. 280

[112] Also note that the 2012 Order is not a "regulation"; rather it is a waiver of waste discharge requirements issued pursuant to Water Code section 13269, that authorizes discharges of waste that comply with the conditions of the waiver.

there is no discharge to sample. However, Provision 69, to conduct photo monitoring of aquatic habitat, and Provisions 80 and 81, requiring riparian buffer protection plans, apply if a farm is adjacent to an impaired waterbody, regardless of whether or not runoff from the farm drains to the impaired waterbody.

The purpose of a water quality buffer protection plan is to maintain riparian vegetation such that it helps prevent erosion and waste discharges. There may be no agricultural runoff from a field, but removal of riparian vegetation, in and of itself, can cause severe erosion and degradation of beneficial uses. This is especially important for waterbodies that are already impaired for temperature, turbidity or sediment. (March 2011 Staff Report[113], Pages 27, 28, March 2011 Staff Report, Appendix D[114]. Options Considered, pages 56, 69, 71-77).

Furthermore, buffers are required by the Water Quality Control Plan for the Central Coast Region (Basin Plan), which states in part that:

> "A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, shall be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies." See Basin Plan, Chapter V, Part V.G.4.

Buffers are also standard water quality protection practices, encouraged by several agencies including the Natural Resource Conservation Service. Protection of riparian vegetation is also required by the Department of Fish and Game (March 2011 Staff Report, Pages 27, 28, March 2011 Staff Report, Appendix D. Options Considered, pages 104-108).

The Central Coast Water Board was reasonable and did not overreach in including Provision 69, photo monitoring, in the Order based on proximity to impaired waterbodies. As with the water quality buffer plan, this provision only applies to higher risk farms (Tier 2 and Tier 3), located directly adjacent to streams already impaired for temperature, turbidity or sediment. Also, this Provision is to document condition of the riparian and wetland habitat areas, as well as management practices implemented, and not just controls or impacts of runoff or drainage. The purpose of Provision 69, photo monitoring, is to "document the condition of perennial, intermittent or ephemeral streams (wet or dry), riparian and wetland area habitat, and demonstrate compliance with Basin Plan erosion and sedimentation requirements, including the presence of bare soil vulnerable to erosion and relevant management practices and/or treatment and control measures implemented to address impairments." Therefore, this Provision is also properly applied to the dischargers conducting the types of activities in locations where water quality is already impacted irrespective of whether the site is capable of draining to the adjacent impaired waterbody. (March 2011 Staff Report, Appendix D[115]. Options Considered, page 28, 29, 38, 39, 86).

[113] Administrative Record File No. 228

[114] Administrative Record File No. 232

[115] Ibid

A8. Contention: [Section 11.C.7., line 15, page 27] Petitioners contend that milestones for toxic and nutrient controls are unreasonable because they require control of all toxics, sediment and nutrients.

Response: The Central Coast Water Board disagrees that the milestones and timeframes associated with Provisions 82-87 are unreasonable. The petitioners appear to raise this issue based on a misinterpretation that the milestones in the 2012 Order are enforceable requirements and that the timeframes are unreasonable. This is not accurate.

The milestones and timeframes in Provisions 82-87 are reasonable and necessary because:

1) they directly apply to the farms with the highest risk to water quality (Tier 3);
2) they indicate loading of pollutants known to be in agricultural runoff or migrating to groundwater in agricultural areas;
3) they indicate pollutants known to be impairing surface water and groundwater in agricultural areas;
4) the Central Coast Water Board clearly explained how they will be used in conjunction with other information to evaluate compliance;
5) these types of indicators for improvement are necessary to be consistent with the Water Code and the NPS Policy; and
6) they are based on timeframes shown to be achievable within the five-year term of the Order; and

Provision 82 requires Tier 3 dischargers to comply with Order conditions pursuant to *time schedules* in Provisions 84-87. Provision 82 in the 2012 Order references *milestones* generally and refers to Table 4 which lists the *milestones* individually (Table 4, Page 38). *Milestones* are indicators of improvement and are not enforceable.

Provisions 84-87 set *time schedules* for dischargers to "effectively control individual waste discharges" and are enforceable dates. Provision 82 explains that the Central Coast Water Board will consider multiple indicators and evidence in determining compliance with Provisions 84-87, including, but not limited to, meeting *milestones*. The specific milestones are targets or goals that the Central Coast Water Board will use to evaluate effectiveness of implementation efforts and progress improving water quality, along with other compliance reporting and water quality data and information. The milestones in the 2012 Order (Table 4, Page 38) are specific, measurable indicators of individual discharge characteristics, constituents known to be in agricultural discharges and known to be causing water quality impairments. For example, "75% reduction in turbidity or sediment load" relative to the turbidity or sediment load measured in first year of sampling (September 2011 Staff Report[116], Page 19, 20,).

The petitioners appear to be interpreting Provisions 82-87 incorrectly. These provisions do not require growers to control "all" toxics, sediment and nitrate discharges by these dates or "in groundwater" as claimed by petitioners. These Provisions require only the farms with highest risk to water quality (Tier 3) to implement management practices and demonstrate the practices are effectively controlling individual waste discharges by specified dates in the Order for the various constituents known to be in agricultural discharges and known to be causing water quality impairments- pesticides and toxic substances (by October 1, 2014), sediment (by

[116] Administrative Record File No. 283

October 1, 2015), nutrients to surface waters (by October 1, 2016), and nitrates to groundwater (by October 1, 2016). Requirements to implement management practices are not new. The 2004 Order also required management practices to achieve water quality standards and objectives, as required by the Water Code. However, the reporting of effectiveness by specific dates is new, and this reporting is necessary given the severe and ongoing degradation of water quality in the Region. These provisions do not order growers to demonstrate effectiveness in any one particular way but acknowledge that they can make this demonstration by showing reductions in waste discharge or pollution loading in individual waste discharges from their farms.

In practice, and as indicated in Provision 82 in the 2012 Order, the Central Coast Water Board will consider the following information in determining the extent to which Dischargers are effectively controlling individual waste discharges and complying with the Order: a) compliance with the time schedules; b) effectiveness of management practice implementation; c) effectiveness of treatment or control measures; d) results of individual discharge monitoring (Tier 3); e) results of surface receiving water monitoring downstream of the point where the individual discharge enters the receiving water body; and f) other information obtained by Central Coast Water Board staff during inspections at operations or submitted in response to Executive Officer orders. This was discussed on page 20 of the September 2011 Staff Report (Administrative Record File No. 249).

Additionally the Central Coast Water Board made it clear in the 2012 Order, as well as in its written responses and testimony, that it will not take enforcement action against a discharger that is implementing and improving management practices to address discharges impacting water quality. For example, Provision 12 of the 2012 Order states that "[d]ischargers who are subject to this Order shall implement management practices, as necessary, to improve and protect water quality and to achieve compliance with applicable water quality standards." Finding 10 of the 2012 Order clarifies this statement further:

> *This Order requires compliance with water quality standards. . . . Consistent with the Water Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy, 2004), dischargers comply by implementing and improving management practices and complying with other conditions, including monitoring and reporting requirements. This Order requires the discharger to address impacts to water quality by evaluating the effectiveness of management practices . . . and taking action to reduce discharges. If the discharger fails to address impacts to water quality by taking the actions required by this Order, including evaluating the effectiveness of their management practices and improving as needed, the discharger may then be subject to progressive enforcement and possible monetary liability.*

The time schedules associated with Provisions 84-87 are based on timeframes shown to be achievable within the five-year term of the Order The 2012 Order did not set achievement of water quality standards in receiving waters within the five-year timeframe of the Order, as staff recognizes that it will take time to address all sources of pollution and fully resolve the severe water quality impairments. For the subset of dischargers that pose the highest threat (Tier 3), the 2012 Order sets time schedules of two to five years to show pollutant load reduction in individual discharges to surface water and to show pollutant load reduction in discharge to

groundwater. Staff's recommendation for time schedules is based upon known half-lives of pesticides known to cause toxicity (e.g. half-lives of chlorpyrifos and diazinon are significantly less than two years) and demonstrated success at reducing nutrient and sediment loading through on-farm improvements implemented as part of grant-funded projects, waste discharge control required by the Central Coast Water Board and independently by individual growers. (March 2011 Staff Report[117], Page 29).

The Agricultural Proposal submitted by the California Farm Bureau Federation on Dec. 3, 2010, proposed milestones that Central Coast Water Board staff determined to indicate very limited progress towards meeting legal water quality standards, long timeframes (4-10 years versus 2-3 years in the Draft Order), and no milestones or timeframes for groundwater loading or groundwater quality conditions. The evaluation of this proposal and conclusions about timeframes and milestones was discussed in the March 2011 Staff Report, Appendix D., Options Considered, beginning on Page 78. Timelines and milestones were also discussed in response to comments (March 2011 Staff Report, Appendix E[118]. Response to Comments, e.g., response to Comment No. 487 on Page 27, September 2011 Staff Report[119], Attachment 4, e.g., response to Letter #2 on Page 16).

The 2004 Order, similar to the 2012 Order, prohibited dischargers from causing or contributing to conditions of pollution or nuisance in violation of Water Code section 13050, and exceedances of any numeric or narrative water quality standards. It also required dischargers to comply with all applicable water quality control plans. As a result, dischargers should have been implementing management practices to make progress towards complying with water quality standards' provisions since 2004. From this perspective, the timeframes which provide a few years after adoption of the 2012 Order, in addition to time invested controlling waste discharges since adoption of the 2004 Order is extremely reasonable.

B. LEGAL/PROCEDURAL CONTENTIONS

B1. Contention: [Part II, B. page 14] The petitioner contends that the petitioners' time to prepare to submit a petition was prejudicially delayed by the Central Coast Water Board.

Response: See Response to Farm Bureau petition Legal/Procedural Contention B1.

B2. Contention: [Part II, E, page 32] The petitioner contends that the 2012 Order is procedurally defective in that it contains post record amendments from the environmental community.

Response: See Response to Grower-Shipper Legal/Procedural Contentions B1 and B2.

[117] Administrative Record File No. 228

[118] Administrative Record File No. 233

[119] Administrative Record File No. 283

B3. Contention: [Part II, F. page 33-42] The petitioner contends that the Regional Board's certification and filing of a notice of determination for the Final SEIR constitutes a prejudicial abuse of discretion.

Response: See Response to Farm Bureau Legal/Procedural Contention B1.

SWRCB/OCC FILE NO. A-2209(a)

PETITION FROM THE MONTEREY COASTKEEPER, ET AL.

A. Legal/Procedural Contentions

A1. Contention: [page 9] The Order is not in the public interest, is inconsistent with the Basin Plan and violates Water Code Section 13269(a)(1) because the Central Coast Water Board's "removal of firm targets for nitrate discharges" to groundwater allows for the continued deterioration of water quality and negative impacts on human health.

Response: Protecting groundwater, especially drinking water is among the highest priorities for the Central Coast Water Board. The Central Coast Water Board agrees that ongoing discharges of nitrogen without any regulatory controls, monitoring or reporting would continue to degrade surface water and groundwater quality to the detriment of public health and the ecosystem (March 2011 Staff Report, Appendix G. Water Quality Conditions, Administrative Record No. 197).

The Central Coast Water Board disagrees that the 2012 Order is not in the public interest, and disagrees that the 2012 Order is inconsistent with the Basin Plan and violates Water Code Section 13269(a)(1). Petitioner is referring to a revision the Central Coast Water Board made to Provision 78 of the draft 2012 Order during the hearing process, as follows:

> **By October 1, 2015,** Tier 3 Dischargers with High Nitrate Loading Risk farms/ranches must ~~meet~~ report progress towards the following Nitrogen Balance ratio targets milestones or implement an alternative to demonstrate an equivalent nitrogen load reduction. The Nitrogen Balance ratio refers to the total number of nitrogen units applied to the crop (considering all sources of nitrogen) relative to the typical nitrogen uptake value of the crop (crop need to grow and produce, amount removed at harvest plus the amount remaining in the system as biomass).
>
> a. Dischargers producing crops in annual rotation (such as a cool season vegetable in a triple cropping system) must report progress towards~~achieve~~ a Nitrogen Balance ratio target equal to one (1). A target of one (1) allows a Discharger to apply 100% of the amount of nitrogen required by the crop to grow and produce yield for every crop in the rotation. (Nitrogen applied includes any product, form or concentration, including but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil and nitrate in irrigation water.)
>
> b. Dischargers producing annual crops occupying the ground for the entire year (e.g., strawberries or raspberries) must report progress towards~~achieve~~ a Nitrogen Balance ratio target equal to 1.2. A target of 1.2 allows a Discharger to apply 120% of the amount of nitrogen required by the crop to grow and produce a yield.

This revision clarified that the nitrogen balance ratio is a milestone that indicates progress, rather than an enforceable condition that must be achieved.

Controlling nitrate loading to groundwater to protect public health and drinking water is among the highest priorities for the Central Coast Water Board. The 2012 Order contains many conditions to insure that growers take steps to reduce on-going nitrate loading and demonstrate water quality improvements. These include Provision 31 to use backflow prevention devices on irrigation systems, Provision 44 to implement a farm water quality management plan that includes irrigation and nutrient management practices, Provision 62 to conduct groundwater well monitoring, Provision 70 to report total nitrogen applied, Provision 75 to implement an Irrigation and Nutrient Management Plan (INMP) certified by a professional, and Provision 77 to report elements of the INMP on nitrate sources and loading.

In conjunction with these Provisions, the Central Coast Water Board can still use reported nitrogen balance ratios to evaluate whether a discharger is making progress reducing the source of nitrate pollution or nitrate loading to groundwater and whether discharges are continuing to degrade water quality.

The 2012 Order is in the public interest because it includes many provisions to protect water quality, including provisions regarding implementation and requiring monitoring and reporting based on the indicators.

As described in the March 2012 Staff Report, there is evidence in the record that indicated that the nitrogen balance ratios are achievable and in some cases farm advisors, growers and commodity groups (e.g. The California Strawberry Commission) reported already meeting the identified nitrogen balance ratios. The Central Coast Water Board also clarified that not meeting the nitrogen balance ratio target itself would not be the basis for any monetary civil liability or penalty, and that staff would first have to work with the grower to make progress, and then would have to make the case that the progress was insufficient and discharge was causing pollution.

At the March 15, 2012 Hearing, in response to comments from agricultural stakeholders that the Provision was unreasonable, the Central Coast Water Board modified the draft order and adopted the nitrogen balance ratios as “milestones”.

CONCLUSION

The Central Coast Water Board requests that the State Water Board deny the Petitioners’ requests to vacate the 2012 Order and to revise specific Provisions. The Central Coast Water Board recommends that the State Water Board include specific language and edits as discussed above to clarify the following Provisions of the 2012 Order:

- Provision 33 (containment structures)
- Provision 44(g) (effectiveness)
- Provision 68, Tier 2 and Tier 3 MRPs, Part 2 Section C (nitrate loading risk factor determination)
- Definition 63 and Provisions 70 – 71, Tier 2 and Tier 3 MRPs, Part 2 Section C (total nitrogen applied reporting or alternative).

The Central Coast Water Board recommends that the State Water Board uphold the 2012 Order with these clarifications and edits.

Water quality on the Central Coast is severely degraded, and there is substantial empirical evidence that irrigated agriculture is the major cause of the pollution. All beneficial uses are affected, including large-scale degradation of drinking water. Protecting the beneficial use of drinking water is the Central Coast Water Board's highest and most urgent priority.

The 2012 Order is reasonable and rational because it scales requirements according to the threat to water quality and provides growers with flexibility and appropriate timeframes to implement management practices and submit reports.

The Central Coast Water Board's public process to consider and adopt the 2012 Order was the most extensive process of its kind in the Board's history, and was greatly broadened to include all stakeholders consistent with the State Water Board's Environmental Justice goals. The Central Coast Water Board carefully considered many hundreds of pages of written comments and proposals and many hours of oral comments prior to adoption of the 2012 Order.

The 2012 Order requires compliance with conditions required by Water Code section 13269, including consistency with the applicable water quality objectives and implementation programs in the Central Coast Water Board's Basin Plan to restore and protect the beneficial uses; compliance with applicable State Water Board policy, such as the NPS Policy; and implementation of monitoring and reporting programs.

The 2004 Order implemented the new Water Code section 13269, which was addressed pollution from agricultural discharges. Based on the information collected as part of the 2004 Order, the 2012 Order will provide the information for the Central Coast Water Board to focus on the most significant threats to water quality using the additional monitoring and reporting requirements and conditions that will address impaired water bodies and impacts on drinking water.

Central Coast growers are highly adaptive and innovative. The industry is constantly improving and reinventing itself as markets and technologies change. Experts agree that proven solutions are available and significant water quality improvement is possible. Some growers are already using effective solutions and should be commended. The Central Coast Water Board is confident that improvements in agricultural practices implemented by growers in compliance with the 2012 Order will result in improvements in water quality conditions in the Central Coast Region.