

**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF MARCH 14-15, 2012  
Prepared on February 22, 2012**

**ITEM NUMBER: 4**

**SUBJECT: Recommendation to Renew an Updated Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2012-0011**

**1.0 SUMMARY**

The purpose of this Staff Report is to provide background information and to recommend that the Central Coast Regional Water Quality Control Board (Water Board) renew the proposed updated 2012 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Draft 2012 Agricultural Order), associated Monitoring and Reporting Program (MRP), and Resolution to Certify the Subsequent Environmental Impact Report (SEIR).

The Water Board's mission is:

*To preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit for present and future generations.*

Since the issuance of the initial Agricultural Order in 2004, the Water Board compiled additional and substantial empirical data demonstrating severe groundwater and surface water pollution caused in large part by irrigated agricultural practices, 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.
- Widespread surface water and sediment toxicity due to pesticides.
- Widespread degradation and loss of riparian and wetland habitat.

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. Staff is proposing that the Water Board renew an updated Draft 2012 Agricultural Order that requires measurable pollutant load reduction to surface water and groundwater, and allows dischargers the necessary flexibility to achieve compliance and resolve the severe water quality problems in the agricultural areas of the Central Coast Region.

The current process to renew the 2004 Agricultural Order began in August 2008, and has been the most extensive public process in the history of the Central Coast Water

Board. During the last three and a half years, 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 organizations. This is discussed further in Section 3.3 in this staff report.

This staff report emphasizes the need for an updated order, and summarizes the order renewal process, stakeholder outreach and public input opportunities, and public comments and staff's responses. In addition, this staff report discusses staff's recommended Draft 2012 Agricultural Order (Attachment 1) and Monitoring and Reporting Program (Attachment 2). The content of the Draft 2012 Agricultural Order is discussed in Section 4.1 and 4.3 of this staff report. Much of the information included in this staff report is available in greater detail as part of past Board Meetings, and references to the previous information are provided.

In some cases, comments in objection to the Draft 2012 Agricultural Order appear to result from specific misconceptions about the order, including, for example: numbers and types of growers in the various tiers, how requirements apply to growers in the various tiers, nutrient management requirements, third-party groups and enforcement of the order, especially related to individual discharge monitoring. Explanations to clarify these and other common misconceptions are discussed in Section 4.4 of this staff report.

During the process to renew the Agricultural Order, the Water Board received alternative proposals from agricultural and environmental groups, referred to in this staff report as Agricultural Proposal and Environmental Proposal, respectively. Given the dramatic differences between the Agricultural Proposal and Water Board staff's Draft 2012 Agricultural Order, staff compared the two proposals in detail. Staff's comparisons are included in the March 17, 2011 Board Meeting Staff Report and the Addendums to the Staff Report released on July 8, 2011 and August 16, 2011. This is also discussed in Section 3.5 of this staff report.

Staff also evaluated the Agriculture Proposal relative to the Water Board's policies, plans, and the Porter Cologne Water Quality Control Act (which is the foundation of the Water Board's authority and responsibility). The Agricultural Proposal does not comply with these plans, policies and law. Therefore, staff cannot recommend the Agricultural Proposal as a legal or appropriate alternative (this is explained in more detail below in Section 3.5). However, staff did incorporate some important Agricultural Proposal concepts into staff's Draft 2012 Agricultural Order. Staff added or clarified language to make clear that coalitions, cooperative implementation and treatment efforts, alternative monitoring approaches for cooperative implementation efforts, and aggregated reporting are allowed in the Order. Note that such alternative monitoring efforts must be designed to allow the Water Board to evaluate practice effectiveness and include pollution load reduction indicators at an appropriate scale to determine short-term water quality improvements and effectiveness of the conditions of the Draft 2012 Agricultural Order.

Overall, the Agricultural Proposal does not comply with the Water Board's plans, policies, and the law as follows:

- The Agricultural Proposal is not consistent with Water Code section 13269 nor with the State Water Resources Control Board's "Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program" (NPS Policy) and it is not enforceable.
  - It applies the waiver of waste discharge requirements to a "third-party group" or to individual dischargers of wastes (farms). To be consistent with the Water Code and NPS Policy, the "third-party group" may assist in compliance, but it is always the discharger (i.e., owner or operator) who is responsible for complying with the Water Code.
  - It establishes a less stringent (and not legal) 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. Moreover, "working towards compliance" is a vague term based on unacceptable parameters, such as qualitative "audits, surveys and reporting that do not indicate water quality conditions or measurable improvements in pollution load reduction, and unreasonable or lack of timeframes by which persons must comply.
  - It does not provide adequate information for the Water Board to evaluate individual compliance, progress towards water quality improvement or effectiveness of the waiver's conditions. Monitoring reports would aggregate information (by unspecified groups without individual farm information) and would include information, for example, about the numbers of growers participating and implementing certain types of practices, instead of information that *quantifies* the effectiveness of practices and pollution load reduction (e.g., amount of nitrate prevented from leaching to groundwater, reductions in toxicity measured in farm discharge, amount of sediment prevented from leaving a farm). Aggregation of data cannot be used to cover up or obscure the sources and amounts of pollution being discharged. The proposal does not contain milestones that indicate reasonable pollution reduction or water quality improvement within the five-year term of the waiver.
- The Agricultural Proposal does not address impacts on drinking water sources, nor propose timely management practices to protect aquatic habitats. The Agricultural Proposal deleted several conditions from the Draft Agricultural Order that are needed to protect and improve groundwater and deleted the provisions with respect to aquatic habitat.
- Agricultural representatives estimate of costs and comparison of costs does not allow for an appropriate comparison between the staff proposal and the agricultural proposal.
  - Agricultural representatives estimated costs of the Agricultural Proposal by including only institutional and administrative costs to implement the "third-party" group concept; they did not include the costs to dischargers to implement management practices to reduce pollution loading or improve water quality.

- Agricultural representatives compared their administrative costs to cost estimates for presumed management practices “required” by the Draft 2012 Agricultural Order, as if the Agricultural Proposal would not include management practices. This is not a valid comparison.
- Only the Agricultural Proposal would result in extra administrative costs to pay for the “third-party group” that are not included in the staff proposal

If the Agricultural Proposal includes management practices to reduce pollutant loading, the overall cost would be similar to the cost of Water Board staff’s Draft 2012 Agricultural Order. The overall costs of the Agricultural Proposal may be higher due to the extra administrative costs.

In addition to the Agricultural Proposal, staff also evaluated a proposal submitted by several environmental groups (Environmental Proposal). The Environmental Proposal does comply with the Water Boards plans, policies, and the law, and supports Water Board staff’s first Preliminary Draft Agricultural Order, dated February 2010, but states that the February draft should be strengthened in certain areas. For example: stormwater protections should be much stronger and the two year timeline for Pesticide Runoff/Toxicity compliance is too liberal.

In summary, the Draft 2012 Agricultural Order DOES the following:

- Establishes three tiers addressing various threats to water quality;
- Requires compliance with water quality standards over time;
- Is consistent with the NPS policy;
- Establishes that compliance means a) implementation of management practices, b) reporting short-term indicators of practice effectiveness and/or pollution reduction, and c) improving practices if they are not effective at pollution reduction; and
- Requires submittal of ground and surface receiving water monitoring data to indicate long-term water quality improvement and provide information for prioritizing implementation (for farmers, the public, and the Water Board).

The Draft 2012 Agricultural Order does NOT:

- Specify the manner of compliance (farmer chooses own methods to meet water quality standards); nor
- Require immediate compliance with water quality standards.

Implementation of a renewed and updated Agricultural Order, without further delay, will address the severe water quality problems and improve water quality in the agricultural areas of the Central Coast Region consistent with the Water Board’s Mission and the Porter-Cologne Water Quality Control Act. Staff recommends that the Water Board take the following actions:

- Adopt the updated 2012 Conditional Waiver of Waste Discharge Requirements for Irrigated Agricultural Waste Discharges, as proposed by staff for the September 1, 2011 Board Meeting with the revisions identified in this staff report (Draft Agricultural Order No. R3-2012-0011);

- Adopt the Monitoring and Reporting Program (MRP) as proposed by staff for the September 1, 2011 Board Meeting with the revisions identified in this staff report (Draft MRP No. R3-2012-0011);
- Adopt the Resolution to Certify the Final SEIR, as proposed by staff for the September 1, 2011 Board Meeting with the revisions identified in this staff report (Resolution No. R3-2012-0012), including a statement of overriding considerations;

## 2.0 PUBLIC NOTICE

As indicated in the public notice for this hearing, and the public notice postponing the September 1, 2011 Board Meeting item to consider the Draft 2012 Agricultural Order, and in Orders issued on January 8, 2012 and February 16, 2012, by the Chair of the Water Board, the written public comment period is complete. The Water Board will not accept any additional written comments on the Draft 2012 Agricultural Order and associated documents. The Water Board will provide an opportunity for oral comments at the hearing scheduled for March 15, 2012. Powerpoint presentations that include new written evidence will not be accepted into the record. Given that the Water Board held a two-part panel hearing on this matter, the Water Board encourages oral comments that focus on the revisions to the Draft 2012 Agricultural Order and MRP made since the version released on August 10, 2011 for the September 1, 2011 Board Meeting (shown in yellow highlight in Attachment 1 pages 18-20 and pages 25-26, Attachment 2A page 10, Attachment 2B page 9 and page 14, Attachment 2C page 21) and the revisions proposed in Table 4 and Table 5 of this staff report. The Water Board expects that speakers will summarize their previous submittals, avoid repetition, and group similar presentations

Comprehensive information on the Agricultural Order Renewal, including the public notice for the March 15, 2012 Board Meeting, is available on the Water Board's website: [http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/ag\\_order.shtml](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml)

## 3.0 BACKGROUND

The Agricultural Order regulates discharges from irrigated lands, where water is applied for producing commercial crops. Discharges from irrigated lands regulated by the Agricultural Order include discharges of waste to surface water and groundwater, such as irrigation return flows, tailwater, drainage water, subsurface drainage water generated by irrigating crop land, stormwater runoff, runoff from frost control, and/or operational spills. In the Central Coast Region, irrigated agricultural discharges are causing severe degradation of water quality, including nitrate in drinking water aquifers and surface water, toxicity in surface water and sediment, erosion, and degradation of riparian and wetland habitat. Owners and operators of irrigated lands are responsible for complying with the conditions of the Agricultural Order.

### **3.1 Central Coast Agriculture**

The Central Coast Region is one of the most productive agricultural regions in the nation, with a gross production value of more than six billion dollars in 2008, and contributing to more than 14% of California's agricultural economy. The region 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. As of December 2011, 3649 individual farms or ranches are enrolled in the Agricultural Order, representing approximately 372,000 irrigated acres.

### **3.2 Need for an Updated Agricultural Order**

The Water Board adopted a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands in 2004 (2004 Agricultural Order). In adopting the 2004 Agricultural Order, the Water Board found that the discharge of waste from irrigated lands had impaired and polluted the waters of the State and of the United States within the Central Coast Region, impaired the beneficial uses, and caused nuisance. However, the 2004 Agricultural Order did not directly address pollution of groundwater caused by nitrate discharges at that time, did not include groundwater monitoring, and did not include conditions consistent with typical orders to control waste discharges from industries or activities affecting water quality in a similar level of severity. In addition, the 2004 Agricultural Order required surface receiving water monitoring but did not require individual monitoring or reporting to evaluate the effectiveness of management practices in reducing pollution from individual farm operations, not even those posing the highest risk to water quality and beneficial uses. To address the severe water quality problems, the Draft 2012 Agricultural Order addresses these limitations, adding discharge monitoring and reporting, verification of on-farm water quality improvements, and public transparency regarding on-farm discharges. Figure 1 illustrates that the Water Board's current Order (2004 Agricultural Order) for irrigated agriculture is very low relative to other regulatory programs and how the Draft 2012 Agricultural Order would bring the level of regulation of discharges of waste from irrigated agriculture closer in line with other regulated types of discharges.

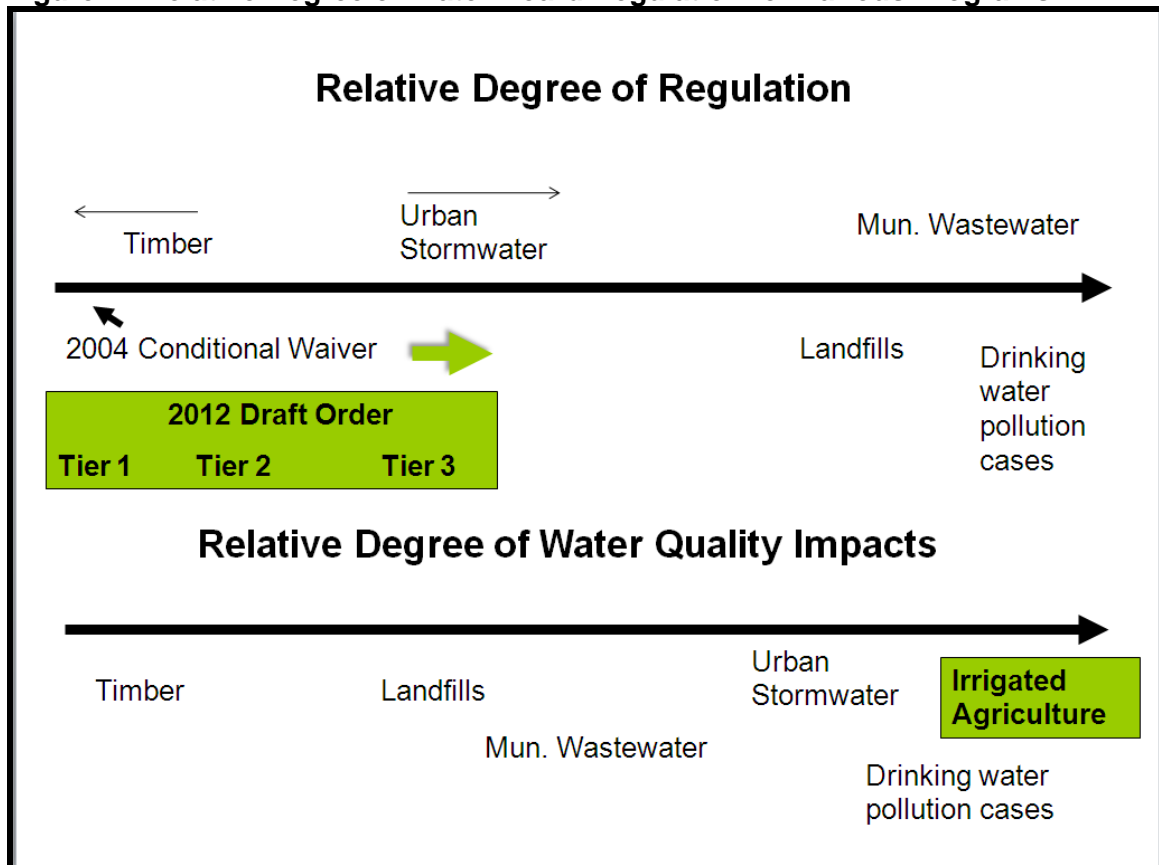
Discharges of waste associated with agricultural discharges (e.g., pesticides, sediment, nutrients) are a major cause of water pollution in the Central Coast Region, as detailed in the Draft 2012 Agricultural Order (Findings 5-8; Attachment A – Additional Findings 1, 27, 33-133), and the March 17, 2011 staff report to the Board (see staff report and Appendix G – Report on Water Quality Conditions). 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. Furthermore, additional data and information gathered as a result of work by the University of California of Davis to address nitrate in groundwater, funded by the State Water Resources Control Board for Senate Bill SBX2, indicates that the nitrate problem in groundwater is more severe than originally estimated by staff at the Central Coast Water Board. In addition, results described in the State Water Resources Control Board's Summary of Toxicity in California Waters 2001-2009 and more specifically in the most recent Monterey Bay National Marine Sanctuary Condition Report, the Central

Coast Region also has some of the most toxic and severely impaired surface water in the State.

Nitrate is the region’s most widespread groundwater contaminants. Agricultural fertilizers applied to irrigated cropland are the largest regional source of nitrate in groundwater. Total financial costs of nitrate contamination include additional drinking water treatment, new wells, monitoring, alternative water supplies and other safe drinking water actions. Private domestic drinking water wells are also affected and are at greater risk to public health because monitoring and treatment are not required. Many communities in the areas of nitrate contamination are among the poorest in California and have limited economic means or technical capacity to maintain safe drinking water given threats from nitrate.

The March 17, 2011 staff report and Appendix G can be viewed at the following link: [http://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2011/march/Item\\_14/index.shtml](http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/march/Item_14/index.shtml)

**Figure 1. Relative Degree of Water Board Regulation for Various Programs**



The Draft 2012 Agricultural Order prioritizes conditions to control nitrate loading to groundwater and impacts to public drinking water systems (Finding #6). Extensive studies and empirical data verify that fertilizer from irrigated agriculture is the overwhelming source of nitrate pollution in groundwater in intensively farmed areas such

as the lower Salinas Valley and lower Santa Maria Valley. According to the most recent data from California Department of Public Health in the Water Board's GeoTracker database, as of the date of this staff report, approximately 273 public supply wells (serving hundreds of thousands of people) exceed the state drinking water standard and must be treated before it can be provided to the consumer. In parts of the Salinas groundwater basin, more than 33% of the public supply wells used for drinking water exceed the drinking water standard and require treatment. In the Santa Maria groundwater basin, more than 29% of public supply wells used for drinking water exceed the drinking water standard and require treatment. Municipalities and water purveyors in many areas must treat drinking water to remove nitrates before providing the water to customers. The cost to municipalities and the public for treating drinking water polluted by nitrate is estimated to be in the hundreds of millions of dollars, and the cost is increasing over time as the pollutant loading continues.

Moreover, rural residents in intensively farmed irrigated agriculture areas who use private domestic wells are at the greatest risk from nitrate contamination in their drinking water. Most residents do not test their wells, and no agency oversees water quality monitoring in individual domestic wells. In some areas of our Region, the concentration of nitrate in drinking water aquifers is more than ten times the drinking water standard. The health risks to residents are serious and include Blue Baby Syndrome, with nitrate being increasingly linked to cancer, Parkinson's disease, thyroid inhibition, diabetes, and endocrine disruption, as described in the March 17, 2011 staff report Appendix F. This significant public health risk is getting steadily worse, and is caused by both historic agricultural practices and current practices and loading. The Water Boards are the only agencies with the authority and responsibility for addressing and resolving this major pollution problem and public health threat.

At the September 2011 Board Meeting, Dr. Thomas Harter, a UC Davis researcher, summarized some of the most recent data and analyses on groundwater pollution in the Salinas (Region 3) and Tulare (Region 5) areas. The data and analyses show that the groundwater pollution problem is even more extensive than Water Board staff previously described. Dr. Harter noted that the concentration of nitrate in groundwater in rural areas is increasing significantly, and these are the areas where homeowners are using private domestic wells. Home owners and workers at agricultural labor camps are at the greatest health risk, and are Water Board staff's highest priority. Dr. Harter also emphasized that there is a great opportunity for improving farm practices in the Salinas Valley and thereby lowering nitrate pollutant loading to groundwater. Dr. Harter's presentation to the Board at the September 1, 2011 Board Meeting can be viewed at the following link:

[http://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2011/Sept/Item\\_16/index.shtml](http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/Sept/Item_16/index.shtml)

The Draft 2012 Agricultural Order also addresses the severe pollution of surface waters in agricultural areas. Extensive empirical data verify that toxicity resulting from agricultural discharges of pesticides has severely impacted aquatic life in Central Coast streams, and some agricultural drains are toxic (lethal to aquatic life) nearly every time the drains are sampled, as described in the March 17, 2011 staff report and Appendix G – Water Quality Conditions. This pollution problem is highlighted in the State Water Resources Control Board report on Toxicity in California Waters, October 2011. The report summarized the findings of monitoring conducted by the state's Surface Water Ambient Monitoring Program (SWAMP) and associated programs between 2001 and



2010. The results of the study indicate that of all regions sampled, the Central Coast region had the greatest percentage of toxic sites and greatest percentage of highly toxic sites statewide. Moreover, many local communities and visitors catch and consume fish in these areas, and are therefore exposed to health risks from contaminated fish tissue. Water Board staff has been working with local health agencies to post contaminated waters to inform the public of the health threat, including Oso Flaco Lake.

In addition, comprehensive studies in the Salinas and Santa Maria rivers on the Central Coast have demonstrated that pesticide toxicity in the lower reaches of these rivers is linked to severe impacts on resident aquatic insect communities that are critical for aquatic habitat and healthy watersheds. Pesticide toxicity in surface waters creates complex and long-term degradation of ecological processes and systems.

Existing and potential water quality impairment from agricultural discharges takes on added significance and urgency, given the impacts on public health, the fact that groundwater provides more than 80% of drinking water on the Central Coast, sources of drinking water supplies are limited, and proximity of the region's agricultural lands to critical habitat for species of concern. If the Water Board and the agricultural community do not adequately address the protection of water quality and beneficial uses, the environmental and health effects will become more severe and widespread, the associated costs of pollution are likely to increase substantially, and the impacts will impose significant risk on future availability and uses of the Central Coast's water resources.

### **3.3 Process to Renew the Agricultural Order and Public Input Opportunities**

The Water Board and Water Board staff engaged in a comprehensive public process to consider renewal of the 2004 Agricultural Order. Staff initiated the renewal process in mid-2008, and described the Water Board's intent to address the major water quality issues in agricultural areas in the Executive Officer's December 2008 letter to stakeholders available on the Water Board's website at:

[http://www.swrcb.ca.gov/rwqcb3/water\\_issues/programs/ag\\_waivers/docs/ag\\_order/letter\\_invitation\\_12\\_08.pdf](http://www.swrcb.ca.gov/rwqcb3/water_issues/programs/ag_waivers/docs/ag_order/letter_invitation_12_08.pdf)

The Executive Officer's December 2008 letter includes five priority water quality issues that must be addressed:

1. Eliminate toxic discharges of agricultural pesticides to surface waters and groundwater.
2. Reduce nutrient discharges to surface waters to meet nutrient standards.
3. Reduce nutrient discharges to groundwater to meet groundwater standards.
4. Minimize sediment discharges from agriculture lands.
5. Protect aquatic habitat (riparian areas and wetlands) and their buffer zones.

Addressing these issues is the primary function and responsibility of the Central Coast Water Board, as directed by our plans, policies, governing law, and our mission.

During most of 2009, the Water Board convened an Agricultural Advisory group consisting of agricultural and environmental representatives to work on updating the Agricultural Order. On February 1, 2010, the Water Board released for public review a

Preliminary Staff Draft Conditional Waiver of Waste Discharge Requirements for Discharges of Waste from Irrigated Lands (Preliminary Staff Draft Order) and received comments and alternative proposals to the Preliminary Staff Draft Order. The Water Board received alternative proposals from both agricultural and environmental stakeholder groups.

The alternative proposals submitted by agricultural representatives (collectively referred to as the Agricultural Proposal) recommended “third-party” groups, self-auditing and group or aggregated reporting of qualitative information about implementation practice and effectiveness, and cooperative monitoring. The Agricultural Proposal includes less stringent requirements, as compared to the February 2010 Preliminary Draft Staff Order. Also, many aspects of the agricultural proposals are not consistent with the Water Code or State Water Board policy. In particular, the proposed method of implementing water quality standards and reporting information would not allow the Water Board to evaluate the effectiveness of the management practices or compliance with other conditions of the Order.

The alternative proposal submitted by environmental representatives (Environmental Proposal) proposed additional, more stringent, requirements on the February 2010 Preliminary Draft Staff Order. In general, the Environmental Proposal is consistent with the Water Code and State Water Board policy, but some of their suggestions are not immediately necessary to protect water quality. These proposals are discussed in more detail below in Section 3.5. On May 12, 2010 and July 8, 2010, the Water Board held public workshops to provide an opportunity for public comments and recommendations on the renewal of the 2004 Agricultural Order.

After considering various regulatory options and public comments received, including alternative proposals, the Water Board released a revised Draft 2012 Agricultural Order, Draft MRP, and staff report on November 19, 2010 and held an additional public workshop on February 3, 2011. Staff revised the Draft Agricultural Order to include additional prioritization (tiering) criteria related to the threat to water quality, and added criteria related to location of individual farms/ranches in proximity to a public water system well that is polluted by nitrate. On March 1, 2011, the Water Board staff released a further revised Draft 2012 Agricultural Order and the Water Board held a panel hearing on March 17, 2011. The Water Board continued the panel hearing to May 4, 2011, to allow further opportunity for public input. At the May 4, 2011 Panel Hearing, the Water Board allowed agricultural representatives to submit additional information regarding their alternative proposal originally submitted on December 3, 2010.

In July 2011, staff released an addendum to the March 2011 staff report, including additional revisions to the revised Draft 2012 Agricultural Order made in response to public comments. The Water Board scheduled a Board Hearing (in the event the Water Board had a quorum) or another Panel Hearing (in the event the Water Board did not have a quorum) for September 2011. The Water Board later postponed the hearing due to lack of a quorum to consider the item. Because the Water Board did not renew the Agricultural Order before its five-year term expired, the Water Board, or Executive Officer pursuant to delegated authority, extended the 2004 Agricultural Order four times beyond the original 2009 expiration date. The current order expires on September 30, 2012. Most recently, the Water Board held a workshop on February 1, 2012, at the request of agricultural industry representatives, to provide the opportunity for Water

Board members to become more familiar with the record in this matter and to hear comments by the public on the proposed Draft 2012 Agricultural Order.

Table 1 summarizes the versions of the Draft Agricultural Order proposed by staff from February 2010 to present. The Water Board Hearing to consider the Final Draft 2012 Agricultural Order is scheduled for March 14 & 15, 2012.

Since the Water Board began the process to renew the Agricultural Order in 2008, staff convened multiple public input opportunities and held numerous meetings with persons interested in the renewal of the 2004 Agricultural Order, including individuals and representatives of agricultural groups, environmental groups, and public health groups. A list of the various public input opportunities and stakeholder meetings and events to discuss the Agricultural Order renewal since November 2009, is available on the Water Board's website at:

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order/outreach\\_021412.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/outreach_021412.pdf)

In summary, Water Board staff released a preliminary draft and then four revised versions of the Draft 2012 Agricultural Order and associated staff reports, held six public written comment periods, and convened or participated in more than 60 outreach events. The Water Board and the Executive Officer also approved three extensions of the 2004 Agricultural Order to allow for a more comprehensive public process. The public process for this item has been the most comprehensive process of its kind in the Water Board's history. The proposed Draft 2012 Agricultural Order has changed significantly from the original February 2010 Preliminary Draft Staff Order as a result of public input.

### **3.4 Summary of Major Comment Areas and Responses**

During the process to renew the Agricultural Order, the 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, and the general public. The Water Board also received many letters from individual growers. Many of these comment letters indicated that many growers were already implementing farm water quality management practices. In addition to comment letters, the Central Coast Water Board also received three alternative proposals – two from agricultural groups and one from environmental groups. All comment letters and alternative proposals are available on the Water Board's website, and staff prepared response to comments in November 2010, March 2011, July 2011, and August 2011, which are also available on the Water Board's website in staff reports to the Board and supplemental sheets. This section describes the range of comments received on specific issues and also identifies key concepts important to stakeholders and Water Board Members. The alternative proposal submitted by agricultural representatives is also discussed in more detail below.

Comment letters submitted by individuals and organizations reflect a wide range of perspectives on the need and degree of regulation that the Water Board should use to ensure that discharges from irrigated agriculture do not affect the quality of surface water or groundwater. A sample range of comments for key issues is described below.

ISSUE	RANGE OF COMMENTS - DEGREE OF REGULATION	
	LESS	MORE
<b>Nutrient discharges to groundwater</b>	Our State and Federal constitution does not provide a guarantee of right to clean water – nor do our state or federal laws/regulations <sup>1</sup> (Ag).	Make drinking water protection the highest priority for the order <sup>2</sup> (EJ).
	Statements that irrigated agriculture is the primary source of nitrate pollution in drinking water wells are not supported by available data and information <sup>3</sup> (Ag).	Groundwater nitrate pollution is severe and widespread. Dischargers who pollute groundwater should be required to clean it up and pay costs of alternative drinking water <sup>4</sup> (EJ/ENV).
	There is no scientific proof that any fertilizer reports, fertilizer permits, or plans are going to improve water quality <sup>5</sup> .	Growers must prepare nutrient management plans to ensure that discharges do not further degrade groundwater <sup>6</sup> (Ag/ENV/EJ).
	Nutrient Balance Targets are unreasonable <sup>7</sup> (Ag).	Growers are already achieving Nutrient Balance Targets <sup>8</sup> (Ag).
<b>Toxic discharges of pesticides to surface waters and groundwater</b>	In many cases, eliminating toxicity is impossible <sup>9</sup> (Ag).	The two year timeline to eliminate toxicity in surface water is too liberal. The pesticides known to be causing toxicity impairments degrade in weeks or a few months <sup>10</sup> (EJ/ENV).
<b>Nutrient discharges to surface waters</b>	Milestone should show decreased nitrate loads in surface water by 10% within 10 years <sup>6</sup> (Ag).	Nutrient discharges to surface water that exceed water quality standards should be eliminated within 4 years <sup>10</sup> (ENV).
<b>Sediment discharges to surface waters</b>	Water Board should address sediment in subsequent order <sup>11</sup> (Ag).	Order must strengthen stormwater protection <sup>12</sup> (ENV).
<b>Protect aquatic habitat and their buffer zones</b>	Water quality buffer requirements will take agricultural land out of production <sup>7</sup> (Ag).	Water Quality Buffer Plan requirement does not apply to sufficient acreage and should apply to both Tier 2 and Tier 3 Dischargers <sup>13</sup> (ENV).
<b>Proposed Tiers</b>	It is arbitrary and unfair to single out Tier 3 dischargers <sup>14</sup> (Ag).	Tier 3 is too narrow and should include more farms and acreage (EJ/ENV)
	Low impact farms should not have same requirements as higher impact farms. Requirements should be less stringent in unimpaired areas <sup>16</sup> (Ag).	Farms that contribute to surface water toxicity should have increased requirements. Requirements should be more stringent in impaired areas <sup>17</sup> (Ag/ENV/EJ).
<b>Groundwater Monitoring</b>	Groundwater monitoring should rely on existing data not individual well sampling <sup>18</sup> (Ag).	Dischargers must conduct annual groundwater sampling of one primary groundwater well <sup>6</sup> (Ag/ENV/EJ).
<b>Individual Monitoring</b>	On-farm sampling can assist growers in addressing their farms' water quality issues. On-farm sampling has assisted, in some cases, in significant reduction or elimination of discharge of waste through adaptive management practice implementation <sup>19</sup> (Ag).	Dischargers must conduct waste specific monitoring and reporting that includes Ind. Discharge Characterization Monitoring and Ind. Discharge Monitoring to inform the Discharger, the Water Board, and the public regarding compliance with this Order <sup>10</sup> (ENV/EJ).
<b>Individual Reporting</b>	Farming information is proprietary and not appropriate for release in the public domain. Object to the cost and liability associated with individual on farm monitoring and reporting <sup>20</sup> (Ag).	Ind. discharge monitoring and reporting is necessary to identify specific sources of pollution. Recommend that individual discharge monitoring requirements be more frequent during the initial phase of the Order <sup>12,13</sup> (ENV/EJ).

Ag – Agriculture, ENV – Environment, and EJ – Environmental Justice. References are at end of staff report (p 40).

It is worth noting that for many of the issues described above, there was a broad range in comments from agricultural stakeholders regarding the degree of regulation. For example, there are individual agricultural stakeholders that agree and disagree with sampling their groundwater wells. And many agricultural stakeholders agree with some tiered approach to regulation based on risk to water quality. However, the area with least diversity in the range of comments from agricultural stakeholders was regarding reporting results of on-farm monitoring, in this case there is a common objection to the reporting of individual runoff data or information. Staff considered the diverse and wide range of stakeholder perspectives in developing the Draft 2012 Agricultural Order and included many edits based on stakeholder input.

More than half of the comment letters included comments related to the following three topics of the various versions of the Draft 2012 Agricultural Order: 1) tiers and tiering criteria, 2) impacts to drinking water and conditions related to groundwater, and 3) monitoring and reporting. Staff also identified the following key concepts as important to stakeholders and Water Board members from review of stakeholder and Board member input:

- Prioritize based on water quality effects and make protection of human health and drinking water the highest priority;
- “One size does not fit all.” Each farm is unique and has a unique risk to water quality. Increase requirements for farms/ranches discharging the most waste, creating the greatest impacts, or with the greatest threat to water quality. Reduce requirements for farms/ranches with the least discharge of waste or least threat to water quality;
- Provide reasonable timeframes to control waste discharges and meet water quality goals;
- Require reasonable amount of implementation, monitoring and reporting requirements;
- Allow dischargers flexibility to comply with requirements based on individual farm/ranch;

In response, staff incorporated Water Board members’ suggestions and stakeholder input in the Draft 2012 Agricultural Order by:

- Building on the 2004 Agricultural Order and Preliminary Draft Agricultural Order distributed on February 1, 2010;
- Incorporating key concepts from the Agricultural proposal;
- Making human health protection the highest priority for waste discharge control;
- Including short term actions that will immediately improve and protect drinking water;
- Targeting the most impaired areas;
- Using multiple prioritization criteria that provide integration of water quality impairments (locations, severity and human health risks) with characteristics of individual farms/ranches that inform where and which operation are highest risk for discharging waste that affects water quality (e.g., size, crop types, fertilizer and pesticide use), thereby increasing efficiency;
- Including more implementation, monitoring and reporting requirements for the highest risk farms/ranches;

- Including less implementation, monitoring and reporting requirements for the lowest risk farms/ranches;
- Including specific timeframes to reduce waste discharge and pollutant loading from high risk operations;
- Including targeted monitoring and reporting to collect information to determine reductions in waste discharges, reductions in pollutant loading, and water quality improvements in receiving surface and groundwater;
- Allowing dischargers flexibility to comply with requirements based on characteristics of individual farm/ranch;
- Allowing dischargers who participate in cooperative water quality improvement efforts flexibility in monitoring and timeframes for compliance;
- Maintaining confidentiality of groundwater well locations;
- Clarifying that trade secrets or secret processes are exempt from public disclosure;
- Streamlining reporting information and improving information management systems and tools so information is available to growers and staff can more efficiently and effectively evaluate data and information and focus limited staff resources on highest priority compliance and enforcement activities;

### **3.5 Summary of the Agricultural Proposal Submitted by Agricultural Representatives**

On April 1, 2010, the California Farm Bureau Federation submitted a "Preliminary Alternative Agricultural Proposal" and on December 3, 2010, a revised "Draft Central Coast Agriculture's Alternative Proposal for the Regulation of Discharges from Irrigated Agricultural Lands" (Agricultural Proposal), signed by several individuals and entities associated with irrigated agriculture ("Ag Group"). The primary focus of the Agricultural Proposal was to create waiver conditions specific to the formation of third-party groups. At the March 17, 2011 Panel Hearing, agricultural representatives submitted new information regarding the Agricultural Proposal, putting the proposal into the same format as the Draft 2012 Agricultural Order. At the May 4, 2011 continuation of the March 17, 2011 Panel Hearing, the Ag Group submitted additional new information modifying the Agricultural Proposal and adding a proposed groundwater monitoring program. The Agricultural Proposal, including the new information, includes many edits to the findings and order portion of the Draft 2012 Agricultural Order and adds an alternative set of conditions for dischargers who elect to participate in a third-party group. Water Board staff, including staff from the Water Board, staff from the State Water Board's Office of Enforcement, and legal counsel from State Water Board's Office of Chief Counsel reviewed the Agricultural Proposal, including new information. In addition, staff met with agricultural representatives on multiple occasions to discuss the Agricultural Proposal. Even after our meetings and other attempts at clarification, it remains unclear as to which agricultural groups or individual growers are represented by the "Ag Group" submitting the Agricultural Proposal. In fact, the Water Board received comment letters from agricultural groups and individual growers both in support of and in objection to the Agricultural Proposal. This is an important issue because it highlights fundamental differences between Water Board staff's Draft 2012 Agricultural Order and the Agricultural Proposal.

Water Board staff received comments and talked to many small farmers who stated that they did not want to be regulated the same as the large commercial operations in areas

with the greatest water quality problems. Staff agreed, and developed a tiered approach to separate growers based on threat to water quality and impairments. Tier 1 has the lowest requirements, and the majority of farmers in our Region (55%) are in this Tier. Tier 2 has a moderate level of requirements, and the majority of acreage in our region (47%) is in this Tier. It is important to understand that the vast majority of small family farms would be in Tier 1, which is similar to the 2004 Ag Order, and that most of the rest of the farms would be in Tier 2, which includes some new requirements for a fraction of the farms in that Tier. Together, Tier 1 and Tier 2 include 97% of farms and 86% of the irrigated acreage in the Region. It appears from the comments received that the larger farming operations, posing higher water quality threat and likely to be in Tier 3 of the Water Board staff's Draft 2012 Agricultural Order, are most supportive of the Agricultural Proposal.

A detailed discussion of staff's evaluation of the Agricultural Proposal is included in the Staff Report for the March 17, 2011 Board Meeting and the Addendums to the Staff Report released on July 8, 2011 and August 16, 2011.

Staff found some similarities between the Agricultural Proposal and the Draft 2012 Agricultural Order. First, both prioritize farms/ranches that grow crops with high potential to discharge nitrogen to groundwater, include implementation of farm plans that identify management practices and provide for coalitions, commodity-specific or other third-party groups to implement cooperative management, treatment or monitoring (or request specific order unique to the group). However, after evaluating the Agricultural Proposal and new information, staff finds the Agricultural Proposal not acceptable for the following fundamental reasons:

- The Agricultural Proposal's recommendations that define and set requirements for third-party groups are not consistent with Water Code section 13269 that applies to waivers of waste discharge requirements. For example the Agricultural Proposal would allow the "third-party group" or the individual waste discharger to be responsible for compliance. While third-party groups may assist in compliance, a waiver of waste discharge requirements applies to the discharger, not a group. Other recommendations for third-party groups were incomplete, unclear, or internally inconsistent.
- The 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.
- The Agricultural Proposal does not appear to sufficiently protect human health and drinking water sources.
- The Agricultural Proposal would not report information to allow the Water Board to determine or verify if individual farms are making adequate progress towards

water quality improvement or verify the adequacy and effectiveness of the waiver's conditions.

- The Agricultural Proposal does not include sufficient timeframes for compliance and achievement of water quality improvements.

Many of the proposed changes and comments within the Agricultural Proposal are reasonable. Staff made revisions to its September 2011 draft that are now included within the Draft 2012 Agricultural Order in response to the Agricultural Proposal. For example, the Draft 2012 Agricultural Order allows dischargers to participate in acceptable cooperative groundwater monitoring (MRP Part 2A.6) and maintains the confidentiality of precise locations of groundwater monitoring wells (Condition #65). In addition, the Draft 2012 Agricultural Order provides incentives (e.g., alternative monitoring and time schedules for compliance) for dischargers who participate in cooperative water quality improvement projects such as local treatment wetlands or managed aquifer recharge projects (Finding #12, Condition #12). The Draft 2012 Agricultural Order also explicitly allows for third-party groups, such as coalitions (Condition #10) and provides incentives for third-party certifications that require implementation of similar management practices as the Draft 2012 Agricultural Order (e.g., Sustainable in Practice, Condition #14.1d). Finally, the Draft 2012 Agricultural Order also specifies that individual dischargers or groups of dischargers (e.g., commodity groups) can request individual or general orders tailored to their specific operation, farm/ranch, commodity or type of discharge (Condition #6).

The discussion of staff's evaluation of the Agricultural Proposal in the Staff Report for the March 17, 2011 Board Meeting is available at

[http://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2011/march/Item\\_14/14\\_staffreport.pdf](http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/march/Item_14/14_staffreport.pdf)

The discussion of staff's evaluation of the Agricultural Proposal in the Addendum to the Staff Report released on July 8, 2011 is available at:

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/2011\\_sept\\_hearing\\_docs/sept2011\\_agorder\\_addstfrpt\\_070611\\_final.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/2011_sept_hearing_docs/sept2011_agorder_addstfrpt_070611_final.pdf)

The discussion of staff's evaluation of the Agricultural Proposal in the Addendum to the Staff Report released on August 16, 2011 is available at:

[http://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2011/Sept/Item\\_17/17\\_stfrpt.pdf](http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/Sept/Item_17/17_stfrpt.pdf)

Agricultural representatives also submitted their estimates of costs regarding Water Board staff's Draft 2012 Agricultural Order as well as the Agricultural Proposal. The report is flawed in several ways, as described below, and therefore is not an actual cost analysis or cost comparison, and cannot be evaluated as such. The conclusions of the cost analysis provided by agricultural representatives, similar to the Water Board staff's cost information in Appendix F of the March 17, 2011 Staff Report, shows that costs for a farm, or per acre to comply, range widely, depending on the farm. It also acknowledges that many factors are uncertain and were difficult to estimate; therefore, the authors made several assumptions. Some of the assumptions overestimate the number of farms and acreage in tiers of the Draft 2012 Agricultural Order, and if and how some of the Draft 2012 Agricultural Order Conditions apply to farms, hence overestimating costs. For example, the costs include all dischargers (in all tiers) constructing containment structures and all Tier 3 dischargers installing riparian buffers. Neither of these requirements apply, so the resulting cost information is not valid. Furthermore, the cost analysis provided by agricultural representatives do not take into



account revisions made to staff's Draft 2012 Agricultural Order, which further reduce costs, for example revised conditions to allow cooperative groundwater monitoring.

The cost estimates by agricultural representatives for the Agricultural Proposal appear to only include the costs of starting and running the third-party group, auditing and conducting program review. It does not appear to include the cost to growers to implement management practices. However, the bulk of the costs they estimated for staff's Draft 2012 Agricultural Order are costs to farmers to implement management practices and report on their status and effectiveness. It is misleading to include the cost of management practices with respect to staff's Draft 2012 Agricultural Order and not include the cost of management practices for the Agricultural Proposal. The cost comparison is not valid.

Staff assumes the costs to individual farmers to implement practices that effectively control discharges and protect water quality should be similar for both the Draft 2012 Agricultural Order and the Agricultural Proposal. Both proposals also include monitoring and reporting, so those costs may be similar or at least represent similar provisions that incur costs. Therefore, the only distinct cost that is unique to the Draft 2012 Agricultural Order compared to the Agricultural Proposal is the time spent or cost paid to farm staff or a consultant to collect and report required information (e.g., for a certified irrigation and nutrient management plan for a tier 3 grower). The distinct cost that is unique to the Agricultural Proposal is the cost to fund and operate the third-party group and pay auditors. The cost analysis for the Draft 2012 Agricultural Order includes all of the above cost categories. The cost analysis for the Agricultural Proposal only includes costs associated with the added organizational framework of the third-party group.

Finally, the Agricultural Proposal costs depend on the number of farmers who choose to participate in a third-party group, so estimating the per farm or per acre cost of the Agricultural Proposal is speculative and varies depending on the assumptions about the number of growers. The costs of the Draft 2012 Agricultural Order depends on the conditions or requirements associated with the tier that each farm falls into, so the costs by farm or by acre are more predictable and can be estimated more specific to the actions a farmer must take. In addition, the number of farms and acreage in each tier of the Draft 2012 Agricultural Order can be estimated based on existing information from the electronic Notice of Intent submitted by growers enrolled in the existing Agricultural Order.

Therefore, the cost information submitted by agricultural representatives seems to compare "apples and oranges" and does not adequately explain the costs or relative costs of the Draft 2012 Agricultural Order or the Agricultural Proposal.

Water Board staff's cost evaluation did not include the costs of coalitions explicitly, as staff views coalitions as an organizational structure for growers to join, as a voluntary option, to facilitate their individual compliance with the conditions of the Draft 2012 Agricultural Order. The Draft 2012 Agricultural Order allows individual growers to join coalitions and take advantage of functions that may be more efficiently or economically implemented by a third-party on behalf of a group of growers, such as cooperative monitoring, reporting, and collective or regional treatment systems, to comply with the Order (see Conditions 10, 39, 40, 50, 76, 104). However, this is not a required condition of the Draft 2012 Agricultural Order. Therefore, staff's cost evaluation focused on the individual costs to growers to implement management practices, monitor and report

pursuant to conditions in the Order. The range of costs differed mostly based on differing costs of management practices and monitoring. The economic analysis conducted for alternatives for the Long-term Irrigated Lands Program for the Central Valley Water Board (Central Valley Regional Water Quality Control Board, 2010) also found the costs of different alternatives, including some using coalitions and some without, was driven by differing costs of management practices, and not by whether or not growers could form coalitions.

## **4.0 DISCUSSION**

### **4.1 Summary of Draft 2012 Agricultural Order and Monitoring and Reporting Program**

The March 17, 2011 staff report included a detailed discussion of the requirements included in the Draft 2012 Agricultural Order and MRP. Subsequent staff reports released for the May 2011 and September 2011 Board Meeting discussed additional revisions. Further revisions are discussed in this staff report. Table 1 summarizes the versions of the Draft 2012 Agricultural Order proposed by staff from February 2010 to present (including web links).

To build upon the existing 2004 Agricultural Order, staff is recommending the continued use of a conditional waiver with the addition of tiers to address the unique characteristics and risk to water quality of individual farms. The Draft 2012 Agricultural Order is based on the level of waste discharge and threat to water quality from an individual farm/ranch and establishes three tiers of conditions (Conditions 12 – 16). The Draft 2012 Agricultural Order requires Dischargers to comply with conditions for the “tier” that applies to their individual farm/ranch. The tiers are based on criteria that indicate threat to water quality, including: crops known to have higher risk of discharging nitrogen to groundwater and size of farm, use of chemicals of concern, and proximity or discharge to an impaired surface waterbody or public water system well.

In general, farms/ranches with the highest level of waste discharge or threat to water quality have the greatest amount of waste discharge control requirements, and greatest amount of individual monitoring and reporting. Conversely, dischargers with the lowest threat have the least amount of discharge control requirements, and least monitoring and reporting. Table 2 summarizes the estimated number of farms/ranches and irrigated acreage in each Tier based on information in the electronic Notice of Intent (eNOI) database; this is the database that contains the information submitted by growers to enroll and maintain compliance with the existing Agricultural Order. Staff estimates that approximately 1986 (55%) farms/ranches covering 141,186 irrigated crop acres in the Central Coast Region are Tier 1 (lowest threat); 1523 (42%) operations covering 174,150 irrigated crop acres are Tier 2 (moderate threat); 103 (3%) operations covering 51,019 irrigated crop acres are Tier 3 (highest threat).

The conditions in the Draft 2012 Agricultural Order are summarized in Table 3. Dischargers must comply with the conditions and monitoring and reporting requirements based on the tier associated with their individual farm/ranch. The Draft 2012 Agricultural Order complies with the Water Code and the NPS Policy. It prioritizes conditions to protect human health and immediately reduce nitrate loading to drinking water sources, and addresses the most impaired areas in the region. The Draft 2012 Agricultural Order

requires the implementation of farm water quality management practices to achieve compliance and meet water quality standards. In addition, the Draft 2012 Agricultural Order requires reporting of information to allow the Water Board to determine or verify if individual farms are making adequate progress towards water quality improvement, and includes specific timeframes for compliance and achievement of water quality improvements. As suggested in public comments and input from Board Members, the Draft 2012 Agricultural Order is not “one size fits all.” The Draft 2012 Agricultural Order reduces requirements for farms/ranches with the least discharge of waste or least threat to water quality and increases requirements for farms/ranches discharging the most waste, creating the greatest impacts, or with the greatest threat to water quality. In addition, the most stringent requirements of the Draft 2012 Agricultural Order would apply to a very limited number of farms and acreage, and most farms would have similar requirements as with the 2004 Agricultural Order. Finally, the Draft 2012 Agricultural Order provides dischargers with several alternatives and reasonable flexibility to achieve compliance, given the magnitude and severity of water quality conditions and impacts from agricultural discharges.

As illustrated in Figure 1, staff found that in a general comparison with the existing 2004 Agricultural Order and the Draft 2012 Agricultural Order, Tier 1 requirements are fewer than the requirements in the existing 2004 Agricultural Order, Tier 2 requirements are comparable to the 2004 Agricultural Order with a few additional reporting requirements to better indicate effectiveness of management practices and reduction in pollutant loading. Tier 3 requirements are greater than the requirements in the 2004 Agricultural Order.

In summary, the Draft 2012 Agricultural Order is in the public interest because it requires compliance with water quality standards and includes conditions that are intended to eliminate, reduce and prevent pollution and nuisance and protect the beneficial uses of the waters of the State. In addition, the Draft 2012 Agricultural Order tiering structure focuses on the highest priority water quality issues and most severely impaired waters. The tiering structure provides reasonable flexibility for Dischargers who seek coverage under the order by providing them with a reasonable time schedule and options for complying with the Water Code commensurate with the specific level of waste discharge and threat to water quality associated with an individual farm/ranch. Finally, the Draft 2012 Agricultural Order provides for an efficient and effective use of Water Board resources, given the magnitude of the discharges and number of persons who discharge waste from irrigated lands.

#### **4.2 Final Supplemental Environmental Impact**

For the purposes of the California Environmental Quality Act (CEQA), the project is the renewal of the 2004 Agricultural Order and the CEQA lead agency is the Water Board. Attachment 3 is a resolution (Draft Resolution No. R3-2012-0021) to certify the Final Subsequent Environmental Impact Report (SEIR) pursuant to CEQA, including Findings and Statement of Overriding Considerations for the Adoption of a Renewal of a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands in the Central Coast Region (Order No. R3-2012-0011).

On July 9, 2004, the Water Board adopted the 2004 Agricultural Order, waiving waste discharge requirements for discharges of waste from irrigated lands in the Central Coast Region (2004 Agricultural Order) and adopted a Negative Declaration under CEQA

(2004 Negative Declaration). No person filed any legal challenge to the 2004 Agricultural Order or the 2004 Negative Declaration. This project is the renewal of the 2004 Agricultural Order, which is the previous project, with clarifications and new conditions.

CEQA and the CEQA Guidelines state that when a Negative Declaration has been adopted for a project, no subsequent environmental impact report (SEIR) shall be prepared for the project unless the lead agency determines that, among other reasons, changes are being proposed in the project that could involve an increase in the severity of environmental effects identified in the Negative Declaration. (Cal. Code Regs., tit 14 § 15162(a)(1).)

To assist in determining whether an SEIR would be necessary, the Water Board staff held a CEQA scoping meeting and received oral and written comments from the public, sought and received input from interested public agencies on potentially significant environmental effects of the proposed project, and reviewed the comments received on the multiple draft orders, workshops, and board hearings.

The Water Board issued a Notice of Availability on October 25, 2010, and provided the public with 45 days to submit written comments on the Draft SEIR. The Water Board received 12 written comment letters. Responses to the comments are discussed in Section 7 of this Final SEIR and included as Attachment A to the Final SEIR.

In preparing this Final SEIR, Water Board staff reviewed the 2004 Negative Declaration, including the Initial Study (Environmental Checklist), considered the comments received during the public participation process with respect to renewal of the 2004 Agricultural Order. Review of this information did not result in identification of any new environmental effects that had not already been evaluated in the 2004 Negative Declaration. Staff identified two areas included on the Environmental Checklist where there was a potential for an increase in the severity of environmental effects previously identified. These areas are the potential for more severe impacts on agricultural resources due to the potential for an increase in the use of vegetated buffer strips and economic impacts due to new requirements that could take some land out of direct agricultural use and impacts on biological resources due to the potential for a reduction in water flows in surface waters. This Final SEIR evaluates those potential environmental effects.

With respect to Agricultural Resources, the Final SEIR concludes that adoption of the proposed alternative could result in some economic or social changes but that there was insufficient evidence to conclude that the economic changes would result in adverse physical changes to the environment. Commenters speculated that the economic impacts would be so large as to result in large scale termination of agriculture and that land would be sold for other uses that would result in impacts on the environment. No significant information was provided to justify that concern. As described in the Section 2.4 of this Final SEIR, the Draft 2012 Agricultural Order would impose additional conditions on approximately 100 to 300 of the 3000 of owners or operators currently enrolled in the 2004 Agricultural Order. CEQA states that economic or social effects of a project shall not be treated as significant effects on the environment. (Pub. Res. Code § 21083.) The Final SEIR concludes that due to some new conditions, particularly the requirement that some dischargers may implement vegetated buffer strips, the Order could result in loss of land for agricultural production since the buffer strips would generally not produce crops and some land could be converted to other uses. This impact was found to be less than significant and that mitigation could reduce impacts further. The Water Board may not generally

specify the manner of compliance and therefore, dischargers may choose among many ways to comply with the requirement to control discharges of waste to waters of the state. Even if all dischargers who could be subject to the condition to use vegetated buffers or some other method to control discharges in the Draft 2012 Agricultural Order (Tier 3 dischargers) chose to use vegetated buffers or converted to other uses, the total acreage is quite small compared to the total amount of acreage used for farming and was, therefore, found to be less than significant. In addition, since the land would be used as a vegetated buffer to comply with the Order, this would result in beneficial physical impacts on the environment, not adverse impacts.

With respect to Biological Resources, the Final SEIR concludes that wide scale water conservation could result in lower flows into surface water resulting in impacts on aquatic life. The Water Board may not specify the manner of compliance so it has insufficient information to evaluate the extent to which dischargers would choose to use water conservation to comply and to evaluate potential physical changes to the environment that could result. Reduction in toxic runoff may offset impacts due to the possibly reduced flows. In addition, reduction in water use could result in increased groundwater levels that would also result in more clean water recharging surface water and augmenting rather than depleting flows (an offsetting effect).

Based on this information, the Final SEIR concludes that the environmental effects associated with the Draft 2012 Agricultural Order may be significant with respect to biological resources. However, given the uncertainty associated with evaluating the available information, it is possible that the effects may turn out to be less than significant. This Final SEIR provides this information to the public and to the Water Board so that it can make an informed decision. Proposed Resolution R3-2012-0012, contains findings consistent with the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15091) and a statement of overriding considerations (Cal. Code Regs., tit. 14, § 15093), concluding that project's benefits override and outweigh its potential unavoidable significant adverse impacts, for the reasons described in the March 17, 2011 Staff Report and Appendix H, and Addendum to the SEIR included in the September 1, 2011 Staff Report to address revisions to the Draft 2012 Agricultural Order.

The CEQA documents conclude that the Draft 2012 Agricultural Order would result in actions to restore the quality of the waters of the state and protect the beneficial uses, including aquatic habitat. While some impacts could occur, for example due to reduced surface water flows from implementing actions to comply with the Order, the benefits, which include contributing to the present and future restoration of beneficial water uses, and reducing or eliminating pollution, nuisance and contamination, warrant approval of the project, despite each and every unavoidable impact.

The March 17, 2011 Staff Report and Appendix H can be viewed at the following link: [http://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2011/march/Item\\_14/index.shtml](http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/march/Item_14/index.shtml). The Addendum to the SEIR can be viewed on page 25 of the following link: [http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/2011\\_sept\\_hearing\\_docs/17\\_stfrpt.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/2011_sept_hearing_docs/17_stfrpt.pdf).

### 4.3 Proposed Revisions to the Draft 2012 Agricultural Order and Monitoring and Reporting Program since September 1, 2011

In a staff report issued on August 16, 2011 for the September 1, 2011 Board Meeting, staff included redline-strikeout edits to the Draft 2012 Agricultural Order and Monitoring and Reporting Program, made in response to comments from versions released in preparation for the March 17, May 4, and September 1, 2011 Board Meetings. The most recent edits for the September 1, 2011 Board Meeting were shown in yellow highlight on the version posted on the Water Board's website, and also discussed in detail in the associated staff report starting on page 24. The Staff Report, Draft 2012 Agricultural Order and Monitoring and Reporting Program issued on August 16, 2011, for the September 1, 2011 Board Meeting (Item 17), is at the following web link:

[http://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2011/Sept/Item\\_17/](http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/Sept/Item_17/)

Since the staff report for the September 1, 2011 Board Meeting, staff is proposing additional revisions to the Draft 2012 Agricultural Order, Monitoring and Reporting Program, and Resolution to certify the Final SEIR as identified in Table 4, Table 5 and Table 6, respectively. In general, the revisions proposed by staff are not substantive and reflect necessary adjustments to the official order number and compliance dates. General timeframes in the Order and MRP are consistent with those proposed in previous versions of the Order and MRP, and organized relative to an annual October 1 report submittal date to allow for more efficient reporting and to relate to the proposed order expiration date, March 14, 2017. Staff also proposed additional minor changes to reflect delay in process due to lack of a Board quorum and other minor editorial corrections.

### 4.4 Clarifications to Address Common Misconceptions

In some cases, comments in objection to the Draft 2012 Agricultural Order appear to result from specific misconceptions about the order. The following section is to provide additional explanation to clarify common misconceptions.

1. Misconception – The Draft 2012 Agricultural Order treats all growers the same.  
Answer: No, the Draft 2012 Agricultural Order does not treat all growers or farms the same. Water Board staff talked to many small farmers who stated that they did not want to be regulated the same as the large commercial operations in areas with the greatest water quality problems. Staff agreed, and developed a tiered approach to separate growers based on threat to water quality. Tier 1 has the lowest requirements, and the majority of farmers in our Region (55%) are in this Tier. It is important to understand that the vast majority of small family farms would be in this Tier, which is similar to the 2004 Ag Order, and that most of the rest of the farms would be in Tier 2, which includes some new conditions.
2. Misconception - The Draft 2012 Agricultural Order increases requirements for all growers.  
Answer: No, the Draft 2012 Agricultural Order is scaled based on threat to water quality and lessens or maintains existing requirements for approximately 97% of farms and 86% of the irrigated acreage in the region. The Draft 2012 Agricultural Order does include requirements to monitor groundwater (twice in the first year) and

install backflow prevention devices on wells where chemicals are applied and most growers have indicated they are already implementing these practices. The Draft 2012 Agricultural Order does increase requirements for the farms that are the highest risk to water quality (Tier 3) to reduce nitrate loading to groundwater and toxic discharges to surface water (see below).

3. Misconception - The proposed new requirements related to Irrigation and Nutrient Management Plans, Water Quality Buffer Plans, and individual discharge monitoring apply to all farms.

Answer: No, these new requirements only apply to a SUBSET of Tier 3 Farms that have a relatively higher risk to water quality (e.g., discharge to pesticide or toxicity impaired creek, high nitrate loading, or adjacent to creek impaired for temperature/turbidity/sediment). Based on information submitted by individual growers, the number of farms estimated to be affected by these new requirements is currently less than 3% (less than 100 individual farms out of 3600).

4. Misconception - The Draft 2012 Agricultural Order is prescriptive and specifies the methods that growers must use to comply.

Answer: No. in general, the Draft 2012 Agricultural Order does not specify how a grower must comply. Growers can choose the practices based on the specifics of their individual farm. In addition, the Draft 2012 Agricultural Order provides many alternatives for compliance with requirements. A more prescriptive order would provide more certainty for growers. In response to comments, the draft order provides flexibility for growers to choose actions to protect water quality.

5. Misconception - The Draft 2012 Agricultural Order would prohibit discharges from farms.

Answer: No, the Draft 2012 Agricultural Order, like the existing 2004 Order, requires growers to implement management practices to minimize wastes from leaving the farm with discharged water (either water that must percolate below the root zone, or possible tail water from runoff, or tile drainage).

6. Misconception - The Draft 2012 Agricultural Order requires growers to line their ponds.

Answer: No, the Draft 2012 Agricultural Order does not require growers to line any ponds.

7. Misconception - The Draft 2012 Agricultural Order prohibits the use of tile drains.

Answer: No, the Draft 2012 Agricultural Order does not affect the use of tile drains. There are several ways waste constituents from agricultural operations get to surface and groundwater. Tile drains are one of them. They're not prohibited or singled out for fixing.

8. Misconception - The Draft 2012 Agricultural Order's nutrient management requirements require 100% crop efficiency related to fertilizer.

Answer: No, the Draft 2012 Agricultural Order does not require 100% crop efficiency. The Draft 2012 Agricultural Order does require the implementation of nutrient management practices generally, and requires only Tier 3 farms to implement a certified Irrigation and Nutrient Management Plan to protect groundwater and prevent the excessive application of nutrients.

The Irrigation and Nutrient Management Plan requirements apply only to a subset of Tier 3 Farms that have a relatively higher risk of nitrate loading to 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).

The proposed Irrigation and Nutrient Management Plan requirements, including specific nutrient balance targets, were developed in coordination with UC Cooperative Extension, Certified Crop Advisors, and other qualified professionals who recommended the specific targets. Nutrient balance targets compare the amount of nitrogen applied compared to the amount of nitrogen needed to produce a crop. Data exist that demonstrate that, in many cases, growers are already achieving these targets (e.g., grant projects and research).

In the case of a single crop rotation (e.g., strawberries), the proposed Draft 2012 Agricultural Order allows growers to apply 120% of crop needs, within three years of the order adoption. 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 proposed Draft 2012 Agricultural Order allows growers to apply 100% of crop needs annually, within three years of order adoption. 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 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.

In addition, based on comments from agricultural stakeholders, staff made edits to the order to clarify that considering the total nitrogen removed at harvest in the calculation of the nitrogen balance ratio is a long term goal and not an explicit requirement for the term of Draft 2012 Agricultural Order. This change is based on comments staff heard from agricultural representatives submitting the Agricultural Proposal that, in many cases, the amount of nitrogen removed at harvest may be unknown and difficult to quantify at this time.

The goal is to make sure growers are making progress, compared to a specific measure (e.g., nutrient balance target). If a grower's nutrient balance ratio indicates they are not making sufficient progress, we would then require them to provide additional information on how they will make progress or how they are reducing loading. Not meeting the nutrient target itself would not be the basis for any fine or penalty. Water board 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. In any case, monetary penalties have to come before the Board if contested by the discharger (not decided by staff).

9. Misconception – The Draft 2012 Agricultural Order does not recognize that soils are different and provide farmers with flexibility to deal with operations over varying areas.



Answer: No, the Draft 2012 Agricultural Order, like the existing 2004 Order, allows the growers to select the management practices that are appropriate based on their soil types, and other site specific conditions related to their individual operation.

10. Misconception - The Draft 2012 Agricultural Order does not allow for combined monitoring proposals, or combined practices like vegetated treatment ditches or wood chip ditches to treat nitrate.

Answer: No, this is not correct. The Draft 2012 Agricultural Order states: "The Central Coast Water Board encourages Dischargers to coordinate the effective implementation of cooperative water quality improvement efforts, local or regional scale water quality protection and treatment strategies (such as managed aquifer recharge projects) to lower costs, maximize effectiveness, and achieve compliance with this Order. In cases where Dischargers are participating in effective local or regional treatment strategies, and individual on-farm discharges continue to cause exceedances of water quality standards in the short term, the Executive Officer will take into consideration such participation in the local or regional treatment strategy and progress made towards compliance with water quality standards in evaluating compliance with this Order. In cases where cooperative water quality improvement efforts, or local or regional treatment strategies necessitate alternative water quality monitoring or a longer time schedule to achieve compliance than required by this Order, Dischargers may submit an alternative water quality monitoring plan or time schedule for approval by the Executive Officer."

11. Misconception – The Draft 2012 Agricultural Order makes proprietary information available to the public.

Answer: No, the Water Code and other laws require the Water Board to protect trade secrets and secret processes from public disclosure. Existing procedures provide for non-disclosure of legitimately proprietary information.

#### **4.5 February 2012 Water Board Workshop- Comments and Staff Responses**

The Water Board held its sixth public workshop on February 1, 2012 in Salinas to hear additional public input regarding staff's Draft 2012 Agricultural Order. The Water Board heard several presentations, which are summarized below.

Water Board staff summarized the extensive public process over the past 3 ½ years, the severity of surface and groundwater pollution caused by irrigated agriculture on the Central Coast, alternative proposals, changes staff has made to its Draft 2012 Agricultural Order, and staff's tiering structure based on threat to water quality.

Steve Shimek, representing several environmental organizations, emphasized the historical beneficial uses that have been degraded, the need to protect and restore beneficial uses, the relatively high amounts of farm chemicals applied in the Central Coast Region relative to other areas, the loss and degradation of aquatic habitat, and the severe and worsening water quality pollution conditions as verified by the Water Board's own empirical data. Mr. Shimek also stated support for Water Board's staff's February 2010 Draft Agricultural Order as the preferred option, and conditional support of Water Board staff's Draft 2012 Agricultural Order if the following changes were made:

1. After two years from the implementation of this Order, any operation that discharges to a waterbody impaired for toxicity and continues to show water or

sediment toxicity in the previous two (CMP) toxicity tests immediately moves to tier 3 unless it can be shown by the operation that the toxicity is caused by legacy contaminants such as DDT/DDE.

2. A vegetated buffer strip of at least 30 feet shall be maintained along all Tier 2 and 3 streams based on the National Hydrography Dataset Plus (NHDPlus,) and a vegetated buffer strip of at least 50 feet shall be maintained along lakes, wetlands, estuaries, and other natural bodies of standing water.

Staff's response to Mr. Shimek's presentation:

Staff agrees with the need to protect and restore beneficial uses and the characterization of water quality conditions in the Central Coast Region. Regarding Mr. Shimek's first recommendation to revise staff's Draft 2012 Agricultural Order, staff believes the current tiering criteria are reasonable and adequate to address the toxicity issue in our Region for this permit cycle. Staff based the decision to "tier" on just chlorpyrifos and diazinon because, more than any other chemicals, these had been repeatedly measured at very elevated concentrations, compared to established literature values for their toxicity, at many locations in the Region.

Specifically, the current cooperative monitoring program requirements for all dischargers enrolled in the current order already includes (as of the September 30, 2011 reissuance):

- Toxicity monitoring in surface receiving water. (Monitoring for toxicity will generally capture the impacts caused by multiple individual pesticides).
- Individual pesticide monitoring for approximately 50 of the most common agricultural pesticides in surface receiving water. This will provide the data to identify the detection of and any changes in occurrence in receiving water related to specific individual pesticides (this was added in response to similar comments made by Mr. Shimek at previous workshops and hearings).
- Toxicity Identification Evaluation studies (TIE) to be conducted when there is persistent unresolved toxicity (this was added in response to similar comments made by Mr. Shimek at previous workshops and hearings).

Proposed requirements to address the above comment include the following in the Draft 2012 Agricultural Order:

- Tier 3 Individual discharge monitoring, includes toxicity and chlorpyrifos and diazinon. The toxicity monitoring will capture the impacts of individual pesticides not included in monitoring.
- The EO can add additional pesticides to the individual monitoring, based on changes in pesticide use or other evidence that additional chemicals are being discharged.
- The Board can modify the pesticide tiering criteria, if appropriate, during the five-year term of the Order.

In general, if staff or the Water Board gets evidence that individual operations in any Tier are contributing to exceedances of water quality toxicity criteria and are

not taking adequate steps to reduce pollutant loading, staff can pursue additional requirements as described in the enforcement section below.

In evaluating these comments now, and previously at former workshops and hearings, staff considered the consequences of adding new pesticides to the tiering criteria. Staff is attempting to be reasonable in the initial tiering approach by starting with the specific chemicals that are the most known and used sources of severe toxicity on the Central Coast. Including additional pesticides will likely include many more growers in Tier 3, thereby increasing implementation, monitoring and reporting, hence costs, to those additional growers.

Regarding Mr. Shimek's second recommended edit, staff agrees that all streams and wetlands should be protected with buffer areas. However, staff reduced the requirements for aquatic habitat protection to a minimum level as a compromise for this Order. On a broader scale, Water Board staff is pursuing a Basin Plan amendment to better protect riparian and wetland areas and their buffer zones, which will apply to all types of activities that affect water quality and aquatic habitat. We expect to have draft Basin Plan amendment language available in 2012.

Ben Pitterle, Santa Barbara Channelkeeper, presented information showing the extensive changes Water Board staff made in going from its February 2010 Preliminary Draft Agricultural Order to staff's current Draft 2012 Agricultural Order. Mr. Pitterle emphasized that these changes greatly decreased the draft requirements to the point where only those operations in the most severely polluted areas would have to meet any meaningful requirements. In other areas, such as southern Santa Barbara County, few if any operations would be in Tier 3, even though there are impaired water bodies in that area.

Staff's response to Mr. Pitterle's presentation:

Staff agrees that we made extensive changes to our draft orders. These changes resulted in a tiered structure that prioritizes severe water quality conditions and the operations that are most likely contributing the greatest pollutant loads to the most impaired areas. As Mr. Pitterle stated, this results in fewer requirements for less severely polluted areas, such as southern Santa Barbara County. Ideally, Water Board staff would address all areas of concern simultaneously, but this is not practical with currently available resources. Therefore, we are prioritizing our efforts and requirements according to the severity of water quality impairment. In addition, all dischargers, regardless of their tier, are required to take action to meet water quality standards in the receiving water by implementing appropriate and effective management practices.

Nathan Alley, Environmental Defense Center, presented the history of the Water Board's extensive public process since 2008 to consider a renewed agricultural order. Mr. Alley also emphasized the need to adopt an updated Order as soon as possible to address the water quality conditions, specifically the items/issues that were "left on the table" when the Agricultural Advisory Panel developed the 2004 Conditional Waiver, such as conditions to reduce pollution loading to groundwater and groundwater monitoring.

Staff's response to Mr. Nathan's presentation:

Staff agrees that the public process has been extensive and that it is imperative to adopt a renewed order as soon as possible that effectively addresses the severe water pollution problems in the Central Coast Region, particularly impacts to groundwater heavily used for drinking water supply and already polluted or at risk for further water quality degradation from agricultural fertilizers.

Maricela Morales, Central Coast Alliance United for a Sustainable Economy, presented information on the economics of agriculture on the Central Coast compared to the distributional use of agricultural chemicals, the distribution of income, the distribution of pollution, and the demographics of ethnic groups. This information illustrates that the pollution and health risks from irrigated agriculture cause a disproportionate impact to lower income ethnic groups that are mainly Latino, and this environmental justice issue must be addressed.

Staff response to Ms. Morales:

Staff agrees that there is a significant environmental justice issue. The State Water Resources Control Board has established an environmental justice program, which is discussed here:

[http://www.waterboards.ca.gov/water\\_issues/programs/outreach/education/justice.shtml](http://www.waterboards.ca.gov/water_issues/programs/outreach/education/justice.shtml)

Environmental Justice is defined by California statute as "The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of all environmental laws, regulations, and policies."

The State Water Board's environmental Justice web page states the following: Consistent with legislative mandates, the Water Board's Environmental Justice Program goals include:

1. Integrating Environmental Justice considerations into the development, adoption, implementation and enforcement of Board decisions, regulations and policies.
2. Promoting meaningful public participation and community capacity building to allow communities to be effective participants in Board decision-making processes.
3. Working with the Office of Environmental Health Hazard Assessment to improve research and data collection in communities of color and low-income populations.
4. Ensuring effective cross-media coordination and accountability when addressing environmental justice issues.

Staff agrees with the goals above. Staff's highest priority is protection of public health and reducing health risks. Our highest priority public health issue is the severe nitrate groundwater pollution in rural irrigated agriculture areas, where thousands of residents and farm laborers are using domestic wells that may be contaminated with nitrate above the drinking water standard. In response, to comments from environmental justice organizations, staff defined environmental

justice in the Draft 2012 Agricultural Order. In addition, the Draft 2012 Agricultural Order prioritizes the highest risk growers in Tier 3 based partly on the threat to drinking water wells. Separately, staff is also actively investigating groundwater nitrate contamination cases to consider requirements for replacement water. In addition, staff is developing a program to help residents sample their own wells using certified laboratories, and staff will provide information on the health threat due to nitrate, and options for dealing with the threat. Water Board staff will present a funding proposal for this program to the Water Board in May 2012, and staff will work with affected communities and environmental justice organizations to implement this program.

Dr. Marc Los Huertos, California State University at Monterey Bay, presented information on an approach to monitor the effectiveness of agricultural management practices via a coalition based on voluntary participation with audits and surveys similar to and outlined within the framework of the agricultural industry's Agriculture Proposal.

Staff's response to Dr. Los Huertos's presentation:

According to Dr. Los Huertos, his concept changes almost daily, and therefore a comprehensive response is not possible. It may be an approach that is most applicable to the relatively small number of growers in Tier 3, rather than all growers, but it is not possible to evaluate. Dr. Los Huertos presented concepts from the Agricultural Proposal that has been submitted and reviewed by staff. Staff made significant revisions to earlier drafts of the order in response to the Agricultural Proposal. With respect to third-party groups, staff's Draft 2012 Agricultural Order allows the use of coalitions or other cooperative efforts.

During the workshop, Dr. Los Huertos stated that farmers in lower tiers had no incentive to join a coalition due to the extra costs they would incur. This is very important because the vast majority of farmers in our Region are in the lower tiers. Water Board staff consider this to be a fundamental issue. Many small farmers have stated that they do not want to be regulated the same as large operations and do not want to be held responsible for the pollution problems in the lower Salinas and Santa Maria Valley areas where many large operations are located. Water Board staff agreed, and developed the tiered structure in response to this feedback and in response to Water Board member comments at our first public workshop on March 2010. In Water Board staff's Draft 2012 Agricultural Order, lower risk farms have significantly lower requirements and lower costs. Coalitions and other types of cooperative efforts are allowed under staff's Draft 2012 Agricultural Order. However, individual growers may want to consider their own situation, and whether a coalition approach would be appropriate in their own situation.

Dr. Los Huertos stated that the concept complied with the Porter Cologne Water Quality Control Act. However, Dr. Los Huertos also stated that he is not familiar with the legal requirements, and he presented his concept in the context of the agricultural industry's Agriculture Proposal, which, in some important respects, is not consistent with the Porter Cologne Act or the Water Board's plans and policies, as discussed in this and previous staff reports.

Dr. Los Huertos also referenced cost estimates in his presentation, based upon the “Economic and Cost Analysis of the Proposed Ag Waiver and Ag Alternative (Barbeau/Mercer), submitted August 1, 2011.” During the workshop, Dr. Los Huertos stated that these cost estimates are biased because they are based on surveys for Tier 3 operations only and may not reflect accurate numbers of growers within specific tiers. As discussed in this staff report, staff considers these cost estimates to be flawed because essentially they compare “apples to oranges”.

Dr. Los Huertos also discussed the submittal of “aggregate data” to the Water Board. This is a critically important issue. The term “aggregate data” has very different meanings to different people. There are two fundamental issues associated with aggregate monitoring that must be clear: 1) what data or information is being proposed for aggregation and 2) whether the aggregated data improperly shields dischargers from individual responsibility to comply with the conditions for fear of liability or enforcement.

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 conditions. 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 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.

Dr. Los Huertos and other commenters implied that proposals for use of aggregate data are being made or are preferred in the context of avoiding discharger liability, fear of enforcement and limiting public transparency. That is, these proposals do not include data collected or submitted that would identify the source and amount of pollution being discharged from an individual operation. It appears from these comments and others that there is a lot of misunderstanding about enforcement and protection of proprietary information (see Section 4.4 and Section 4.6). The type of aggregate reporting proposed would not allow the Water Board to determine the source and amount of waste being discharged and whether management practices are being effective. However, the Water Board can deal with the liability and fear issues by describing its compliance and enforcement policies and practices for these types of discharges. Contrary to statements made, the Draft 2012 Agricultural Order does not require immediate compliance with water quality standards nor compliance at the edge of field since it does not include effluent (i.e., end of pipe) limits. The Water Board's compliance and enforcement policies and practices are described later in this staff report.

Water Board staff acknowledges the work Dr. Los Huertos conducts to assist growers in implementing innovative best management practices and encourages all such efforts to provide technical assistance to growers to make on the ground water quality improvements. Examples of Dr. Los Huertos' work on implementation is described below in Section 4.8, including the innovative design and implementation of various treatment wetland options to effectively remove nutrients from tailwater and tile drains.

#### **4.6 Implementation, Compliance Evaluations and Enforcement**

The Water Board's approach toward enforcement and liability depends on the type of order, permit, or letter that is issued. The Water Board and/or the Executive Officer can issue requirements in different forms, such as Cleanup and Abatement Orders, Cease and Desist Orders, Waste Discharge Requirements, National Pollutant Discharge Elimination Permits, and Conditional Waivers of Waste Discharge Requirements. In this case, staff's Draft 2012 Agricultural Order is a Conditional Waiver of Waste Discharge Requirements, which has specific enforcement characteristics that are different than other Water Board orders or permits. Typically a waiver of waste discharge requirements does not include effluent limits that must be met at the end of the pipe, i.e., edge of field. Instead, dischargers are required to meet water quality standards in the receiving water by implementing management practices and taking actions over time to improve water quality. Failure to take appropriate actions as specified in conditions in the Draft 2012 Agricultural Order could result in enforcement through a progressive enforcement process. Failure to meet water quality standards on its own is not sufficient to result in enforcement. -- Staff's Draft 2012 Agricultural Order is a Conditional Waiver of Waste Discharge Requirements, and therefore has two implementation or compliance determination paths: direct enforcement of certain administrative type conditions, and evaluation of water quality data, as explained below.

<b>Staff's Draft 2012 Agricultural Order: Direct Enforcement of Conditions Versus Evaluation of Water Quality Data</b>	
<b>Direct Enforcement of Conditions</b>	<b>Evaluation of Water Quality Data</b>
<p>The conditions of staff's Draft 2012 Agricultural Order that are directly enforceable are administrative in nature (not water quality). For example, if a discharger fails to enroll in the Conditional Waiver, or fails to submit a report on time, or fails to pay fees, the Water Board can take direct enforcement action, as follows:</p> <ol style="list-style-type: none"> <li>1. Water Board staff issues a Notice of Violation to the discharger, notifying them of the violation, the liability associated with the violation, and a due date by which they must respond. For other existing Conditional Waivers (including the existing Order for irrigated agriculture), the majority of violations are resolved at this level.</li> <li>2. If the violation continues, Water Board staff issues a second Notice of Violation, or, if the violation is egregious, staff may issue an order specifying the amount of liability that is due for the violation, and offer a settlement. A discharger may settle, or request a hearing before the Water Board. The majority of violations that get to this level are settled without going to a Water Board hearing.</li> <li>3. If the violation continues and staff receives no cooperation</li> </ol>	<p>There are no potential violations of staff's Draft 2012 Agricultural Order regarding water quality data because there are no defined <b>requirements to specifically meet water quality standards or objectives in runoff or discharges</b> in the Order. Rather, Water Board staff will evaluate water quality data as follows:</p> <ol style="list-style-type: none"> <li>1. If water quality data indicate exceedences of other water quality standards (Basin Plan objectives and California Toxics Rule), Water Board staff will prioritize those operations that are likely to be causing or contributing the most to the exceedences (by design, these operations are more likely to be in Tier 3 and already are staff's highest priority).</li> <li>2. Water Board staff will review these priority operations to make sure they are complying with the administrative conditions of the Order (enrolling, submitting reports on time, paying fees) and will pursue enforcement action for administrative violations as described in the first column to the left, if appropriate.</li> <li>3. In addition to the administrative type conditions of the Order, Water Board staff will consider the dischargers overall efforts to reduce pollutant loading (implementation of effective management practices) per the schedules and targets in the Order. If water quality exceedences continue to occur and the dischargers overall efforts are not adequate relative to the schedules and targets in the Order, Water Board staff will consider whether to remove the operation from the Order for the purpose of establishing more appropriate requirements. These more appropriate requirements will directly address the particular water quality issue</li> </ol>



<p>from the discharger, staff will schedule a hearing before the Water Board and recommend the assessment of monetary liability. The Water Board may dismiss, decrease, or increase the recommended assessment of liability.</p>	<p>(such as toxicity, or nutrient loading), and will likely be in the form of a Waste Discharge Requirements Order.</p> <ol style="list-style-type: none"> <li>4. If a Waste Discharge Requirements Order is issued, and violations of that Order occur, staff will pursue enforcement action as described in the first column to the left. Waste Discharge Requirements will include requirements to specifically meet water quality standards or objectives in runoff, discharges or receiving water, hence dischargers may incur violations for not meeting water quality requirements.</li> <li>5. Others scenarios that may lead to an operation being removed from the 2012 Order, and the issuance of individual Waste Discharge Requirements include the following:             <ol style="list-style-type: none"> <li>a. A Tier 3 discharger refuses to enroll in the 2012 Order.</li> <li>b. A discharger does not implement adequate management practices for a specific high priority water quality problem.</li> <li>c. A group of dischargers collaborate to implement a local or regional wetland treatment system and request that their group have their own specific waste discharge requirements.</li> <li>d. A discharger is benefitting from the group effort of others to treat their runoff, but does not contribute to the effort.</li> </ol> </li> </ol>
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As with all Orders issued by the Water Board, this Draft 2012 Agricultural Order sets the framework and authority for staff to use a routine progressive enforcement strategy, consistent with the State Water Resources Control Board’s Water Quality Enforcement Policy (May 2010, Enforcement Policy) and the NPS Policy. In all of our regulatory programs, Water Board staff typically opts to work with dischargers to rectify violations instead of automatically proceeding with enforcement. If the staff were to propose assessment of monetary administrative civil liability, the discharger always has the right to a hearing before the Water Board to make the final enforcement decision. The only instance in which Water Board staff and the Water Board, itself, have no discretion in this regard is with mandatory minimum penalties associated with violations of effluent limitations and monitoring requirements in National Pollutant Discharge Elimination System (NPDES) permits for point-source discharges (e.g., municipal wastewater discharges directly to rivers). The Draft 2012 Agricultural Order does not include effluent

limits and the discharges addressed by the Draft 2012 Agricultural Order are not subject to NPDES requirements. In other words, there are no “end-of-pipe” requirements that must be met and there are no mandatory penalties. Consistent with the NPS Policy, dischargers meet water quality standards that apply in the receiving waters through implementation and improvement over time of management practices. For the many years of regulating non-agricultural sources, staff has found that an initial non-enforcement related or compliance assistance approach with dischargers is usually more effective and more efficient with regard to staffing resources. Development and implementation of enforcement actions are resource intensive. All of our existing Waste Discharge Requirements, and waivers, such as the 2004 Agricultural Order, contain language similar to the proposed Draft 2012 Agricultural Order that are intended to result in achieving compliance with water quality standards in the receiving water over time and other general conditions. Past experience indicates that with this typical regulatory language in all permits, staff does not usually proceed directly to enforcement as a result of violations; rather, staff uses their discretion to bring enforcement recommendations for only the most egregious violations or recalcitrant dischargers.

The Draft 2012 Agricultural Order contains several general conditions. It also has some conditions with explicit timeframes for specific indicators or milestones to indicate compliance and progress towards water quality improvement. The Draft 2012 Agricultural Order requires dischargers to effectively reduce pollutant loading and waste discharges to surface and groundwater from the irrigated agricultural operations under their control or ownership. Dischargers are legally obligated to comply with the conditions immediately or within specified timeframes. However, the Draft 2012 Agricultural Order (Part A. Additional Finding #2, Attachment A page 2) also acknowledges that it will take time for pollution sources to be controlled enough to meet water quality standards in receiving water. Additionally, Finding #10 (p.4), Condition #82-83 (p.30-31), explain how staff will determine compliance by considering implementation or achievement of multiple conditions, and the information or results included in dischargers’ reports to the Water Board. Given that the Draft 2012 Agricultural Order is a Conditional Waiver of Waste Discharge Requirements, the enforceable provisions are the “conditions” that allow waste discharge requirements to be waived and they are NOT effluent limitations. For a Conditional Waiver, failure to monitor or report specified information by a date certain is enforceable, but failure to meet a water quality level or standard in farm runoff is not.

In practice, staff makes a compliance evaluation, prioritizes any cases (dischargers) where dischargers are not complying with conditions, and decides whether or not to recommend enforcement (i.e., assessment of monetary penalties) to the Water Board. The Water Board itself makes the final enforcement decision and has discretion to withhold enforcement for failure to meet individual general conditions immediately, if dischargers are meeting conditions of the Agricultural Order regarding implementation, monitoring and reporting. In the case of the Draft 2012 Agricultural Order, in the form of a Conditional Waiver, enforcement means a penalty for failure to do something as prescribed or explicitly scheduled (e.g., submit a report on time). Additionally and alternatively, the Water Board can order a discharger enrolled in the Conditional Waiver to submit a report of waste discharge and then permit that discharger with individual waste discharge requirements instead of a Conditional Waiver. If that occurs, then the Water Board can, ultimately, enforce for failure to comply with the waste discharge requirements if they are not met.

Per the Draft 2012 Agricultural Order (Part A. Additional Finding #139, Attachment A page 35), to evaluate compliance, staff takes several steps consistent with the Enforcement Policy. Water Board staff must implement these steps before recommending enforcement to the Water Board for failure to meet one or several conditions of the Order. First staff will consider documentation of data and information related to groundwater sampling, individual discharge monitoring, implementation of management practices, including treatment or control measures, to achieve compliance with this Order, and compliance history. If Water Board staff thinks a discharger is out of compliance or at risk of being out of compliance, staff typically makes informal contact via phone or email with the discharger to confirm or clarify information. Next, staff may conduct a site inspection or request the discharger submit additional information to clarify gaps or interpretations of the available information. Next, staff may send a Notice of Violation simply notifying the dischargers that they are out of compliance and on what basis. Typically, such a notice suggests correcting violations immediately, and may specify how and when to correct a violation (e.g., submit a missed report within two weeks, complete installation of a management practice in two months, or plan to replace an ineffective management practice with a better one). Commonly, at this point, dischargers, with compliance assistance from staff, correct any violations and return to compliance. For those dischargers who do not or cannot correct such violations, staff will prioritize the case for enforcement. If staff decides to recommend enforcement that includes penalties after these other steps are completed, the discharger has a right to a hearing and the Water Board, itself, must make the enforcement decision and has the discretion to reject the staff recommendation and withhold enforcement in some cases.

Dischargers have flexibility to choose how to comply with the Draft 2012 Agricultural Order and to demonstrate compliance. One way a discharger can demonstrate compliance with a timeframe and milestone is to show that irrigation runoff from an individual operation is meeting water quality standards. However, a discharger can also show compliance with timeframes and milestones by showing improvement in the other indicators or parameters required to be measured or observed at the place where a specific condition or action is required by the Order (e.g., practice implementation, photo-monitoring, total nitrogen applied; as required in the Annual Compliance Document in the Monitoring and Reporting Program for the Draft 2012 Agricultural Order).

Many other dischargers (such as those enrolled in stormwater discharge permits) and grant-funded project directors are evaluating or have evaluated effectiveness of their water quality improvement practices using measurements, estimations, or simple modeling of pollution load reduction. This Draft 2012 Agricultural Order will impose similar and routine regulatory requirements and compliance evaluations on agricultural dischargers as currently exists for municipal and other industrial wastewater dischargers and stormwater dischargers.

#### **4.7 History of Water Board Regulation and Compliance Assistance for Irrigated Agriculture**

From the inception of the Water Board's Non-Point Source Program in 1988, and up to 2004, the Central Coast Water Board's emphasis in working with agriculture was on encouraging voluntary efforts and supporting such cooperative efforts as the Monterey Bay National Marine Sanctuary's Agriculture and Rural Lands Plan. As described in the Draft 2012 Agricultural Order (Findings 135 and 136) and further summarized in a staff

report for the February 3, 2011 Board Meeting to discuss a “Summary of Grant Funds Provided to Support Agriculture,” the Water Board has made available more than \$600 million of public grant funds to address agricultural issues from approximately 2000 – 2011. More specifically, the Water Board awarded more than \$55 Million in grants funds to agricultural related projects in the Central Coast Region. Most recently, staff prioritized and secured approximately \$3 Million in Proposition 84 grant funds for local Resource Conservation Districts (RCDs) to implement irrigation and nutrient management practices in agricultural areas of the Central Coast Region to reduce nitrate loading to groundwater and surface water. The Water Board has also made funds available from the Pacific Gas and Electric (PG&E) and Unocal Guadalupe Settlement Funds toward agricultural water quality grants. The focus of these grant projects was to increase educational outreach through ranch and farm water quality management planning short courses, watershed-based monitoring, and implementation grants throughout the Central Coast Region. In general, the Water Boards have had minimal direct contact with individual farmers and relied upon education, outreach, and voluntary technical assistance programs already in place, such as Farm Bureau watershed groups, Natural Resource Conservation Service (NRCS) and Resource Conservation District (RCD) programs and University of California Cooperative Extension (UCCE) Farm Water Quality short courses. Staff is also considering the use of additional Settlement Funds to assist financially disadvantaged growers to conduct groundwater quality monitoring. The staff report for the February 3, 2011 Board Meeting summarizing grant funds for agricultural can be viewed at the following link:

[http://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2011/feb/item\\_18/index.shtml](http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/feb/item_18/index.shtml)

There are also many other public and non-profit resources available to the agricultural industry to obtain technical assistance for pollution prevention and to address water quality problems associated with irrigated agriculture. The United States Department of Agriculture – Natural Resources Conservation Service (NRCS), RCDs, and University of California Cooperative Extension (UCCE) provide non-regulatory technical services and research to promote conservation and address natural resource problems. There are also many non-profit agricultural and commodity-specific organizations and initiatives that promote sustainable agriculture, and provide education and technical support. Several agencies and technical assistance organizations have updated their resources to better assist growers in water quality improvement and achieving compliance with the Agricultural Order. For example, staff recently met with the Central Coast Agricultural Water Quality Coalition and other technical assistance providers who described completed and planned grower workshops to discuss water quality, the introduction of a new Farm Water Quality Planning template that includes elements of the Draft Agricultural 2012 Order, and the availability of tools to assist growers in designing and implementing treatment wetlands.

On July 9, 2004, the Central Coast Water Board adopted the 2004 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (2004 Agricultural Order). The 2004 Order regulated discharges from irrigated lands with a focus on the implementation of Farm Water Quality Management Plans (Farm Plans) using education and outreach.

Farmers acknowledge that this approach primarily relied on self-determined compliance with Farm Plans and agricultural water quality education. Staff acknowledges that the 2004 Agricultural Order did not provide the Water Board with sufficient information to

effectively evaluate compliance and conduct appropriate follow-up (except for enrollment and education). With this approach, Water Boards could not measure and account for success in terms of reducing pollutant loading or achieving compliance with water quality objectives. While this self-regulated or self-policing approach was implemented, agricultural discharges continued to load pollutants and affect water quality conditions. As a result of severe surface water pollution attributed to discharges of pesticides used in agriculture, Water Code section 13269 was amended by the California Legislature to require that waivers include conditions, require compliance with water quality standards, have five year terms, and be in the public interest. In addition, due to the pollution problems associated with nonpoint source discharges, including discharges from agricultural operations, the State Water Board adopted the 2004 NonPoint Source Implementation and Enforcement Policy (NPS Policy), which requires the Water Boards to include five key components in its non point source regulatory program:

1. Define the water quality objectives to be achieved.
2. Require implementation of management measures that will achieve the water quality objectives.
3. Establish time schedules to achieve the water quality objectives.
4. Require compliance verification monitoring.
5. Implement reasonable enforcement.

Water Board staff's Draft 2012 Agricultural Order is based on the 2004 NPS Policy.

A more detailed discussion of how the Water Board has regulated discharges from irrigated agriculture is included in the March 2011 Staff Report, Appendix I:

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/12\\_09\\_2010\\_staffrpt/AqOrder\\_Appl.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/12_09_2010_staffrpt/AqOrder_Appl.pdf)

#### **4.8 Efforts by Growers to Protect Water Quality and Implement Solutions**

During the course of renewing the Agricultural Order and implementing the existing regulatory program, growers described and staff learned about many efforts by growers to actively protect water quality. In some cases, growers are working independently, and in other cases, growers may be working cooperatively to implement local or regional scale water quality protection and treatment strategies. Staff supports any and all efforts by growers and the agricultural community to improve water quality and achieve compliance with the Agricultural Order. Staff also maintains that requirements for agricultural discharges must be sufficiently protective, particularly for farms that present an increased risk to water quality, given the severity of water quality conditions in agricultural areas and the magnitude of actual and potential impacts caused by such discharges – especially to drinking water sources.

One example effort to protect water quality is the Sustainable in Practice (SIP) certification for vineyards. According to the Central Coast Vineyard Team, the number of vineyard acres SIP certified has steadily grown from approximately 3700 acres in 2008 to over 27,000 acres in 2011 (now representing approximately 140 individual vineyards). Many of the requirements of the SIP certification are consistent with the Draft 2012 Agricultural Order. In another example, staff learned of cooperative efforts by growers in the northern part of the region, assisted by Dr. Marc Los Huertos (California State University Monterey Bay), to design and implement various treatment wetland options to effectively remove nutrients from tailwater and tile drains. In addition, nursery and greenhouse commodity groups reported that many growers have already chosen to

use less toxic alternatives to higher risk pesticides. The Strawberry Commission also reported that many growers have reduced fertilizer applications. Similarly, the Avocado Commission reported that many growers already eliminated their irrigation and stormwater runoff. This is the type of implementation that is expected. Growers implementing these types of strategies to improve water quality and achieve compliance with the Agricultural Order will help lead water quality improvement in the Central Coast Region's agricultural areas. In addition, research recently presented by University of California Cooperative Extension (UCCE) and California State University Monterey Bay (CSUMB) states that there is significant room for improvement to reduce pollutant loading from agriculture and describes promising solutions available to growers.

Consistent with the Water Board's mission, the Draft 2012 Agricultural Order advances the types of water quality improvement strategies described above. It provides incentives to those growers who are taking the initiative to protect water quality and includes the necessary monitoring and reporting to ensure that farms/ranches that may pose an increased risk for pollution are making adequate progress and achieving compliance with the Agricultural Order.

As discussed in detail at previous Board Meetings, including the March, May and September 2011 staff reports, staff agrees that cooperative efforts to comply with the Order may be beneficial for some dischargers. The Draft 2012 Agricultural Order explicitly allows for cooperative water quality improvement efforts and provides incentives for participation. While the Draft 2012 Agricultural Order allows for the development of cooperative efforts, it also requires individuals in such groups to comply with the Water Code to the same extent as other dischargers to ensure and verify adequate progress towards water quality improvement. Specifically, the Draft 2012 Agricultural Order proposed by staff explicitly allows for third-party groups (Condition #10) and provides incentives for third-party certifications that require implementation of similar management practices as the Draft 2012 Agricultural Order (e.g., Sustainable in Practice, Condition #14.1d). In addition, the Draft 2012 Agricultural Order encourages participation in cooperative water quality improvement efforts, such as the implementation of local or regional scale water quality protection and treatment strategies (Finding #12). And, for these cooperative efforts, the Draft 2012 Agricultural Order provides the opportunity for dischargers to propose alternative monitoring and alternative time schedules to allow flexibility for such cooperative efforts to achieve compliance with the order (Condition #12). Furthermore, the Draft 2012 Agricultural Order also allows dischargers to implement cooperative or individual surface receiving water monitoring (Condition #52) or cooperative or individual groundwater monitoring (MRP Part 2A.6). Finally, the Draft 2012 Agricultural Order also specifies that individual dischargers or groups of dischargers (e.g., commodity groups) can request individual or general orders tailored to their specific operation or type of discharge (Condition #6).

As stated above, staff supports any and all efforts by growers and the agricultural community to improve water quality and achieve compliance with the Agricultural Order – both individual and cooperative. All dischargers must also provide the Water Board with sufficient monitoring and reporting to verify and ensure adequate progress towards water quality improvement to address the severity of water quality conditions in agricultural areas and resolve the impacts caused by agricultural discharges.

## 5.0 CONCLUSION

The Water Board's role is to protect water quality. With more than 4000 mi<sup>2</sup> of groundwater basins (providing more than 80% of our 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*), and the endangered Marsh Sandwort (*Arenaria paludicola*), and the endangered Gambel's watercress (*Rorippa gambellii*).

In addition, the Central Coast has some of the most valuable and intensely farmed land in the country, a large amount of specialty crops and some of the highest agricultural yields. Agriculture on the Central Coast generates approximately \$6 billion per year in revenue, and it is increasing. As with water resources, agriculture is important to the Central Coast's economy and culture. Along with this agricultural abundance, the Central Coast Region has some of the most severe water pollution problems in the United States. Pollution from agricultural discharges has impacted drinking water and our estuaries, rivers and streams. Most sources of pollution have been regulated and controlled for decades. Irrigated agriculture is one exception. This is not sustainable for the industry, the economy, water resources, or future generations. Central Coast growers are highly adaptive and innovative. The industry is constantly improving and reinventing itself as markets and technologies change. Proven solutions are available and significant water quality improvement is possible. Some growers are already using effective solutions and should be commended. 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.

For more than three years, the Water Board has worked to renew the Agricultural Order to control pollution from irrigated agriculture and ensure water quality protection. This is the most challenging and important work the Water Board has ever done. The impacts from agricultural discharges are severe and we cannot let the problem get worse. The Water Board engaged many stakeholders, issued many drafts and included edits based on stakeholder input, reviewed and responded to many comments, and completed a Draft 2012 Agricultural Order that recognizes the unique characteristics of individual farms and the relative risk to water quality, prioritizes water quality efforts in the most severely impacted areas and to protect drinking water, and provides flexibility and time to achieve compliance. The Draft 2012 Agricultural Order also reiterates the Board's authority and continued opportunity to modify and improve the Order over time (e.g., tiering criteria). Implementation of a renewed Agricultural Order, without further delay, is critical to protect and improve water quality in the Central Coast Region.

## 6.0 RECOMMENDATION

Staff recommends that the Central Coast Water Board:

- Adopt the Conditional Waiver of Waste Discharge Requirements for Irrigated Agricultural Waste Discharges, as proposed by staff for the September 1, 2011 Board Meeting with the revisions identified in this staff report (Draft Agricultural Order No. R3-2012-0011);
- Adopt the MRP as proposed by staff for the September 1, 2011 Board Meeting with the revisions identified in this staff report (Draft MRP No. R3-2012-0011);
- Adopt the Resolution to Certify the Final SEIR, as proposed by staff for the September 1, 2011 Board Meeting with the revisions identified in this staff report (Resolution No. R3-2012-0012);

## ATTACHMENTS

Attachment 1: Red-line strikeout version of Draft Agricultural Order No. R3-2011-0006

Attachment 2: Red-line strikeout version of Draft MRP No. R3-2011-0006

Attachment 3: Resolution No. R3-2011-0021 to Certify the Final SEIR

## References identified on page 12:

<sup>1</sup>Salinas Valley Water Coalition; Letter dated May 5, 2010.

<sup>2</sup>Clean Water Action, California Rural League Assistance, and Community Water Center; Letter dated January 3, 2011.

<sup>3</sup>California Strawberry Commission; Letter 83 dated January 3, 2011.

<sup>4</sup>Environmental Justice Coalition for Water et al; Letter 105 dated January 3, 2011. Clinica de Salud del Valle de Salinas; Letter P11 dated March 31, 2010.

<sup>5</sup>Wayne Gularte – Rincon Farms; Letter 86 dated January 2, 2011.

<sup>6</sup>California Farm Bureau Association, Agriculture's Alternative Proposal dated December 3, 2010.

<sup>7</sup>William Thomas for Ocean Mist and RC Farms; Letter 15 dated December 28, 2010.

<sup>8</sup>California Strawberry Commission; Presentation to the Water Board March 17, 2011.

<sup>9</sup>David Costa – Costa Family Farms; Letter 67 dated January 3, 2011.

<sup>10</sup>Environmental Defense Center et al, Alternative Proposal submitted by Environmental Groups dated April 1, 2010.

<sup>11</sup>Santa Barbara County Farm Bureau, Letter 26 dated December 28, 2010.

<sup>12</sup>Monterey Coastkeeper et al; Letter 85 dated January 3, 2011.

<sup>13</sup>National Marine Fisheries Service, Letter 90 dated January 3, 2011.

<sup>14</sup>Grower Shipper Association of Santa Barbara and San Luis Obispo; Letter 82 dated January 3, 2011.

<sup>15</sup>Monterey Coastkeeper et al; Presentation to the Water Board March 17, 2011.

<sup>16</sup>Bill Coy, Cambria, CA; Letter F30 dated March 22, 2010.

<sup>17</sup>Helen Snyder – Tognetti Ranch Partnership, King City, CA; Letter F49 dated March 29, 2010.

<sup>18</sup>Sue and Karl Luft, Templeton, CA; Letter 21 dated December 29, 2010.

<sup>19</sup>Agriculture's Alternative Proposal; Presentation to the Water Board March 15, 2010.

<sup>20</sup>Western Growers Association, Letter 77 dated August 1, 2011.



**Table 1. Draft Agricultural Order – Date of versions issued by the Central Coast Water Board and associated public comment period**

DATE	VERSION	PUBLIC COMMENT <sup>1</sup>
February 1, 2010	Preliminary Draft Agricultural Order <a href="http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order_att3.pdf">http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order_att3.pdf</a>	Written public comment 02/01/2010 – 07/08/2010  Oral comments at 05/12/2010 and 07/08/2010 workshops
November 19, 2010	Draft Agricultural Order (2 <sup>nd</sup> version), Draft Monitoring and Reporting Program, and Draft Staff Report  LINKS: Draft Order - <a href="http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/12_09_2010_staffrpt/AgOrder_AppA.pdf">http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/12_09_2010_staffrpt/AgOrder_AppA.pdf</a> Draft MRP – <a href="http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/12_09_2010_staffrpt/AgOrder_AppB.pdf">http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/12_09_2010_staffrpt/AgOrder_AppB.pdf</a>	Written public comment 11/19/2010 – 01/03/2011  Oral comments at 02/03/2011 workshop
March 1, 2011	Draft Agricultural Order (3 <sup>rd</sup> version), Draft Monitoring and Reporting Program, and Draft Staff Report for the March 17, 2011 and May 4, 2011 Board Meetings.  LINKS: Draft Order – <a href="http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/march/Item_14/14_att1.pdf">http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/march/Item_14/14_att1.pdf</a> Draft MRP – <a href="http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/march/Item_14/14_att2.pdf">http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/march/Item_14/14_att2.pdf</a>	Oral comments at 03/17/2011 and 05/04/2011 panel hearings
July 8, 2011	Draft Agricultural Order (4 <sup>th</sup> version), Draft Monitoring and Reporting Program, and Draft Staff Report Addendum for the September 1, 2011 Board Meeting.  LINKS: Draft Order – <a href="http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/2011_sept_hearing_docs/sept2011_agorder_att1_070611_final.pdf">http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/2011_sept_hearing_docs/sept2011_agorder_att1_070611_final.pdf</a> Draft MRP – <a href="http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/2011_sept_hearing_docs/sept2011_agorder_att2_070611">http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/2011_sept_hearing_docs/sept2011_agorder_att2_070611</a>	Written public comment 07/07/2011 – 08/01/11

	<a href="#">_final.pdf</a>	
August 16, 2011	<p>Draft Agricultural Order (4<sup>th</sup> version with minor revisions), Draft Monitoring and Reporting Program, and Draft Staff Report Addendum for the September 1, 2011 Board Meeting.</p> <p>LINKS:  Draft Order - <a href="http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/Sept/Item_17/17_att1ab.pdf">http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/Sept/Item_17/17_att1ab.pdf</a>  Draft MRP – <a href="http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/Sept/Item_17/17_att2abc.pdf">http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/Sept/Item_17/17_att2abc.pdf</a></p>	Board Hearing postponed
February 2012	<p>Draft 2012 Agricultural Order (4<sup>th</sup> version with additional minor revisions), Draft Monitoring and Reporting Program, and Staff Report for the March 14-15, 2012 Board Meeting.</p> <p>Draft Order and MRP attached.</p>	Board Hearing pending

<sup>1</sup>Information presented at Board Meetings and public comments submitted are available on the Water Board's website associated with the specific Board Meeting date.

**Table 2. Estimated number of farms/ranches and acreage in Draft 2012 Agricultural Order Tiers based on enrollment information in the electronic-Notice of Intent (eNOI) database<sup>1</sup>.**

	<b>TIER 1</b>	<b>TIER 2</b>	<b>TIER 3</b>
Number of Farms/Ranches	<b>1986</b>	<b>1523</b>	<b>103</b>
% Farms/Ranches	55%	42%	3%
Approximate Irrigated Acreage	<b>141,186</b>	<b>174,150</b>	<b>51,019</b>
% Irrigated Acreage	39%	47%	14%

<sup>1</sup>As of December 2011, the total number of farms/ranches in the eNOI database was 3649 and total irrigated acreage was approximately 372,000 acres. Of these farms/ranches, 37 farms/ranches (approximately 5600 acres) had bad locations and could not be assigned to a tier, however based on initial staff evaluation, all of these farms/ranches are likely to fall into Tier 1 or Tier 2 and none would fall into Tier 3. In total, 3612 farms/ranches (approximately 369,130 acres) were evaluated for tiering purposes.

**Table 3. Summary of Requirements - Draft 2012 Agricultural Order and Monitoring and Reporting Program (Tier 1, Tier 2, and Tier 3).**

TIER 1	TIER 2	TIER 3
<p><b>TIER 2</b> Requirements <b><u>MINUS:</u></b></p> <p>Annual compliance info – online entry</p>	<p>Meet water quality standards</p> <p>File Notice of Intent (NOI)</p> <p>Develop Farm Plan and Implement Management Practices</p> <ul style="list-style-type: none"> <li>• Irrigation Management</li> <li>• Nutrient Management</li> <li>• Pesticide Management</li> <li>• Erosion Management</li> <li>• Schedules to implement</li> </ul> <p>Surface Receiving Water Monitoring</p> <p>Education, Time Schedules</p> <p>Groundwater Well Backflow Prevention</p> <p>Proper Well Abandonment</p> <p>Groundwater Monitoring and Reporting</p> <p>Annual compliance info – online entry</p> <ul style="list-style-type: none"> <li>• Total Nitrogen Applied Reporting<sup>1</sup></li> <li>• Riparian and Wetland Photo Monitoring and Reporting<sup>1</sup></li> </ul>	<p><b>TIER 2</b> Requirements <b><u>PLUS:</u></b></p> <p>Individual Surface Runoff Monitoring</p> <p>Water Quality Buffer Plan<sup>1</sup></p> <p>Irrigation and Nutrient Mgmt Plan<sup>1</sup></p> <p>Nutrient Balance Targets<sup>1</sup></p>

<sup>1</sup>Requirement applies to only a subset of Tier 2 or Tier 3 farms/ranches.

**Table 4. Proposed Revisions to Draft Agricultural Order No. R3-2011-0006 since September 1, 2011**

LOCATION	PROPOSED REVISION
<b><i>Order Number Revisions</i></b>	
Various	<p>Replace Order Number “R3-2011-0006” with Order Number “R3-2012-0011” throughout document, including:</p> <p>Page 1 – Title and header; Page 2 – Finding 1; Page 3 – Finding 14; Page 6 – Subheading; Page 11 – CEQA Finding; Page 12 – Condition 4; Page 13 - Condition 10; Page 22 – Condition 50 (a-c), Condition 51, Condition 52; Page 23 – Condition 53; Page 25 – Condition 62, Page 26 – Condition 67; Page 27 – Condition 68, Condition 69, Condition 70; Page 28 – Condition 72, Condition 73, Condition 74, Condition 75, Condition 77; Page 29 – Condition 79, Page 30 – Condition 80;</p> <p>Attachment A Page 1 – Title and header, paragraph 1, paragraph 2, paragraph 3; Att. A Page 4 – Finding 10; Att. A Page 5 – Finding 17; Att. A Page 7 – Finding 22; Att. A Page 48 – paragraph 1</p>

<b>Dates</b>	
Page 29	Condition 79; Replace "By June 30, 2016", with "By October 1, 2016".
Page 29	Condition 80; Replace "By June 30, 2016", with "By October 1, 2016".
Page 31	Condition 86; Replace "By June 30, 2016", with "By October 1, 2016".
	Condition 87; Replace "By June 30, 2016", with "By October 1, 2016".
Page 31	Condition 88: Replace "becomes effective on September 1, 2011" with "becomes effective on March 15, 2012". Replace "expires on August 31, 2016" with "expires on March 14, 2017".
Page 31	Executive Officer certification: Replace "on September 1, 2011" with "on March 15, 2012".
Page 37	Table 3. Additional Time Schedule for Compliance with Conditions Tier 2 and Tier 3 Dischargers. Row 15 (Water Quality Buffer Plan): Replace "June 30, 2016", with "October 1, 2016".
Page 37	Table 3. Additional Time Schedule for Compliance with Conditions Tier 2 and Tier 3 Dischargers. Row 16 (INMP Effectiveness Report): Replace "June 30, 2016", with "October 1, 2016".
Page 38	Table 4. Time Schedule for Milestones, third row: Replace "June 30, 2016", with "October 1, 2016".
Page 39	Table 4. Time Schedule for Milestones, last row: Replace "October 1, 2014" with "October 1, 2015"
<b>Plans and Policies</b>	
Attachment A Pages 35-36	<p>Insert the following into list of Other Relevant Plans, Policies, and Regulations:</p> <p>"State Water Resources Control Board. Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List. Effective December 13, 2004. State Board Resolution 2004-0063."</p> <p>"State Water Resources Control Board, Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality. Effective August 25, 2009. State Board Resolution 2008-0070."</p> <p>"State Water Resources Control Board. Recycled Water Policy. Effective May 20,2010. State Board Resolution 2009-0011."</p> <p>Insert "Amended February 1, 2006." after, "State Water Resources Control Board, Resolution No. 88-63, <i>Sources of Drinking Water Policy</i>, May 1988."</p>
<b>Other</b>	
Page 2	<p>Add the following sentence to the end of Finding 4:</p> <p>"The Central Coast Water Board did not have a quorum to take action to adopt a renewal of the 2004 Agricultural Order with modifications by the September 30, 2011 termination date. On September 30, 2011, the Executive Officer issued Executive Officer Order No. R3-2011-0017 to extend the 2004 Agricultural Order again for an additional year, with a September 30, 2012 termination date. Executive Officer Order No. R3-2011-0017 also required dischargers to implement an updated Monitoring and Reporting Program No. R3-2011-0018."</p>
Page 8	Add the following sentence to the ed of Finding 35: "The Central Coast Water Board released further revised versions of the Draft Agricultural Order in March, July, and August 2011 and held an additional public workshop on February 1, 2012."
Page 8	Finding 36: Replace "February 2011" with "February 2012". Replace "more than 40 meetings" with "more than 60 meetings".
Page 15	Condition 15(2c): Delete superscript "9" on "nitrite <sup>9</sup> ".

Page 16	Condition 16(3b): Replace “chlorpyrifos and diazinon”, with “chlorpyrifos or diazinon”.
Attachment A Page 7	<p>Finding 26: Delete the following two sentences: “The Central Coast Water Board extended the 2004 Agricultural Order on July 10, 2009, and again on July 8, 2010, as documented in Order No. R3-2009-0050 and Order No. R3-2010-0040. The 2004 Agricultural Order expires on March 31, 2011.”</p> <p>Insert the following: “The Central Coast Water Board extended the 2004 Agricultural Order multiple times. The 2004 Agricultural Order expires on September 30, 2012.”</p>

**Table 5. Proposed Revisions to MRP No. R3-2011-0006 since September 1, 2011**

LOCATION	PROPOSED REVISION
<b>Order Number Revisions</b>	
Tier 1 MRP	Replace Order Number “R3-2011-0006” with Order Number “R3-2012-0011” throughout document, including:  Page 1 – Title and header, first paragraph line 1 and line 3,
Tier 2 MRP	Page 1 – Title and header, first paragraph line 1 and line 3,
Tier 3 MRP	Page 1 – Title and header, first paragraph line 1 and line 3; Page 17 Part 6.A.1,
<b>Dates – Tier 3 MRP</b>	
Page 13	Footnote 4 – Replace “June 30, 2016” with “October 1, 2016”.
Page 19	Part 6.B.2 - Replace “June 30, 2016” with “October 1, 2016”.
Page 20	Part 7.A.1 - Replace “June 30, 2016” with “October 1, 2016”.
Page 29	Table 6, Row 11 - Replace “June 30, 2016” with “October 1, 2016”.
Page 30	Table 6, Last row - Replace “June 30, 2016” with “October 1, 2016”.

**Table 6. Proposed Revisions to Resolution No. R3-2011-0021 to Certify the Final SEIR since September 1, 2011**

LOCATION	PROPOSED REVISION
Page 1	Title, replace “Resolution No. R3-2011-0021” with “Resolution No. R3-2012-0012”
Various	Replace Order Number “R3-2011-0006” with Order Number “R3-2012-0011” throughout document, including:  Page 1 – Title and header, Finding 1; Page 2 – Finding 5, Finding 6, Finding 7; Page 4 – Fourth paragraph;
Various	Replace “2011 Agricultural Order” with “2012 Agricultural Order” throughout document, including:  Page 1 – Finding 1; Page 2 – Finding 12, Finding 14, Finding 15, Page 3 – Finding 15, Finding 16, Finding 17, Finding 18, Page 4 – Finding 19, Finding 20
Page 2	Finding 7, after second sentence – Add the following “On August 10, 2011, the Central Coast Water Board staff issued an Addendum to the SEIR to reflect revisions to the Draft Agricultural Order. A new SEIR was not required because the revisions to the Draft Agricultural Order have either already been evaluated in the Final SEIR or the 2004 Negative Declaration, or the revisions do not constitute substantial changes that involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects (Cal. Code Regs. tit. 14, §§ 15164, 15162).”
Page 4	Finding 20, last sentence – Replace “proposed prohibition” with “proposed order”.
Page 4	Certification – Replace “March 17, 2011” with March 15, 2012.