



9/24/13 Board Meeting
A-2209(a)-(e)
Deadline: 9/17/13 by 12 noon

September 17, 2013

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
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Via email to: commentletters@waterboards.ca.gov



Re: Comments to SWRCB/OCC File A-2209 (a)-(e) - September 24, 2013 Board Meeting

Dear Chair Marcus, Board Members, and Staff:

Thank you for the opportunity to offer comment to the consolidated petitions of the Conditional Waiver of Waste Discharge Requirements Order No. R3-2012-0011 (and the associated Monitoring and Reporting Requirements) and the State Water Resources Control Board "Third Public Draft" Findings and Order. These comments are made on behalf of Santa Barbara Channelkeeper, San Luis Obispo Coastkeeper, and Monterey Coastkeeper (a program of The Otter Project) ("Keepers"). The Keepers have many years of experience dealing with the water quality challenges facing the Central Coast including agricultural discharges and have been continuously involved in the Irrigated Agriculture Regulatory Program since at least 2008. Agricultural pollution is perhaps the most important water quality problem impacting the environment and communities throughout the Central Coast Region. The Order currently being considered is a critically important issue to our organizations and our constituents.

The State Water Resources Control Board released its third public draft at 8 pm on September 9th, the late evening before the 9 am public hearing on September 10th to hear comments on the second public draft. Because the third public draft reversed some of the positive revisions in the second draft and discussion of these last minute reversals overwhelmed the hearing on September 10th, it is fair to say the public was never afforded the opportunity to fully comment on the positive aspects of the second draft.

We feel it is critical to recognize the process that has unfolded to this point. There have now been at least nine iterative revisions of the Central Coast Ag Order, the first public draft appearing in February 2010, seven months late after the 2004 Ag Order was set to expire in July 2009. With each iteration the Ag Order became weaker; new drafts were released in May 2010, November 2010, May 2011, August 2011, February 2012, and 15 March 2012. The 15 March 2012 version was then adopted by the Central Coast Regional Water Quality Control Board.

Agricultural interests then submitted four petitions aimed at further weakening or entirely striking down the Order. Environmental interests submitted a single petition with the intent to uphold or strengthen the Order. The State Board granted a stay of critical provisions of the Order on 19 September 2012, delaying implementation and reporting of the efficacy of the Order for many months. The State Board then came out with new iterations of the Order on 6 June 2013, on 20 August 2013, and at 8 pm on 9 September 2013, with each new version again weaker than the previous.

The Keepers are losing faith in the State Board's willingness to fulfill its duty to protect water quality and public health from agricultural pollution on the Central Coast. We fear that yet another even weaker version will be issued before the 24 September adoption hearing, and we fear that State Board revisions at the September 24th hearing will further gut what can no longer be considered an "Order."

We feel the current Ag Order is not protective of the environment or public health, does not protect State surface or ground waters from degradation, does not create a path forward to clean up polluted waters, and is not in the public interest. We do not support the current draft Ag Order. It is impossible to comment on this latest version without comment on the efficacy of the Order as a whole and without making suggestions to amend the Order such that it will actually be protective of the environment and human health. The current draft of the Ag Order does not have a single numeric effluent limitation.

Given the extremely well referenced and unchallenged "Report on Water Quality Conditions" (found at http://www.waterboards.ca.gov/rwqcb3/water_issues/programs/ag_waivers/docs/12_09_2010_staffreport/AgOrder_AppG.pdf and part of the record) states in part:

Of the 250 sites evaluated for the CCAMP [Central Coast Ambient Monitoring Program] and CMP [Cooperative Monitoring Program] monitoring programs, fully 30 percent have nitrate-N concentrations that exceed the drinking water standard [10 mg/L] on average. Several sites have average nitrate concentrations that exceed the standard by five-fold or more. The top twenty worst sites from the standpoint of nitrate contamination have mean concentrations that range from 32.6 to 93.7 mg/L.

The levels of toxicity found in ambient waters of the Central Coast far exceed anything allowed in permitted point sources discharges. The California Toxics Rule allows only one acute and one chronic toxic test every three years on average for permitted discharges to surface waters. We have drainages in agricultural areas of the Region that are toxic virtually every time they are measured.

A recent USGS study has shown that the breakdown products of chlorpyrifos, diazinon, and malathion are ten to 100 times more toxic to amphibians than the products themselves (Sparling and Fellers, 2007). According to the Department of Pesticide Regulation 2006 Pesticide Use Report, many more pounds of diazinon are applied in Monterey County than in other counties in the Region (or State), particularly to leafy vegetable crops. Chlorpyrifos is applied most heavily to broccoli and wine grapes, in both Monterey and Santa Barbara counties.

Ng et al. (2008) describes finding significant toxicity in sediments coming out of agricultural land above the City of Salinas, as well as within the City limits, and shows that urban chemical signatures were somewhat different than those from agricultural areas. In a statewide study of four agricultural areas (Salinas, Sacramento, San Joaquin, and Imperial valleys), conducted by the Department of Pesticide Regulation, the Salinas study area had the highest percent of sites with pyrethroid pesticides detected (85 percent), the highest percent of sites that exceeded levels expected to be toxic (42 percent), and the highest rate (by three-fold) of active ingredients applied (113 lbs/acre) (Starner, 2006). More details on this research, as well as access to the technical papers, can be found at http://www.ccamp.net/ag/index.php/Toxicity_Research_Findings.

Staff has examined a large amount of data from both CCAMP and the CMP. We have found that many of the same areas that showed serious contamination from agricultural pollutants five years ago, particularly nitrate and toxic pesticides, are still seriously contaminated. We have seen evidence of improving trends in some parameters in some areas. Dry season flow volume appears to be declining in many areas of intensive agriculture. However, we are not seeing widespread improvements in nitrate concentrations in areas that are most heavily impacted, and in fact a number of sites in the lower Salinas and Santa Maria areas appear to be getting worse, at least in terms of concentration. Invertebrate toxicity remains common in both water and sediment.

In general, staff finds poor water quality, biological and physical conditions in many waterbodies located in, or affected by, agricultural areas in the Central Coast Region.

In addition, the findings of the Ag Order itself state in part:

2. The Central Coast Region has more than 17,000 miles of surface waters (linear streams/ rivers) and approximately 4000 square miles of groundwater basins that are, or may be, affected by discharges of waste from irrigated lands.

6. Nitrate pollution of drinking water supplies is a critical problem throughout the Central Coast Region. Studies indicate that fertilizer from irrigated agriculture is the largest primary source of nitrate pollution in drinking water wells and that significant loading of nitrate continues as a result of agricultural fertilizer practices. Researchers estimate that tens of millions of pounds of nitrate leach into groundwater in the Salinas Valley alone each year. Studies indicate that irrigated agriculture contributes approximately 78 percent of the nitrate loading to groundwater in agricultural areas. Hundreds of drinking water wells serving thousands of people throughout the region have nitrate levels exceeding the drinking water standard. This presents a significant threat to human health as pollution gets substantially worse each year, and the actual numbers of polluted wells and people affected are unknown. Protecting public health and ensuring safe drinking water is among the highest priorities of this Order. This Order prioritizes conditions to control nitrate loading to groundwater and impacts to public water systems. In the case where further documentation indicates nitrate impacts to small water systems and/or private domestic wells, the Central Coast Water Board will consider proximity to impacted small water systems and private domestic wells for inclusion in tiering criteria.

7. Agricultural use rates of pesticides in the Central Coast Region and associated toxicity are among the highest in the State. Agriculture-related toxicity studies conducted on the Central Coast since 1999 indicate that toxicity resulting from agricultural discharges of pesticides has severely impacted aquatic life in Central Coast streams. Some agricultural drains have shown toxicity nearly every time the drains are sampled. Twenty-two sites in the region, 13 of which are located in the lower Salinas/Tembladero watershed area, and the remainder in the lower Santa Maria area, have been toxic in 95% (215) of the 227 samples evaluated. This Order prioritizes conditions to address pesticides that are known sources of toxicity and sources of a number of impairments on the 2010 List of Impaired Waterbodies, specifically chlorpyrifos and diazinon. In the case where further documentation indicates that additional pesticides are a primary source of toxicity and impairments in the Central Coast region, the Central Coast Water Board will consider such pesticides for inclusion in tiering criteria.

8. Existing and potential water quality impairment from agricultural waste discharges takes on added significance and urgency, given the impacts on public health, limited sources of drinking

water supplies and proximity of the region's agricultural lands to critical habitat for species of concern.

Given the significant detrimental impacts that agricultural discharges have on the environment and human health, it is clearly not in the public interest to have an Ag Order that does no more than require enrollment, submission of reports, monitoring of discharges, and development of plans, and completely fails to set limits on discharges of toxic waste and groundwater-polluting nitrates.

It is important to review what the Central Coast Regional Board was trying to accomplish in light of the critical water quality problems in the region, what has been lost through the process, where we are now, and what is needed to fix the deficiencies.

Former Central Coast Regional Water Board Executive Officer Roger Briggs convened an Agricultural Advisory Panel in December 2008 to help shape a new Ag Order to replace the one set to expire in July 2009. The intent of the new Ag Order was clearly and concisely spelled out:

The Irrigated Ag Order will be revised to require growers and property owners to demonstrate compliance with the following conditions per defined schedules:

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

Our comments below will follow the outline of these bullet points.

Eliminate toxic discharges of agricultural pesticides to surface waters and groundwater

Throughout the process it has been repeatedly stated that the issue of water and sediment toxicity is an issue more easily solved in comparison to nitrates in groundwater. Modern pesticides such as chlorpyrifos, Diazinon, and malathion have half-lives measured in days and weeks. Many pesticides, including Diazinon and chlorpyrifos, have substitutes that may be equally effective and toxic to the environment. The proposed Order focuses on only Diazinon and chlorpyrifos. Additional Finding 68 of the Order states in part:

68. Based on CCAMP, CMP, and other monitoring data, multiple pesticides and herbicides have been detected in Central Coast surface waterbodies (identified below). The Basin Plan general objective for pesticides states that no individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses, and no increase in pesticide concentrations shall be found in bottom sediments or aquatic life. Many currently applied pesticides have not been tested for, and staff is only recently aware of data showing several relatively new fungicides (azoxystrobin, pyraclostrobin and boscalid) in fish tissue and sediment of lagoons in the Central Coast Region. This is a violation of the Basin Plan general objective for pesticides.

New information indicates that growers are switching away from Diazinon and chlorpyrifos and towards malathion, which will result in many fewer growers being enrolled in the most stringent regulatory tier, Tier 3. As a result, fewer actual discharges will be monitored, the actual issue of water and sediment toxicity will not be addressed, and the efficacy of the Order will be further weakened.

Clearly, this Order does not fulfill the Executive Officer's mandate to eliminate toxic discharges of agricultural pesticides to surface and ground waters, nor does it foster compliance with the Basin Plan.

To remedy this failure, the Keepers strongly recommend that Provisions 53, 55, and 56 of the 1 February 2010 draft Ag Order be fully inserted into the final Order. These provisions include all pesticides that pose a high risk of contamination to surface waters and prohibit applications immediately adjacent to surface waters.

Pesticide Runoff/Toxicity Elimination

53. Within 2 years from the adoption date of this Order, all Dischargers adjacent or in close proximity (within 1000 feet) to any surface waterbody (creek, stream, river, slough, lake, pond, or other body of water) designated in the Basin Plan, or to tributaries to such waterbodies must implement management practices sufficient to eliminate toxicity in irrigation runoff or eliminate the discharge of irrigation runoff from their farming operation. Alternatively, Dischargers may provide water quality data and information per MRP Order No. R3-2010-00XX to demonstrate that any irrigation runoff has been sufficiently treated or controlled to achieve toxicity water quality standards, or is of sufficient quality where it will maintain existing high quality water, and not cause or contribute to exceedances of any toxicity water quality standards in waters of the State.

55. Dischargers using pesticides with a high potential to degrade/pollute surface water (identified in Attachment A of this Order) and persons performing pest control using such pesticides for the Discharger, must comply with the following conditions to protect surface water from pesticide drift, in compliance with any existing pesticide use regulation:

- a. Ground applications must not be made within 50 feet of any surface waterbody;***
- b. Airblast, high-pressure wand or hand gun applications must not be made within 100 feet of any surface waterbody;***
- c. Aerial applications must not be made within 150 feet of any surface waterbody;***

56. Dischargers must not apply any chemical directly to surface waterbodies designated in the Basin Plan, including chemicals used for the purposes of breaking down applied pesticides or reducing associated toxicity (e.g. Landguard), unless approved by the Central Coast Water Board. Any such chemical used for this purpose in irrigation systems must have documented effectiveness and must not result in further impact to water quality or aquatic habitat, and must not result in negative ecological impacts.

Reduce nutrient discharges to surface waters to meet nutrient standards

The last remaining numeric standard – the requirement to meet a nitrogen balancing ratio – was stricken before the adoption of the Order on 15 March 2012 and is the focus of the “Keepers” petition.

The State Board has repeatedly indicated through the course of this process that four components of nitrogen balancing are subjective and inaccurate:

With regard to the four reportable elements of the INMP, we agree with the Agricultural Petitioners that they result in at best an estimate of the nutrient balance ratio at a given farm and of the nitrate load leaving the farm. Crop nitrogen uptake values are not widely available and will require crop substitution, making the accuracy of the balance ratio questionable. An accurate calculation of the load discharged to surface water and groundwater requires a much more nuanced calculation than simply comparing the nitrogen applied to the fields and the amount expected to be taken up by the crops. Without reliable data on annual nitrate loading to groundwater in the first place, estimates of annual reductions in that loading are also unreliable.

For these reasons, we will strike the requirements in the Agricultural Order to include calculations of the balance ratio of nitrogen applied to nitrogen uptake, the estimation of annual loading of nitrogen to groundwater and surface water, and the annual reduction in nitrogen loading to groundwater, as well as the requirement to report this information to the Central Coast Water Board.

It is a simple and widely recognized fact that to avoid discharge of pollutants such as nitrogen (nitrates), the amount applied must be very close to equal the amount required by the crop and not over-applied. As recognized by the State Board:

We note that the practice of recording and budgeting of nitrogen application is a relatively low-cost, standard industry practice that is widely recommended by agronomists and crop specialists and already utilized by many growers in the Central Coast region.

It appears that the State Board and agricultural representatives want it both ways; while they recognize it is a standard industry practice (used for literally decades), they do not want to show their calculations and affirm to the public that they are in fact not polluting.

To budget nitrogen applications and achieve balance, the State Board correctly suggests that three input parameters must be determined: nitrogen available in the soil; nitrogen available in the irrigation water; nitrogen applied through various fertilizers

Unfortunately, in the September 9 revision the State Board added a second method to the crop reporting methodologies and did not require comparable reporting of input parameters for each method; reporting of nitrogen in the soil is not required for method 2. The result is that datasets for each method will not be comparable, and without reporting of nitrogen in the soil for method 2, calculating a budget or balance is impossible.

The State Board and agricultural interests also suggest that reporting of the nitrogen requirements of the crop are “not widely available” and subjective, despite the stated fact that “budgeting of nitrogen application is a relatively low-cost, standard industry practice that is widely recommended by agronomists and crop specialists and already utilized by many growers in the Central Coast region.” The major crops of the Central Coast – lettuce, strawberries, broccoli, and cauliflower – have been widely studied in the Central Coast region and crop uptake values are well known and available in both the scientific literature and in the literature readily available to growers. These crops account for the vast majority of acreage in the Central Coast region. For crops with less well studied uptake values, growers have been making estimations and substitutions for many years and through their experience have learned the appropriate values.

In light of these undisputed facts, the Keepers request that the Order be amended to include requirements that 1) all three nitrogen input values be calculated and reported in the Annual Compliance Form by all Tier 2 and 3 growers; 2) the crop uptake value be reported by all Tier 2 and 3 growers on the Annual Compliance Form; 3) the State Water Board assure that datasets created by any methodology be both complete and comparable; 4) all Tier 2 and 3 growers calculate the balance and report on the Annual Compliance Form the ratio of total nitrogen available to the crop (available in soil, irrigation water, and any fertilizers) divided by the crop uptake requirements; and 5) Tier 3 growers meet a ratio of 1.0 for harvested crops or 1.2 for crops with harvested fruits.

Reduce nutrient discharges to groundwater to meet groundwater standards

Throughout the process we have heard agriculture's repeated complaints that the Ag Order goes too far and that there is not enough information or science on which to base regulation. The State Board is now parroting those references. It is important to note that the document repeatedly referenced but not allowed into the record is the report entitled: "Addressing Nitrate in California's Drinking Water, Report for the State Water Resources Control Board, Report to the Legislature" (Harter Report). This report represents the most comprehensive review of groundwater data and, more importantly, offers promising solutions for what is arguably the State's most critical drinking water issue. The 80-page Report was issued the week before the Regional Water Board's 15 March 2012 adoption hearing. Ag interests have repeatedly and stridently objected to any reference to the Harter Report, and the State has obliged by keeping the Report and its promising solutions out of the record. The Report was available before the conclusion of the Regional Board process, and Regional Board staff and various stakeholders attempted to cite the Report. The Regional Board has requested inclusion of the Report in the record; environmental justice stakeholders have requested inclusion; and the Keepers are requesting inclusion as well.

We request that the Harter Report be admitted into the record of this proceeding. The explanation is not needed because the record has numerous and sufficient references to groundwater pollution yet ignores the numerous solutions offered by the Report. These solutions speak to the heart of agriculture's and the State Board's claim that we do not know enough or have sufficient solutions to address harmful discharges from agriculture.

We believe that if all Tier 2 and 3 growers calculated their nitrogen balance and Tier 3 growers met balancing requirements, nitrate loading to groundwater would be reduced.

The record has numerous documented references and references quoted at both the Regional and State Board levels that the threat of nitrates in groundwater and drinking water is a critical public health threat. Allowing the Harter Report into the record will supplement and add detail to the critical need to take action.

Approximately 1,000 wells that supply drinking water to homes and families are covered by this Order. The Waiver explicitly states the requirements for individual groundwater monitoring for Tier 1 and Tier 2 growers; Tier 3 growers have additional requirements. These requirements have not been stayed and are affirmed in the current version of the SWRCB Order. Requirements as excerpted directly from the Tier 1 MRP, Part 2, include:

2. Dischargers must sample at least one groundwater well for each farm/ranch on their operation. For farms/ranches with multiple groundwater wells, Dischargers must sample the primary irrigation well and all wells that are used or may be used for drinking water purposes. Groundwater monitoring parameters must include well screen interval depths (if available), general chemical parameters, and general cations and anions listed in Table 3.

3. Dischargers must conduct two rounds of monitoring groundwater wells, one sample collected during fall (September - December) and one collected during spring (March - June). The first round of monitoring must be completed by December 2012. These two rounds of monitoring must be repeated every 5 years. (Emphasis added.)

The MRPs for all Tiers also originally read:

6. In lieu of conducting individual groundwater monitoring, Dischargers may participate in a cooperative groundwater monitoring effort to help minimize costs and to develop an effective

groundwater monitoring program. Qualifying cooperative groundwater monitoring and reporting programs may include, but are not limited to, regional or subregional groundwater programs developed for other purposes as long as the proposed cooperative groundwater monitoring program meets the Central Coast Water Board's general purpose of characterizing groundwater quality and ensuring the protection of drinking water sources. At a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes.

This statement does not allow for any less to be done than what is required by the "individual" groundwater monitoring program. This provision also specifically lays out the minimum requirements for a cooperative groundwater monitoring plan:

- characterize the groundwater aquifer(s) in the local area of the participating Dischargers
- *and* characterize the groundwater quality of the uppermost aquifer
- *and* evaluate groundwater used for domestic drinking water purposes.

In response to our comments, the August 20th State Board draft clarified:

[W]e will make a revision to the cooperative groundwater monitoring provisions at Section A.6 of Part 2 of MRP Orders 1, 2, and 3. **The revision clarifies that any cooperative groundwater monitoring program must require sampling of all domestic drinking water wells to the same extent these wells are required to be sampled under the individual groundwater monitoring provisions.**

Then, in its 8 pm September 9th revision, at the request of agricultural stakeholders, the State Board backpedaled and struck their own revision without ever hearing public comment on the beneficial August 20 changes. The new revision allows for a statistical characterization of water quality based on existing and collected data. No statistical characterization can be as accurate and protective of public health as actually monitoring and reporting the quality of water being pumped into a family's home. No statistical characterization can provide the two samples, dry and wet season, that the Director of the State Board's own Office of Enforcement Division has said is a line of evidence that can lead to replacement water.

Existing drinking water data will certainly include monitoring results from existing small and municipal water systems. Because these systems must deliver water that meets drinking water standards, a characterization that includes these predominantly deeper and clean wells will likely indicate better water quality than what may be available from shallow single home domestic wells.

Agricultural stakeholders have complained that the monitoring will cost thousands of dollars per sample. This statement has already been reviewed and refuted. Regional Board staff reached out to numerous labs who conduct sampling and received estimates of around \$200 per sample – including driving to the property, taking the sample, analyzing the sample, and reporting the results. Even if two samples are required, the \$400 cost is still not prohibitive for a requirement that protects the health of tenants – often farm workers – drinking the water.

We strongly urge the State Board to reinstate to the August 20th revision outlined above.

Minimize sediment discharges from agriculture lands

Control of sediment discharges has been eliminated from all iterations of the Ag Order since the original February 1, 2010 draft. Yet essentially every study of sediment transport, including studies within the record, indicate that pesticides and resultant toxicity is aggravated by transport of sediments as many toxic pesticides tend to adhere to fine sediment particles.

Ultimately, better solutions will be identified such a requirement for cover cropping of fallow fields. We also believe that the Aquatic Habitat requirements identified below will reduce sediment transport and erosion. For now, we believe the Order should include the following provision extracted from the February 2010 draft:

We suggest including provisions from the February 2010 Draft:

1) Inclusion of a sediment management element in the required Farm Plan.

Sediment Management / Erosion Control / Stormwater Management

64. Within 3 years from the adoption of this Order, all Dischargers adjacent or in close proximity (within 1000 feet) to any surface waterbody (creek, stream, river, slough, lake, pond, or other body of water) designated in the Basin Plan or to tributaries to such waterbodies must implement management practices sufficient to eliminate or minimize sediment and turbidity to meet water quality standards in irrigation runoff or eliminate the discharge of irrigation runoff from their farming operation. Alternatively, Dischargers may provide water quality data and information per MRP Order No. R3-

2010-00XX to demonstrate that any irrigation runoff has been sufficiently treated or controlled to meet sediment and turbidity water quality standards or is of sufficient quality where it will maintain existing high quality water, and not cause or contribute to exceedances of any sediment or turbidity water quality standards in waters of the State.

65. The purpose of the erosion control and sediment management element of the Farm Plan is to maximize sediment and erosion control and stormwater management to eliminate or minimize discharge of sediments and turbidity to meet water quality standards using best practicable treatment and control, and to assure compliance with this Order. Dischargers are encouraged to coordinate the implementation of stormwater management practices with other Dischargers in the watershed or subwatershed to maximize water quality protection and reduce costs. The sediment management element of the Farm Plan must include, but is not limited, the following:

- a. The identification and implementation of management practices to eliminate or minimize the discharge of sediments by (1) controlling erosion, (2) reducing soil detachment, (3) reducing sediment transport, and (4) trapping sediments.*
- b. Management practices that will be implemented to achieve the following: (1) maintain crop residue or vegetative cover on the soil; (2) improve soil properties; reduce slope length, steepness, or unsheltered distance; reduce effective water and/or wind velocities;*
- c. Erosion control management measures that reduce or prevent sheet and rill erosion, wind erosion, concentrated flow, streambank erosion, soil mass movements, road bank erosion, construction site erosion, and irrigation induced erosion;*
- d. Specific stormwater management measures;*
- e. Schedule for implementation;*
- f. Progress towards interim milestones*

Protect aquatic habitat (riparian areas and wetlands) and their buffer zones

The February 2010 Central Coast Staff Report identifies the important role that riparian and wetland areas play in protecting several of the beneficial uses designated in the Basin Plan. The report notes that:

Agricultural activities have degraded, and threaten to degrade, these beneficial uses related to aquatic habitat, which include, but are not limited to:

- a. Ground Water Recharge;
- b. Fresh Water Replenishment;
- c. Warm Fresh Water Habitat;
- d. Cold Fresh Water Habitat;
- e. Inland Saline Water Habitat;
- f. Estuarine Habitat;
- g. Marine Habitat;
- h. Wildlife Habitat;
- i. Preservation of Biological Habitats of Special Significance;
- j. Rare, Threatened or Endangered Species;
- k. Migration of Aquatic Organisms;
- l. Spawning, Reproduction and/or Early Development

The February 2010 Central Coast Draft Order sought to protect this broad range of beneficial uses by prohibiting the clearing of natural vegetation in aquatic areas. It also included 100, 75, or 50-foot stream buffers (depending on natural stream flow) to protect water quality or the required the development of a robust Riparian Function and Restoration Plan as an element of the Farm Plan.

Iterative versions of the Draft Order continually weakened these provisions as documented in our comment letter of July 2013. The Central Coast finally adopted ORDER NO. R3-2012-0011, which requires a much more limited subset of growers (Tier 3 growers adjacent to temperature, turbidity, or sediment impaired water bodies) to submit a Water Quality Buffer Plan that controls discharges of waste that cause or contribute to exceedances of water quality standards. Growers have the additional option, however, of avoiding submittal of a Water Quality Buffer Plan by submitting evidence that their BMPs are controlling discharges of sediment, temperature, and turbidity. No explicit buffer widths are required, no prohibitions of aquatic habitat clearing are established, and no further protections are offered for the much broader set of habitat and water quality benefits provided by wetland and riparian systems.

We request that provisions 78 – 83 of the 1 February 2010 draft Ag Order be fully inserted into the current draft. These provisions fully protected all beneficial uses provided by aquatic habitat from agricultural discharges.

Part G. Aquatic Habitat Protection Requirements

This Part G applies to Dischargers who discharge or threaten to discharge waste to waters of the State that cause or contribute to exceedances or excursions of water quality standards due to disturbance and degradation of aquatic habitat as described below. Disturbance and degradation of aquatic habitats result from human activities that result in water quality impairment and make habitats less suitable or less available to aquatic life, such as removal of riparian vegetation, channel clearing, creation of bare dirt areas, and hydromodification.

78. Dischargers must protect existing aquatic habitat, collectively described as perennial, intermittent, or ephemeral streams, and riparian and wetland area habitat and prevent

discharges of waste to waters of the state to meet water quality standards (e.g. temperature, turbidity, dissolved oxygen, etc), maintain existing high quality water, protect beneficial uses, and achieve compliance with this Order using best practicable treatment and control. Management practices to prevent such discharges of waste include, but are not limited to the following:

- a. Maintaining the following riparian functions: Streambank stabilization and erosion control; stream shading and temperature control; chemical filtration; flood water storage; aquatic life support; wildlife support;*
- b. Maintaining naturally occurring mixed vegetative cover (such as trees, shrubs, grasses, as described in NRCS Ecological Site Descriptions or other similar regional biological typologies) in aquatic habitat areas and their buffer zones;*
- c. No clearing of beneficial vegetation for food safety reasons;*
- d. No clear cutting or creating bare dirt areas;*
- e. No channel clearing except for agriculture ditches;*
- f. Preventing man made erosion and sedimentation, and maintaining shade over surface waters;*
- g. Other measures include limiting agricultural activities, such as equipment operation, in and near aquatic habitat;*

79. The Central Coast Water Board may authorize aquatic habitat disturbance necessary for the purposes of water quality improvement or restoration of aquatic habitat. In these cases, Dischargers must implement appropriate and practicable measures to avoid or minimize impacts to aquatic habitat;

80. Where the discharge of waste impacts waters of the State that constitute wetlands or jurisdictional waters of the United States, the Discharger shall notify the Executive Officer and seek waste discharge requirements or Clean Water Act Section 401 certification and any required federal permit.

81. Within 4 years from the adoption of this Order, Dischargers must document with photo documentation in the Farm Plan, the presence of minimum riparian buffer widths adjacent to perennial and intermittent streams, per the time schedule and milestones in Part H below. Required buffer widths are based on stream tiers and identified in Table 1. Stream tiers are based upon modeled average daily natural flow and identified in Table 2. The buffer width for streams is measured from the top of the bank in each direction. In the case of an existing engineered levee system, the outer bank of the existing levee will be the outer edge of the buffer width. Where existing riparian vegetation width is greater than the riparian buffer widths required in Table 1, the Discharger must protect and maintain the maximum buffer width.

Table 1. Minimum riparian buffer widths for perennial and intermittent streams.

Tier	Minimum Riparian Buffer Width	Modeled Average Daily Natural Flow
Tier 1	50 feet	1- 15 cfs
Tier 2	75 feet	15 – 50 cfs
Tier 3	100 feet	50 cfs and above

[Please refer to record for additional tables including a specific list of streams]

82. Within 4 years of the Board adoption of this Order, Dischargers must document with photo documentation in the Farm Plan, the presence of minimum buffer widths of fifty feet as

measured from the high water mark for lakes, wetlands, estuaries, lagoons or any other natural body of standing water, as specified in Table 3, per the time schedule and milestones in Part H below.

Table 3. Minimum buffer widths for lakes, wetlands, and estuaries.

Feature	Minimum Buffer Width
Lakes, wetlands, estuaries and other natural body of standing water	50 feet

83. As an alternative to establishing and maintaining minimum buffer widths as required in Tables 1 – 3 above, a Discharger or group of Dischargers may develop and implement a Riparian Function Protection and Restoration Plan, as part of the Farm Plan, that demonstrates how all of the following riparian functions are to be restored and protected: (a) Streambank stabilization and erosion control, (b) stream shading and temperature control, (c) chemical filtration, (d) flood water storage, (e) aquatic life support, (f) Wildlife support. The Riparian Function Protection and Restoration Plan must be certified by a State registered Professional Engineer or Registered Geologist and include a schedule for implementation, measurable success criteria and a maintenance and monitoring plan. The Riparian Function Protection and Restoration Plan must be submitted within 2 years of the Board adoption of this Order for approval by the Executive Officer.

Enforcement

Not only must the Order have clear limits and messaging, but it must be enforceable. Revisions of August 20 seriously weakened enforceability and adding additional “discussion” on September 9 offers little comfort – the plain language of the Order allows dischargers to simply change practices, effective or not, to avoid enforcement. The timeline to compliance contains narrative provisions 84 through 87 that read as follows:

- 84. By October 1, 2014, Tier 3 Dischargers must effectively control individual waste discharges of pesticides and toxic substances to waters of the State and of the United States.
- 85. By October 1, 2015, Tier 3 Dischargers must effectively control individual waste discharges of sediment and turbidity to surface waters of the State or of the United States.
- 86. By October 1, 2016, Tier 3 Dischargers must effectively control individual waste discharges of nutrients to surface waters of the State or of the United States.
- 87. By October 1, 2016, Tier 3 Dischargers must effectively control individual waste discharges of nitrate to groundwater.

But these are interpreted to be read within the context of the vague and squishy provision 82 that reads:

82. Time schedules for compliance with conditions are identified in Conditions 84 – 87, and described in Table 2 (all Dischargers) and Table 3 (Tier 2 and Tier 3 Dischargers). Milestones are identified in Table 4. Dischargers must comply with Order Conditions by dates specified in Tables 2 and 3 in accordance with the MRP. The Water Board will consider the following information in determining the extent to which the Discharger is effectively controlling individual waste discharges and compliance with this Order:

- a) compliance with the time schedules;
- b) effectiveness of management practice implementation;

- c) effectiveness of treatment or control measures (including cooperative water quality improvement efforts, and local and regional treatment strategies);
- d) results of individual discharge monitoring (Tier 3);
- e) results of surface receiving water monitoring downstream of the point where the individual discharge enters the receiving water body;
- f) other information obtained by Water Board staff during inspections at operations or farms/ranches, or submitted in response to Executive Officer orders;

The time schedules “detailed” in Tables 2 and 3 are entirely narrative and principally require “enrolling,” “submitting” reports, “monitoring” of waste discharges, and “developing” plans. The milestones of Table 4 are explicitly unenforceable.

Further weakening the Order at the request of the agricultural stakeholders, the State Board has added draft provision “87.5” that states:

87.5. To comply with Provisions 22, 23, and 84-87 of this Order, Dischargers must (1) implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and (2) to the extent practice effectiveness evaluation or reporting, monitoring data, or inspections indicate that the implemented management practices have not been effective in preventing the discharges from causing or contributing to exceedances of water quality standards, the Discharger must implement modified management practices.

This new provision essentially states that any simple change in practices – whether reasoned or effective or not -- brings the discharger into compliance with the Order.

We request this provision be entirely removed from the Order.

Additional Comments on the Draft Ag Order

Beginning with the 6 June 2013 the State has repeatedly stated it will convene an “expert panel” to: “provide a more thorough analysis and long-term statewide recommendations regarding many of the issues implicated in the Agricultural Order, including indicators and methodologies for determining risk to surface and groundwater quality, targets for measuring reductions in risk, and the use of monitoring to evaluate practice effectiveness.” Many issues within the Central Coast Ag Order including appropriate standards, potential discharge limitations, and measures and monitoring have been delayed while the “expert panel” deliberates, conducts workshops, and – again – iteratively makes recommendations. It is our recollection at the public meeting of 23 July Deputy Director Mr. Darrin Polhemus stated that within a few weeks efforts would be made to contact stakeholders to seek their advice for the panel and the panel’s deliberations would be concluded within a year. To date, none of the environmental stakeholders have been contacted. Further, referral of critical provisions of the Order ignores the fact that the Regional Board consulted many experts (likely some of the same experts) during the years of delay while the Ag Order was deliberated at the regional level.

We request that this revision of the Ag Order contain all provisions necessary to protect the environment and public health, protect State surface or ground waters from degradation, create a path forward to clean up polluted waters, and protect the public interest. The Order must fully comply with State Water Code section §13269. By delaying and punting numerous issues to the “expert panel,” we believe the current Order indefinitely delays any determination of the efficacy of the Order.

The September 9 revision includes the following new language:

Depending on the scope of any proposed third party program **under the current Agricultural Order**, the Central Coast Water Board may consider developing a separate order specific to the third party program. **Further, in the next iteration of the Agricultural Order, the Central Coast Water Board should strongly consider developing orders for both third party programs and individual dischargers.**

We believe this new language tilts a level playing towards a third party program at any cost. Of course we understand that third party programs will be proposed and will be considered and in fact we have a history of offering compromises to allow third party programs. But the State must recognize that to date, the proposed third party programs have included monitoring and reporting schemes that aggregated data and did not report a complete dataset to the Regional Board or to the public. We believe that State Water Code is very clear that all monitoring data must be reported. Our fear is that by explicitly stating that the "Central Coast Water Board should strongly consider developing orders for both third party programs and individual dischargers" the State is in fact influencing consideration of programs that may not adequately report data to the Boards or to the public.

We request the State Board revert to the language of the August 20th revision.

In conclusion

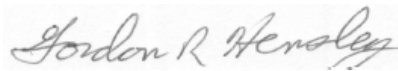
Santa Barbara Channelkeeper, San Luis Obispo Coastkeeper, and Monterey Coastkeeper (a program of The Otter Project) appreciate the opportunity to comment on the consolidated petitions and the Second Public Draft SWRCB Findings and Order. Quoting the CCRWQCB, we believe "These impairments are well documented, severe, and widespread. Nearly all beneficial uses of water are impacted, and the discharges causing the impairments continue. Immediate and effective action is necessary to improve water quality protection and resolve the widespread and serious impacts on people and aquatic life."

Thank you for your attention and consideration.

Sincerely,



Kira Redmond
Executive Director
Santa Barbara Channelkeeper



Gordon Hensley
Executive Director
San Luis Obispo Coastkeeper



Steve Shimek
Executive Director
The Otter Project