



April 1, 2010

Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401

**RE: Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands**

Dear Board Members:

We offer these comments on the Draft Order implementing the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Draft Order). The Environmental Defense Center (EDC), Monterey Coastkeeper (MCK), Ocean Conservancy and Santa Barbara Channelkeeper (SBCK) support a conditional waiver program that contains robust regulatory provisions to ensure that our waters are protected from agricultural discharges. In general, we are very supportive of the direction that staff has taken. We offer additional suggestions to make the Draft Order even more protective of water quality, drinking water standards, associated public trust resources and the wider range of beneficial uses.

EDC is a non-profit public interest law firm that represents community organizations in environmental matters affecting California's south central coast. EDC protects and enhances the environment through education, advocacy and legal action.

MCK protects the water, watersheds and coastal ocean for the benefit of wildlife and human populations alike. MCK serves Monterey and Santa Cruz counties including the northern Salinas and Pajaro river basins. Monterey Coastkeeper is a program of The Otter Project.

Through science-based advocacy, research and public education, Ocean Conservancy informs, inspires and empowers people to speak and act for the oceans. Ocean Conservancy is headquartered in Washington, DC, and has offices in Florida, the Gulf of Mexico and the Pacific, including Alaska, with support from more than half a million members and volunteers.

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SBCK is a non-profit environmental organization dedicated to protecting and restoring the Santa Barbara Channel and its watersheds through citizen action, education, field work and enforcement. Channelkeeper has nearly ten years of experience in conducting citizen water quality monitoring activities in agricultural watersheds.

EDC, the Ocean Conservancy and SBCK participated in the original stakeholder process which informed the existing Ag Order, and EDC, MCK and SBCK participated in the 2009 stakeholder process convened by staff to discuss the next iteration of the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands. We have also engaged other Central Coast public interest organizations in this process, including organizations that focus on water quality and related issues.

## **I. The 2008-2009 Stakeholder Process**

Staff convened the Agricultural Advisory Panel monthly for more than a year, with fifteen individuals and organizations representing agricultural interests, a representative of the Monterey Bay National Marine Sanctuary, a representative from UC Davis, and representatives from four environmental organizations. Panel representatives were repeatedly encouraged to communicate with their constituent groups, and the newsletters published by Water Quality Preservation, Inc. and the various Farm Bureaus indicate that this outreach charge was taken seriously.

Although the Agriculture Advisory Panel did not reach consensus on a new Conditional Waiver, the Draft Order contains many of the elements discussed during 2009, including:

- A focus on dischargers with tailwater;
- A focus on dischargers in sub-watersheds with impairments;
- A common understanding of the value of individual monitoring (although there was no consensus on reporting of individual monitoring);
- Agreement that toxicity was more easily addressed than nitrate pollution;
- Agreement that nitrate groundwater pollution was a pervasive problem that would take more time to address;
- Agreement that growers did not want “one size fits all” management practices dictated to them; and
- Agreement that the RWQCB should actively enforce the Order.

## **II. The Existing Conditional Waiver**

The Agricultural Advisory Panel reviewed the existing waiver on numerous occasions. Several themes consistently emerged.

## **Enforcement**

A serious problem under the existing Conditional Waiver is a lack of adequate enforcement on both enrolled and non-enrolled growers. Currently, there exists no database of growers and the actual plots they farm.

The current program requires that Best Management Practices (BMPs) be implemented on-site to minimize the quantity and improve the quality of agricultural discharges. BMP implementation, however, varies from site to site by necessity depending on site-specific concerns. As a result, without defined water quality standards for discharges to surface and groundwater, it is impossible to determine whether or not agricultural operations are contributing to exceedances of basin plan objectives in surface water bodies.

The current program lacks standards and mechanisms pertaining to stormwater discharges. Crops such as strawberries are especially problematic, as ground is covered with impervious plastic during the rainy season which increases water volumes and velocities running through furrows and ditches – especially on steeper slopes. Grapes are also difficult as rows are planted with little regard to slope.

There is particularly a gap in the current program when it comes to stormwater discharges from fallow agricultural fields. BMPs are frequently not implemented when agricultural fields are not in operation. From a stormwater quality perspective, fallow agricultural fields present a similar risk to surface water quality as would a large construction site.

The existing Conditional Waiver expresses no vision for maintenance of vegetated buffer areas between farm fields and aquatic habits. With the current focus on ‘food safety’ there are documented cases of removal of riparian vegetation. The riparian corridor along our creeks and rivers is the ultimate vegetated buffer before runoff enters our open waters. These riparian areas offer many public benefits including improvement of water quality.

## **Water Quality Monitoring**

While the Cooperative Monitoring Program (CMP) has produced useful data, a critical weakness in the existing Conditional Waiver is a lack of individual discharge monitoring. Ambient data produced through the CMP does allow the Regional Board and stakeholders to identify general long-term water quality trends; however the data does not allow us to identify specific sources.

Some methodologies are flawed. For example, the CMP currently collects dissolved oxygen measurements in the middle of the day. Due to diurnal fluctuations in dissolved oxygen, measurements collected in the middle of the day do not accurately diagnose potential anoxic conditions and are actually misleading. In order for such measurements to be valid they must occur during periods when dissolved oxygen can be expected to be at a minimum,

usually before dawn. Ideally, such measurements would be collected continuously throughout the day to capture the extent of diurnal fluctuation.

There is a widespread gap in the availability of groundwater quality data throughout the region. Groundwater is directly linked to surface water quality through surface-to-groundwater interactions and through tail water discharges. Without groundwater data, the Regional Board and stakeholders are unable to evaluate whether the current program is improving groundwater quality over time. Without groundwater data, it is also impossible for growers to make certain informed decisions regarding nutrient management.

### **Reporting**

Water quality data that is received by Central Coast Region staff is not always complete or available in a useful format. Part of this problem stems from a lack of on-farm data. The information also has not been made generally available to the public.

### **Enrollment**

While enrollment numbers are high, there are significant numbers of growers and operations that are not enrolled in the existing Conditional Waiver. For the program to be ultimately successful there must be a higher rate of participation. It is far too easy for a small number of bad actors to spoil an otherwise productive regulatory program. It is inaccurate to state that any percentage of the dischargers or any percentage of the land is enrolled. The reality is that we don't really know. Without better data, it is impossible to identify the gaps.

### **III. Water Quality Response to the Existing Conditional Waiver**

Results from both the Cooperative Monitoring Program and CCAMP water quality testing are contained in the February 1, 2010 report, "Preliminary Draft Report on Water Quality Conditions in the Central Coast Region Related to Agricultural Discharges." These findings indicate:

- In the Central Coast Region, thousands of people are drinking water contaminated with unsafe levels of nitrate or are drinking replacement water to avoid drinking contaminated water. The cost to society for treating and/or avoiding polluted drinking water is estimated to be in the hundreds of millions of dollars.
- Some positive reductions in nitrate pollution are occurring in the Santa Barbara region; improvement is possible.
- Endemic aquatic organisms in large stretches of rivers in the region's major watersheds have been severely impaired or completely destroyed by severe toxicity from pesticides.
- Agricultural water quality impairments are widespread. For example, the 2008 Clean Water Act Section 303(d) List of Impaired Waterbodies for the Central Coast Region (Impaired Waters List) identified surface water impairments for approximately 167 water quality limited segments related to a variety of pollutants (for example, salts,

nutrients, pesticides/toxicity, and sediment/turbidity). Sixty percent of the surface water listings identified agriculture as one of the potential sources of water quality impairment.

- Nitrate concentrations in areas that are most heavily impacted are not improving in a significant or widespread manner and a number of sites in the lower Salinas and Santa Maria watersheds appear to have become more polluted over the past five years.

The Preliminary Draft Report on Water Quality Conditions finds that there is enough high quality data to make the above findings with statistical certainty. In short, we believe that conditions have not improved generally, and conditions in bad areas are becoming worse. We acknowledge that some areas – notably areas with less intense row crop agriculture – are showing some signs of water quality improvement.

#### **IV. The Draft Order Improves Upon the Existing Conditional Waiver**

In the Draft Order, water quality standards are enumerated for discharges to surface water and groundwater, including stormwater. This should clarify for some growers that the Conditional Waiver does in fact regulate discharges to surface and groundwater.

Timelines for compliance are explicit and liberal.

- Elimination of tailwater within two years if near impaired waterbody. Growers have been informed by their peers that elimination of tailwater was an essential practice and irrigation management and use of tailwater ponds is standard procedure for most growers.
- Elimination of toxicity within three years. Toxic discharge is illegal, and modern pesticides degrade quickly.
- Eliminate sediment runoff within three years. Reducing soil loss and erosion is a common and accepted practice.
- Eliminate nitrate and salt in runoff above water quality standards within four years.
- Eliminate discharge of nitrate and salt to groundwater above water quality standards within six years.

We agree with the new emphasis on clear standards and timelines, as opposed to an emphasis on training and education. The CCRWQCB is a regulatory agency; there are multiple agencies and organizations – such as the NRCS and UC Davis – offering practical advice to growers. The CCRWQCB should set standards and targets and let the growers decide how to meet them.

We very much appreciate the staff recommendation to include riparian protection, setbacks and vegetated buffers in the new Conditional Waiver. Riparian areas are literally the ultimate buffer and water quality treatment before farm runoff reaches our creeks and streams.

In areas with high levels of contaminants in groundwater where growers continue to discharge waste, the staff draft recognizes the authority of Water Code Section 13304 that states the RWQCB can require clean up, remediation or abatement. Pollution of groundwater by agriculture represents a transfer of costs from agricultural to urban users who share the groundwater. The Draft Order recognizes both the seriousness of the problem and the length of time needed to see improvement. The Draft Order requires growers to discharge below the drinking water standard within six years, and also recognizes that the drinking water standard is not entirely protective of aquatic life. The staff approach is reasonable and balanced.

The Draft Order includes new provisions that require “Individual Discharge Characterization Monitoring” and provisions related to groundwater monitoring. This recommendation is consistent with the Agricultural Panel recommendation that “every grower should know what is in their water.”

**V. The Draft Order Should Be Even More Protective Of Water Quality And Associated Public Trust Resources**

The citizens of the Central Coast deserve clean water, and the Regional Water Board is required by mandate to draft an Order that is protective of water quality and associated public trust resources.

[T]he health, safety and welfare of the people of the state requires that there be a statewide program for the control of the quality of all the waters of the state [and] the state must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation . . . .

[T]he state board and each regional board shall be the principle state agencies with primary responsibility for the coordination and control of water quality.

(Cal. Water Code § 13000, 13001.)

In particular, the Regional Water Board regulates both point and non-point sources of water pollution. “Any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state” must file a report of the discharge to the Regional Water Board. (Cal. Water Code § 13260.) The Regional Water Board must then “prescribe requirements as to the nature of any proposed discharge [or] existing discharge.” The requirements shall take into consideration “beneficial uses to be protected,” “water quality objectives reasonably required for that purpose,” “other waste discharges,” and “the need to prevent nuisance.” (Cal. Water Code § 13263.)

Beneficial uses are described by the Central Coast Region Basin Plan and include: agricultural supply, cold fresh water habitat, preservation of biological habitats of special significance and migration of aquatic organisms. Surface water bodies that do not have

designated beneficial uses are protected for both “municipal and domestic water supply” and “protection of both recreation and aquatic life.”

Section 13269 provides that the requirements of Sections 13260 and 13263 “may be waived by the state board or a regional board as to a specific discharge or type of discharge if [it is determined] that the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest.” According to Subsection 13269(a)(2), waivers may not exceed five years in duration and must be conditional. Conditions include “the performance of individual, group, or watershed based monitoring . . . . Monitoring results shall be made available to the public.”

Components that are new to the Draft Order include greater protections for aquatic/riparian habitats and requirements for individual monitoring. These conditions are necessary for the Draft Order to be consistent with the Central Coast Region Basin Plan and for the Order to be “in the public interest.”

Generally, stormwater protections should be much stronger. There is little difference between a massive construction site with earth laid bare and a fallow field. Mandatory best practices should be prescribed including: (1) cover cropping during fallow months; and (2) on slopes, rows should be laid out to reduce erosion and runoff velocities.

Many stakeholders agree that the Conditional Waiver should be better enforced. A second document should accompany this Order, realistically detailing staff’s plan to identify irrigated properties under production and how the owners or growers will be brought into compliance. The Enforcement Plan should detail how many farms will be inspected or audited each year, how quickly monitoring results will be made available to the public, how staff will handle the sheer volume of paperwork created from operations that are rotated annually, etc. The Enforcement Plan should have transparent, measurable goals.

Entities that guide and/or represent the Conditional Waiver should be inclusive and transparent. For example, the Agricultural Monitoring Committee should be opened to non-industry stakeholders, such as conservation organizations and scientists, in order to preserve the integrity of the Order and ensure its success.

In addition, the following changes should be made to the Staff Recommendations for the Agricultural Order:

- Attachment 3, Pages 23 and 34: Erosion and Sedimentation. We commend the SIP program for the advances it has made in reducing irrigation demands and pesticide use, and we anticipate that other commodity groups will follow SIP’s lead. However, we are not aware of any SIP requirement to reduce erosion and sediment in stormwater. Vineyards can be found on steep terrain and can have rows aligned in a way that increases stormwater runoff velocities. Knowing that some commodity groups are likely to seek similar “low-risk” designations and exemptions, we would suggest that the definition of low-risk be amended to include storm water protections

including alignment of rows to minimize runoff velocities and use of cover crops to hold soils in place.

- Attachment 3, Page 34: “Sampling.” We are concerned that within the definition of monitoring the word “sampling” is occasionally used. It is our understanding that sampling results do not necessarily need to be reported while “monitoring” results must be reported and disclosed. Generally, all monitoring should be disclosed (except individual reporting postponed under Section 16). The term “monitoring” should be used consistently.
- Attachment 3, Page 39: “Waters of the State.” We believe there would be value added to bringing consistency to the many definitions of streams and waterways. For example, the National Marine Fisheries Service ([http://www.nmfs.noaa.gov/pr/pdfs/pesticide\\_biop.pdf](http://www.nmfs.noaa.gov/pr/pdfs/pesticide_biop.pdf), page 393) definition of salmonid habitat contains helpful elements that should be incorporated into the Conditional Waiver: “[F]reshwater habitats include intermittent streams and other temporally connected habitats to salmonid-bearing waters. Freshwater habitats also include all known types of off-channel habitats as well as drainages, ditches, and other manmade conveyances.” (Emphasis added).
- Attachment 3, Page 54: “Collective Progress.” The proposed Terms and Conditions (Attachment B), Part A, Section 16 states that, “The Executive Officer may postpone individual reporting of Individual Discharge Monitoring data . . . in cases where all Discharges in a watershed or sub-watershed are achieving collective progress towards compliance and meeting milestones per the defined time schedule.” Regional Board staff needs to specifically define what criteria will be used to determine whether “collective progress” is being achieved.
- Attachment 3, Page 63: Pesticide Runoff/Toxicity. The two year timeline is too liberal. The pesticides known to be causing toxicity impairments degrade in weeks or a few months. We believe that with good pesticide practices, toxicity can be eliminated very quickly. In accordance with law, discharge of toxic substances should be prohibited.
- Attachment 3, Page 68: Nurseries. We agree with others who have already pointed out that the current text should be edited to allow rainwater to fall on containerized plants. We are confident this obvious oversight will be corrected.
- Attachment 3, Page 69 at Section 77: Public Disclosure. Similar to our comment on monitoring, we are concerned that “sampling” may not require public disclosure. We suggest that either the term monitoring be used or the phrase “public disclosure” be incorporated into this section.
- Attachment 3, Surface Water Quality Objectives, Page 43. We are concerned that water quality objectives for biostimulatory substances to protect all surface waters do

not apply to agricultural discharges but only to receiving waters as indicated by the lack of a double asterisk (\*\*) in table 1A. While the 10 mg/L NO<sub>3</sub>-N objective does apply to discharges, we believe it is extremely likely most existing beneficial use impairments related to nitrate concentrations will continue under this scenario. In place of a strict numeric discharge limit of 1 mg/L NO<sub>3</sub>-N to allow for situations in which the volume of tail water has been reduced to a minimal level so that discharges 1>10 mg/L do not impact beneficial uses of receiving waters, we recommend that the Regional Board develop a stream-flow weighted discharge objective.

- Attachment 3, Surface Water Quality Objectives, Page 42. We are similarly concerned that water quality objectives for potentially toxic substances including organic chemicals, chromium, cadmium, copper, lead, mercury, nickel, and zinc do not apply to agricultural discharges but only to receiving waters. We find it difficult to imagine a scenario where discharges exceeding objectives for these parameters would not be impairing or potentially impairing beneficial uses, therefore requiring elimination, treatment, or control per the language in Attachment 1, Page 23.
- Attachment 4, Page 1: E. Coli Data. The Regional Board should take care to ensure that E. coli data collected by the growers is reported as E. coli data, and not “Fecal Coliform” data. The two parameters are not synonymous and should not be used interchangeably. Further, E. coli data submitted to the regional board to fulfill Attachment 4 monitoring requirements should not be compared to Basin Plan objectives for Fecal Coliform (listed in Attachment 3) to determine compliance. This inappropriate and misleading comparison has been commonly made by the Regional Board, permittees, and dischargers, and the Board should take this opportunity to provide clarity and consistency to one of its regulatory programs.
- Attachment 4, Page 1: Dissolved Oxygen Data. The Board needs to insert an additional timing condition to the requirement to collect dissolved oxygen data. Due to diurnal fluctuations in dissolved oxygen, measurements collected in the middle of the day do not accurately diagnose potential anoxic conditions and are actually misleading. In order for such measurements to be valid they must occur during periods when dissolved oxygen can be expected to be at a minimum, usually before dawn. Since nutrient impairments are one of the major issues facing water bodies throughout our region, the monitoring program needs to collect information that will determine whether or not eutrophication from nutrient enrichment is occurring. This is a major flaw in the current monitoring program that needs to be corrected by this updated Order.

**Conclusion**

We appreciate this opportunity to comment on the Draft Order. If you have any questions, please do not hesitate to contact any of our organizations.

Sincerely,



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