



# California Regional Water Quality Control Board Central Coast Region



Linda S. Adams,

Secretary for

Environmental Protection

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Arnold Schwarzenegger

Governor

June 12, 2009

Joe Pezzini

Chair of the Leafy Green Marketing Agreement (LGMA)

1521 "I" Street

Sacramento, CA 95814

RE: Proposed Changes to California's LGMA Food Safety Practices

Dear Mr. Pezzini,

The Central Coast Regional Water Quality Control Board's Irrigated Agriculture Program has been in existence for nearly five years now. During those five years, and in previous collaborative work, our program has made great strides in implementing on-farm management practices to address water quality.

We appreciate the LGMA's willingness in the past to update the food safety practice metrics to be more protective of water quality and on-farm conservation practices as new information has come forward. Focusing on *animals of significant risk*, instead of all *wildlife* was a good step in the right direction. Eliminating the need for sterile ground buffers between crops and habitat was also an important modification (although we would prefer stronger wording to promote the benefits of vegetated buffers). Both these changes allow farms to coexist with and protect natural resources. However, there are still some changes that need to occur before our agency and those that we worked with in producing this letter consider the CA LGMA's food safety practices to be in concert with conservation practices and the protection of water quality. In recognition of the importance of this issue in protecting wildlife and on-farm bio-diversity, (which contribute to the protection of beneficial uses that we are charged with), the Central Coast Waterboard collaborated with the Defenders of Wildlife and the Wild Farm Alliance in producing this letter.

Unfortunately, the protection of water quality has suffered from misguided food safety requirements. Many food safety requirements that go above the CA LGMA are in conflict with the water quality protections of the California Water Code. California has been a leader in adopting environmental actions that benefit us all. As stewards of the land, many farmers in the Central Coast had installed conservation practices with public and private funds, only to have their shippers or buyers require them to be removed, along with removing other non-crop vegetation and deterring or eliminating wildlife. While the CA LGMA does not specifically instruct farmers to destroy water quality protection practices, it does have several vague areas open to interpretation. Tightening these loose areas in the LGMA will help farmers justify keeping small and large non-crop vegetation that filters pathogens from the water and the air, which ultimately helps lower risk.

### Making the CA LGMA the Only Leafy Green Food Safety Metrics

Now is a good time to consider updating the CA LGMA Food Safety Practices since the program is being considered as a template for a national model. Fixing problematic areas should be a priority for the Board before they are amplified nationwide.

One of the most problematic aspects of the creation of the LGMA has been its spurring the creation of "super metrics", a large number of metrics that go beyond its requirements, encouraging the removal of buffers that protect soil and water quality, the destruction of wildlife habitat adjacent to farms, and the poisoning of frogs. Since the majority of leafy green crops are inspected for both the LGMA and the super metrics before the LGMA label can be used, the LGMA should institute internal controls that do not allow the super metrics to go above and beyond them.

### Scope of Leafy Green Crops

The CA LGMA should only include fresh cut leafy greens that are processed and sold raw as ready-to-eat, not bunched crops like spinach, kale, and chard, or whole heads of lettuce that undergo no processing. According to Community Alliance with Family Farmers, seventeen out of twenty six leafy green outbreaks in California are traced back to the bagged product, and the others occurred before the FDA had been differentiating between processed and non-processed products. In this way, all other field packed leafy greens will not be subject to unnecessary and expensive audits, and reducing the scope of leafy green crops would reduce conservation conflicts.

### Animals of Significant Risk

The CA LGMA should not list deer as an animal of significant risk unless new research proves otherwise. In April 2009, California Department of Fish and Game and collaborators preliminarily reported that only 0.5% of wildlife carry E. coli O157: H7 and that none of the 311 deer they tested were positive. Other studies show deer were found with 0, 0.3, 0.6, 1.8, and 2.4% of E. coli O157 in Texas, Nebraska, Southern States, Louisiana, and Kansas, respectively. The higher prevalence (2.4%) was found where deer and cattle intermingle. For Salmonella, 1% of deer tested positive in Nebraska. Because of the potential impacts to conservation, the animals of significant risk list should reflect the best science, and deer should be removed from the list.

### Specific Changes to Reduce Vague Wording

(lines 905-7)

*If there are animals of significant risk present, ~~make particular~~ efforts to reduce their access to lettuce and leafy green produce must be in compliance with local, state, and federal laws and regulations that protect riparian habitat, restrict removal of vegetation or habitat, or restrict construction of wildlife deterrent fences in riparian areas or wildlife corridors.*

(lines 922-24)

*DO NOT harvest areas of fields where unusually heavy activity by animals of significant risk occurs. If animal of significant risk intrusions are common on a particular production field, consider fencing, barriers, noisemakers, and other practices that may reduce intrusions, but make sure measures are in compliance with local, state, and federal laws and regulations that protect riparian habitat, restrict removal of vegetation or habitat, or restrict construction of wildlife deterrent fences in riparian areas or wildlife corridors.*

These changes would prevent auditors from misinterpreting these efforts and practices to mean removing nearby habitat.

(lines 927-8)

*If ~~P~~ooled water (e.g., a seasonal lake) from rainfall ~~may~~ is observed to attract animals of significant risk, actions must be in compliance with local, state, and federal laws and regulations that protect riparian habitat, restrict removal of vegetation or habitat, or restrict construction of wildlife deterrent fences in riparian areas or wildlife corridors. ~~and should be considered as part of any land use evaluation.~~*

In regard to the above statement, some auditors may interpret that these areas should be destroyed even though, or especially because, they are biologically important for wildlife.

Table 5 (line 945)

*Tracks of Animals of significant risk ~~tracks~~ in production block*

Within Table 5, "animal tracks" is too broad of a term and should be replaced with the more specific phrase *tracks of animals of significant risk*.

Figure 5 (line 964)

***Figure 5. Decision Tree for Conducting Pre-harvest and Harvest Assessment of Animal of Significant Risk Activity in Field (Wild or Domestic)***

Figure 5's heading should use the same term *Animal of Significant Risk* that is used in Table 5's title, instead of just *Animals*.

Within Figure 5. Decision Tree for Conducting Pre-harvest and Harvest Assessment of Animal Activity in Field (Wild or Domestic)

*~~Animal tracks~~ Tracks from Animals of Significant Risk- high risk animals include ~~deer~~, wild pigs, cattle, sheep or goats*

In Figure 5, the focus should solely be on *animals of significant risk* except as the audit relates to all dead animals and all feces or urine. If any type of dead animal, feces or urine is found, the area may need to be isolated and a portion of the crop may need to be eliminated.

All other examinations should be limited to *animals of significant risk*. Therefore, a normal harvest schedule can proceed with the presence of animals that are not a significant risk, such as frogs, birds, and bobcats. No further steps should be taken to limit their access with fences, barriers, or other deterrents, nor should areas be drained of water, or nearby habitat destroyed.

#### Encouraging Co-management of Food Safety and Conservation

The CA LGMA should reference conservation measures that lower the risk of pathogen transfer.

(line 322)

*Assessment of Adjacent Land Use*

*Evaluate all land and waterways adjacent to all production fields for possible sources of human*

*pathogen of concern. These sources include, but are not limited to, manure storage, compost storage, CAFO's, grazing/open range areas, surface water, sanitary facilities, and composting operations (see Table 6 for further detail). Best practices to prevent aerial transmission of pathogens include hedgerows and windbreaks. If any possible uses that might result in produce contamination are present, follow management practices identified in the sections below related to environmental and land use concerns.*

Regarding Water management practices, insert the following text between lines 382 and 383:

*Best practices for water quality management include planting grassed buffers and grassed roadways.*

Suggested text to insert above line 954 at the bottom of **Table 6: Crop Land and Water Source Adjacent Land Use**

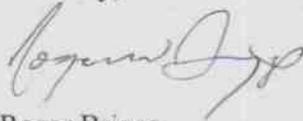
*Rationale: Recent research has found that vegetative buffers are an effective method for reducing agricultural inputs of waterborne E. coli into surface waters.*

*(Reference: Tate, Kenneth, Edward R. Atwill, James W. Bartolome, and Glenn Nader. 2006. Significant Escherichia coli attenuation by vegetative buffers on annual grasslands. Journal of Environmental Quality. 35:795-805.)*

*Rationale: The presence of hedgerows and windbreaks results in a distance of wind protection equal to 10-30 times the height of the planting. Consequently, these plantings reduce the distance necessary between crops and compost or grazing areas.*

Thank you for considering these modifications. Please contact Jill Wilson of my staff at [jwilson@waterboards.ca.gov](mailto:jwilson@waterboards.ca.gov) or 805-542-4762 if you have any questions or comments.

Sincerely,



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Executive Officer

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