Public Workshop
Eastern San Joaquin General Order
Deadline: 6/1/16 by 12:00 noon

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Chair Felicia Marcus and Board Members
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via electronic mail to: commentletters@waterboards.ca.gov

RE: Comments to A-2239(a)-(c).

Dear Chair Marcus and Board Members:

California Coastkeeper Alliance (CCKA) is a network of California Waterkeeper organizations working to protect and enhance clean and abundant waters throughout the state, for the benefit of Californians and California ecosystems. We appreciate the opportunity to comment on the Eastern San Joaquin River Watershed Agricultural Order SWRCB/OCC Files A-2239(a)–(c). While we recognize the State Water Board's attempt to resolve numerous deficiencies in the Waste Discharge Requirements (WDRs), the Draft Order fails to adhere to the Porter-Cologne Act, the Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program (Nonpoint Source Policy) and our Statement of Policy with Respect to Maintaining High Quality Waters, State Water Board Resolution No. 68-1626 (Antidegradation Policy). The Draft Order makes significant strides toward conforming the General WDRs with basic data transparency standards across the state, but it does not require performance standards that are linked to achieving water quality objectives, nor does it place strong requirements on the provision of replacement water for residents denied clean drinking water due to agricultural discharges.

The California Waterkeepers represent communities with serious watershed impacts resulting from uncontrolled, rampant agricultural pollution. In the North Coast, 400,000 acres of irrigated agriculture in the Klamath Basin has largely depleted the flows of major rivers and their tributaries. The Humboldt region faces a growing threat of marijuana cultivation, causing illegal diversions and sediment runoff into extremely sensitive aquatic ecosystems. And the Russian River has been put into a strait jacket as winery growth has encroached into riparian areas, resulting in high sediment and nutrient runoff. In the Central Coast, agricultural pollution significantly contributes to the region having the highest percentage of "highly toxic" surface waters in the state. And in Southern California where significant agricultural production still exists, discharges of waste from agricultural lands lead to some of the most polluted and Clean Water Act 303(d) impaired waterways in the United States.

As climate change persists, and our drought becomes the new normal, agricultural impacts will only be exacerbated. Heavily diverted rivers will see even less flows during summer months due to diminished snowpack. Harmful algae blooms largely caused by nutrient pollution will only continue to intensify as water temperatures rise and agricultural nutrients continue to be loaded into the system. And riparian encroachment will cause even more damage as intense flood events cause rivers to expand past their channelized banks, eroding the riparian zone and destroying valuable aquatic habitat.

Each of our Waterkeepers have unique watershed issues, but collectively, we see the same persistent regulatory problems occurring in every region. California lacks consistent and effective regulations to ensure agricultural production meets water quality standards and prevents nuisance to the surrounding community. Throughout the

state, we are unable to identify which agricultural management practices are working effectively to meet water quality standards because we lack the monitoring necessary to ensure compliance. To date, Water Boards have been unwilling to require individual growers to take accountability by demonstrating individual compliance. Discharges from irrigated agriculture are the largest source of pollution to Central Valley waterways. The State Water Board's 2010 Integrated Report Clean Water Act Section 303(d) List /305(b) Report identifies some 730 waterbody impairments in the Central Valley. Agriculture is identified as the source of 269 of these segments covering 1,572 waterway miles and 96,147 acres of open water. The Central Valley Regional Board's assessment of data collected at 313 Central Valley sites revealed that: toxicity to aquatic life was present at 63 percent of the monitored sites; pesticide water quality standards were exceeded at 54 percent of sites; one or more metals violated criteria at 66 percent of the sites; human health standards for bacteria were violated at 87 percent of monitored sites; and more than 80 percent of the locations reported exceedances of general parameters (dissolved oxygen, pH, salt, TSS).

California's agricultural management needs accountability. It is time the State Water Board begin resolving the persistent problems we see throughout California's agricultural management by relying less on iterative management practices and representative monitoring, and start requiring accountability for individual growers. Our comments focus not only on the problems within the Eastern San Joaquin watershed, or even the Central Valley, but rather the ubiquitous problems we see in every region's attempt to control agricultural pollution.

To comply with the Porter-Cologne Act, the Nonpoint Source Policy, the Antidegradation Policy, and to begin addressing California's impaired waterways due to agricultural activities, we request the State Water Board make the following changes:

(1) Require that following a water quality exceedance, water quality benchmarks become enforceable effluent limitations measured at the edge-of-field;
(2) Require that management practices must be designed and engineered to attain Basin Plan water quality objectives, and that such design must be supported by an accompanying reasonable assurance analysis;
(3) Require all growers upstream of a receiving water exceedence to conduct edge-of-field monitoring until the exceedence is corrected;
(4) Require edge-of-field monitoring at representative sites;
(5) Require all growers that discharge to an impaired waterway to conduct edge-of-field monitoring until the grower demonstrates achievement of discharge effluent limitations;
(6) Begin the time schedule for meeting water quality objectives at the Order's effective date, not when a receiving water exceedence occurs;
(7) Require the Regional Water Board – not a Third Party Coalition – to determine the shortest time necessary to meet water quality objectives and set quantifiable milestones;
(8) Allow individual growers that are not attaining water quality standards one year to come into compliance before they are subject to enforceable effluent limitations;
(9) Make Nutrient Ratios enforceable and linked to water quality objectives;
(10) Include groundwater monitoring for legacy pollutants like 123-TCP and DBCP;
(11) Comply with the Antidegradation Policy;
(12) Require all grower data to be publically available; and
(13) Limit Third Party Coalition involvement in the Regional Board's regulatory responsibilities.

A. THE DRAFT ORDER VIOLATES WATER CODE §13263 BECAUSE THE ITERATIVE APPROACH IS NOT SUFFICIENT TO ACHIEVE COMPLIANCE WITH THE BASIN PLAN WATER QUALITY OBJECTIVES.

The Draft Order violates Water Code §13263. Under the Porter-Cologne Act, anyone discharging or proposing to discharge waste that could affect water quality must either obtain Waste Discharge Requirements (WDR) or a Conditional Waiver of Waste Discharge Requirements (Waiver). A WDR must be consistent with any applicable state and regional water quality control plans and policies. The Porter-Cologne Act also authorizes a Waiver of waste discharge requirements only if the Waiver is both consistent with the applicable basin plan and in the public

interest.[1] Thus, in practical terms, Conditional Waivers operate in the same manner as WDRs.[2] Both WDRs and waivers shall include individual, group, or watershed-based monitoring requirements, unless the board determines that the discharges at issue does not pose a significant threat to water quality. When imposed, monitoring requirements must be designed to support the development and implementation of the WDR or Waiver program, including verifying the adequacy and effectiveness of the WDR or Waiver's conditions.

The State Water Board's iterative approach is not sufficient to achieve compliance with the Basin Plan's water quality objectives (WQOs) because it lacks specific, enforceable standards against which to measure existing management practices; lacks meaningful deadlines; and lacks adequate feedback mechanisms to determine if management practices are effective.

1. *The Draft Order fails to require specific, enforceable standards against which to measure existing management practices*.

The Draft Order is inconsistent with the Central Valley Basin Plan and relevant water quality objectives because it does not contain specific, enforceable standards to measure the effectiveness of management practices. The Central Valley Basin Plan establishes water quality objectives to protect beneficial uses of water, establishes a program of implementation to achieve water quality objectives, and includes the requirements of the Nonpoint Source Policy.

The Central Valley Basin Plan contains Water Quality Objectives for Inland Surface Waters. Among them, at least three water quality objectives relate specifically to agricultural discharges. For pesticides, the Basin Plan requires:

- No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
- Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses.
- Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer.
- Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies.
- Pesticide concentrations shall not exceed the lowest levels technically and economically achievable.
- Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.
- Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thiobencarb in excess of 1.0 µg/l.[3]

Additionally, the Central Valley Basin Plan contains a Toxicity Water Quality Objective that "[a]ll waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances."[4] And a Sediment Water Quality Objective requires "[t]he suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in

[1] California Water Code §13269.
[2] *Monterey Coastkeeper et al. v. State Water Resources Control Bd.* (Super Ct. Sacramento County, 2015, No. 34-2012-80001324 pg. 8.
[3] Central Valley Regional Water Quality Control Board, Amendments to the 1994 Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, pg. 33 (March 2014).
[4] *Id*. at 38.

such a manner as to cause nuisance or adversely affect beneficial uses."[5] These are only a few examples of the Central Valley Basin Plan water quality objectives that agricultural dischargers must meet. The Draft Order does not contain any specific, enforceable standards to measure compliance with these water quality objectives.

The existing and previous WDRs' lack of enforceable standards has led to widespread water quality impairments due to agricultural actives. Historic and ongoing nonpoint source discharges impact Central Valley surface waters.[6] Significant portions of major rivers and the Delta are impaired by discharges from agriculture.[7] Pesticides and nutrients are also major ingredients of surface agricultural drainage.[8] They have found their way to ground and surface waters in many areas of the basins.[9] Fish and aquatic wildlife deaths attributable to pesticide contamination of surface water occur periodically.[10] Nitrate and DBCP (1,2-Dibromo-3-chloropropane) levels exceeding the State drinking water standards occur extensively in Central Valley groundwater basins. [11] Domestic supply wells have been closed because of DBCP, EDB, nitrates, and other contaminants in several locations.[12] The Regional Water Board has identified over 7000 sites with confirmed releases of constituents of concern which have adversely impacted or threaten to impact the quality of groundwater resources.[13] The iterative, representative management of agricultural activities in the Central Valley has failed. It is time for a new water quality control regime that begins to hold individual growers responsible for their impairments. Yet, the Draft Order only perpetuates these impairments due to the lack of enforceable standards.

Iterative management practices do not ensure water quality objectives are being met. The Draft Order is based on an iterative approach to attain water quality standards, by which dischargers must implement management practices to prevent discharges of waste that are causing or contributing to exceedence of water quality standards. When a receiving water violation has occurred, the Draft Order requires the Third Party to begin taking an iterative approach by conducting additional monitoring upstream to determine where additional management practices might be helpful. However, the Draft Order does not require individual monitoring requirements to determine the grower responsible for the receiving water limitation. Nor does the Draft Order specify how the Third Party or the grower will achieve water quality standards through an iterative process.

The State Water Board's reliance on iterative management practices in lieu of enforceable standards is illegal due to the inability of the monitoring scheme to determine whether a grower's management practices are effective. Water Code §13263 requires WDRs to implement any relevant water quality control plans, and must take into consideration the beneficial uses and water quality objectives required to achieve beneficial uses. Additionally, Water Code §13269 requires a conditional Waiver of waste discharge requirements to include monitoring requirements "designed to support the development and implementation of the Waiver program, including, but not limited to, verifying the adequacy and effectiveness of the Waiver's conditions."[14] The Draft Order's compliance monitoring is inadequate.

The Draft Order's iterative surface water monitoring program will not ensure responsible parties are identified. The Draft Order states that when "an exceedance is detected through receiving water monitoring, the source or sources causing or contributing to the exceedance at the monitoring site *will not necessarily be apparent* in the absence of further investigation."[15] The Draft Order then directs the Third Part to "subsequently move upstream

[5] *Id*. at 36.
[6] *Id*. at 41.
[7] *Id*.
[8] *Id*. at 46.
[9] *Id*.
[10] *Id*.
[11] *Id*.
[12] *Id*.
[13] *Id*.
[14] California Water Code §13269(a)(2).
[15] State Water Resources Control Board, In the Matter of Review of Waste Discharge Requirements General Order No.

to locate the source of the problem."[16] The Draft Order's unspecific direction for a Third Party to be responsible for an iterative monitoring program does not ensure adequate feedback to determine if grower specific management practices are effective.

While the Draft Order provides a goal that agricultural growers must plan to achieve Basin Plan water quality objectives though implementation of management practices within 10-years, the Order presents this 10-year timeframe as merely a target rather than an enforceable milestone, and does not require sufficient monitoring to verify that growers have in-fact achieved, or are even on track to achieve such objectives. Therefore without requiring compliance with Basin Plan water quality objectives within a time certain, and without providing a mechanism to verify individual grower compliance with these objectives, the Draft Order impermissibly provides no assurances that Basin Plan water quality objectives will ever be met. This is inconsistent and non-compliant with Water Code section 13263.

The State Water Board must set enforceable water quality standards. Therefore, the State Water Board should require that following a water quality exceedance, water quality benchmarks become enforceable effluent limitations measured at the edge-of-field.

Furthermore, the Draft Order lacks management practice implementation requirements further demonstrates the Order fails to require compliance with Basin Plan water quality objectives within a time certain. This is because the Draft Order entirely omit requirements to ensure that adoption of management practices at individual farms that are actually designed and engineered to attain Basin Plan water quality objectives.

To assure management practices will meet water quality objectives by a certain timeframe, the State Water Board should require that management practices must be designed and engineered to attain Basin Plan water quality objectives, and that such design must be supported by an accompanying reasonable assurance analysis that demonstrates the management practices implemented are in fact designed to ensure compliance with Basin Plan water quality objectives.

2. *The Monterey Coastkeeper decision dictates that an iterative process with representative monitoring fails to ensure water quality standards will be achieved.*

The Draft Order's monitoring program provides less feedback than the monitoring program overturned in *Monterey Coastkeeper et al. v. State Water Resources Control Bd.*[17] The Central Coast Waiver at issue in *Monterey Coastkeeper* required only the largest polluting growers to conduct individual farm monitoring for effluent discharges. All other growers were allowed to participate in regional, representative monitoring.

The Draft Order's flawed reliance on the iterative process is almost identical to the management program held to be illegal in *Monterey Coastkeeper*. The *Monterey Coastkeeper* Waiver also relied upon the implementation of iterative management practices to achieve water quality standards. Just like the Draft Order, the *Monterey Coastkeeper* Waiver provided that for "the extent monitoring data shows implemented management practices have not been effective in preventing discharges from causing or contributing to exceedances, the Modified Waiver requires the discharger to implement 'improved' management practices."[18] The *Monterey Coastkeeper* court found the Modified Waiver to be unenforceable because in practice, "this approach is highly unlikely to

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R52012-0116 for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group Issued by the California Regional Water Quality Control Board, Central Valley Region; ***SWRCB/OCC FILES A-2239(a)-(c)*** Order, pg. 45 (February 8, 2016).

[16] *Id*.

[17] *Monterey Coastkeeper et al. v. State Water Resources Control Bd.* (Super Ct. Sacramento County, 2015, No. 34-2012-80001324.

[18] *Id*. at 34.

work because the receiving water monitoring data, submitted in most cases by a cooperative monitoring group, does not identify the individual discharges that are 'causing or contributing' to the exceedence."[19] The same conclusion can be drawn with the Draft Order.

The Draft Order does not provide enforceable standards because nobody can determine where receiving water violations are occurring. *Monterey Coastkeeper* held the Waiver's monitoring program did not ensure compliance with water quality standards because "neither the Board, nor the cooperative monitoring group, nor (in many cases) the grower, can identify where the pollution is coming from or whether the grower's management practices are effectively reducing pollution and degradation."[20] The Draft Order contains the same illegal flaw. There is no effective feedback mechanism to ensure each grower is complying with the Basin Plan's water quality objectives. As such, the Draft Order does not provide specific, enforceable standards to ensure compliance with water quality objectives.

The courts find minimal monitoring programs – with some individual monitoring – is inefficient to determine compliance with water quality standards. In *Monterey Coastkeeper*, the court held that "the Waiver's compliance/verification monitoring is inadequate."[21] The court's justification was that because "the Waiver relies on implementation of management practices to achieve water quality standards", the "monitoring must be sufficient to verify the effectiveness of the management practices that are implemented."[22] When receiving water exceedances occur, the court held that "limitations of the cooperative surface receiving water monitoring in identifying the source of exceedances" was the reason the "Waiver continues to be inadequate to identify and resolve exceedances for all but the small class of dischargers subject to individual surface discharge monitoring."[23] Even though the Central Coast Waiver had individual monitoring requirements for some growers, it was still not adequate to ensure all growers' management practices were sufficient to meet water quality objectives.

The current Draft Order requires no individual surface water monitoring. The Draft Order only requires representative monitoring – for all growers regardless of associated impacts. Even after an exceedence occurs, the Draft Order never explicitly requires individual farm monitoring to assess compliance with standards. The Draft Order does not even meet the level of rigor in the overturned monitoring program from *Monterey Coastkeeper* because zero growers are explicitly subject to individual monitoring to identify and resolve exceedances.

Representative monitoring – on its own – is not sufficient to determine compliance with water quality standards. We understand the law does not mandate individual field monitoring for all growers. However, there needs to be adequate monitoring to identify and resolve the source of exceedances. While the courts have not determined the precise monitoring program that will achieve this standard, the courts have ruled in *Monterey Coastkeeper* that the Draft Order's current reliance on representative monitoring is illegal and not sufficient to comply with the law.

Management practices do not ensure that water quality standards are being met. The Draft Order's representative monitoring essentially guarantees that the Regional Board will not take enforcement action against a discharger as long as the discharger believes it is implementing iterative management practices, even if those iterative practices remain completely ineffective at controlling discharges of waste and meeting water quality objectives. As *Monterey Coastkeeper* explains, "Management practices are merely a means to achieve water quality standards. Adherence to management practices does not ensure that standards are being met."[24] However, the State Water Board continues to condone iterative management practices in-lieu of specific, enforceable standards. The State

[19] *Id*.
[20] *Id*.
[21] *Id*. at 41.
[22] *Id*.
[23] *Id*.
[24] *Id*. at 34.

Water Board should heed the opinion in *Monterey Coastkeeper*: "It is unreasonable for the Board to keep doing the same things it has been doing and expect different results."[25]

3. The monitoring scheme suffers from the same illegal deficiencies overturned in the Agua decision.

The Draft Order's representative monitoring is as illegal as the overturned monitoring scheme recently rejected by the Court of Appeal in *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Bd (Agua)* [26]. In *Agua*, the Central Valley Regional Water Board required monitoring for supply wells a significant distance from the source of pollution – the manure ponds. The *Agua* court determined that the WDRs' regional monitoring locations are "ineffective to accomplish the timely detection of a change in [water] quality."[27] Like the vacated dairy WDRs, the Draft Order does not require additional upstream monitoring unless the regional, *i.e.* distant, monitoring sites already show an adverse impact.

The Draft Order's monitoring scheme is not adequate to ensure the Order's directive that beneficial uses are to be protected. In *Aqua*, the court found that the "crucial question of fact in this case is whether the monitoring system prescribed in the Order is adequate to ensure the Order's directive that no further degradation of groundwater shall occur."[28] The court went on to hold that there were "no facts from which any court could determine the monitoring system is adequate to detect and prevent further groundwater degradation."[29] Water Code §13263 and the Draft Order require growers to not degrade beneficial uses by achieving water quality objectives. However, like the Regional Board in *Agua*, the State Water Board cannot point to any fact in the record that ensures the proposed surface water monitoring scheme will detect and prevent further beneficial use degradation.

The fact that follow-up management plans may be triggered does not obviate the fact that the prescribed monitoring locations will not monitor localized areas that feel the full brunt of one or more irrigated land dischargers' pollution. Like the dairy WDRs, follow-up management plans by the growers are only triggered after multiple violations of water quality objectives far downstream are detected. That triggering event already establishes that instead of beneficial uses being protected from further degradation, water quality objectives are being violated and beneficial uses unreasonably affected.[30]

Agua was explicit that general warnings that Coalition members not discharge pollutants at levels that exceed applicable water quality objectives do not cure the absence of meaningful monitoring to ensure that dischargers are actually complying with water quality standards. The *Agua* Court of Appeals stated:

> The Order protects the beneficial uses of groundwater by declaring that degrading groundwater is prohibited. However, as previously shown, the mechanism for ensuring the groundwater will not be degraded, the monitoring program, is insufficient for the task.[31]

The point applies equally to the Draft Order. Although the Order includes general requirements to protect beneficial uses, comply with standards and not degrade surface waters, those general requirements do not cure the absence of any meaningful monitoring to determine whether receiving waters are degraded by individual discharges. Indeed, the Court of Appeals said:

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[25] *Id*. at 35.
[26] *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Bd.* (2012) 210 Cal. App. 4th 1255, 1270.
[27] *Id*. at 1260.
[28] *Id*. at 1267.
[29] *Id*.
[30] *Id*. at 1276-77.
[31] *Id*. at 1280.

> The wish is not father to the action. The Order finds that the beneficial domestic, agricultural, and other uses of the groundwater underlying the dairies will be protected by the Order, but the finding wholly depends upon the Order's prohibition of the further degrading of groundwater without requiring the means (monitoring wells) by which that could be determined. Because the monitoring plan upon which the Order relies to enforce its no degradation directive is inadequate, there is not substantial evidence to support the findings.[32]

In the absence of water quality monitoring that is able to detect degradation beyond a small percentage of Central Valley waters, the WDRs suffer from the same inadequacy. Until the Draft Order requires surface water monitoring that will detect degradation, there is no substantial evidence to support the Order's mandate that beneficial uses be protected.

4. *The State Water Board should acknowledge that representative monitoring – without individual monitoring – is insufficient to protect beneficial uses as required by Water Code §13263.*

To ensure the protection of the Central Valley Basin Plan's beneficial uses, the Draft Order must contain adequate surface water quality monitoring to detect and resolve water quality objective exceedances. The WDRs' requirement to do representative water sampling once a month represents approximately 0.1 percent of streamflow. Water quality standards for toxic pollutants, by definition, cause impairment if they are exceeded more than once in three years. Compliance with water quality standards cannot be determined by collecting samples, perhaps 20 to 40 miles from a discharge point and analyzing 0.1 percent of streamflow draining 15,218 to 83,767 irrigated acres. Representative monitoring cannot measure or detect degradation that may have occurred upstream and dissipated by the time the effected waters commingle with other waters and flow past the downstream monitoring location. Discharger specific or, at a minimum, a statistically significant sampling of individual discharges is fundamental to providing the information necessary to adequately regulate specific sources of pollution.

Information in the record from expert consultants, demonstrates that representative monitoring – without any individual monitoring – cannot protect water quality. For example, former Regional Board geologist Steve Bond, in a letter that is included in the record observes that: 1) it is impossible to protect the beneficial uses of waters of the State without monitoring those waters; 2) it is impossible to evaluate the effectiveness of treatment systems or management measures without monitoring the discharge; 3) it is impossible to evaluate the effectiveness of specific management measures from a distant downstream monitoring location and 4) it is impossible to determine the water quality of upstream sub-watersheds in a complex watershed by measuring at distant downstream locations.[33] Monitoring edge-of-field and adjacent ambient waters is necessary to evaluate whether waters are being polluted and the effectiveness of applied management measures.

The Regional Board admits representative monitoring is ineffective to ensure beneficial uses are protected. The WDRs' Findings state, "[t]he surface water quality monitoring and trend groundwater quality monitoring under this Order are regional in nature instead of individual field discharge monitoring. The benefits of regional monitoring include the ability to determine whether water bodies accepting discharges from numerous irrigated lands are meeting water quality objectives and to determine whether practices, at the watershed level, are protective of water quality. However, there are limitations to regional monitoring's effectiveness in determining possible sources of water quality problems, the effectiveness of management practices, and individual compliance with this Order's requirements."[34] The Regional Board admits that the Draft Order's representative monitoring is limited in determining compliance with water quality objectives. Given this admission coupled with case law, the State Water Board should acknowledge that representative monitoring – without individual monitoring – is not

[32] *Id.* at 1260-61.
[33] Steven Bond and Associates letter to Bill Jennings dated 27 September 2010.
[34] Waste Discharge Requirements General Order R5-2012-0116, Finding 23, pg. 6.

sufficient to protect beneficial uses as required by Water Code §13263.

5. *The State Water Board should follow the direction of Region 4 to ensure adequate individual monitoring is required to detect and resolve water quality exceedances.*

The State Water Board should look to Region 4's recently adopted Waiver as guidance for the minimum amount of individual monitoring necessary to ensure beneficial uses are protected. The Los Angeles Regional Water Quality Control Board has adopted a new five-year irrigated lands regulatory program affecting all farming operations in Ventura County. The updated version of the "Conditional Waiver of Waste Discharge Requirements" will be in effect from 2016 to 2021. Although there have been two previous versions of the Conditional Waiver, 2005-2010, and 2010-2015 (later extended until 2016), the version adopted on April 14 at a meeting in Simi Valley includes significantly more rigorous requirements for farm owners and operators than the previous versions.

The Los Angeles Regional Board acknowledged that representative surface water monitoring was not adequate to detect receiving water limitations. The previous Ventura Waiver relied heavily on the collection of receiving water data to characterize water quality and identify pollution sources. However, when an exceedance occurred, follow-up monitoring was never reported by third-party coalition and presumably never conducted. As a result, neither the Board, nor the third-party coalition, nor (in many cases) the grower, could identify with any specificity where the pollution was coming from or whether the grower's management practices were effectively reducing pollution and degradation.

The Los Angeles Regional Board agreed that representative monitoring on its own was not able to identify sources of pollution. In the Regional Board's March 21st, 2016 Response to Comments staff admitted that "the requirements for follow-up monitoring in the existing Waiver were not specific enough to compel VCAILG to conduct follow-up monitoring."[35] The Regional Board then added further direction in the Waiver's monitoring scheme by requiring an investigation that included individual monitoring.[36]

Therefore, we request that when a receiving water violation has been detected by representative monitoring, the State Water Board should require all growers upstream of the watershed exceedence to begin conducting individual field monitoring until the responsible parties are identified and the exceedence is corrected.

The Los Angeles Regional Board also required edge-of-field monitoring at representative sites in Los Angeles. The data collected at the representative edge-of-field sites is assumed to be the same as the discharge quality at other sites with the same size, crop type, and location.[37]

Therefore, we request the State Water Board to require edge-of-field monitoring at representative sites with the presumption that the discharge water quality is the same as the other growers the site represents. If a representative site has an exceedance, all growers under that representative class must perform additional management practices until the exceedence is corrected, or until the grower conducts individual monitoring to demonstrate their field is not degrading the beneficial uses of the Basin Plan.

Lastly, the Los Angeles Regional Water Board requires additional monitoring for discharges to impaired waterways. The Waiver includes deadlines to meet the Total Daily Maximum Load (TMDL) benchmarks. If the

[35] Los Angeles Water Quality Resources Control Board, COMMENT SUMMARY AND RESPONSES CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED AGRICULTURAL LANDS WITHIN THE LOS ANGELES REGION, pg. 36 (Comment Deadline: March 21, 2016).
[36] *Id*.
[37] *Id*. at 40.

TMDL benchmarks are not met by the deadlines, the Waiver includes provisions that will require edge-of-field monitoring and individual reporting for all growers within the watershed.

Therefore, we request that the State Water Board require all growers that are discharging into impaired waterways to conduct edge-of-field monitoring until the grower can demonstrates achievement of discharge effluent limitations. For non-TMDL waterways, the grower shall demonstrate their discharge meets water quality objectives.

The above three recommendations – taken in totality – will be sufficient for the Draft Order to ensure beneficial uses are not degraded by providing adequate feedback mechanisms to ensure compliance with water quality objectives. Our proposed monitoring scheme attempts to strike a balance between cost-effectiveness and achieving water quality objectives. If a grower's management practices are truly effective and not impairing waterways then no individual monitoring is required. Only when a grower is degrading a waterway will that grower be subject to individual monitoring. Our proposed monitoring scheme gives the benefit of the doubt to the grower. When that benefit is compromised, the burden then shifts to the grower to demonstrate they are not responsible for the degradation. If that demonstration can be made, then no further individual monitoring is required. Our proposed monitoring scheme holds growers accountable in a reasonable and cost-effective manner.

B. THE DRAFT ORDER VIOLATES THE CALIFORNIA NONPOINT SOURCE POLICY.

In May 2004, the State Water Board adopted the Nonpoint Source Policy. The purpose of the Policy is to improve the state's ability to effectively manage nonpoint source pollution and conform to the requirements of the Federal Clean Water Act and the Federal Coastal Zone Act Reauthorization Amendments of 1990. The NPS Policy requires, among other key elements, an NPS control implementation program's ultimate purpose to be explicitly stated. It also requires implementation programs to, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

1. *The Draft Order fails to comply with Nonpoint Source Policy Element 1 and 2, because the program does not achieve water quality objectives and protect beneficial uses.*

The Draft Order fails to comply with the Nonpoint Source Policy. The key element of all nonpoint source control programs is verification measures to determine whether a program is meeting its stated purpose.[38] The Nonpoint Source Policy requires an Agricultural Waiver or Order to address nonpoint source pollution "in a manner that achieves and maintains water quality objectives and beneficial uses."[39] This does not mean the Regional Board only set Water Quality Objectives, but it must also determine that there is a *high likelihood* the program will attain those objectives. The Draft Order fails to make this determination.

Nonpoint Source Policy Element 2 states that: "[a] nonpoint-source control **i**mplementation program must include a description of the [management practices (MPs)] and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation."[40] A Regional Water Board must be able to determine there is a "high likelihood that management practices will be successful."[41] "Management practices must be tailored to a specific site and circumstances and justification for the use of a particular category or type of management measure must show that

[38] State Water Resources Control Board, POLICY FOR IMPLEMENTATION AND ENFORCEMENT OF THE NONPOINT SOURCE POLLUTION CONTROL PROGRAM Cite to NPS Policy, pg. 13 (May 20, 2004).
[39] *Id*. at 12.
[40] *Id*.
[41] *Id.*

the measure has been successfully employed in similar circumstances."[42] "If a management measure has not previously been employed, documentation to establish its efficacy must be provided by the discharger."[43]

Growers have been required to implement management measures to prevent pollution since the adoption of the irrigated lands Waiver in 2003. A large percentage of rivers, streams and channels in the Central Valley are impaired by pollutants discharged from irrigated lands. In those places where downstream violations have been detected, the Third Party Coalition has surveyed farmers for existing management measures and asked their members to perhaps employ additional management measures. However, because there is effectively no monitoring of receiving waters adjacent to where farms are discharging and effectively no monitoring of actual discharges to evaluate the effectiveness of management measures, water quality standards violations in those waters will remain undetected and the effectiveness of implemented management measures will remain unknown. The Regional Board will continue to have no evidence demonstrating any likelihood that any current management measures will achieve water quality standards in those waters.

The Third Party Coalition cannot adequately demonstrate measurable progress towards water quality objectives. In the Regional Board's 2012 Response to Comments, staff suggested that the Eastside Coalition's 1 April 2012 Management Plan Update Report identifies specific management practices implemented and that the Coalition had been able to document measurable progress towards improved water quality because of a claimed reduction in chlorpyrifos exceedances and a reduction in *Ceriodaphnia dubia* toxicity test results. When the new management practices were reviewed, the new measures in first and second priority watersheds amounted to 4,102 acres (about 1% of irrigated acres in the Coalition area). And while *C. dubia* toxicity declined from 16 percent to 2 percent, zooplankton (*H. azteca*) toxicity increased from 14 percent to 20 percent. Exceedances from chlorpyrifos were down; which was to be expected given the 82 percent reduction in use. Growers have shifted to cheaper and more effective (toxic) products that are not reflected in monitoring. Further, there is no chronic toxicity monitoring and the current acute toxicity monitoring fails to capture episodic events when toxicity is likely to be present. There is nothing in the record to indicate that the WDRs' regional monitoring approach can detect violations of water quality standards in all upstream waters or that it can evaluate the effectiveness of management measures to prevent violations in waters well upstream of the regional or representative monitoring locations. By eliminating measurement of what is happening in local waters adjacent to dischargers or measurement of what is being locally discharged, the WDRs cannot evaluate whether management measures are "tailored to a specific site and circumstances."[44] Nor is there any evidence upon which the Regional Board could determine that implemented management measures are "highly likely" to be successful in attaining standards in those upstream waters. There is no evidence of any studies or data demonstrating the effectiveness of any management measures in the Central Valley to achieve discharges that comply with water quality standards. Only through representative monitoring of edge-of-field discharges can the Regional Board determine the effectiveness of management measures and whether violations of water quality standards are occurring.

The fact that after seven years of implementation, the Third Party Coalition has not produced substantive information describing the locations of management practices actually in place in the Coalition area and the effectiveness of such practices, roundly demonstrates that the WDRs have no feedback mechanism to evaluate management measures, especially one designed to establish "a strong correlation between the specific implemented management measures and the relevant water quality requirements."[45]

[42] *Id.*
[43] *Id.*
[44] *Id.*
[45] *Id.*

2. *The Draft Order fails to comply with Nonpoint Source Policy Element 3, because the program does not contain meaningful deadlines with quantifiable milestones to meet receiving water limitations.*

The Draft Order fails to comply with Nonpoint Source Policy Element 3. The Nonpoint Source Policy requires that where a Regional Board determines it is necessary to allocate time to achieve water quality requirements, the Nonpoint Source program "shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements."[46]

Any necessary allocation of time to meet water quality objectives should begin at the adoption of a Nonpoint Source program – not at the point when a receiving water exceedence occurs. The Porter-Cologne Act (CWC §13242[b] and § 13263[c]), the NPS Program Plan, and the NPS Implementation and Enforcement Policy recognize that there are instances where it will take time to achieve water quality requirements. The Draft Order allows growers up to 10 years to come into compliance with a water quality objective once a receiving water exceedance occurs. This is unacceptable. The Nonpoint Source Policy is clear that the "time schedule may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives." By waiting to start the time schedule only after an exceedance is detected, the Regional Water Board is purposefully trying to extend the time schedule for as long as possible without justification.

The Nonpoint Source Policy's intent is to begin any necessary time at the adoption of the Nonpoint Source program. The Policy states that in the consideration of approval of specific interim goals and the time necessary to achieve those goals, a Regional Water Board considers such factors as: significant capital outlays for MP implementation; the presence of a severely degraded waterbody; and whether or not an NPS control implementation program is a component of a larger TMDL implementation program. These are considerations made at the beginning of a Nonpoint source program, not after an exceedance is detected.

The Draft Order's illegal monitoring scheme cannot detect receiving water exceedances. As explained above, the Draft Order lacks specific data to determine compliance with water quality standards. Requiring a Third Party to conduct future monitoring provides no assurances that receiving water violations will ever be detected. Given the lack of monitoring to determine individual grower responsibility for a receiving water exceedance, it is conceivable that the 10-year time schedule may never begin.

Other regional water boards start the implementation timeframe at the adoption of the Nonpoint Source Program – not after a receiving water violation has occurred. In the Central Coast Waiver, the time schedule began at the beginning of adoption, not at some mythical point in the future based on regional monitoring. And the Central Coast Waiver's time schedule was much shorter than what is being proposed here. The Central Valley Regional Board has provided no justification for why the Central Valley needs ten years after detection, while the Central Coast only needed two to four years following adoption of the Waiver.

The Draft Order must include requirements reasonably designed to show measurable progress toward improving water quality over the short-term and achieving water quality standards in a meaningful timeframe. There is little evidence to support a conclusion that the Draft Order will lead to quantifiable improvements in water quality or even arrest the continued degradation of the region's waters.

The Draft Order should require all Members to comply with water quality standards from the shortest time possible following adoption of this Draft Order – not once a violation has occurred. The State Water Board should not begin a 10 year compliance clock once the regional monitoring assessments and Third Parties identify a receiving water violation. Moreover, the State Water Board should justify why the time schedule is as short as possible, and provide interim quantifiable milestones.

[46] *Id*. at 13.

The State Water Board should look to the recently adopted Los Angles/Ventura Ag Waiver[47] to set a time schedule for growers to come into compliance once an exceedance has occurred. The Ag Waiver states that:

> If individual irrigated agricultural lands represented by the Discharger Group monitoring sites are not attaining Water Quality Benchmarks based on one year of sampling (one wet-weather event and one dryweather event), then these individual sites shall have an additional year before they are subject to discharge limitations equal to Water Quality Benchmarks at the points of discharge.[48]

Therefore, we request that the State Water Board set a timeframe – as short as possible – and state if individual irrigated agricultural lands represented by group monitoring sites are not attaining water quality standards based on one year of sampling, then the individual sites shall have one year to come into compliance before they are subject to enforceable effluent limitations equal to the water quality benchmarks at the point of discharge.

3. *The Draft Order fails to comply with Nonpoint Source Policy Element 4, because it lacks verification measures adequate to determine whether growers meet water quality objectives.*

The Draft Order's monitoring scheme fails to meet the requirements of Nonpoint Source Policy Element 4. Regional monitoring locations cannot identify localized pollution problems that occur at individual field discharge locations or receiving waters in close proximity to pollution discharges. The WDRs' regional monitoring will provide no information and no correlation about dischargers' use of management practices and their discharges' impacts on more localized waters. Even on a regional level, the evidence shows that regional monitoring cannot establish any clear correlation, nevermind a "strong correlation, between pollution levels measured regionally and the effectiveness of any given dischargers' management practices."[49] Likewise, even the limited surveying of management practices being conducted in some watersheds by the Eastside Coalition in their management plans and updates does nothing to inform either the Regional Board or the public about the effectiveness of those management practices. As discussed above, the coalitions have only disclosed summaries of the survey results. And general summaries for small areas relative to the entire Coalition watershed say nothing about whether management measures are being properly implemented as required by the Nonpoint Source Policy. Consequently, the WDRs do not contain feedback mechanisms by which either the Regional Board or the public could "determine whether the program is achieving its stated purpose, or whether additional or different MPs or other actions are required."[50]

The State Water Board admits that the Draft Order required data does not "facilitates easy determination and enforcement of compliance with receiving water quality limitations."[51] But the Water Code does not require compliance only if it will be easy: it simply requires compliance with the WQOs.[52]

The Draft Order's representative and regional monitoring program does not produce specific enough data to determine if any of the implemented management practices are in fact achieving water quality standards. Instead, rather than require growers to demonstrate they are meeting water quality objectives through individual outfall discharge monitoring, the Draft Order states that management practice implementation will be used as a substitute.

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[47] Los Angeles Water Quality Control Board, Conditional Waiver for Discharges from Irrigated Agricultural Lands Within the Los Angeles Region, Order No. R4-2016-0143.
[48] Los Angeles Water Quality Control Board, Conditional Waiver for Discharges from Irrigated Agricultural Lands Within the Los Angeles Region, Order No. R4-2016-0143, Appendix 2 pg. 10.
[49] Supra note 38, at 13.
[50] *Id*.
[51] Supra note 15, at 15.
[52] California Water Code §13263(a).

In making this determination, the Draft Order inaccurately relies upon the Nonpoint Source Policy. Page 16 of the Draft Order asserts that the State Water Board can use management practice implementation as a proxy for meeting water quality standards. This directly conflicts with the actual Nonpoint Source Policy language, which states that "management practice implementation never may be a substitute for meeting water quality requirements."[53]

The State Water Board's assertion that management practice implementation can be used as a proxy for meeting water quality standards is misplaced. The Draft Order misconstrues the intent of the Nonpoint Source Policy. That Policy states that "in the earlier stages of some pollution control programs, water quality changes may not be immediately apparent" and therefore "MP implementation assessment may, in some cases, be used to measure nonpoint source control progress."[54] The Policy makes clear that MP implementation may help measure progress because at "early stages" of the Nonpoint Source Program you might not see immediate water quality results. However, the Policy is explicit that "MP implementation never may be a substitute for meeting water quality requirements."[55] However, the use of MP implementation in lieu of meeting water quality requirements is only temporary as the Regional Board waits for water quality improvements to begin showing results in water quality data. This is not the case with the Draft Order. The Draft Order substitutes – in perpetuity - management practice implementation for real data verification.

The Draft Order does not meet the requirements of the NPS Policy because it lacks adequate monitoring and reporting to verify compliance with the requirements and does not measure progress over time. The Draft Order lacks specific time schedules designed to measure progress toward reaching quantifiable milestones. And the Draft Order fails to meet the requirements of the NPS Policy because it lacks a description of actions to be taken to correct a receiving water violation to achieve water quality objectives. In total, the State Water Board has failed to show a "high likelihood" that the Draft Order will successfully achieve water quality standards. The State Water Board should include a finding that management practice implementation may never be a substitute for meeting water quality standards.

C. THE STATE WATER BOARD SHOULD SET ENFORCEABLE NITROGEN RATES LINKED TO WATER QUALITY OBJECTIVES TO REMEDY PERSISTENT GROUNDWATER DEGRADATION.

Thirteen years after the passage of legislation requiring the Regional Water Boards to review and revise their conditional Waivers of waste discharge for irrigated agriculture, the Regional Board has failed to pass general waste discharge requirements for approximately 3,600 growers that adequately protect water quality for the beneficial uses of the region. This lapse is particularly grievous in its impact on municipal drinking water use of groundwater, which receives no protection under either the original Waiver or in the current conditional Waiver.

Residents of this region are heavily dependent upon groundwater. According to the State Board's own draft report "Communities Reliant upon Contaminated Groundwater" 300,000 residents of Stanislaus and Merced Counties rely upon contaminated groundwater. Up to 100,000 people in these two counties rely upon domestic wells. Today the vast majority of San Joaquin Valley community water systems rely on groundwater as a drinking water source. According to the 2008 Existing Conditions Report, nitrate concentrations in groundwater in the eastern San Joaquin Valley exceeded drinking water standards in approximately 25 percent of domestic water supply wells, and a variety of pesticides were detected in up to 60 percent of the groundwater samples collected.

[53] Supra note 38, at 13.
[54] *Id*. at 12.
[55] *Id*.

1. *A/R and A-R nutrient ratios are not enforceable and are not linked to water quality objectives*.

Without performance standards linked to water quality objectives, the nutrient ratios do not enable us to understand how water quality will be impacted by current management practices. The State Water Board should require the AR nutrient ratios to be enforceable and linked to water quality objectives. As Element 5 of the Nonpoint Source Policy explains, each Regional Water Board shall make clear, in advance, the potential consequences for failure to achieve an NPS control implementation program's stated purposes. It is not sufficient that Members simply notify the Third Party when the Member has failed to meet the nutrient ratio. Violation of the nutrient ratio should be an enforceable standard in the Draft Order. Any violation of the nutrient ratio should result in additional controls, as if a receiving water violation had occurred.

In addition, it is inappropriate to allow the Third Party to establish the nutrient ratio coefficient. The AR nutrient ratio coefficient is a critical component of the entire Draft Order, and yet the State and Regional Water Board defer this authority to the Third Party to set the standard without any oversight. The State Water Board should require a public process for approving the AR ratio coefficient, which is then adopted by the Regional Water Board.

2. *On-farm drinking water well monitoring and reporting is the most practical way to ensure a functional feedback mechanism exists regarding nitrate pollution*.

We support the added requirement to monitor and report nitrate levels of on-farm drinking water wells. As noted by the State Water Board, high levels of nitrates in drinking water pose serious health risks – especially for infants and pregnant women.[56] We agree with the Agricultural Expert Panel "that good nitrogen management is essential in all areas, not just high vulnerability areas . . . . Because deep percolation of nitrates is universal within irrigated agriculture, a good regulatory program must encompass all irrigated areas . . . ."[57] Given the importance and prevalence of nitrate contamination, testing of on-farm wells is a necessary step to addressing nitrate pollution in the Central Valley.

The Superior Court in *Monterey Coastkeeper* found a Waiver that did not allow for the identification of dischargers contributing to exceedances of water quality objectives to be insufficient.[58] The Court explained that a Waiver which did not practically allow for identification of those causing or contributing to exceedances of water quality objectives "lack[ed] . . . feedback mechanisms to assess the effectiveness of implemented management practices in reducing pollution and preventing further degradation of water quality."[59] The monitoring required in the Waiver did not identify specific growers and therefore the monitoring group and the Board could not identify who was causing the exceedances. If they could not identify who was causing the exceedance, then they could not determine which management practices were insufficient and therefore needed to be changed.

As *Monterey Coastkeeper* makes clear, how a program is implemented practically should be taken into account when evaluating compliance with the Nonpoint Source Policy. In effect, any Waiver which does not provide a practical mechanism to identify dischargers contributing to exceedances of water quality objectives violates the Nonpoint Source Policy.[60] On-farm drinking water well monitoring and reporting is the most practical way to ensure a functional feedback mechanism exists regarding nitrate pollution.

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[56] Supra note 15, at 32.
[57] *Id.* at 22.
[58] Supra note 17, at 33-34.
[59] *Id.* at 33.
[60] *Id.* at 34; Nonpoint Source Policy, at 13-14 ("KEY ELEMENT 4: An NPS control implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional different MPs or other actions are required.").

3. *Well testing should include nitrates, 123 TCP, DBCP, and other contaminants in Title 22 known to be related to agriculture, as determined by the Drinking Water program.*

Nitrates are not the only water quality threat posed by agricultural activities. Therefore we urge that on-farm well testing include nitrates, 123-TCP, DBCP, and other contaminants in Title 22 of the CCC Division 4, Chapter 15, known to be related to agriculture, as determined by the Drinking Water program. By excluding these contaminants the General WDRs fails to provide feedback mechanisms as required by the Nonpoint Source Policy.[61] Although the General WDRs has been amended to specifically include pesticides and other contaminants that are monitored by the Department of Pesticide Regulation (DPR), this is insufficient to protect water quality as required by law. Advising the Central Valley Water Board that they "can rely" on the monitoring done by the DPR is not sufficient to protect ground and surface water from all of the impacts of agriculture. Merely stating the Board "can rely" on DPR data instead of requiring the data to be examined and acted upon does not ensure meaningful progress towards attaining water quality objectives.[62] Even if the DPR data is required to be used, some of the main pollutants of concern, such as 123-TCP and DBCP, are not monitored by the DPR because they are no longer in use as pesticides. Although these are no longer in use, they are still impacting water quality and therefore growers under the General WDRs should be required to monitor for them.

At the very least the General WDRs should be amended to include monitoring for contaminants like 123-TCP and DBCP that are legacy pollutants from agricultural operations that are still impacting water quality but are not monitored by the DPR. In addition, the General WDRs should be amended to require growers and/or the Third Party to examine the monitoring done by DPR and use that data to require growers to update management practices as necessary. If a well is identified as exceeding the MCL for any of the contaminants determined by the Division of Drinking Water as being related to agricultural operations,[63] the member must notify the Central Valley Water Board. In addition that member, or the Central Valley Board, must notify the users of the well in a timely manner in accordance with section IV, A of the proposed order or in accordance with Health and Safety Code Section 116455(b).

D. THE STATE WATER BOARD SHOULD COMPLY WITH THE ANTIDEGRADATION POLICY BY ESTABLISHING A BASELINE, CONDUCTING A PROPER MAXIMUM-BENEFIT ANALYSIS, AND REQUIRING THE BEST PRACTICABLE TREATMENT CONTROL.

The Draft Order does not cure the deficiencies of the General WDRs with respect to the State Antidegradation Policy. Antidegradation law requires that, in high-quality waters, baseline water quality must be maintained unless it is demonstrated that any change in quality will (1) be consistent with the maximum benefit to the people of the state ("maximum benefit"); (2) not unreasonably affect present or probable future beneficial uses; and (3) not result in water quality less than that prescribed by state policies. Furthermore, any activity that produces or may produce waste, and that discharges into high-quality waters,[64] must result in best practicable treatment control ("BPTC") to ensure that (a) pollution or nuisance will not occur, and (b) the highest water quality consistent with maximum benefit will be maintained.

The General WDRs fail to meet the requirements of Antidegradation Policy by failing to (1) establish a water-

[61] Supra note 38, at 13-14.
[62] *Supra note 17*, at 34.
[63] This would include both those contaminants monitored under the General WDRs and those monitored by the DPR. The language of the DPR should be amended to make it explicit that MCL exceedance discovered by either monitoring program triggers the action requirements of the General WDRs.
[64] The court in *AGUA* found that an actual showing of degredation is not required; instead the policy applies when there "is a determination that the receiving water is high quality water and that an activity will discharge waste into the receiving water." *Associacion De Gente Unida Por El Agua (Agua) v Central Valley Regional Water Board*, (2012) 210 Cal.App.4th 1255, 1272. The policy presumes from these two facts that the quality of the receiving water will be degraded by the discharge of waste. *Id.*

quality baseline to determine authorized alterations in water quality and their impacts on beneficial uses, (2) conduct an adequate maximum-benefit analysis, and (3) establish BPTC to ensure that nuisance and pollution will not occur and that the highest water quality consistent with maximum benefit will be maintained. In addition, the General WDRs explicitly authorize pollution and nuisance for more than 10 years.

1. *The Order fails to meet the requirements of the Antidegradation Policy because there is no establishment of a water quality baseline*.

The draft order authorizes continued noncompliance with the State Antidegradation Policy. First, the draft order does not require the establishment of a water-quality baseline. The State Water Board recognizes that the appropriate baseline is the "best quality of water since 1968," but that, "[i]n almost all cases, it will be impossible … to establish an accurate numeric baseline for potentially hundreds of waterbodies…."[65] Thus, the Board finds that a "general review and analysis of readily available data is sufficient."[66]

We acknowledge that a general analysis of available data is appropriate for determining whether the Antidegradation Policy applies. As the draft order states:

> [T]he Central Valley Water Board appropriately assessed thousands of surface water[67] and groundwater data points and concluded that at least some of the surface waters and groundwater in the … watershed were high quality. Based on this finding, the Central Valley Water Board acted appropriately by then conducting a general antidegradation analysis.[68]

We agree that this approach is appropriate for determining that the Antidegradation Policy applies to the Eastern San Joaquin River watershed.

Nevertheless, once determined that the Antidegradation Policy applies, it becomes unacceptable to abandon any attempt to establish a numeric baseline. We concede that a calculation of the best water quality since 1968 will necessarily be an estimate based on available data. However, since any meaningful antidegradation analysis requires comparing said baseline to WQOs it is fundamental that some baseline be established.[69] For example, the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) process established 2-4 mg/L as the background concentration of nitrate-nitrogen in Central Valley groundwater. Without setting such a background, the General WDRs makes it impossible to assess the level of degradation that will occur as a result of authorized discharges, and thus whether those changes in water quality are consistent with maximum benefit.

The draft seems to imply that the analysis in *Agua* does not apply to nonpoint discharges, stating that the groundwater discharges regulated under the General WDRs are unlike the "concentrated discharges … that were the subject of [*Agua*]." This characterization of *Agua* is inaccurate. In *Monterey Coastkeeper v. SWRCB* the Court contemplated whether an Agricultural Waiver for the Central Coast was required to apply the Antidegradation Policy as laid out in *Agua*.[70] In that case the State Water Board did not make any of the necessary findings to allow a degradation to occur and instead stated the Waiver was consistent with the policy "because it will 'improve' water quality."[71] The Court found this analysis unacceptable and remanded and directed the Board "to

[65] State Water Resources Control Board Draft Order No. R5-2012-0116, at 59-60.
[66] *Id.* at 60.
[67] "Any actions that can adversely affect high quality surface waters are also subject to the federal antidegredation policy developed under the Clean Water Act. Where the federal antidegredation policy is applicable, the State Board has interpreted its Antidegredation Policy as incorporating the federal policy." *Monterey Coastkeeper v. California State Water Resource Control Board (SWRCB)*, (2015) No. 34-2012-80001324, 6 (internal citations omitted).
[68] *Id.*
[69] *Agua*, 210 Cal. App. 4th 1255, 1270.
[70] *Monterey Coastkeeper v. SWRCB*, (2015) No. 34-2012-80001324.
[71] *Id.* at 39.

consider whether the Waiver is consistent with the Antidegradation Policy, as interpreted by the Court in [*Agua*]."[72]

By merely stating that the Antidegradation Policy has been satisfied, the Water Board fails to make the required findings that would allow high quality waters to be degraded. When there "is a determination that the receiving water is high quality and that an activity will discharge waste into the receiving water" degradation is assumed[73] and an Antidegradation Policy analysis is required. Therefore to allow degradation, the Draft Order must "set forth findings that bridge the analytical gap between the raw evidence and ultimate decision."[74] The State Board's findings must provide "the analytic route [it] traveled from evidence to action" to satisfy this requirement, so as to allow the reviewing court to satisfy its duty to "compare the evidence and ultimate decision to 'the findings.'"[75] Mere recitation of legal requirements – as done here - is not sufficient.

The findings to allow degradation must be made using the EPA's Economic Guidance for Water Quality Standards Workbook[76] ("EPA Workbook") which establishes a test to determine if there might be interference with important social and economic development. The EPA Workbook outlines three steps involved in performing an economic impact analysis as part of an antidegradation review: (1) verify the project's costs and calculate annual costs of the pollution control project; (2) determine if maintaining high quality waters will interfere with development; and (3) determine if development is economically and socially important.[77] The EPA Workbook provides several worksheets for addressing these factors.[78] Yet the State Board and the Regional Board have not addressed these basic factors or completed the EPA worksheets – or provided any evidence even remotely resembling such an analysis – in reaching their conclusion. The Draft Order does not meet the requirements of law and is therefore an abuse of discretion.

2. *The Order fails to meet the requirements of the Antidegradation Policy because it allows for an inadequate maximum-benefit analysis.*

Second, the Draft Order more generally sanctions an inadequate maximum-benefit analysis. It first notes that "the state depends on Central Valley agriculture for food and that Central Valley communities rely on agriculture for employment."[79] It goes without saying that California depends on agriculture for food and employment; the statement seems to imply a false choice between agriculture and no agriculture. This is akin to stating that the state depends on clean drinking water. The Draft Order then goes on to conclude that the "societal benefits outweigh the costs associated with the effects of irrigated agriculture under the Modified General WDRs," and thus "any degradation allowed … is consistent with the maximum benefit to the people of the state."[80] This statement is purely conclusory, as there is no identified cost-benefit analysis supporting such a finding. In reaching this conclusion, the draft states that "if monitoring of drinking water wells indicates that MCLs are being exceeded, we expect dischargers that are causing or contributing to the exceedance to provide replacement water to the affected population."[81] A mere "expectation," however, is not an appropriate consideration for determining the costs and benefits of discharges to the people of the state. This type of conclusory reasoning is precisely what *Agua* determined to be not sufficient as a proper antidegradation analysis.[82]

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[72] *Id.*
[73] *Agua*, at 1272. Degredation is assumed when waste is being discharged into high quality waters.
[74] *See Topanga Association for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d, 506, 514-516.
[75] *Id.* at 515.
[76] U.S. Environmental Protection Agency, *Interim Economic Guidance for Water Quality Standards Workbook* (March 1995), available at http://water.epa.gov/scitech/swguidance/standards/economics/chaptr5.cfm.
[77] *Id.* at 5-2.
[78] *Id.* at Worksheets AA, AB, and O-Y.
[79] Draft order, at 61.
[80] *Id.*
[81] *Id.*
[82] *Agua*, 210 Cal. App. 4th at 1280. "While the findings need not be extensive or detailed, mere conclusory findings without

In *Monterey Coastkeeper* the Superior Court found a draft agricultural Waiver to be in violation of the Antidegradation Policy because it made conclusory statements without any findings of evidence.[83] In that case, the Board did not provide any findings and just stated they complied with the Antidegradation Policy because the Waiver would "'improve' water quality."[84] The Court remanded the draft order and directed the Board to apply the Antidegradation Policy as laid out in *Agua*.[85] This draft order suffers from the same faults as the one in *Monterey Coastkeeper*. The Board makes the statement that "societal benefits outweigh the costs" but does not provide any findings to justify that conclusion.[86] Conclusory statements like those in the draft order at issue here were specifically rejected as insufficient in the context of agricultural Waivers by the Superior Court in *Monterey Coastkeeper*.[87] By not providing findings of evidence to justify the maximum-benefit analysis, this draft order does not meet the requirements of the law.

An adequate maximum-benefit analysis would compare the economic, health, and environmental costs and benefits of the authorized degradation. The serious health risks posed by nitrate-contaminated water increase costs not only to individuals but to the healthcare system as a whole. Financial costs, moreover, include not only those to farmers, but also those to individuals and communities that must spend a greater share of their incomes and resources to obtain potable water, such as through bottled water, water treatment, or the drilling of new or deeper wells. Contaminated water also has regional economic impacts, both because of the opportunity costs involved with diverting resources to alternative water sources, as well as because contaminated water can reduce property values, increase loan costs, and in general limit community development. Without including these and other costs associated with allowed degradation, it is impossible to conclude that authorized changes in water quality are consistent with maximum benefit.

The State Water Board laid out how a proper maximum-benefit analysis should be conducted in State Water Board Order 86-17.[88] A maximum-benefit determination "is made on a case-by-case basis and is based on considerations of reasonableness under the circumstances at the site" and must consider the following factors:[89] "past, present, and probable beneficial uses of the water" as specified in the Water Quality Control Plans; "economic and social costs, tangible and intangible, of the proposed discharge compared to the benefits,[90] environmental aspects of the proposed discharge; and the implementation of feasible alternative treatment or control methods."[91] The Draft Order did not conduct this required analysis and therefore does not comply with the law and is an abuse of discretion.

3. The Order fails to meet the requirements of the Antidegradation Policy because it does not require Best Practicable Treatment or Control.

Third, the Draft Order does not require Best Practicable Treatment or Control (BPTC). As stated above, the

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reference to the record are inadequate. . . . Here, the crucial findings that would have allowed the Regional Board to authorize a discharge that would degrade the groundwater, i.e., that the discharge will be consistent with the maximum benefit to the people of the state, that it will not unreasonably affect beneficial uses, and that it will not violate water quality objectives, were all based upon the finding that the Order would not further degrade groundwater quality. That finding is not supported by the evidence in the record. . . ." *AGUA*, 210 Cal. App. 4th at 1281 (internal citations omitted).

[83] *Monterey Coastkeeper*, No. 34-2012-80001324 at 39.

[84] *Id.*

[85] *Id.*

[86] Supra note 15, at 61.

[87] *Monterey Coastkeeper*, No. 34-2012-80001324 at 39. "On remand, the Board is directed to consider whether the Waiver is consistent with the Antidegration Policy, as interpreted by the Court in *AGUA*." *Id.*

[88] State Water Resources Control Board Order No. 86-17, at 22, n. 10; *AGUA*, at 1279.

[89] *AGUA.* at 1279.

[90] With reference to economic costs, costs to both the discharger and the affected public must be considered. *Id.*

[91] *Id.*

General WDRs specifically authorize pollution and nuisance for up to 10 years in areas subject to Ground Water Quality Management Plans (GQMPs). This, by definition, does not constitute BPTC. Although WDRs may authorize phased compliance, they may not permit "unnecessary time lag."[92] Without an enforceable standard tied to water quality objectives, it is impossible to know whether authorized management practices will lead to cessation of pollution and nuisance within a reasonable timeframe. In *San Joaquin County Resource Conservation District* the Court found "the program is geared towards identifying exceedances, rather than degradation . . . .render[ing] the Renewed Waiver inconsistent with the Antidegradation Policy.[93]

Like the Renewed Waiver in *San Joaquin County Resource Conservation District*, the draft order creates a program in which for the first 10 years exceedances are only identified and not enforced in areas subject to GQMPs. The Court in *San Joaquin County Resource Conservation District* goes on to explain why only identifying exceedances does not comply with the Antidegradation Policy: "it is not clear that the Board has an adequate means of identifying and taking actions against dischargers who are violating water quality objectives, or of ensuring BPTC is being implemented."[94] The Draft Order suffers from the same fatal flaws as the Renewed Waiver in *San Joaquin County Resource Conservation District*, it specifically prevents the Board from having the ability to take action against dischargers or ensure BPTCs are fully implemented for 10 years.

Furthermore, it is impossible to determine whether authorized discharge activities will ensure maintenance of the highest quality water consistent with maximum benefit, since (1) the amount of authorized degradation is unknown, (2) the maximum-benefit analysis is insufficient, and (3) there are no enforceable standards. This again, by definition, does not constitute BPTC. "If the Board is going to rely on watershed-scale monitoring to ensure agricultural dischargers are implementing BPTC, the Board still must ensure that any activity that will result in a discharge of waste to high quality waters will comply with water quality standards and meet BPTC."[95] The General WDRs in the Draft Order do not meet this requirement.

E. THE STATE WATER BOARD SHOULD REQUIRE ROBUST REPORTING LINKED TO SPECIFIC LOCATIONS WITH ALL DATA MADE AVAILABLE TO THE PUBLIC.

1. All grower data should be made publically available.

The public has a right to all growers' individual data. Under both State and Federal law, disclosure of water quality data to the public is of great importance. Anything less than individual grower data violates the Clean Water Act, the Porter-Cologne Act, and the Nonpoint Source Policy. The right of the public to water quality data is only tempered by the need to protect methods and processes that amount to trade secrets. As the acts make clear, methods and processes does not include monitoring data needed to ensure compliance with water quality standards.

The Clean Water Act and the Porter-Cologne Act demand that data be made available to the public. Water Code §13269 requires a Waiver to include monitoring requirements "designed to support the development and implementation of the Waiver program, including, but not limited to, verifying the adequacy and effectiveness of the Waiver conditions."[96] Additionally, "monitoring results must be made available to the public."[97]

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[92] 23 C.C.R. § 2231(b).
[93] *San Joaquin County Resource Conservation District v. Central Valley Regional Water Quality Control Board*, (2013) No. 34-2012-80001186, at *20.
[94] *Id.*
[95] *Id.*
[96] Cal. Water Code §13269(a)(2).
[97] *Id.*

The Clean Water Act clearly states that parameter data, such as nitrogen levels, are always required to be disclosed. The growers try to argue that some of their field level data amounts to protected trade secrets. This argument misinterprets the law. The Federal Clean Water Act deliberately excludes effluent data from amounting to a protected trade secret:

> Any records, reports, or information obtained under this section (1) shall, in the case of effluent data, be related to any applicable effluent limitations, toxic, pretreatment, or new source performance standards, and (2) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof (*other than effluent data*), to which the Administrator has access under this section, if made public would divulge *methods or processes* entitled to protection as trade secrets.[98]

The only types of information that can ever be considered trade secrets are methods and processes.[99] Any interpretation of trade secrets that includes contamination levels, their locations, and the owner of those locations, violates the mandate of the Act to make available to the public information related to water quality. The data the growers' seek to protect, parameter data from wells and the owner of those wells, are not methods or processes and therefore must be disclosed.

In addition to violating the Act on its face, allowing the growers to protect any of the field level data would undermine the intention of Congress to have the public actively involved in monitoring and enforcement.[100] Without field level data tied to particular growers, the public will not be able to identify which growers are in violation. If the public cannot determine who is in violation they will not be able to utilize their rights to bring citizen suits. Therefore, growers are not entitled to protect this data from disclosure.

The Nonpoint Source Policy also requires all data to be made available to the public. The Policy requires that regardless of the monitoring required, "all monitoring programs should be reproducible, provide a permanent/documented record and be available to the public."[101] This requirement is to ensure that Key Element 4 can be achieved. Key Element 4 states "[a]n NPS control implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine whether the program is achieving its stated purpose(s) . . . ."[102] The public cannot do their duty under the Nonpoint Source Policy to ensure the program is achieving its purpose if data cannot be tied to particular BMPs. By not providing all field data, including its location and owner, the public will not be able to determine which farms are bad actors and/or which BMPs are not being effective. If the public cannot determine which measures are effective and which are not, then the Waiver lacks the feedback mechanisms required by the Nonpoint Source Policy.

2. The General WDRs do not provide a means for determining the effect of the regulatory program on water quality.

We are pleased that the State Board has amended the Farm Evaluation reporting requirements to require field-level data; however this amendment will still not provide enough data for the Regional Board to ensure progress towards improving water quality as required under the law. Even though the Nonpoint Source Policy acknowledges that achieving water quality objectives might take time, a Waiver "must include requirements reasonably designed to show measurable progress toward improving water quality over the short-term and achieving water quality standards in a meaningful time frame."[103] The General WDRs at issue here do not provide

[98] 33 U.S.C. § 1318(b) (2012) (emphasis added).
[99] *Id.*
[100] *See* 33 U.S.C. § 1365 (2012).
[101] NPS page14.
[102] NPS page 13 (emphasis added).
[103] Supra note 17, at 32.

a means of ensuring progress towards attaining water quality standards.[104] To comply with the Policy the General WDRs at a minimum must provide, accurate, transparent A/R data, linked to specific locations. This data is needed to begin to address the problem of nitrate contamination of groundwater. Without providing detailed data the General WDRs have no way to verify the program is working and instead are essentially hoping that the program will be effective.

In *Monterey Coastkeeper* the Superior Court found that a Waiver program which employed an iterative management practice[105] approach, like here, does not meet the requirements of law.

> In theory, the Modified Waiver ensures that dischargers will, over time, implement "effective" management practices because it requires them to implement increasingly "improved" management practices until there are no more discharges causing or contributing to exceedances of water quality standards. . . . In practice, this approach is highly unlikely to work because the receiving water monitoring data, submitted in most cases by a cooperative management group, does not identify the individual discharges that are "causing or contributing" to the exceedance. As a result, neither the Board, nor the . . . group . . . can identify where the pollution is coming from or whether the grower's management practices are effectively reducing pollution and degradation.[106]

In addition, the Modified Waiver in *Monterey Coastkeeper* did not define what an "improved" practice would be and did not require a specific amount or percentage of improvement.[107] By not providing these elements the Court determined that the Waiver did not provide any means to "ensure any meaningful progress towards achieving quantifiable reductions in pollutant discharges" and therefore was inadequate.[108] The General WDRs in this case suffers from the same defects as the Modified Waiver in *Monterey Coastkeeper*. By not providing for robust reporting that is linked to specific farms, the Regional Board does not have an accurate means of assessing which management practices are failing and in need of review and enforcement. The General WDRs also do not identify what amount of "improvement" would be necessary to bring a discharger into compliance. Therefore, like the Modified Waiver in *Monterey Coastkeeper*, the General WDRs in practice will not meet the requirements of the Nonpoint Source Policy because it does not require a level of reporting that would allow for follow up, enforcement, and meaningful improvement of management practices.

3. The Draft Order should require submission of field-level data to begin during the first year of order adoption.

Although the Nonpoint Source Policy recognizes that there are "instances where it will take time to achieve water quality requirements, the time schedule may not be longer than that which is reasonably necessary to achieve . . . water quality objectives."[109] Delaying the reporting of field-level data would be an unreasonable time delay in violation of the Policy. While the proposed order would require the Third Party and the Regional Board to collect and process more information than in the current permit, individual growers are already required to collect this information for retention on their site/farm. Since the growers are already collecting this information, there is no reasonable justification to delay the reporting of that data to the Third Party and the Regional Board within the first year.

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[104] *Id.* at 33.
[105] "[D]ischargers must implement 'management practices' to prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards. To the extent monitoring data shows implemented management practices have not been effective in preventing discharges . . . the Modified Waiver requires the discharger to implement "improved" management practices." *Id.*
[106] *Id.* at 33-34.
[107] *Id.* at 34-35.
[108] *Id.*
[109] Supra note 38, at 13.

Receiving this data within the first year of adoption will allow for the Board and the Third Party to more quickly address the water quality problems associated with agriculture return irrigation flows and stormwater runoff. The development of the nitrogen coefficient relies on the field-level information that will currently not be reported in the first year. The longer that data is not reported, the longer it will take for the coefficient to be developed. The nitrogen coefficient is expected to be an important tool for addressing nitrogen pollution, which is a major water quality concern in the Central Valley. By delaying the reporting of this field-level data, the General WDRs delays the development of an important implementation tool without any justification, violating the Nonpoint Source Policy.

F. THE STATE WATER BOARD SHOULD MINIMIZE THIRD PARTY INVOLVEMENT IN DATA AGGREGATION, DETERMINING UPSTREAM MONITORING, AND DEVELOPING A NITROGEN COEFFICIENT.

1. *The Third Party should not develop the nitrogen removal coefficients without any public input or review by the Regional Board or State Board*.

The General WDRs improperly directs the Third Party to develop the nitrogen removal coefficients without input from the public or any oversight by the State or Regional Water Board. The nitrogen coefficients will eventually be used to determine A/R ratios, which will be used to determine the effectiveness of growers' nitrogen management practices. By allowing the Third Party to develop the nitrogen coefficients without oversight, the General WDRs violates the Nonpoint Source Policy. "Before approving . . . a specific NPS . . . program, a RWQCB must determine that there is a high likelihood the implementation program will attain . . . stated water quality objectives. This includes consideration of the MPs to be used and the process for ensuring their proper implementation, as well as assessment of . . . effectiveness."[110] As mentioned above, the nitrogen coefficients are an important piece that will be used to measure the effectiveness of MPs. Leaving this important task to the Third Party with no input from the public, State Board, or Regional Board violates the Nonpoint Source Policy's explicit instruction that the Regional Board determine there is a "high likelihood" of success the program will attain water quality objectives. The Boards cannot determine the likelihood of success if they have no say in the development of the process which will be used to evaluate management practices of nitrogen. If the Regional or State Board cannot develop the coefficients, then at a minimum, any coefficients developed by the Third Party should be reviewed and commented on by the public and formally approved by the Regional Board. Formal oversight by the Regional Board is necessary to meet the requirements of the Nonpoint Source Policy.

2. *The State Water Board should require regular submission of all underlying data to the Central Valley Board, along with all correspondence between the Third Party and the growers*.

The Nonpoint Source Policy requires "sufficient feedback mechanisms" so the Board, dischargers, and the public can determine whether the program is effectively meeting its "stated purpose(s)."[111] By not requiring regular submission of all underlying data and correspondence between the Third Party and the growers, the General WDRs does not provide "sufficient feedback" to allow the Board and the public to determine effectiveness. Requiring submission of all data and correspondence will ensure that the Board, along with the public, can verify that the data is being reported and summarized accurately. Oversight of the Third Party is imperative to the program's success. Without oversight, there is a chance that inaccurate or incomplete data will be reported to the Board which could in turn compromise the efforts to address on-going water quality problems. Having a strong mechanism to scrutinize the practices of the Third Party will help combat their bias in favor of the growers and encourage accurate and complete reporting.

[110] *Id.* at 11.
[111] Supra note 38, at 13.

3. The Third Party should not be responsible for upstream monitoring.

The General WDRs improperly delegates upstream monitoring activities to the Third Party. By delegating upstream monitoring, enforcement responsibilities are improperly deferred to the Third Party. It is clear from the Nonpoint Source Policy that enforcement responsibility ultimately rests with the Regional and State Boards.[112] "The SWRCB and RWQCBs may not delegate their NPS authorities and responsibilities to another agency, and may not indefinitely defer taking necessary action if another agency is not properly addressing a NPS problem."[113] The sole purpose of upstream monitoring is to determine which discharger(s) is/are responsible for an exceedance of water quality in an effort to identify who to take enforcement action(s) against. In other words, upstream monitoring is an investigative tool to identify bad actors. Because this tool will solely be used for informing enforcement activities, it should be the Regional Water Board's responsibility not the Third Party's.

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Transparency and accountability must become a cornerstone of California's agricultural management. It is time the State Water Board take meaningful action to address the persistent pollution problems caused by California agricultural practices. We look forward to working with you to reform agricultural pollution management.

Sincerely,

Sean Bothwell
Policy Director
California Coastkeeper Alliance

[112] Supra note 38, at 10.
[113] *Id.*