











(1/23/18) Board Meeting

A-2239(a)-(c) Deadline: 12/22/17 by 12 noon



December 22, 2017

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:

On behalf of the California Waterkeepers, we appreciate the opportunity to comment on the Eastern San Joaquin River Watershed Agricultural Order SWRCB/OCC Files A-2239(a)–(c). California needs a statewide agricultural policy to set forth minimum best practices that ensures California's waterways are protected from excessive agriculture pollution—the ESJ Order is not that policy. Agricultural regulation is not on par with the damage done by agricultural pollution. The State Water Board should be selecting the most effective features from regional agricultural programs around the state to set a successful statewide agriculture program. Instead, the State Water Board is using the ESJ Order to pull other regions down to the Central Valley's inferior performance standard.

California's agricultural sector is booming while those impacted by agriculture pollution are exponentially affected. Despite the most severe drought on record, agricultural revenue from crop production in 2013 and 2014 was the highest and second highest, respectively, in California history. Employment data suggest that overall agricultural employment has reached record-high levels. Meanwhile, over 100,000 square miles of California's groundwater basins are contaminated with nitrates, and agricultural runoff is creating dead zones in our oceans, making our surface waters too toxic for aquatic life.

It is time California protects its citizens and waterways from agricultural pollution. There are persistent problems throughout California's agricultural programs due to the over reliance on iterative management practices and representative monitoring. The state needs a statewide agricultural program that holds growers accountable in the most efficient way possible – but the ESJ Order only lowers standards by delegating regulatory authority to Third Party Coalitions, setting unenforceable targets, retaining deficient surface water monitoring, and worst yet, hiding the performance of growers from the Regional Boards and the public.

To supplement our comprehensive legal letter, the following comments are intended to be a succinct summary of our concerns and the top ten things we want fixed.

#### A. Nitrogen

1. The State Water Board Should Remove the New, Dangerous Categorical Exemption for Nitrate Reporting.

<u>Importance</u>: The U.C. Davis Nitrate Report makes clear that "[g]ood nitrate management is essential across the board for agriculture, and should not just be restricted to areas that presently have high levels of detected nitrate in groundwater."

State Water Board Direction (Revised Draft Order, Page 26): "...there may be uniquely-situated categories of growers for whom the requirement for nitrogen reporting is inappropriate. Our order revisions allow a category of growers to be exempted from the nitrogen applied and removed reporting requirements subject to a demonstration that applied nitrogen is not expected to seep below the root zone in amounts that would, even over multiple decades, reach groundwater, and is further not expected to discharge to surface water."

<u>Problem</u>: Nitrogen reporting is a critical component of good nitrate management. Entire categories of growers will be permanently exempt from the Nitrate reporting if they "demonstrate" that they are not likely to pollute for decades. There are no parameters on the "demonstration". How will anyone demonstrate they will not pollute for decades?

Ask: Eliminate the Nitrate reporting exemption.

#### 2. The State Water Board Should Set Enforceable Nitrogen Loading Targets.

<u>Importance</u>: California needs enforceable targets to ensure accountability and reduce over-application of nitrates that led to groundwater pollution and ultimately impacts public health.

State Water Board Direction (Revised Draft Order, Pages 78 and 79): "... The Central Valley Water Board is directed to use the data to *confirm that the Third Party is appropriately following up with its Members*, *including those who are AR data outliers*, those failing to implement appropriate management practices, and those that fail to timely submit required reports."

<u>Problem</u>: Once the Regional Board has determined the multi-year A/R and A-R value, "over the next few years" it will use it as a guide to determine "acceptable ranges for multi-year A/R target values by crop." The 2017 Proposed Order does not direct that these targets values be enforceable. The State Board instead punts the issue, asserting that "[i]t is premature at this point to project the manner in which the multi-year A/R ratio target values might serve as regulatory tools." Without enforceable targets, the Regional Boards cannot reduce nitrogen overapplication.

Ask: Create enforceable targets effective immediately.

#### 3. The State Water Board Should Set Nitrate Standards Now Using Scientifically Valid Studies.

<u>Importance</u>: We can use best available science now to determine nitrogen loading (e.g. nitrogen update ratios), as A/R is being developed.

State Water Board Direction (Revised Draft Order, Page 44): "We task the Third Party with conducting the appropriate testing or research to determine the relevant coefficients for calculating nitrogen removed by crop. We direct the Third Party to publish nitrogen removed coefficients for crops that cover 95% of acreage within the General WDRs' boundaries in time for use with the INMP Summary Reports due 1 March 2021 and 99% of the acreage in time for use with those due 1 March 2023."

<u>Problem</u>: We need to stop nitrate over-application immediately. The timeline under the 2017 Proposed Order is as follows: The Third Party has until 2021 to publish coefficients (used to convert crop yield numbers to the "R" value for each crop) that cover 95% of cropland, and until 2023 to publish coefficients for 99% of cropland. The coefficient determination will then go through public comment. Within "three years" of the availability of the coefficient for each crop, but not by a date certain, the Regional Board must propose target values. These proposed target A/R values will then be subject to an undefined exert panel process and public comment. Thus, the earliest any multi-year A/R target values will be available is 2025. After the values are determined, the State Board will then decide whether and how they will be used to meet water quality objectives. A/R targets should not allow for continued over-application. The A/R process will take too long—at least 5 years—and best available science can be used now.

<u>Ask</u>: Use scientific studies not existing practices to set A/R until sufficient research is complete to set an A/R ratio; Speed up the target value-setting by using A and R values that are already accessible.

Ask: The Regional Board should calculate the coefficient for R conversion, not the Third Party.

## **B.** Anonymous Reporting

4. The State Water Board Should Make All Location and Name Identifiers in Nitrate Reports, INMP Reports, and Other Reports Available to the Public.

<u>Importance</u>: Without reporting, neither the public nor the Regional Board can hold growers accountable, conduct proper oversight of the Third Party, understand if and how best management practices are leading to water quality improvement, or create the "correlated data set" that the State deemed vital to understanding and addressing nitrate pollution throughout the state.

"The people of this State do not yield their sovereignty to the agencies which serve them. The people, in delegating authority, do not give *their public servants the right to decide what is good for the people to know and what is not good for them to know.* The people insist on remaining informed so that they may retain control over the instruments they have created." – The Brown Act.

State Water Board Direction (Revised Draft Order, Page 51): "While we direct reporting of field-level data, rather than aggregated data, to the Central Valley Water Board, at this early stage in the development of the multi-year AR data framework, we will not require the individual field data to be routinely identified by name or location. We are satisfied that the goals of the program can be carried out effectively if field-level data is linked to anonymous identifiers, with the Third Party withholding name and location data."

<u>Problem</u>: Neither the Regional Board nor the public can discern causes of exceedances (e.g. excessive pesticide application that causes exceedence near X creek). Neither the Regional Board nor the public can discern whether changes in management practices are effective or ineffective at reducing exceedances. This "feedback mechanism" is the backbone of the entire Order. Anonymization violates the public's right to know.

In the 2017 Proposed Order, the State Board reverses course. Directly contradicting its 2016 rationale, the State Board eliminates nitrogen reporting by location identifier. It determines that it is now "satisfied that the goals of the program can be carried out effectively if field-level data is linked to anonymous identifiers." And despite its own statements to the contrary, it "anticipate[s] that the anonymous field-level data is sufficient for the Central Valley Water Board to verify that implemented management practices are making progress toward achievement of the water quality goals of the program."

Ask: Remove anonymity. Make all location and name identifiers in reports available to the public.

#### C. Surface Water Protections

5. The State Water Board Should Install an Interim Surface Water Monitoring Program.

<u>Importance</u>: As the State Board itself has noted, in order evaluate the effectiveness of the management practices, the Regional Board must know where, when, and how growers are implementing them. It must also know where,

when, and how water quality is changing as these management practices are employed.<sup>1</sup> According to the State Board, "a management practice-based nonpoint source regulatory program will succeed in its ultimate purpose of 'achiev[ing] and maintain[ing] water quality objectives and beneficial uses' only to the extent it facilitates implementation of effective management practices." Therefore, "[i]nstituting effective management practices requires sufficient monitoring and reporting to determine if existing management practices are leading to compliance with water quality requirements and [to the] implementation of improved water quality practices where they are not."<sup>3</sup>

State Water Board Direction (Revised Order, Page 58 and 59): "...having now carefully reviewed the particular surface water monitoring framework established in the Eastern San Joaquin Agricultural General WDRs, we cannot find that it is, in fact, "of sufficient density (spatially and temporally) to identify general locations of possible pollution."

State Water Board Direction (Revised Order, Page 61 and 62): "We will instead convene a panel of experts to make recommendations on a framework for surface receiving water monitoring to inform irrigated lands programs statewide." ... "Once convened, the expert panel will report to the State Water Board on the monitoring and program data needed to inform the expert panel's review and determinations. The Executive Director of the State Water Board may then issue a monitoring and reporting program order under Water Code section 13267 to the Eastern San Joaquin Coalition and to other third parties in the irrigated lands programs requesting the data recommended by the expert panel. In the interim, the Central Valley Water Board and the Third Party shall continue to implement the existing program."

<u>Problem</u>: The State Water Board acknowledges that the current ESJ Order's surface water monitoring program is deficient, yet the current order keeps in place the deficient monitoring program while an Expert Panel develops recommendations at some indeterminate time.

<u>Ask</u>: Require improvements to the monitoring program now, including additional monitoring upstream to detect detected individual exceedances and increased spatial and temporal density.

# 6. The State Water Board Should Modernize California's Toxicity Monitoring Protocol.

<u>Importance</u>: The use of diazinon and chlorpyrifos has been declining for many years, and dischargers are rapidly replacing them with more toxic (pyrethroids) and more persistent (neonicotinoids) alternatives. Noenicitinoid imidacloprid has become the largest selling pesticide in the world, is extensively used throughout California, is persistent in the environment, is highly soluble and poses a risk for groundwater contamination, and is of growing concern. Strawberries and wine grapes, important crops for Regions 1,3, and 4, use imidacloprid extensively.

<u>Problem</u>: To avoid toxicity detections, growers are substituting organophosphate pesticides in favor of more toxic and persistent pyrethroids and neonicotinoids. California's toxicity monitoring program, which tests for toxicity caused by organophosphate pesticides but not pyrethroid and neonicotinoid pesticides, may be vastly underestimating the toxicity of California's waters.

Ask: Set up a system that is adaptive to changing pesticide use and based on best available science.

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<sup>&</sup>lt;sup>1</sup> See, e.g., MRP § III.C.1, p. 7 (General WDRs require "[s]urface water monitoring must provide sufficient data to describe irrigated agriculture's impacts on surface water quality and to determine whether existing or newly implemented management practices comply with the receiving water limitations of the Order.).

<sup>&</sup>lt;sup>2</sup> 2017 Proposed Order redline at 17.

<sup>&</sup>lt;sup>3</sup> 2017 Proposed Order redline at 17.

## 7. The State Water Board Should Prohibit Tiering.

<u>Importance</u>: The Agricultural Expert Panel "found that good nitrogen management is essential in all areas, not just high vulnerability areas, and recommended against differential requirements for nitrogen management based on risk." The Agricultural Expert Panel thus effectively rejected risk categorization for groundwater requirements, recommending that uniform requirements apply to all dischargers.

State Water Board Direction (Revised Draft Order, Page 26): "The uniform application of requirements for groundwater protection shall be precedential for irrigated lands programs statewide. But we leave open the possibility that risk-based designations continue to be used for differentiating surface water protection requirements and for phasing in groundwater protection requirements. We also decline to direct a uniform set of criteria for risk designation and leave the regional water boards with considerable discretion to design reasonable frameworks for differentiation and prioritization. In addition to the high/low vulnerability approach of the Eastern San Joaquin Agricultural General WDRs, such criteria may, for example, include the risk-based tier designations in the Central Coast irrigated lands programs or possibly categories based on farm-size."

<u>Problem</u>: The Central Coast Waiver's tiering structure incentivizes growers to switch to new classes of pesticides that are more toxic and more persistent than existing pesticides, and growers are in fact switching to these new pesticides. Moreover, tiering allows growers to game the system and get out from conducting critical assessments to determine whether their management practices are working – as exemplified by the Central Coast Waiver. Tiering incentivizes more toxic pesticides leads to an illegal agricultural program. The State Water Board should not be endorsing such programs statewide.

Ask: Eliminate tiering as an option for other Regions.

The uniform application of requirements for groundwater protection shall be precedential for irrigated lands programs statewide. But we leave open the possibility that risk based designations continue to be used for differentiating surface water protection requirements and for phasing in groundwater protection requirements. We also decline to direct a uniform set of criteria for risk designation and leave the regional water boards with considerable discretion to design reasonable frameworks for differentiation and prioritization. In addition to the high/low vulnerability approach of the Eastern San Joaquin Agricultural General WDRs, such criteria may, for example, include the risk based tier designations in the Central Coast irrigated lands programs or possibly categories based on farm size.

#### 8. The State Water Board Should Set Nitrate Standards to Protect Aquatic Life.

<u>Importance</u>: We know that eutrophication and toxic algae blooms are harming aquatic life and fisheries.

<u>Problem</u>: The Basin Plan has a narrative standard that should be referenced and implemented by the Order. Instead, the ESJ Order only sets a nitrate standard for public health.

Ask: Set appropriate nitrate standards for aquatic life (i.e. 1mg/L).

# D. Drinking Water

# 9. The State Water Board Should Require Annual Testing of Domestic Wells.

<u>Importance</u>: The State Board explains that, "given the public health risk associated with drinking water that exceeds the MCL levels, the only way to ensure that public health is fully protected is to require sampling of every drinking water supply well."

<u>State Water Board Direction (Revised Draft Order, Page 63)</u>: "Where existing data or sampling data indicates that the nitrate concentration was below 8 mg/L for three consecutive annual sampling events, the member may thereafter sample every five years instead of annually."

<u>Problem</u>: A lot can change in five years, and communities could be put at risk as conditions change.

<u>Ask</u>: Require testing annually; remove:

"Where existing data or sampling data indicates that the nitrate concentration was below 8 mg/L for three consecutive annual sampling events, the member may thereafter sample every five years instead of annually."

# 10. The State Water Board Should Provide Notice that Domestic Well Exceedances Will Result in Enforcement Orders to Provide Replacement Water.

<u>Importance</u>: The State Board acknowledges that groundwater contamination in the Eastern San Joaquin Valley poses a serious health risk to residents, especially pregnant women and children, who consume water from contaminated drinking water supply wells.

State Water Board Direction (Draft Order, Page 84): "...while dischargers are working to comply with the time schedule, if monitoring of drinking water supply 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."

<u>Problem</u>: The 2017 Proposed Order fails to require replacement water if exceedances are detected. This is especially concerning given the failures identified above with the 2017 Proposed Order weakening of nitrogen target-setting and lack of enforceable targets.

<u>Ask</u>: Require the growers provide replacement water if exceedence is detected. Alternatively, include intent language that the Regional Boards shall bring an enforcement action for all growers exceeding drinking water standards and not providing replacement water.

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Sincerely,

Sean Bothwell Policy Director

California Coastkeeper Alliance