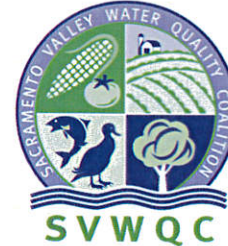




NCWA
Northern California Water Association



December 22, 2017

Felicia Marcus, Chair
State Water Resources Control Board
1001 "I" Street
Sacramento, California 95812-0100

**RE: "Comments to A -2239(a) -(c)." Second-Staff Draft Order Revising the
Eastern San Joaquin General Order R5-2012-0116**

Dear Chair Marcus:

The Northern California Water Association (NCWA) on behalf of the 8150 owners and operators of irrigated lands enrolled in the Sacramento Valley Water Quality Coalition (SVWQC) submit the following comments on the above referenced matter. At the outset it is important to note that protection of water quality, whether for drinking water, aquatic life, or agricultural use, is an immutable goal of NCWA and the Members of the SVWQC. To that end NCWA took the lead in forming the SVWQC in 2003 and is an active participant in the CV-SALTS initiative, which is developing the framework and toolbox for regional scale Salt and Nitrate Management in the Central Valley. Discernable progress is being made in advancing the CV-SALTS goals of 1) providing safe drinking water supplies, 2) reducing salt and nitrate impacts on groundwater, and 3) restoring groundwater quality. Additionally, funding and solutions to provide safe drinking water to areas that are documented to have impaired groundwater quality conditions has been advanced by both the State Water Board and agriculture community.

As the State Water Board recognizes on Page 2 of the Second-Staff Draft Proposed Order (Second-Staff Draft Order) released October 10, 2017, a vast majority of landowners plan for the long term, and are "naturally motivated to protect natural resources, through the stewardship of the land." This extends to water quality as well. The SVWQC appreciates the State Water Board's recognition that effective management of a nonpoint source program for agricultural discharges is not necessarily dependent on tying each data point to a discharger identified by name, or to a specific location as stated in Footnote 63 on Page 19 of the redline version of the Second-Staff Draft Order. Similarly, providing the opportunity to conduct outreach and education of members in low vulnerability areas to be done remotely, and proposing that the Farm Evaluation be submitted every five (5) years is appreciated.

However, the proposed five (5) year reporting cycle for Farm Evaluation submittal in the Second-Staff Draft Order is offset by the significant new and costly requirements. By requiring nearly 4500 owners or operators of irrigated lands in low vulnerability areas of the Sacramento Valley Water Quality Coalition to 1) Certify the new and expansive Irrigation and Nitrogen Management Plan (INMP), and 2) Complete a Management Practices Implementation Report (MPIR), the cumulative outcome of precedential changes proposed in the Second-Staff Draft Order is exactly opposite of the State Water Board's intent "to minimize increases in the reporting burden for growers and the coalition, as stated in the response to Question 5 – *How does the Second-Staff Draft Order differ from the draft order released in February 2016?* Coalition Members in the Sacramento River watershed who have successfully protected water quality for more than a decade will view these changes as burden without benefit.

The Second-Staff Draft Order underestimates the expense associated with these new requirements, by focusing only on self-certification costs (Section II. 10, Page 75) and not capturing the full costs, such as database management costs of compiling and reporting this information. In the five (5) years since adoption of the Eastern San Joaquin Waste Discharge Requirements (WDR) growers in the Sacramento Valley Water Quality Coalition have been conscientiously working to complete their Farm Evaluation, Nitrogen Management Plan (NMP), NMP Summary Reports, and if required Sediment Erosion Control Plan (SECP). In 2015 this required an "all hands on deck" effort involving thousands of hours and upwards of \$750,000 to assist growers with just completing Farm Evaluations. While the Coalition was able to streamline the data collection and entry process in 2016 and 2017, it is estimated \$300,000 annually was still required. Assistance with the NMP, NMP Summary Report and SECP self-certification added an amount equal or greater to the 2016 and 2017 costs.

An estimated 25 workshops were held for owners and operators of irrigated agriculture in 2015. Thousands of letters were mailed, monthly newsletters were sent during the months which Farm Evaluation distribution and collection efforts were underway, follow-up emails or letters were sent to those who hadn't returned Farm Evaluations, and 670 appointments were made with individual members to help them complete the forms. A staff of 15-20 dedicated local Farm Bureau and Resource Conservation District personnel assist growers in the Sacramento Valley.

Report preparation, data management, and reporting costs for the Irrigated Lands Program cannot be viewed in isolation. There is increasing cost pressure on California agriculture, especially lower value commodities. Agricultural operations have to comply with multiple permits and in some areas pay fees for water masters and/or fire suppression. All of which comes from the same pocket of the grower or rancher.

Request for Exemption from Nitrogen Applied and Removed Reporting Requirements

For the hundreds of owners and operators of irrigated agriculture in the foothills, where there are no groundwater basins, the tens of thousands of acres in the intermountain region of Northeastern California and Sierra Nevada valleys where irrigated pasture doesn't apply nitrogen, agricultural grazing is seasonal, Mother Nature is the dominant land use and the agricultural land use has remained unchanged since the 1800s, in areas where wild rice production occurs – wild rice has many of the same practices as *Oryza sativa* (commercial rice)- , areas where alfalfa is grown and basins which the Department of Water Resources (DWR) ranks a very low or low priority, the expanded nitrogen reporting requirements will **not yield meaningful and high quality data to help better protect groundwater quality.**

The Second-Staff Draft Order accounts for these types of operations in Section II. A.1 (Page 26) which states, “that there may be uniquely-situated categories of growers for whom the requirement for nitrogen reporting is inappropriate.” The Coalition asks that the State Water Board recognize several comprehensive technical studies and the Coalition’s own NMP Summary Report analysis as the basis for exempting the Coalition Members from the proposed changes to reporting requirements in the Second-Staff Draft Order.

The results of both the 2016 *High Resolution Mapping the Central Valley*, completed as a foundational element of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) Basin Plan Amendment to manage nitrates and salts, and the recently completed a long-term assessment of past and current potential loading to groundwater on irrigated and natural lands across the entire Central Valley of California by Dr. Thomas Harter, Chair of Water Management and Policy, UC Davis Department of Land, Air, and Water Resources, **demonstrate applied nitrogen is not expected to seep below the root zone in amounts that would, even over multiple decades, reach groundwater at levels that would cause impairment.**

The results from the Coalition’s Nitrogen Management Plan (NMP) Summary Report Analysis for 2016 Crop Year, show growers already employing effective nitrogen management practices. Statistical analysis showed that for the top 10 crops, which cover 87% of irrigated acreage, nitrogen applications were generally within an average range, meaning they were within 25% of the median. Comparison with the University of California (UC) recommended nitrogen fertilizer application rates for specific crops, these results showed that the majority of nitrogen application rates fell within UC recommended ranges. For example, the vast majority of nitrogen fertilizer application rates on walnuts, which account for about 30% of the Coalition’s irrigated acreage, were within recommended ranges for all varieties and orchard ages.

Both the information on ambient groundwater quality conditions and nitrogen management application warrant the removal of the precedential nitrogen applied and removed requirements, directed by the Second-Staff Draft Order, for the Sacramento Valley.

Agricultural Expert Panel Did Not Direct Field Level Reporting

The first paragraph on Page 49, mischaracterizes the Agricultural Expert Panel when it states: “The Agricultural Expert Panel found that the AR data needed to be tracked at a field level to be meaningful.”

The Panel actually suggested two ways of defining a “reporting unit” with the explicit purpose of providing farmers with flexibility to group fields in a customized manner that makes operational sense. Specifically, the Agricultural Expert Panel states in *Section 4.5.2.ii Reporting Units*:

“The Panel recommends that the “reporting unit” be defined in one of two ways: (i) on a crop basis, which could include multiple fields that have similar soils, irrigation methods, irrigation water nitrate levels (not defined by the Panel), and irrigation/nitrogen management styles; alternatively, (ii) a reporting unit could be defined as an individual field. The Panel’s recommendation for grouping of multiple fields is more restrictive than the “nitrate loading risk unit” [Q2b] [Q13], or “management block” defined by Region 3.”

“The recommended reporting unit provides the flexibility to farmers to group fields in a customized manner so that it makes operational sense in part because multiple fields may receive nitrogen applications simultaneously but without the infrastructural means to separate their applications. It gives the flexibility to vary the field sizes between crops and seasons. It does not necessitate mapping or farm-scale spatial analysis.”

Therefore the State Water Board’s recommendation should **not be precedential** for the reporting requirements.

Agricultural Expert Panel Allows for Phasing

As the Second-Staff Draft Order states on Page 24, “The Agricultural Expert Panel Report left open the possibility that the concept of high vulnerability or similar risk-based category may be used for prioritization where requirements need to be phased in for sets of dischargers over time.” The exact language on Page 16 of the Agricultural Expert Panel report goes even further in the Coalition’s view stating “*The Panel recognizes that the State and Regional Water Boards have limited resources and are interested in prioritizing regulatory oversight and assistance according to the risk posed by discharges to the environment into which the discharge occurs.*” and providing justification for the State Water Board to eliminate many of the precedential recommendations.

The studies cited above show the risk posed by irrigated agricultural discharges in the Sacramento Valley will protect groundwater quality for decades to come. Like the Sustainable Groundwater Management Act’s (SGMA) underlying principal of subsidiarity, where the State performs only tasks which cannot be performed effectively at a more immediate or local level, the Coalition views this approach should also guide any recommendations of the State Water Board on development of the next generation of the irrigated lands program.

Surface Water Quality Monitoring Expert Panel

The surface water monitoring program for the Sacramento Valley is significantly different than in the Eastern San Joaquin. Unlike the Eastern San Joaquin, the Coalition does not rotate sampling to different monitoring sites. Rather we monitor the same sites each year. A total of 23 sampling sites were monitored by the Coalition and coordinating Subwatershed monitoring programs during 2016. These sites represent agricultural operations in the drainage which they are located.

Since 2005 only 0.3% of over 42,000 surface water quality analyses for pesticides have resulted in exceedances. Only 2.7% of toxicity testing – also over 12 years and 2331 toxicity tests- have shown an effect on aquatic organisms that are indicative of a healthy aquatic ecosystem. Often the Toxicity Indicator Evaluations (TIEs) conducted by the Coalition’s EPA accredited lab show toxicity is not from pesticides or materials used in agricultural operations.

Nearly 80% of the Coalition’s Surface Water Quality Management Plans are for field parameters - dissolved oxygen or pH - (40), *E. coli* (32), or salinity (27). The Coalition has completed 25 Management Plans for surface water quality in the last decade. There are only five (5) current Pesticide Management Plans in the Sacramento Valley.

In addition to surface water monitoring done by irrigated lands programs, there are monitoring efforts by waste water treatment plants, storm water, the State's Surface Water Ambient Monitoring Program (SWAMP), USGS, and other dischargers that adequately characterize surface water quality conditions. The Coalition participates with other dischargers in the Delta Regional Monitoring Program formed to develop water quality data necessary for improving understanding of Delta water quality issues related to pesticide, toxicity, pathogens, mercury and nutrients.

For the 2018 Monitoring year, the Central Valley Regional Water Quality Control Board is requiring Irrigated Lands Coalitions throughout the Central Valley to monitor for a new and expanded list of constituents – some of which have low levels of usage and/or have not been detected in the surface water for decades. This new monitoring program developed through a Pesticide Evaluation Protocol process, is providing greater assurance that surface water quality is protected. It has resulted in approximately a ten (10%) increase in surface water monitoring costs.

Given the comprehensive nature of surface water quality monitoring that has occurred for over 20 years in the Sacramento Valley, there is no need to establish a Surface Water Expert Panel in the Sacramento Valley Water Quality Coalition's view.

In conclusion, the Coalition, which includes 1.3 million irrigated acres between Solano County and the Oregon border, views that the precedential recommendations in the Second-Staff Draft Order will **not yield meaningful and high quality data to help better protect groundwater quality** in the Sacramento Valley. Characterization of groundwater quality conditions, potential impacts from agricultural discharges, and the appropriate regional framework to continue to make progress in protecting groundwater quality is already in place. Let the Coalition and its partners (UC Cooperative Extension, Resource Conservation District, etc.) continue its successful educational and outreach activities. Education, more than regulation, will be effective in protecting both surface and groundwater quality.

Sincerely,



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Northern California Water Association

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