



BEST BEST & KRIEGER
ATTORNEYS AT LAW

Indian Wells
(760) 568-2611
Irvine
(949) 263-2600
Los Angeles
(213) 617-8100
Ontario
(909) 989-8584

500 Capitol Mall, Suite 1700, Sacramento, CA 95814
Phone: (916) 325-4000 | Fax: (916) 325-4010 | www.bbklaw.com

Riverside
(951) 686-1450
San Diego
(619) 525-1300
Walnut Creek
(925) 977-3300
Washington, DC
(202) 785-0600

William J. Thomas
(916) 551-2858
wiliam.thomas@bbklaw.com
File No. 82231.00003

March 31, 2016



Via Email

commentletters@waterboards.ca.gov)

Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

**Re: Comments to A-2239(a)-(c)
(SWRCB Own Motion Review of the Eastern San Joaquin
General Order)**

Dear Ms. Townsend:

The Southern San Joaquin Valley Water Quality Coalition is a named party to the East San Joaquin General Order appeal and hereby responds to the extensive re-write of the East San Joaquin General Order in light of the State Board taking this Order up on its own motion and expressly stating on page 8 that it applies statewide.

“The discussed recommendations are appropriate not only for the Eastern San Joaquin Agricultural General WDRs, but also for the next generation of regional water quality control board (regional water board) agricultural regulatory programs statewide, and our conclusions in this precedential order apply statewide.”(Draft Order, page 8)

I. OVERARCHING ISSUES

1. The Order Requires Balance.

A. The General Order must strive for a reasonable balance and a reasonable pace. The State Board’s order expressly recognized the need to preserve the viability of agriculture; however, in our evaluation it seems the Order went beyond what is required to effectively protect the valley waters and, therefore, does in fact jeopardize the vitality of agriculture.



March 31, 2016

Page 2

B. The Order underscores the importance of complying with the Nonpoint Source Policy provisions requiring the achieving of water quality objectives. However, the Order also expressly recognizes that it may take considerable time to achieve full compliance with water quality limits and that compliance shall not be at every point at all times.

“While waste discharge requirements require compliance with the water quality objectives specified in the water quality control plans, such compliance need not be achieved immediately. . . It is not always necessary for the reasonable protection of beneficial uses that each water quality objective be met at each discrete point in time and space.” (Draft Order, p. 12) (Emphasis added.)

“The Sacramento Superior Court Ruling appears to read the revision as requiring only nominal improvements without a clear mandate to achieve the receiving water limitations over some defined timeframe. Although we disagree that the revision should be read in that manner, to the extent the Superior Court’s interpretation is affirmed on appeal, we note that the Eastern San Joaquin Agricultural General WDRs are clearer in mandating that discharges may not cause or contribute to exceedances of water quality objectives except where a clearly articulated program of management practice implementation with a finite time schedule is established.” (Draft Order, p. 15, footnote 44) (Emphasis added.)

C. There are recognizable and understandable limits on how extensive and how soon the state’s leading industry can make remarkable advancements in irrigation and crop nutrition when producing food in a biological environment. The Order recognized this difficult balance and the importance of coordinating with the water quality coalitions in regulating this industry.

“Nonpoint source discharges, such as irrigated lands discharges, pose unique challenges that are not easily addressed by strategies designed to address point source pollution.” (Draft Order, p. 12) (Emphasis added.)



March 31, 2016

Page 3

“Nonpoint sources are thus diffuse and are most effectively addressed by control of the sources of pollution, typically with implementation of management practices, rather than by attempts to treat the discharge at the multiple, and often indeterminate, number of discharge points. The Nonpoint Source Policy further recognizes that, ‘given the extent and diversity’ of nonpoint source discharges, the regional water boards must be creative and efficient in addressing nonpoint source pollution and may rely on third-party programs that are effective in reaching a large number of dischargers.” (Draft Order, p. 13) (Emphasis added.)

The State Board should therefore make strategic amendments to the Order so as to retain this reasonable balance.

D. The State Board recently (March 8, 2016) released written summaries of ex parte discussions they had with the Regional Board Chair, Executive Officer, and Regional Attorney, where it was expressed that the East San Joaquin General Order adopted per the ILRP was a product of considered analysis to achieve balance in respect to data collection, workload, and costs for farms, coalitions, and the Regional Board. They expressed considerable concern that these changes could even obviate the coalitions from continuing. This potential outcome was underscored by the Regional Board representatives. (State Board Summary of Regional Board Meeting, copy attached as Attachment 1.)

On March 14, 2016, the State Board released a subsequent submittal of correspondence from the Regional board (copy attached hereto as Attachment 2) wherein the Regional Board referenced the redundancies presented by this new Order that undermine the present balanced approach the Central Valley Regional Board has carefully charted.

“However, several of the mandates in the draft Order introduce costly redundancies that threaten to undermine a highly successful and carefully-balanced regulatory structure that was the product of over 10 years of stakeholder outreach. These include mandates that direct growers to report individual farm-level management plans to both their coalitions and the CVWB, and new mandates regarding nitrogen accounting.”

We embrace these concerns expressed by the Regional Board, and believe this appropriate balance can be restored to the Order with limited but important revisions.



March 31, 2016

Page 4

2. The East San Joaquin General Order goes well beyond the Central Coast Order which was before Judge Frawley.

A. The State Board believes that Judge Frawley even under-read the Central Coast Order.

“The Sacramento Superior Court Ruling appears to read the revision as requiring only nominal improvements without a clear mandate to achieve the receiving water limitations over some defined timeframe. Although we disagree that the revision should be read in that manner, to the extent the Superior Court’s interpretation is affirmed on appeal, we note that the Eastern San Joaquin Agricultural General WDRs are clearer in mandating that discharges may not cause or contribute to exceedances of water quality objectives except where a clearly articulated program of management practice implementation with a finite time schedule is established.” (Draft Order, p. 15, footnote 44) (Emphasis added.)

B. The State Board very appropriately pointed out in their proposed amendments that the Judge Frawley court had significantly under-interpreted the Central Coast Ag Waiver and that the ESJ Order as promulgated by the Regional Board had gone well beyond that coastal Ag Waiver in many ways. Among the differences are the following:

- (1) Groundwater monitoring
- (2) Role of coalitions
- (3) Reported nitrogen data, and summary of Management Practices Report components 17 and 18
- (4) Surface Water Exceedance Reports, Sect. V.D.
- (5) Sediment and Water Quality Management Plans, MRP, p. 26
- (6) Management Plans, Quality Assurance Plans, MRP, p. 26
- (7) Nitrogen Management Plan Templates, Section VI.B.



March 31, 2016

Page 5

The Central Valley Regional Board further expanded on this in their recent correspondence with the State Board (see Attachment 2).

"When the CVWB developed the ILRP, it considered a wide range of alternatives. This range of alternatives included scenarios where individual farms would submit data and plans directly to the CVWB for analysis and scenarios where all information would go to a coalition for summary reporting. In considering the alternatives, the CVWB weighed factors such as:

- Need for the information to protect water quality
- Compliance with the Nonpoint Source and Antidegradation Policies, as well as the Water Code
- Cost of obtaining the information
- Program effectiveness (how can we be most effective in program implementation?)
- Need to leverage local resources
- Board staffing to implement the program
- Need to collect "quality" data"

3. Comparison of the East San Joaquin Coalition Area and Tulare Lake Basin.

The Southern San Joaquin Coalition /Tulare Lake Basin area is remarkably different than the East San Joaquin coalition area in respect to water hydrology and water quality.

The multiple rivers in the East San Joaquin coalition flow directly to and through the delta and thereby mix with the San Joaquin and Sacramento River systems serving important habitat, protected species, many cities and then outflowing to the Pacific Ocean. The Tulare Lake Basin, however, is terminus as it has no outlet, serves no metropolitan areas, and has limited critical species. Similarly, the farming scope, crops, irrigation practices, water runoff, all differ remarkably. Therefore, the nature of the critical regulatory issues are significantly different between the basins.

The surface water quality issues are also remarkably different. The East San Joaquin Coalition area covers a similar number of irrigated acres as does only the Kings River Coalition component area, which is only approximately a third of the entire Southern San Joaquin Valley Water Quality Coalition/Tulare Lake Basin area. The State Board's Information Sheet on the East San Joaquin Order states that from 2004 to 2010 (six years) that area had 1602 exceedances of water quality objectives involving some 21 different separate constituents. Within the Kings River Watershed Coalition, the monitoring data supports the contention that the surface waters within the coverage area are not impacted by irrigated agriculture. This is due to the flat nature



March 31, 2016

Page 6

of the lands, the dryer climatic conditions, less development within the foothill regions, the lack of field discharge back to the water courses, and the adoption of precision irrigation. Also, the majority of the surface waters within the region are further protected by physical barriers eliminating surface runoff.

Detections of agricultural chemistries by KRWQC monitoring are limited to a couple of detections of chlorpyrifos, of which only 1 management plan has been triggered. Extended monitoring for that constituent has only found 1 additional exceedance, and companion Water Column Toxicity testing did not find any issues. The single additional chlorpyrifos detection was recorded at a separate site, and has not been repeated. Only a couple of other constituents have been detected at random intervals, and they were all below Basin Plan Objectives. This is a remarkable track record over 10 years considering the excess of 500,000 irrigated acres currently subject to the Kings General Order regulations.

Historically, there had also been isolated detections of legacy compounds DDT/DDD, which have not been used in agriculture for decades. Further, the Regional Board acknowledges that there are some EC, pH, DO issues down channel, which are due to limited flow, but these are not regarded to be an agricultural run-off issue as it is a hydrologic water stagnation issue.

On balance, over a 10-year period involving hundreds of monitoring episodes from many sites across the over half a million irrigated acres in the Kings River coalition area, there has only been a single management plan triggered for chlorpyrifos. This demonstrated remarkable water quality and is very disparate from the monitoring results from the other more northern coalitions. It also underscores that the Tulare Lake Basin Order does not require equal regulatory obligations.

II. SPECIFIC RESPONSES TO THE PROPOSED ORDER

1. Elimination of High and Low Vulnerability Areas

The distinction between high and low vulnerability areas has allowed prioritization of limited coalition expertise, staff and resources, and also assured that efforts would be directed to the most significant problematic areas.

We recognize Judge Frawley's directive to disregard such classifications which would "exempt" some growers from the regulatory requirements; therefore, the Order now includes all growers no matter how small or unlikely to make any significant difference in water quality. This, however, should not mean that the General Order cannot encourage coalitions to continue to prioritize their efforts, first concentrating on the most vulnerable areas. (Draft Order, p. 25; Appendix A, p. 20, Sects. IV.B.4 and 8)



March 31, 2016

Page 7

We accept the point that all growers - not just those in high vulnerable areas (Region 5) or Tier 1 lands (Region 3) - should be obligated to comply with the same obligations of those principally targeted operations. However, because this single regulatory amendments will increase the coalition's workload from two to fourfold this raises serious capacity and cost issues. Consequently, it seems wise to add clarifying provisions whereby the coalitions can prioritize their efforts focusing first on the most critical areas. Each Judge Frawley's decision and the Expert Panel did embrace the concept of worst first prioritization. Such prioritization was also expressly stated in respect to compliance with the Nonpoint Source Policy.

The Regional Board has expressed similar concerns regarding the workload should this new approach be implemented all at the same time. In Attachment 2, the Board points out that specifically as to the East San Joaquin area these 70,000 documents would be overwhelming.

"All members must develop certified INMPs, participate in outreach events, and submit INMP summary reports and farm evaluations to the Coalition annually. Coalition must transmit individual INMP summary reports and farm evaluations to the CVWB for review. [These requirements are currently limited to growers in high vulnerability areas, and duplicate reporting of raw data the CVWB is not required.]"

2. Field Level Monitoring.

The amended Order increased the scope of the data reporting significantly. First, it requires individual monitoring and reporting rather than representative monitoring, and not merely specific to the individual farm, but specific to each individual field.

"We find that the data required to be reported by the Members to the Third Party is generally appropriate, but direct several revisions, primarily with regard to nitrogen application reporting. With regard to reporting of the data from the Third Party to the Central Valley Water Board, we revise the General WDRs to require reporting of some of the data at a field-level." (Draft Order, p. 20) (Emphasis added.)

This will expand the existing monitoring and reporting between a hundredfold and a thousand fold. We also believe the State Board is not yet fully aware of the present extent of the monitoring, reporting, and management reported under the existing Central Valley Orders (including the East San Joaquin Order), particularly in respect to the presently developing MPEP Reports, which will actually be reduced to field level specificity, as discussed below in Section 11. (Draft Order, pp. 25, 27)



March 31, 2016

Page 8

3. Nitrogen Data by Field.

Our most significant concerns have to do with the new and extreme provisions mandating the reporting of nitrogen applied by field. This remarkable new requirement involves reporting nitrogen applied, nitrogen removed, nitrogen sequestered, and calculating a nitrogen applied/removed ratio, and then calculating the nitrogen applied – less the nitrogen removed, for each individual field. (INMP pp. 20-25)

4. Field Monitoring/Coalition Viability.

The Order compels moving from dealing with perhaps 10,000 growers to more than 100,000 individual grower fields, therefore, this obligation changes the character and scope of the Order in fundamental ways. This would be a virtually impossible task for the coalitions due to its scope and also because this new regulation also calls for this data to all also be duplicatively submitted to the Regional Board thereby this dramatically changes the relationship between the coalitions and its member growers.

Since 2004, for more than a dozen years, coalitions have lifted regulatory burdens from individual growers, and thereby the coalitions have also provided some important insulation between the growers and enforcement units of the Regional and State as well as from the very litigious environmental plaintiffs. The coalitions have been performing the monitoring, data analysis and summary, advising growers accordingly, and submitting data summaries. Under the present General Order, coalitions have been aggressively pursuing their membership outreach, submitting GARs, developing the newly required MPEP reports, and coordinating with many scientific professionals in crafting those reports so as to make those reports meaningful and effective.

However, pursuant to the new proposed Order, growers would now have to individually monitor and directly report as to all of their drinking water wells. Further, all the required new nitrate data (nitrogen applied, nitrogen removed, nitrogen applied less nitrogen removed, etc.) will all be required to be fully submitted to the Regional Board's public data domain.

The submittal of a hundred thousand farmer filed reports will be not just voluminous, but will have disparate quality and data consistency and utility problems. This will not just burden the Regional Board staff-wise, but will render the data scientifically unreliable.

The proposed Order as written would additionally obligate the coalition to engage extensive analysis of the several hundred thousand data points from tens of thousands of fields, merely for the convenience of the Regional staff because it does not serve any value to the member growers as all that same data will directly go to the enforcement and regulatory personnel at the Regional Board and to the environmental plaintiffs. Therefore, from a farmer



March 31, 2016

Page 9

member perspective, the coalition no longer offers him any benefit regarding the data development and analysis, and the coalition costs associated therewith will be viewed as needless to the farm operator.

The Regional Board also points out that field level reporting is not required and will be counterproductive.

"No Policy Analysis Justifying Need: The Nonpoint Source policy does not mandate field-level reporting; it simply requires "sufficient feedback mechanisms so that the [Regional Board], dischargers, and the public can determine whether the program is achieving its stated purpose." Nowhere has the draft Order supported a finding that the CVWB's ILRP falls short in this regard, and the CVWB suggests that the ILRP's demonstrated success in rectifying numerous water quality impairments points in the opposite direction. *[As shown in Table 2 and Figure 1 above, the ILRP has been very successful in addressing water quality concerns (management plan completion) under the current framework.]* (Attachment 2)

Therefore, the coalition members are not going to stand for the coalition charging them substantially for fussing with their data if their raw data is going to subsequently be submitted for others to evaluate and use against them. This new regulatory combination (extensive new data, increased responsibility, further analysis, meaningless coalition activity, increased costs, and increased farmer member jeopardy) is overkill and cannot be embraced by the coalitions because their members will not endure it. (Draft Order, pp. 33-37)

"Because the multi-year A/R ratio will provide a concrete, measurable, and reliable benchmark by which progress in reducing groundwater nitrate impacts can be determined, we find that the data should be reported to the Central Valley Water Board by field, identified by location." (Draft Order, p. 38)

Notwithstanding the direct submission of the raw data, the Order proposes additional coalition functions which involve conducting testing and research, summarize data, and establish coefficients for calculating nitrogen removed.

"We task the Third Party with conducting the appropriate testing and 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



March 31, 2016

Page 10

within the General WDRs' boundaries in time for use in the INMP Summary Reports due 1 March 2019 and 99% of the acreage in time for use in those due 1 March 2021 (with estimated coefficients based on similar crops being acceptable for crops covering the remaining 1%)." (Draft Order, p. 37)

"Submit them to the Central Valley water Board without aggregating or otherwise obscuring the INMP Summary Report data, so that the data for total nitrogen applied, total nitrogen removed, the ratio, and the difference are available to the Central Valley Water Board." (Draft Order, pp. 38-39, 40, 42)

"We direct the Third Party to evaluate the data, providing comparisons of the A/R ratio and A-R difference by crop type, and within crop type, by irrigation method, soil condition, and farming operation size. The Third Party must identify the mean and standard deviation and report values that are higher than one standard deviation removed from the mean." (Draft Order, p. 43)

Also, the coalitions are further tasked.

"Crop yield is multiplied by a coefficient determined via direct testing of the harvested materials. The nitrogen removed coefficient expresses the amount of nitrogen for a given crop per unit of crop yield." (Draft Order, pp. 34, 35)

"We task the third party with conducting the appropriate testing and research to determine the relevant coefficients for calculating nitrogen removed by crop." (Draft Order, p. 37)

The imposition of the research and testing to determine the appropriate coefficients for each commodity will be an incredible and expensive undertaking. The coalitions are unprepared to engage such research and, given the other amendments to the Order, grower members are unlikely to authorize their coalitions to incur such expenditures.

Similarly, the Order directs "the third party to continue to aggregate and analyze the data" and "identify the mean and standard deviation and report values that are higher than one standard deviation from the mean." (Draft Order, p. 43)



March 31, 2016

Page 11

The water quality coalitions have, for over a decade, been the exclusive monitoring entity and keeper of certain grower information, and were charged with creating reports, and developing data summaries. Under this new order, landowners would have to monitor all their drinking water wells, and submit that information directly to the Regional Board. The order would now additionally compel that all monitoring and other data would have to be submitted as a data dump to the Regional Board. Therefore, the coalitions would not provide any service or insulation to member growers, and this extensive burden and associated costs involved in summarizing such data would only be a “favor” to the Regional Board.

Because the coalitions will no longer offer growers a positive function in the monitoring and data submittals, most coalition members will not support the coalition engaging these data analyses and summarizing functions. The Regional Board will, therefore, have to deal directly with the land operators in not just well monitoring, but also in data reporting, and the Board will hereafter have to do all the summarizing and analysis.

These changes in the fundamental services provided to growers by the coalition will likely result in many growers retreating from membership, and thereby jeopardizing the coalition’s viability on the one hand due to declining membership, and may also give rise to the Regional Board’s decertifying the coalitions due to their not engaging the required summations which the State Board apparently wants.

The Regional Board (see Attachment 2) embellishes the view that the coalitions may no longer be able to provide this assistance to the Regional Board.

“Coalitions are “voluntary.” The draft Order undermines the usefulness and benefit of coalitions in the eyes of growers by requiring duplicate reporting and fostering a lack of confidence in coalition summaries. Consequently, growers may decide that participation in a coalition is not worth the higher fees that coalitions will have to impose to implement the draft Order. Coalitions very well may fold altogether, setting the ILRP back a decade and possibly requiring the CVWB to start over with a different framework entirely. (As part of the development of the EIR for the CVWB’s ILRP, the CVWB considered a regulatory framework without coalitions: “minimum” estimated staffing for such a program is 360 PY.)” (Emphasis added.)

The requirement of growers directly submitting nitrogen applied by field, calculating the N removed, and calculating the remaining N in the soil (A-R) to the Board, and all that becoming public information, will be met with further grower defiance (withdrawing from coalitions or underreporting) because many believe their investments in their crop (i.e. nutrients) are



March 31, 2016

Page 12

proprietary operational trade secrets, and reporting yields (their income) is sensitive business and personal information. We know the Board does not credit these management practices and business records as legally protected. However, the fact is that once the Board compels growers to report that into the public domain, many growers rightly believe these business records and information constitute commercially competitive and sensitive data, and they will not submit that information to coalitions so as to avoid making it public. This issue is a matter of business privacy rather than the Board's narrow view that such information is not legally proprietary. As a simple example: if you grow cumquats for Joe's Market, your primary competitor is your neighboring cumquat grower and what inputs, costs and techniques you employ is valuable competitive information which the competing grower may use to his advantage in his operational practices, or in the price he may demand for his cumquats. Release of that to his competition neighbor vitiates this competitive position.

The Regional Board also shares these concerns regarding the "data dump" on them from both a policy and logistic/cost perspective.

"Specific to the issue of transmittal of nitrogen management plans, farm plans, and farm specific data for each operation, the CVWB weighed the need for this information against costs, and whether the information is required by policy and law. In considering these factors the CVWB found that specific individual data (such as A/Y ratios and farm evaluations) are best transmitted to the coalitions and summarized for the CVWB, thus leveraging local resources in gathering good data, keeping costs down, and providing the information needed to protect water quality. Also, the CVWB was keenly aware that gathering individual information for 35,000 operations, spanning roughly 7 million acres, and multiple commodities, would overwhelm the CVWB's limited resources, could result in a situation where the information, once received by the CVWB, would simply "sit on the shelf," having not been properly reviewed by staff." [Attachment 2]

5. The Nitrogen Management Plan.

Each of the coalition members have to report nitrogen management plans and it is in these plans where the sensitive nitrogen A/R and A-R figures are calculated and reported.

"An INMP must include the information identified in Attachment B MRP Section VI.B to determine an Applied/Removed (A/R) ration for nitrogen, and an Applied-Removed (A-R) difference for nitrogen, as defined in the equations below....The A-R difference



March 31, 2016

Page 13

is the difference of total Nitrogen Applied and the total Nitrogen Removed. Total Nitrogen Removed shall be determined, in part, by multiplying a Member's crop yield by a crop-specific nitrogen coefficient, C_n, provided by the third-party, which represents the amount of nitrogen in the harvested crop." (Appendix A, pp. 28, 29, Sect. VIII.D; *see also* Total N applied, INMP 20; Total N removed, INMP 23; N Applied/Removed ratio, INMP 24; N Applied-N Removed, INMP 25)"

The chair of the State Water Board's Expert Panel, Dr. Burt recently testified before the California Department of Food and Agriculture, State Board of Food and Agriculture. Dr. Burt expressly stated that the State Board had apparently over-evaluated the Expert Panels position in respect to requiring the submittal of field specific nitrate applications and calculations deriving therefrom. His testimony is parallel to our position in that rather limited amendments to the Order in respect to release of such specific information is advisable.

The Regional Board (Attachment 2) also stated that the current Order compels interaction between coalitions and growers in respect to the nitrogen applied and nitrogen removed; therefore, the new amendments are not necessary.

"The Coalitions are required to report the A/R values back to the growers. In addition, the Coalitions will also provide additional data to the growers to make them aware of how their values compare to other growers. Finally, the Coalitions are also required to work with growers that have significantly higher ratios."

The Regional Board concluded (Attachment 2) that the prescriptive mandates proposed by the State Board disrupts what has been a progressive and effective regulatory system.

"Adopting such forward-looking policies, rather than mandating changes to existing orders, would give the CVWB and all other affected regions the opportunity to reconvene stakeholder outreach efforts in order to find cooperative means of integrating these policy goals into the next iterations of ILRP General Orders. In the view of the CVWB, mandating substantial and disruptive changes to existing successful regulatory programs does a disservice to water quality and to the communities of the Central Valley Region." (Attachment 2)



March 31, 2016

Page 14

6. Nitrogen Applied Less Nitrogen Removed.

As the new proposed order now introduces the mathematical equation of subtracting the nitrogen removed from the nitrogen applied, therefore many (some innocently and some by design) will assert that this difference in nitrogen is the amount of nitrogen that is going into the underlying groundwater aquifer.

First, we know from the Expert Panel and all other experts that in most places that transport time from field to aquifer may range from 25 to 40 years, or longer. What has not, however, been adequately developed is that during those many years, many factors further affect the nitrogen molecules as they make their way through the very extensive biologic, chemical, and physical processes taking place within that 200-800 foot downward multi-decade journey.

Below is a simplistic chart making that point.

Nitrogen Sources	Nitrogen Fate
N Fertilizer Applied	Nitrogen removed at harvest
N Manure/compost	Secondary crop removal of N
N Fixation (legumes)	N in secondary plant (woody)
N in irrigation water	
N carry over in soil	
	Surface run off
	Uptake by other vegetation
	Percolation of N in soil
	Denitrification
	Volatilization
	N Transformation
	Immobilization
	Residual tie-up to soil
	Nitrogen leached to groundwater

Therefore, if we are going to regulate this subtraction equation and make it public, focused care should be taken to stress the proper interpretation of such information. There are many factors as expressed above which result in the fact that much of the nitrogen remaining in the soil after harvest never leaches to groundwater.



March 31, 2016

Page 15

7. Crop Yield.

Once the coalition calculates the crop specific nitrogen coefficient, then the member must report his crop yield and nitrogen removed.

This further underscores that most of the duties now rest with the individual farmers, and coalitions are rendered far less significant.

“Once a Cn value has been established for a Member’s crop, the Member will report the crop yield and the Nitrogen Removed as determined by multiplying the crop yield by Cn in the INMP for current and previous years.” (Appendix A, pp. 28, 29; Sect. VII.D)

8. Monitoring Drinking Wells.

The regulation now calls for monitoring and reporting the quality of all drinking water wells.

“Due to the potential severity and urgency of health issues associated with drinking groundwater with high concentrations of nitrates, Members will be required to conduct testing and monitoring of all drinking water supply wells present on the Members’ property. If a well is identified as exceeding the MCL for nitrate, the Member must notify the Central Valley Water Board. That member, or the Central Valley water Board, must then notify users of the well in a timely fashion in accordance with the elements described in MRP section IV.A.” (Appendix A, p. 31, Sect. VII.E and p. 35, Sect. VIII.D)

The purpose of Drinking Water Supply Well Monitoring is to identify drinking water supply wells that have nitrate concentrations exceeding the MCL and obligates the notification of any well users of the potential for human health impacts.

“1. By December 31, 2016, Members must initiate sampling of private drinking water supply wells located on their property.

2. Members must either (1) conduct two rounds of initial drinking water supply well monitoring during the first year, or (2) submit existing drinking water supply well sampling data, provided sampling and testing for nitrates was



March 31, 2016

Page 16

completed using EPA approved methods at least twice within the last 5 years. Initial rounds of drinking water supply well sampling shall be conducted once during the fall (September-December) and once during the spring (March-June), and every five years, thereafter, if the nitrate concentration is below 8 mg/L nitrate+nitrate as N.

3. Groundwater samples must be collected using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols.
4. Laboratory analyses for groundwater samples must be conducted by an Environmental Laboratory Accreditation Program State certified.
5. All drinking water supply well monitoring data are to be submitted electronically to the State Water Board's Geo Tracker Database and to the Central Valley Water Board.
6. If groundwater monitoring determines that water in any well that is used for or may be used for drinking water exceeds 10 mg/L of nitrate+nitrate as N, the Member or third-party must provide notice to the Central Valley Water Board within 24 hours of learning of the exceedance. For wells on a Member's property, the Central Valley Water Board will require that the Member notify the users within 10 days." (Attachment B, MRP, pages 14-15, Sect. IV.A.) (Emphasis added.)

The requirement that the grower must monitor the drinking water wells on his property and notify residents if they are over certain critical nitrogen levels was lifted from the Central Coast Ag Waiver, and therefore has been previously embraced by the State Board. However, it should be recognized that only a subset of these valley wells are actually on grower property. Consequently, well monitoring is more properly addressed in the drinking water/health arena so as to involve all such drinking water wells, rather than only the few which are on farm lands. Moreover, the newly released SGMA regulations also expressly call for the monitoring of all wells. This therefore constitutes needless regulatory overlap, and the agricultural order should defer to the broader state interests (i.e., health and groundwater).



March 31, 2016

Page 17

The Regional Board in Attachment 2 also concurs that this is a broader issue which could be more appropriately and effectively handled through the new State Water Board drinking water program coordinating with the network of local health departments.

“CVWB Impact: With about 35,000 farms region-wide and 2+ wells on average, there will be greater than 100,000 new data points generated per year. The CVWB would need significant resources to review this data in a timely manner and to conduct the needed follow-up to ensure that public health is protected. Table 5 (below in Economic and Programit Discussion) estimates the minimal staffing needed to implement this requirement effectively. Also, in other regions (e.g., the Central Coast Water Board), there are County Health Department programs/resources in place to help facilitate, outreach, and provide this sampling; this is not necessarily the case throughout the Central Valley. In many areas, the Board would need to take a lead role to ensure the data collected is high quality, and representative of conditions (outreach and training needs). This will be such a major draw on resources, especially when considering the number of small farms, that the CVWB would not have the capacity to handle this requirement effectively. The State Water Board should consider leveraging the capacities of the Division of Drinking Water and local public health departments.”

The drinking water well monitoring and reporting requirement is for the landowner to monitor and report the drinking water well data and to notify the Regional Board and the landowner's tenants if the results show the nitrate levels approached the nitrate limits. All these obligations are directly upon the landowner. Notwithstanding that the above regulatory provisions are directed to the landowners, the Report Component (17) mandates that the coalition must summarize these drinking water well reports, which they do not themselves take and identify these user notifications, which they do not engage, and of which they have no record.

“Report Component (17) – Summary of Drinking Water Supply Well Monitoring

The third-party must summarize the results of drinking water supply well monitoring which shall, at a minimum, include the number of drinking water supply wells tested, the number of notifications of exceedances, any locational trends associated with exceedance notifications, and any trends of increasing or



March 31, 2016

Page 18

decreasing concentrations in drinking water supply wells.”
(Attachment B, MRP, page 26, Report 17)

This requirement is therefore misplaced because it is the landowner taking these samples and reporting the results and providing such notice, not the coalitions.

Nitrate is the most common element in our universe and thereafter soil has many nitrogen sources, several of which are within the State Board’s jurisdiction. Therefore, it is important for this program to engage some effort to identify the nitrogen source (i.e., septic, sewer, animal, atmosphere, rock, dairy, manure, crop fertilization, etc.) so as to focus appropriate responsibility and regulatory response. The Regional Board recognized this in their responses to the Board (Attachment 2).

“We are concerned that this requirement is solely focused on one discharge category (such monitoring requirements are not required for any other discharger type or individual domestic well holder), and that the CVWB will be unable to meet this requirement with current resources. In addition, the CVWB suggests that, by solely addressing nitrates the State Water Board may foreclose the development of more holistic approaches that would also address common constituents that are equally harmful to public health...”

“Finally, there is no discussion of the need for source identification, thereby neglecting to consider other possible sources of nitrate contamination, including functioning or failed septic systems. Instead of implementing this requirement through waste discharge requirements, the CVWB believes this type of program should be implemented through a much broader, statewide approach that would involve domestic drinking well owners, the Division of Drinking Water, and local public health departments.”

The Regional Board (Attachment 2) further underscores these concerns.

“All the Coalitions within the CVWB are tasked with developing accurate coefficients to translate the A/Y values to A/R values. This was done to ensure a consistent application of coefficients throughout the region, and to ensure the coefficients were developed based on adequate and proper research and scientific studies. The CVWB believes that having growers make individual nitrogen-removed calculations will introduce more error into this



March 31, 2016

Page 19

process. More error would result in higher outreach costs and poor data quality, which would render the program ineffective.”

9. Expansion to Regulating and Reporting Irrigation.

The revised Order newly introduces the concept of regulating farm irrigation. We understand that the Expert Panel held that the percolation of irrigation water may be a driver of transporting nitrates and salts deeper into the soil profile, and thereby perhaps to the underlying aquifers. We, therefore, do not generally challenge this new regulatory feature. Because, however, the Order does not develop this requirement in detail we anticipate it only intends to report irrigation method, irrigation rate, and timing.

“We first add several required planning elements to facilitate crop irrigation management planning, including consideration of irrigation method, crop evapotranspiration, and anticipated crop irrigation. The Agricultural Expert Panel emphasized that nitrogen management must be done hand-in-hand with irrigation management, pointing out that water movement through the soil is the mechanism for nitrate transport.” (Draft Order, pp. 32-33)

10. Coalitions Instructing Members How to Farm.

A. It will further be regarded as sensitive and concerning to members that the proposed Order compels the coalitions to instruct their members that they are farming improperly by over-applying nitrogen.

“The Third Party must inform such Members that they are potentially over-applying nitrogen to their fields. Following receipt of notification, these Members must either attend additional INMP self-certification training in person or work with an irrigation and nitrogen management plan specialist for certification of the next INMP prepared following notification.” (Draft Order, p. 43)

Such compliance/enforcement functions are improper for the Board to impose on coalitions as enforcement is the role of the regional boards.

11. MPEP

The proposed order adds additional provisions to the MPEP program.



March 31, 2016

Page 20

“The goal of the Management Practice Evaluation Program (MPEP) is to evaluate the effectiveness of irrigated agricultural practices with regard to groundwater quality. A MPEP must address the constituents of concern described in the GAR.”

(Attachment B, MRP, page 17, Sect. IV.C.) (Emphasis added.)

The MPEP program is referenced in the revised Order; however, because those extensive MPEP programs are just being finalized at the present time it is quite understandable that the State Board does not yet fully understand that many of the objectives the State Board was apparently striving for by their revisions are presently in development in these emerging programs. Because they are emerging from the present Order, this renders some of the new proposed extreme provisions unnecessary and underscores the position which the Regional Board has itself asserted that the State Board has disregarded and pushed aside the regulatory balance which was not recognized in the aggressive approach the State Board has advanced.

The Regional Board (Attachment 2) underscores the developing MPEP program and points out that this is more effective than the proposed A/R target analysis standing alone.

“Policy Impact: Setting an A/R target ratio does not equate to protecting water quality. The CVWB’s ILRP has a process in place to conduct representative groundwater monitoring to equate on-farm A/R target ratios with water quality protection: the Management Practices Evaluation Program (MPEP). This process will take time, but it is the key to achieving the goals of protecting water quality, setting protective A/R targets, and ensuring consistency with the Nonpoint Source Policy and Water Code. Setting A/R target ratios without the MPEP process ignores the need to understand the effects on nitrogen leaching to groundwater. Also, the draft Order is silent on integrating farm management with nutrient management and monitoring to determine what is truly effective at protecting WQ while allowing a grower to maintain a viable farming business. The MPEP serves this function.”

12. Farm Size Classifications.

The proposed ESJ Order classified farm size as small (less than 60 acres), medium (60-250 acres), and large (more than 250 acres). This will change remarkably by geographic area. This compels that each of the other Central Valley coalitions will need to have separate hearings on their General Orders and make adjustments in several of the General Order components well beyond just the inapplicable acre classifications. (Appendix A, p. 10, Sect. 37)



March 31, 2016

Page 21

13. Cost Evaluation and Environmental Impact

The amendments are very extensive in scope, impact, obligation and costs. The new dramatic responsibilities and impacts will be to each the farmer dischargers, the water quality coalitions, and to the Regional Board. As discussed, there are major new obligations on growers in the field, in monitoring and directly reporting. The proposed and somewhat duplicative obligations on coalitions may fundamentally change what coalitions may be able to perform or if the growers will continue to support the coalition approach. The Regional Board will no longer just be analyzing somewhat limited surface water data and summarized reports, but will now be dealing with surface and groundwater raw data submitted by thousands of different dischargers and they will be obligated to compile, analyze, and summarize all of that by their staff or contracting these functions out. This will collectively magnify the responsibilities of each of the these parties (growers, coalitions, Regional Board) in significant ways. These fundamental changes will, therefore, also trigger new environmental analyses and new staff and cost analyses. Clearly, the cost analysis in the staff document of \$113-\$118 per acre is widely incorrect.

The Regional Board also asserts that the costs associated with the State Board's amendments are overwhelming on growers, coalitions and the Regional Board. They project the grower/coalition cost across only Region 5 will approach \$18 million derived from their projection of a 50% increase in coalition costs. They did not address the Regional staff cost increases to cover going from 18.7 PYs to 90 PYs. As far as program cost drivers, Table 4 targets a total of \$2.9 million. We believe each of these projections underestimates the grower and coalition costs.

Table 3 Increases in grower and Coalition costs per acre/year (does not include Water Board staff – any increase in staffing will lead to higher state fees.)

East San Joaquin*	Current Cost	Post Order Cost	Change/yr (ESJ)	Change/yr (region)
Administration	\$ 0.85	\$ 1.28	\$ 300,000	\$ 2.4 million
Education	\$ 0.68	\$ 1.24	\$ 390,000	\$ 3.1 million
Farm plans	\$ 0.71	\$ 0.84	\$ 90,000	\$ 730,000
Monitoring/reporting/tracking	\$ 3.66	\$ 5.70	\$ 1.4 million	\$ 11.4 million
Management practices	\$ 113.34	\$ 113.34	\$ 0	\$0
Total	\$ 119.24	\$ 122.40	\$ 2.2 million	\$ 17.7 million

*Costs from Programmatic EIR; assumes 50% increase in coalition administration costs

Table 4. Summary of increased cost drivers in Draft Order requirements

Annual Grower Costs	Current Cost (ESJ)	Draft Order Cost (ESJ)	Draft Order Cost (region)
Domestic well monitoring (Year 1)*	\$ 0	\$ 2.1 million	\$ 18 million
Domestic well monitoring (Post-Year 1)*	\$ 0	\$ 390,000	\$ 3.3 million
Certified INMPs**	\$ 740,000	\$ 1.4 million	\$ 11 million
Outreach Attendance**	\$ 470,000	\$ 860,000	\$ 7 million



March 31, 2016

Page 22

Farm Planning (FE, SECP, NMP)**	\$ 490,000	\$ 580,000	\$ 6.2 million
NMP Summary Report**	\$ 360,000	\$ 660,000	\$ 2.9 million

Table 5. Minimal Staffing Needs to Implement the Draft Order in the Central Valley

Minimum Staffing Needs to Implement Draft Order Central Valley-wide	Current PYs	Post Order PYs (minimum)
Central Valley ILRP staff (for entire region)	18.7	90* [at staff to irrigated lands acreage ratio similar to R3's current program]

*90 PYs = more than all Regional Boards' ILRP staff combined. In the development of the program, the CVWB considered the staffing needs for comprehensive data submittals directly to the CVWB and found that the burden and costs of obtaining/reviewing the information outweighed the need for the data when considering potential benefits to water quality.

The ESJ General Order was developed through an extensive stakeholder process, EIR, and economic analysis over multiple years. In contrast, the draft Order has been developed without the benefit of this exchange, and has not adequately estimated the potential costs and program impacts of the proposed changes. Also, there is no meaningful environmental or cost analysis justifying such far-reaching changes.”

Table 2. Current CVWB ILRP Cost and Summary of Successful Management Plans

	East San Joaquin Coalition	Central Valley coalitions
Cost of ILRP	\$2.8 million*	>\$23 million
Management Plans developed	216	873
Management Plans completed	48	141
Surface Water monitoring	>50,000 data points	>300,000 data points

(Attachment 2)

14. Omissions from the Order.

The SWRCB's extensive re-write of the East San Joaquin General Order took considerable effort to respond to each of the recent related developments which have arisen since the original promulgation of the East San Joaquin Order. Those included the Expert Panel Report, and Judge Frawley's decision, etc. The Order is, however, incomplete in its acknowledgment of new relevant developments as there are other developments which directly overlap, duplicate, or parallel the water quality issues involved in the Order. The Order should not selectively address only a couple of related collateral matters which have arisen. Examples of other significant factors which were ignored include:

A. Sustainable Groundwater Management Act (SGMA)



March 31, 2016

Page 23

Regulations have now been circulated which list water quality as one of the six primary purposes under SGMA which must be addressed by the new groundwater sustainable agencies.. There should be specific reference to this in the East San Joaquin General Order and the other trailing General Orders by acknowledging that SGMA and the emergence of the local GSAs will have to be harmonized with the General Order and vice versa. Among the several overlap examples pursuant to SGMA is that each GSA must monitor every groundwater well in their area which is supplying drinking water.

B. The CV-SALTS Program has been actively addressing the regulation of water quality with particular focus on Central Valley groundwater quality. A critical problem has been identified in that there is inadequate regulatory flexibility to deal with areas with existing impacted water quality and therefore there is no assimilative capacity. Therefore, the CV-SALTS effort is nearing its completion whereby new regulatory flexibility will be developed. That will be taking the form of Analysis Zones (IAZs), offsets, conditional exceptions, or otherwise. The East San Joaquin General Order should, at the very least, acknowledge this process is near conclusion and the likelihood that new regulatory avenues will likely arise and those will have to be folded into the Board's oversight and the coalitions' management.

C. Similarly, the CV-SALTS program has been addressing the problems with salinity, particularly in the Tulare Lake Basin, and the program is moving towards establishing regulatory and basin plan flexibility in that regard. This particular item should be incorporated into the Tulare Lake Basin General Orders, but we raise it here because it is not yet certain if the other coalition areas will be afforded separate meaningful hearings or amendments regarding their General Order development.

Sincerely,

A handwritten signature in blue ink, appearing to read "will thomas".

William J. Thomas
for BEST BEST & KRIEGER LLP

WJT:lmg

Attachments

Cc: Felicia Marcus, Board Chair
Frances Spivy-Weber, Vice Chair
Dorene D'Adamo, Board Member
Steven Moore, Board Member
Tam Doduc, Board Member
Tom Howard, Executive Officer

**STATE WATER RESOURCES CONTROL BOARD
EX PARTE COMMUNICATIONS REGARDING PENDING GENERAL ORDERS
DISCLOSURE FORM**

Note: This form is intended to assist the public in providing the disclosure required by law. It is designed to document meetings and phone calls. Written communications may be disclosed by providing a complete copy of the written document, with attachments. Unless the board member(s) provided you with a different contact person, please send your materials to: commentletters@waterboards.ca.gov
Use of this form is not mandatory.

1. Pending General Order that the communication concerned:

In the matter of Review of General Order No. R5-2012-0116, SWRCB/OCC Files A-2239(a)-(c)

2. Name, title and contact information of person completing this form:

Note: Contact information is not mandatory, but will allow the Water Board to assist you if additional information is required. If your contact information includes your personal residence address, personal telephone number or personal email address, please use a separate sheet of paper if you do not want that information posted on our website. However, this information may be provided to members of the public under the Public Records Act.

Dr. Karl Longley, Pamela Creedon, Clay Rodgers, Patrick Pulupa, Andrew Deeringer

3. Date of meeting, phone call or other communication: February 25, 2016

Time: 3:05pm

Location: Sacramento Regional Sanitation District offices

4. Type of communication (written, oral or both): Oral

5. Names of all participants in the communication, including all board members who participated:

Dr. Karl Longley, Pamela Creedon, Clay Rodgers, Patrick Pulupa, Andrew Deeringer, Dorene D'Adamo

6. Name of person(s) who initiated the communication:

Dr. Karl Longley

7. Describe the communication and the content of the communication. *Include a brief list or summary of topics discussed at the meeting, any legal or policy positions advocated at the meeting, any factual matters discussed, and any other disclosure you believe relevant. The Office of Chief Counsel recommends that any persons requesting an ex parte meeting prepare an agenda to make it easier to document the discussion properly. Attach additional pages, if necessary.*

See attached

8. **Attach a copy of handouts, PowerPoint presentations and other materials any person used or distributed at the meeting. If you have electronic copies, please email them to facilitate web posting.**

ATTACHMENT TO EX PARTE DISCLOSURE

Contents of communication with State Water Board member Dorene D'Adamo
(2/25/16, 3:00pm)

Central Valley Water Board executive management and legal counsel raised the following concerns regarding the State Water Board's draft order:

- Existing Irrigated Lands Regulatory Program (ILRP) orders represent carefully considered trade-off by the Central Valley Water Board between the utility of additional data collection and reporting, on the one hand, and increased workload and costs, on the other. The draft order does not acknowledge that any such trade-off is necessary.
- Budgetary and workload/staffing implications for the Central Valley Water Board in connection with reviewing additional reports.
- Cost implications for growers and coalitions from increased deliverables and increased water quality fees, including but not limited to some coalitions disbanding entirely.
- Significant increased difficulty in obtaining cooperation from growers and coalitions, in a program where such cooperation is essential to program effectiveness.
- Inadequate detail or findings for directive to revisit representative monitoring program.
- Diminished role of coalitions as a result of proposed changes.

**STATE WATER RESOURCES CONTROL BOARD
EX PARTE COMMUNICATIONS REGARDING PENDING GENERAL ORDERS
DISCLOSURE FORM**

Note: This form is intended to assist the public in providing the disclosure required by law. It is designed to document meetings and phone calls. Written communications may be disclosed by providing a complete copy of the written document, with attachments. Unless the board member(s) provided you with a different contact person, please send your materials to: commentletters@waterboards.ca.gov

Use of this form is not mandatory.

1. Pending General Order that the communication concerned:

In the matter of Review of General Order No. R5-2012-0116, SWRCB/OCC Files A-2239(a)-(c)

2. Name, title and contact information of person completing this form:

Note: Contact information is not mandatory, but will allow the Water Board to assist you if additional information is required. If your contact information includes your personal residence address, personal telephone number or personal email address, please use a separate sheet of paper if you do not want that information posted on our website. However, this information may be provided to members of the public under the Public Records Act.

Dr. Karl Longley, Pamela Creedon, Adam Laputz, Patrick Pulupa, Andrew Deeringer

3. Date of meeting, phone call or other communication: 3/11/2016

Time: 8:28p

Location: N/A (by email)

4. Type of communication (written, oral or both): Written

5. Names of all participants in the communication, including all board members who participated:

Tam Doduc, Steven Moore, Felicia Marcus, Dorene D'Adamo

6. Name of person(s) who initiated the communication:

Andrew Deeringer

7. Describe the communication and the content of the communication. *Include a brief list or summary of topics discussed at the meeting, any legal or policy positions advocated at the meeting, any factual matters discussed, and any other disclosure you believe relevant. The Office of Chief Counsel recommends that any persons requesting an ex parte meeting prepare an agenda to make it easier to document the discussion properly. Attach additional pages, if necessary.*

See Attachment

8. **Attach a copy of handouts, PowerPoint presentations and other materials any person used or distributed at the meeting. If you have electronic copies, please email them to facilitate web posting.**

Draft State Board Order Addressing Petition of East San Joaquin ILRP General Order

The Central Valley Water Board (CVWB) maintains that its Irrigated Lands Regulatory Program (ILRP), including the General Order issued to the East San Joaquin (ESJ) Coalition, fully complies with all applicable legal requirements, including the State Water Board's Nonpoint Source Policy and the Antidegradation Policy. Therefore, it would appear that the proposed mandates in the draft State Water Board Order (draft Order) primarily reflect the State Water Board's policy interest in adding "greater specificity and transparency" to the CVWB's ILRP and to similar programs undertaken by other Regional Boards.

However, several of the mandates in the draft Order introduce costly redundancies that threaten to undermine a highly successful and carefully-balanced regulatory structure that was the product of over 10 years of stakeholder outreach. These include mandates that direct growers to report individual farm-level management plans to both their coalitions and the CVWB, and new mandates regarding nitrogen accounting. Since these mandates neither provide any ascertainable water quality benefits over the near-term, nor do they respond to legal deficiencies in the current set of General Orders, it is the opinion of the CVWB that these mandates are not warranted. In this briefing document, the CVWB describes its rationale for opposing several mandates currently under consideration in the draft Order. Because the draft Order is precedential, the following discussion includes potential impacts to both the ESJ Coalition and to the entire ILRP.

When the CVWB developed the ILRP, it considered a wide range of alternatives. This range of alternatives included scenarios where individual farms would submit data and plans directly to the CVWB for analysis and scenarios where all information would go to a coalition for summary reporting. In considering the alternatives, the CVWB weighed factors such as:

- Need for the information to protect water quality
- Compliance with the Nonpoint Source and Antidegradation Policies, as well as the Water Code
- Cost of obtaining the information
- Program effectiveness (how can we be most effective in program implementation?)
- Need to leverage local resources
- Board staffing to implement the program
- Need to collect "quality" data

Specific to the issue of transmittal of nitrogen management plans, farm plans, and farm specific data for each operation, the CVWB weighed the need for this information against costs, and whether the information is required by policy and law. In considering these factors, the CVWB found that specific individual data (such as A/Y ratios and farm evaluations) are best transmitted to the coalitions and summarized for the CVWB, thus leveraging local resources in gathering good data, keeping costs down, and providing the information needed to protect water quality. Also, the CVWB was keenly aware that gathering individual information for 35,000 operations, spanning roughly 7 million acres, and multiple commodities, would overwhelm the CVWB's limited resources, could result in a situation where the information, once received by the CVWB, would simply "sit on the shelf," having not been properly reviewed by staff.

However, while the CVWB placed the burden on the coalitions to aggregate and summarize farm-specific data and plans, the CVWB was also adamant that the coalitions provide all data to the CVWB upon request, should the CVWB deem such information necessary for focused compliance audits. All of the ILRP Orders contain provisions effectuating this concept. Ultimately, the CVWB found that this framework met the requirements of the Nonpoint Source Policy and Water Code. While growers and coalitions argued that all farm-specific data be kept confidential, the CVWB rejected these arguments and instead based its decision on the above factors.

Ultimately, the CVWB is respectful of the policy direction contained in the draft Order. However, it is the opinion of the CVWB that there are better ways to implement this policy direction. For instance, it is well within the

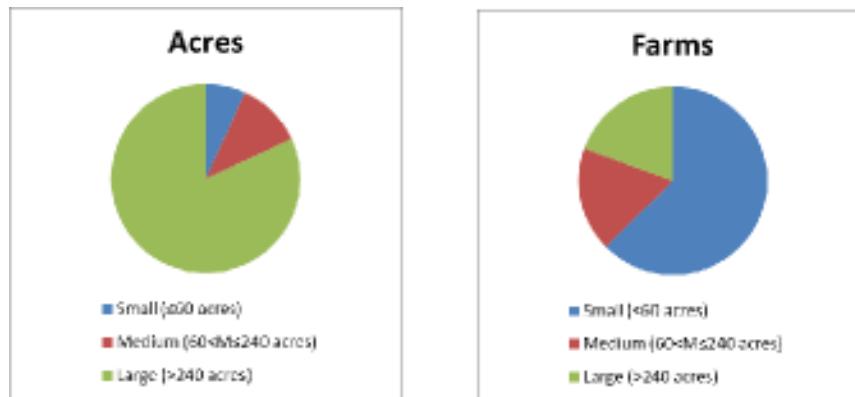
State Water Board's authority to adopt statewide policies that require greater individual grower accountability or that promote specific means of on-farm nitrogen accounting practices. Adopting such forward-looking policies, rather than mandating changes to existing orders, would give the CVWB and all other affected regions the opportunity to reconvene stakeholder outreach efforts in order to find cooperative means of integrating these policy goals into the next iteration of ILRP General Orders. In the view of the CVWB, mandating substantial and disruptive changes to existing successful regulatory programs does a disservice to water quality and to the communities of the Central Valley Region.

IRRIGATED LANDS REGULATORY PROGRAM BACKGROUND

Table 1. Farm size in Central Valley Region

Size	Farms	Acres
Small (≤ 60 acres)	21,368	528,295
Medium ($60 < M \leq 240$ acres)	6,132	871,150
Large (> 240 acres)	6,627	6,347,150

*From Programmatic EIR; acreage estimates have changed but relative distribution should hold



- Table 1 shows the number of small farms is almost twice that of medium and large farms combined. Smaller farms require more CVWB staff resources for compliance and outreach, especially when there are language barriers and if growers don't join the coalitions.
- The ESJ General Order was developed through an extensive stakeholder process, EIR, and economic analysis over multiple years. In contrast, the draft Order has been developed without the benefit of this exchange, and has not adequately estimated the potential costs and program impacts of the proposed changes. Also, there is no meaningful environmental or cost analysis justifying such far-reaching changes.
- Current annual cost to the ESJ Coalition is about \$2.8 million, which does not account for management practice implementation, reporting or grower time for outreach and training.
- The ESJ Coalition has successfully addressed a significant number of the surface water quality exceedances through the implementation of management plans (see Table 2 below).
- The ESJ Coalition has collected over 50,000 surface water data points since the start of the ILRP.

Table 2. Current CVWB ILRP Cost and Summary of Successful Management Plans

	East San Joaquin Coalition	Central Valley coalitions
Cost of ILRP	\$2.8 million*	>\$23 million
Management Plans developed	216	873
Management Plans completed	48	141
Surface Water monitoring	>50,000 data points	>300,000 data points

*Cost based on grower fees collected by ESJ Coalition.

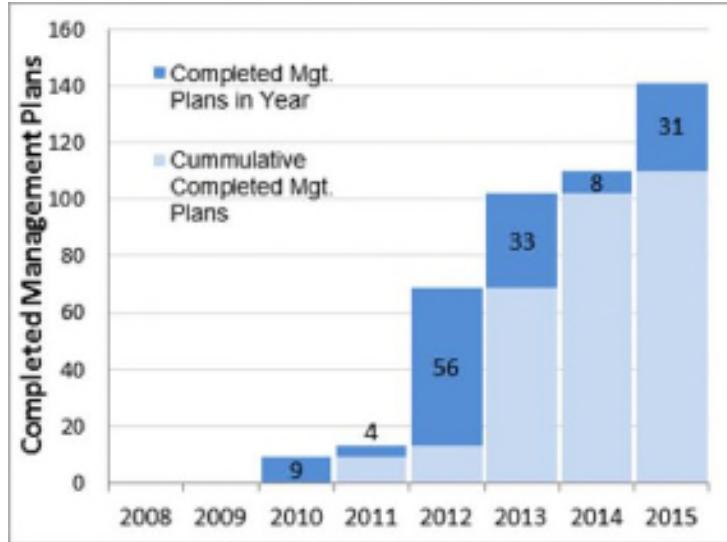


Figure 1: Surface water quality problems successfully

addressed DRAFT STATE WATER BOARD ORDER – NEW REQUIREMENTS

Draft requirements of the draft Order are discussed below (underlined text); with following bullets providing effects and concerns of these requirements.

All members must monitor all domestic wells with data reviewed by CVWB. CVWB must also conduct follow-up to ensure safe drinking water. [ILRP does not currently require domestic well monitoring.]

- **CVWB Impact:** With about 35,000 farms region-wide and 2+ wells on average, there will be greater than 100,000 new data points generated per year. The CVWB would need significant resources to review this data in a timely manner and to conduct the needed follow-up to ensure that public health is protected. Table 5 (below in Economic and Programmatic Discussion) estimates the minimal staffing needed to implement this requirement effectively. Also, in other regions (e.g., the Central Coast Water Board), there are County Health Department programs/resources in place to help facilitate, outreach, and provide this sampling; this is not necessarily the case throughout the Central Valley. In many areas, the Board would need to take a lead role to ensure the data collected is high quality, and representative of conditions (outreach and training needs). This will be such a major draw on resources, especially when considering the number of small farms, that the CVWB would not have the capacity to handle this requirement effectively. The State Water Board should consider leveraging the capacities of the Division of Drinking Water and local public health departments.
- **Policy Impact:** The CVWB supports the Human Right to Water and will continue to work with Disadvantaged Communities to ensure there is access to safe drinking water. However, while the CVWB clearly understands and appreciates the need to address this important public health issue, we are concerned that this requirement is solely focused on one discharger category (such monitoring requirements are not required for any other discharger type or individual domestic well holder), and that the CVWB will be unable to meet this requirement with current resources. In addition, the CVWB suggests that, by solely addressing nitrates, the State Water Board may foreclose the development of more holistic approaches that would also address common constituents that are equally harmful to public health such as pathogens, pesticides, arsenic, chromium VI, etc. Finally, there is no discussion of the need for source identification, thereby neglecting to consider other possible sources of nitrate contamination, including functioning or failed septic systems. Instead of implementing this requirement through waste discharge requirements, the CVWB believes this

type of program should be implemented through a much broader, statewide approach that would involve domestic drinking well owners, the Division of Drinking Water, and local public health departments.

- *Cost Impact:* Tables 3 and 4 (below in “Economic and Programmatic Discussion”) summarizes the cost impact of gathering this information, conducting outreach and training, and other requirements. Note that the growers and the coalition will need to absorb substantial increased costs associated with the draft Order. The draft Order is silent on these costs.

All members must develop certified INMPs, participate in outreach events, and submit INMP summary reports and farm evaluations to the Coalition annually. Coalition must transmit individual INMP summary reports and farm evaluations to the CVWB for review. [These requirements are currently limited to growers in high vulnerability areas, and duplicate reporting of raw data the CVWB is not required]

- *CVWB Impact:* Under the draft Order, there would be approximately 35,000 farms or about 70,000 documents for the CVWB to review annually w/ approximately 18 PY. It would be infeasible to review all that data with current resources. When adopting the ILRP Orders, the CVWB seriously weighed the burden associated with a wide variety of data collection and reporting options, relative to the water quality benefits associated with these different options. The CVWB believes that the reporting requirements established in the existing ILRP will indeed provide the CVWB with the information needed to determine the effectiveness of its program to address water quality concerns. We do not agree additional data for the sake of collecting the data is warranted. The draft Order requires that the CVWB use the newly-obtained data to verify accuracy of Coalition submittals and appropriateness of Coalition actions. Currently, CVWB does not have staffing, programmers, or data managers to complete this task, nor do we have financial resources to contract out for this work. Under the current CVWB ILRP General Order, the coalitions collect, compile and analyze a vast amount of data, and then report this data in a format that allows the CVWB to both efficiently evaluate areas of concern and mandate improved practices in such areas. At any time, the CVWB has full access to all the data. Further, the current ILRP allows for Board audit and reasonable targeted analysis which leverages coalitions, allows for enforcement, and is not overly burdensome and costly. Table5 (below) estimates the minimum staffing needs for the CVWB to implement the draft Order Valley-wide.
- *No Policy Analysis Justifying Need:* The Nonpoint Source policy does not mandate field-level reporting; it simply requires “sufficient feedback mechanisms so that the [Regional Board], dischargers, and the public can determine whether the program is achieving its stated purpose.” Nowhere has the draft Order supported a finding that the CVWB’s ILRP falls short in this regard, and the CVWB suggests that the ILRP’s demonstrated success in rectifying numerous water quality impairments points in the opposite direction. *[As shown in Table 2 and Figure 1 above, the ILRP has been very successful in addressing water quality concerns (management plan completion) under the current framework]*
- *Rubber-Meets-Road Program Concerns:* Coalitions are “voluntary.” The draft Order undermines the usefulness and benefit of coalitions in the eyes of growers by requiring duplicate reporting and fostering a lack of confidence in coalition summaries. Consequently, growers may decide that participation in a coalition is not worth the higher fees that coalitions will have to impose to implement the draft Order. Coalitions very well may fold altogether, setting the ILRP back a decade and possibly requiring the CVWB to start over with a different framework entirely. (As part of the development of the EIR for the CVWB’s ILRP, the CVWB considered a regulatory framework without coalitions: “minimum” estimated staffing for such a program is 360 PY.)
- *Additional Grower/Coalition Costs:* Tables 3 and 4 (below) summarizes additional costs associated with these new requirements.

CVWB to work with other Water Boards to develop multi-year A/R ratio target values within three years of having the nitrogen removed coefficient for the relevant crop.

- **CVWB Impact:** The proposed Order requires coalitions to submit PDF reporting documents to the CVWB until a State database is available to receive the data electronically. The proposed Order indicates this could take up to 2 years. This means electronic data will be unavailable to begin conducting this analysis for ~2 years, resulting in difficulty for the CVWB to meet this requirement. More importantly, the CVWB does not have the level of expertise or knowledge in farm or crop management needed to develop the targets required resulting in the need for outside resources. CVWB does not have the resources to contract the work nor the programming staff to analyze such data.
- **Policy Impact:** Setting an A/R target ratio does not equate to protecting water quality. The CVWB's ILRP has a process in place to conduct representative groundwater monitoring to equate on-farm A/R target ratios with water quality protection: the Management Practices Evaluation Program (MPEP). This process will take time, but it is the key to achieving the goals of protecting water quality, setting protective A/R targets, and ensuring consistency with the Nonpoint Source Policy and Water Code. Setting A/R target ratios without the MPEP process ignores the need to understand the effects on nitrogen leaching to groundwater. Also, the draft Order is silent on integrating farm management with nutrient management and monitoring to determine what is truly effective at protecting WQ while allowing a grower to maintain a viable farming business. The MPEP serves this function.
- **Coalition Impact:** Before the CVWB is able to develop A/R targets, the coalition is required to develop coefficients for nitrogen removed and nitrogen sequestered for growers to make the nitrogen-removed calculations. This task requires significant resources and support from the scientific community. The current ILRP requires the individual growers to develop and report the A/Y values to the Coalitions. All the Coalitions within the CVWB are tasked with developing accurate coefficients to translate the A/Y values to A/R values. This was done to ensure a consistent application of coefficients throughout the region, and to ensure the coefficients were developed based on adequate and proper research and scientific studies. The CVWB believes that having growers make individual nitrogen-removed calculations will introduce more error into this process. More error would result in higher outreach costs and poor data quality, which would render the program ineffective. Under the current ILRP, a feedback loop is included to ensure the growers are aware of their practices. The Coalitions are required to report the A/R values back to the growers. In addition, the Coalitions will also provide additional data to the growers to make them aware of how their values compare to other growers. Finally, the Coalitions are also required to work with growers that have significantly higher ratios.

Revise surface water monitoring program to meet NPS Policy (without meaningful direction).

- **Policy Impact:** The draft Order indicates that CVWB's representative monitoring of surface water is "not enough," but fails to recognize the following: that this program has been developed under the consideration of expert working groups, that monitoring sites must be fully representative of agricultural conditions, that it is similar to our sampling programs for stormwater (e.g., MS4s do not sample every watershed), that it has very effectively located problems and facilitated solutions throughout the Central Valley, that it is designed to trigger additional sampling to follow-up on problems, and that it requires protective management practices in represented watershed areas (areas not directly sampled, but "represented" by another location).

The draft Order fails to justify the need for more without considering the added cost to the monitoring program, cumulative cost when considering all of the draft Order's requirements for growers, or regulatory resource needs to implement and enforce the draft Order. The draft Order also fails to recognize the success of the current surface water monitoring effort, as shown in Table 2 and Figure 1 above.

- **Resource/Cost Impact:** The proposed changes would require revising all CVWB Orders to include additional surface water monitoring. This will require substantial staff resources and additional costs to growers and coalitions.

Potential Benefits of Draft Order

- Collecting domestic drinking well water quality data; notification of pollution.
- Addition of irrigation management component in INMP.

ECONOMIC AND PROGRAMMATIC IMPACT

- Increased reporting for growers, coalitions, and CVWB.
- Increased analysis and redundant data management for coalitions and CVWB.
- Concern about viability of coalitions and current regulatory structure.
- Significant data management and resource concerns for CVWB.

Table 3 Increases in grower and Coalition costs per acre/year (does not include Water Board staff – any increase in staffing will lead to higher state fees.)

East San Joaquin*	Current Cost	Post Order Cost	Change/yr (ESJ)	Change/yr (region)
Administration	\$ 0.85	\$ 1.28	\$ 300,000	\$ 2.4 million
Education	\$ 0.68	\$ 1.24	\$ 390,000	\$ 3.1 million
Farm plans	\$ 0.71	\$ 0.84	\$ 90,000	\$ 730,000
Monitoring/reporting/tracking	\$ 3.66	\$ 5.70	\$ 1.4 million	\$ 11.4 million
Management practices	\$ 113.34	\$ 113.34	\$ 0	\$0
Total	\$ 119.24	\$ 122.40	\$ 2.2 million	\$ 17.7 million

*Costs from Programmatic EIR; assumes 50% increase in coalition administration

costs Table 4. Summary of increased cost drivers in Draft Order requirements

Annual Grower Costs	Current Cost (ESJ)	Draft Order Cost (ESJ)	Draft Order Cost (region)
Domestic well monitoring (Year 1)*	\$ 0	\$ 2.1 million	\$ 18 million
Domestic well monitoring (Post-Year 1)*	\$ 0	\$ 390,000	\$ 3.3 million
Certified INMPs**	\$ 740,000	\$ 1.4 million	\$ 11 million
Outreach Attendance**	\$ 470,000	\$ 860,000	\$ 7 million
Farm Planning (FE, SECP, NMP)**	\$ 490,000	\$ 580,000	\$ 6.2 million
NMP Summary Report**	\$ 360,000	\$ 660,000	\$ 2.9 million

*Based on 2016 unit costs.

**Costs based on Programmatic EIR (2010 dollars), updated to reflect change from high vulnerability to total acreage applications, as appropriate.

Table 5. Minimal Staffing Needs to Implement the Draft Order in the Central Valley

Minimum Staffing Needs to Implement Draft Order Central Valley-wide	Current PYs	Post Order PYs (minimum)
Central Valley ILRP staff (for entire region)	18.7	90* [at staff to irrigated lands acreage ratio similar to R3's current program]

*90 PYs = more than all Regional Boards' ILRP staff combined. In the development of the program, the CVWB considered the staffing needs for comprehensive data submittals directly to the CVWB and found that the burden and costs of obtaining/reviewing the information outweighed the need for the data when considering potential benefits to water quality.